STATEMENT ON MONETARY POLICY

World financial markets have come under severe stress in the period since the last *Statement*. Strains in credit markets escalated in early September, and the period since then has been marked by further large declines in equity prices and exceptional volatility across a range of markets. In response to these developments, a number of governments have announced measures to strengthen their financial systems, which should help to stabilise conditions over time.

The renewed turmoil was sparked by the failure or near-failure of a number of financial institutions in the United States and Europe. In the United States, the largest mortgage institutions were effectively nationalised in early September along with one of the world's major insurance companies. September also saw the demise of the large US investment banks, with one bank filing for bankruptcy, another being taken over and the remaining two announcing their conversion to commercial banks. Several large financial institutions in the United Kingdom and the euro area came under stress during this period and required government assistance. All of this is part of a major reshaping of the financial landscape, in which the business models of some of the most highly leveraged institutions have proven to be no longer viable.

These events saw an intensification of the credit tightening that was already beginning to take hold in a number of countries. While this had previously been mainly apparent in increased funding costs, which were typically passed on to borrowers in the form of higher lending rates, the renewed turmoil saw this develop into a serious tightening in credit availability. As confidence in the financial sector deteriorated, banks became more uncertain about their ability to sustain their funding, and this in turn made it more difficult for them to lend to sound borrowers in the non-financial sector. In some countries, this has been exacerbated by a lack of capital in the banking system, which has been difficult to replenish in the current environment.

The policy responses to these developments took several forms. Central banks around the world have further increased their provision of liquidity to the financial system. In addition, there have been widespread reductions in official interest rates, including a co-ordinated rate cut of 50 basis points by a number of major central banks in early October. In Australia, the RBA has announced rate cuts amounting to a total of 200 basis points at its September, October and November meetings. In addition the Australian Government announced a substantial fiscal stimulus in mid October, equivalent to a little less than 1 per cent of GDP, with the bulk of the effect to be delivered in the December quarter.

Governments around the world have also taken a number of direct measures to strengthen their financial systems. The US authorities have put in place a plan aimed at injecting capital and purchasing distressed assets from financial institutions, and have announced a number of measures to support other parts of the financial system including money market mutual funds, the commercial paper market and the foreign exchange swap market. Governments in Europe have announced substantial direct injections of capital into their banking systems. In addition, a number of governments around the world, including in Australia, have taken steps to increase protection for retail deposits and to offer guarantees to various types of wholesale lending. In the wake of these measures, there have been some signs of improvement in conditions in global credit markets, though sentiment remains fragile. Throughout this period, credit markets in Australia have generally continued to suffer less dislocation than has occurred in other countries.

Foreign exchange markets have been very volatile during the recent period, with evidence of deleveraging and flows associated with hedging activity contributing to sharp movements. In net terms, the yen has appreciated substantially against all currencies over the past three months, while the US dollar has appreciated against most currencies except the yen. Emerging market currencies have fallen sharply. The Australian dollar has been highly volatile and, in net terms, has depreciated by around 20 per cent on a trade-weighted basis since the time of the last *Statement*. The RBA has intervened at times to provide liquidity to the market during this period.

Recent international data have generally indicated that there was a further deterioration in economic conditions in the period leading into this latest financial turmoil. In the United States, GDP contracted slightly in the September quarter. US consumer spending has weakened significantly, reflecting several factors including falls in employment and household wealth and deteriorating consumer confidence, while the housing construction sector has remained a drag on the economy. Conditions in the euro area, the United Kingdom and Japan have also deteriorated in recent months. In addition there have been increasing signs of a slowing in China and other parts of the developing world. China's annual growth rate dropped back to a still-rapid 9 per cent in the September quarter, reflecting both weaker exports and earlier measures to restrain domestic demand. Production and exports have softened in a number of other countries in the Asian region over recent months.

These developments, coupled with the expected impacts of the recent financial turmoil, have prompted significant downward revisions to expectations of world economic growth by official and private-sector observers. As a result, global inflation is expected to decline more quickly than in earlier forecasts.

The deteriorating outlook for world growth has contributed to broad-based falls in world commodity prices over recent months. Oil has traded recently at around US$65 a barrel, down from a peak of over US$140 at mid year. Spot prices for steaming coal and iron ore have dropped sharply over the same period and are now well below current contract prices. Base metals prices are down by an average of more than 30 per cent since the start of the year, and rural commodity prices have also fallen. Based on these developments, it is clear that Australia's terms of trade have now peaked, and movements in the terms of trade are likely to subtract noticeably from national income growth over the year ahead, after several years when they had made large positive contributions.

Recent indicators of spending and activity in Australia, like those available internationally, mostly run up to the August–September period, and hence largely predate both the latest interest rate reductions and the most recent bout of financial turmoil. They suggest that the overall path of economic activity in Australia was close to what the Board had expected, with the needed moderation in demand occurring after an earlier period of rapid growth that had contributed to upward pressure on inflation.

The slowdown in domestic spending has been led by the household sector. Consumer spending declined slightly in real terms in the June quarter, and indications are that it picked up only modestly in the September quarter. Consumer sentiment has been adversely affected by a number of factors, including rising fuel costs in the period up to around mid year and, more recently, by the renewed financial turmoil. Spending on discretionary items has been particularly affected by these developments.

Households are now borrowing at a significantly slower pace than has been seen for some time. Some of this reflects a decline in equity-related margin loans outstanding, but there has also been a gradual slowing in housing-related borrowing. The established housing market has been subdued, with modest falls in house prices occurring in both the June and September quarters. Overall, the combination of declines in house prices and equity prices means that household wealth has fallen significantly since the end of last year, and this is likely to be contributing to the overall moderation in consumer spending.

Business investment continued to grow strongly in the period up to the June quarter, but survey-based indicators of business activity show that conditions overall have softened. Capacity utilisation is reported to have been declining since the early part of this year, though it remains fairly high. Surveys of business investment intentions are providing mixed signals but, on balance, it appears likely that there will be a significant scaling-back of earlier investment plans, in view of the deteriorating world outlook and increased financial uncertainties. A number of businesses have been reporting increased difficulty in obtaining credit. This has been most pronounced in the construction sector, but also appears to have become more common in other parts of the economy recently. As at September, however, business borrowing was still growing at an annual rate of around 8 per cent. While this has moderated significantly from last year's pace, it does not seem to have slowed further in the most recent few months for which data are available.

Consistent with the general moderation in demand and activity, labour market conditions have softened in recent months. Employment has grown at an annualised rate of a little over 1 per cent recently, down from rates of around 3 per cent earlier in the year. Unemployment remains low, but estimates of the number of job vacancies have been declining for several months.

September quarter prices data confirm that inflation has remained high. The CPI rose by 1.2 per cent in the quarter, and in year-ended terms inflation picked up to 5 per cent. Price increases were broadly based, with housing costs making a particularly strong contribution over the past year, reflecting rises in construction costs, rents and utilities prices. Measures of underlying inflation were close to the CPI outcome in the September quarter and a little below the CPI in year-ended terms, at just over 4½ per cent.

The rise in inflation over the past two to three years has been a consequence of a number of factors, including a period of very strong growth in domestic demand and limited spare productive capacity, higher growth in unit labour costs and rapidly rising raw materials costs. There are grounds for expecting at least some of these forces to abate in the period ahead. Growth of domestic demand has moderated significantly and aggregate capacity utilisation is now declining. Given the weakness in the global economy, prospects are that growth in domestic spending and activity will remain below trend for some time. In addition, while commodity price increases were adding to costs in the period up to the September quarter, it is increasingly clear that the global commodity price cycle has peaked. A slowing in global prices of manufactured goods also appears likely, though the recent depreciation of the Australian dollar represents a significant countervailing influence.

On balance it appears likely that underlying inflation is now reaching a peak in quarterly terms and that it will begin to decline over the next few quarters. Given recent falls in world oil prices and their expected flow-on to domestic fuel prices, CPI inflation can be expected to fall more quickly in the short term than underlying measures. Even so, a reduction of inflation to the target is still expected to take some time.

In summary, world financial market developments and economic prospects have moved rapidly in the period since the last *Statement*. At its recent meetings, the Board noted that domestic economic conditions had been evolving broadly as expected in the period immediately prior to the latest bout of financial turmoil. With the needed moderation in demand occurring, the Board judged at its September meeting that inflation was likely to decline gradually over time, and that this allowed scope to begin moving the cash rate towards a less restrictive setting.

The renewed financial turmoil which began in the second week of September materially altered the balance of risks and raised the prospect that global economic conditions could be significantly weaker than previously assumed. That, in turn, would mean weaker prospects for demand and output in Australia, and greater downward pressure on inflation over time. In view of this shift in the balance of risks, the Board judged at its October and November meetings that a significantly more rapid adjustment of the monetary policy setting was needed, and hence the Board decided to make unusually large reductions in the cash rate at those two meetings. In reviewing the stance of policy each month in the period ahead, the Board will be seeking to strike the appropriate balance between avoiding an unduly sharp weakening in demand and the need for inflation to fall back to the target over a reasonable period.

International and Foreign Exchange Markets

Turbulence in international financial markets has increased significantly since the time of the last *Statement*, to be greater than at any time since the current financial turmoil began in the middle of last year. During September, the largest participants in the US mortgage market were placed under conservatorship, the US Government announced its intention to effectively nationalise one of the world's largest insurance companies, a large US investment bank filed for bankruptcy while the other major investment banks were either taken over or became deposit-taking banks. These events saw a general deterioration in confidence in financial markets and institutions. As a result, counterparty risk increased significantly, with interbank lending rates in most currencies spiking higher, and the deleveraging process escalated further, with many asset prices falling sharply as investors wound down leveraged positions.

Governments and central banks responded with an extensive array of support measures to stabilise the financial system. Government actions generally consisted of steps to: increase protection for retail deposits; guarantee various types of wholesale lending; and strengthen the capital position of banks. Central banks introduced further measures to improve liquidity in money markets and many lowered official interest rates.

While these actions have generated some improvement, sentiment remains fragile, with the release of weak economic data refocusing financial markets on the deteriorating outlook for the global economy and contributing to further declines in global markets. This, in conjunction with ongoing financial turmoil, has led to equity markets falling substantially, yields on government debt in many major economies declining, spreads on corporate debt moving sharply higher, and an appreciation of the yen and the US dollar against most currencies.

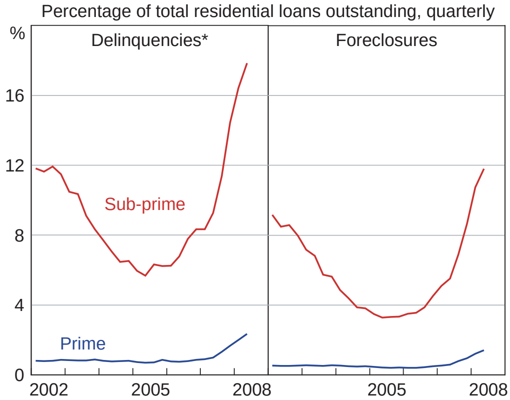
Capital markets and policy responses

As discussed in previous *Statements*, the initial trigger for the current financial turmoil was the collapse of investor confidence in securities backed by US mortgages, particularly sub-prime mortgages. Data for the June quarter, released since the last *Statement*, show a further deterioration in the US housing sector, with delinquencies and foreclosures continuing to rise (Graph 1). The subsequent decline in the value of mortgage-related assets has seen major financial institutions continue to make substantial write-offs although, recently, capital

Graph 1

US Mortgage Delinquencies and Foreclosures

Percentage of total residential loans outstanding, quarterly

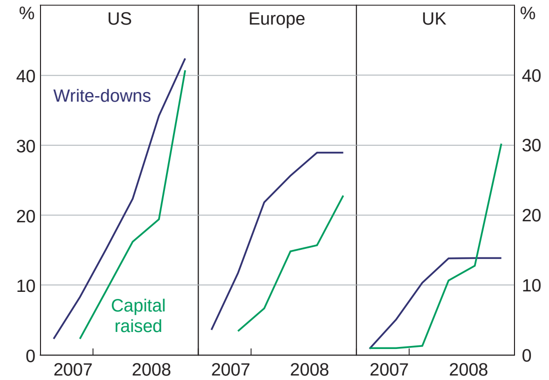


* Loans in arrears for more than 90 days
Source: Bloomberg

Graph 2

Cumulative Write-downs and Capital Raisings

Per cent of regulatory capital*



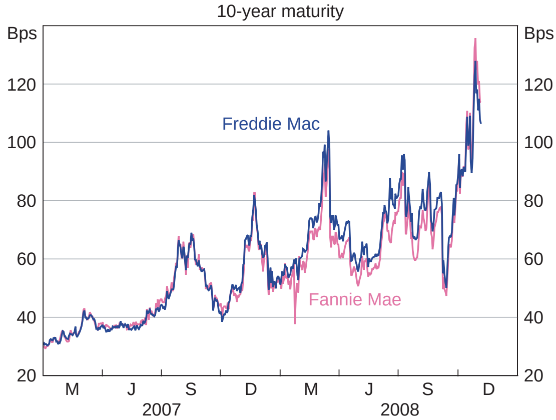
* Consists of a sample of six US, seven European and six UK banks; September and December 2008 quarters only include results reported to date.

Source: Bloomberg

Graph 3

US Agency Debt Spread to Treasuries

10-year maturity

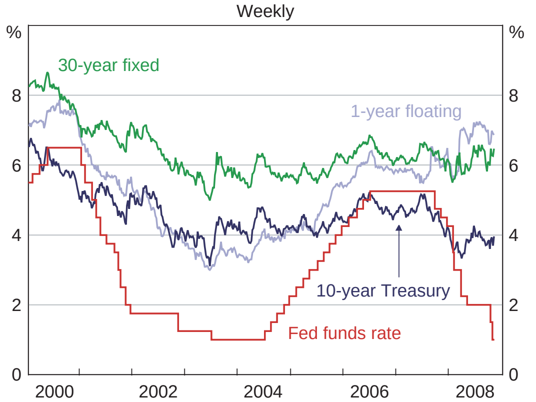


Source: Bloomberg

Graph 4

US Mortgage Interest Rates

Weekly



Source: Bloomberg

raisings have been boosted by governments taking stakes in a number of institutions (Graph 2). Financial institutions have also been setting aside larger provisions, reflecting the more general decline in loan quality.

In early September, the two largest participants in the US mortgage market, Fannie Mae and Freddie Mac (the agencies), were placed under conservatorship by US regulators. In conjunction with this action, the US Government announced a support package which included a pledge to keep the institutions solvent (via Treasury capital injections) and measures to enhance liquidity. Together, these actions effectively resulted in these institutions being nationalised. These events followed worse-than-expected losses in the June quarter of US$2.3 billion and US$0.8 billion for Fannie Mae and Freddie Mac, including write-downs of US$5.3 billion and US$2.8 billion, respectively. The share prices of the two entities had fallen precipitously and the spreads between yields on their debt and yields on US government debt had widened considerably (Graph 3). After the announcement of government initiatives, spreads on agency debt and mortgage-backed securities (MBS) relative to US Treasuries narrowed but subsequently, with the dislocation in financial markets escalating, spreads rose to over 100 basis points. Reflecting this and the financial turmoil more generally, mortgage rates remain high in the United States despite the reduction in policy rates (Graph 4).

As a result of being placed under conservatorship, a credit event was triggered on credit default swaps (CDS) written on agency debt. But with prices for Fannie Mae and Freddie Mac senior debt settling at US$92 and US$94, respectively, (net) CDS payouts were limited to around US$8 and US$6 per US$100 of protection.

The US Government's agency support package did not prevent conditions in financial markets from deteriorating further. Around a week after the agencies' nationalisation, Lehman Brothers, the fourth-largest investment bank in the United States, filed for bankruptcy. Shortly thereafter, one of the world's largest insurance companies, American International Group (AIG), had its credit rating downgraded; subsequently the Fed extended more than US$120 billion through a revolving credit facility. While this facility spared AIG from bankruptcy, the US Government announced its intention to assume a 79.9 per cent equity interest in the company, effectively nationalising it. Subsequently, the remaining large independent US investment banks were either taken over by deposit-taking banks or, in the case of Goldman Sachs and Morgan Stanley, became deposit-taking banks themselves. In the United Kingdom, Lloyds TSB announced it would take over Bank of Scotland (formerly HBOS), a large UK mortgage lender, in order to prevent that company's collapse.

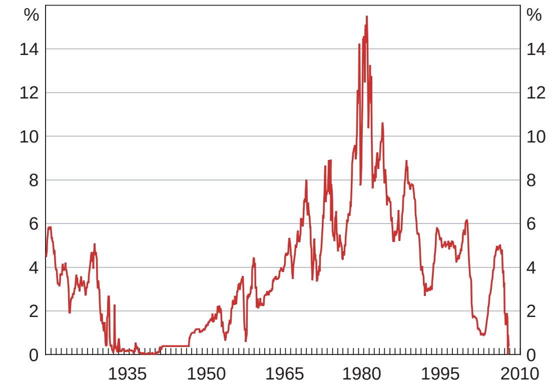
In September, several US money market mutual funds (MMMFs) incurred principal losses, in part because some funds had exposure to paper issued by Lehman Brothers. Net asset values falling below US$1 per dollar invested ('breaking the buck') triggered sizable redemptions from other MMMFs and strong demand for US Treasuries. These events caused severe market dislocation as MMMFs in the United States hold around 40 per cent of all commercial paper and bank acceptances outstanding. In order to provide a liquidity backstop for funds to meet redemption requests and to stabilise short-term funding markets, the US Treasury and the Fed took a number of steps. The US Treasury guaranteed all existing holdings and the Fed extended loans to US depository institutions to finance the purchase of high-quality asset-backed commercial paper from the MMMFs (see Box A). Subsequently, a number of other facilities were put in place to assist the money market funds and the commercial paper market.

The culmination of the US rescue plan for the financial system was the US$700 billion Troubled Asset Relief Program to purchase distressed bank assets. While the draft legislation was initially rejected by the US House of Representatives, a revised form of the package, the *Emergency Economic Stabilization Act* (EESA), was passed into law in early October. The Act allows the US Treasury to provide capital to financial institutions and to purchase troubled assets. It also allows the Federal Reserve to start remunerating reserve balances.

Around this time a number of deposit-taking financial institutions across the United States, Europe and the United Kingdom encountered severe financial difficulties. US regulators took control of Washington Mutual and sold its assets while Wachovia was taken over by Wells Fargo. European financial group Fortis received government support while the governments of Belgium, France and Luxembourg, in conjunction with existing shareholders, injected €6.4 billion of capital into financial services group Dexia. A consortium of German banks joined the German Government to rescue Hypo Real Estate, a large German commercial property lender. In the United Kingdom, Bradford & Bingley, a large lender to landlords, had its retail deposit business and branch network sold to Abbey National by UK authorities.

Graph 5

US 3-month Treasury Bill Rate

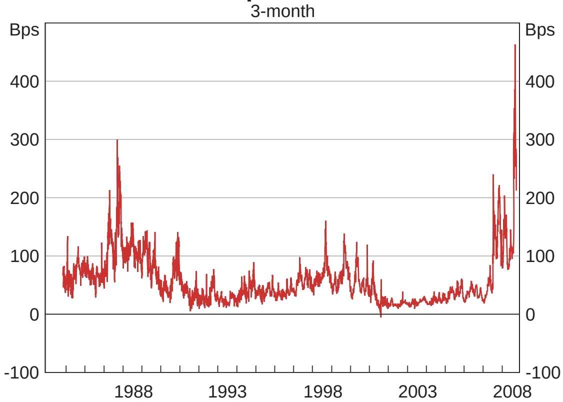


Sources: Bloomberg; Global Financial Data

Graph 6

US$ LIBOR Spread to Treasuries

3-month



Source: Bloomberg

Despite the passage of the EESA, conditions in financial markets continued to deteriorate. Liquidity in short-term money markets was extremely low for terms any longer than one week and demand for high-quality assets in the United States rose. As a result, yields on short-term US Treasuries fell to levels not seen since the 1940s (Graph 5), and the spread between 3-month US dollar LIBOR and yields on US Treasuries rose to a record 460 basis points (Graph 6). As stress mounted in European financial systems, commercial banks chose to hold a growing proportion of assets as reserve balances at central banks despite the interest penalty of doing so. Reserve balances at the European Central Bank (ECB) almost reached a record €300 billion.

In response to these rising tensions, governments around the world took steps to address strains in the financial system. In particular, governments: increased protection for retail deposits; introduced guarantees on wholesale lending; and took steps to strengthen the capital position of banks.

On 30 September, the Irish Government put in place a two-year program to guarantee all deposits at six major Irish banks. Following this, the UK Government increased its protection on bank deposits to £50 000 from £35 000. The German Government legislated a guarantee on deposits up to €100 000 and many other European countries also announced changes to their deposit guarantee arrangements. To ensure co-ordination, the European Union finance ministers agreed to raise the minimum level of deposit guarantees in Europe to at least €50 000 from €20 000. In the United States, the EESA temporarily increased the guarantee on deposits to US$250 000 from US$100 000. Governments in other industrialised nations and emerging economies also increased the level of protection for deposits.

To ensure the stability of its financial system, the UK Government announced that it would facilitate the recapitalisation of its banking industry and guarantee new short- and medium-term debt issuance of eligible institutions on commercial terms. The fee for this guarantee is risk-sensitive, being based on an institution's past CDS premia plus a margin. Eight institutions have confirmed their participation in the scheme. To qualify for the debt guarantee, institutions must raise their Tier 1 capital by the amount, and in the form, that the UK Government considers appropriate. While a number of financial institutions have been able to meet the requirements without having to add to capital, several others will raise capital with the assistance of the UK Government.

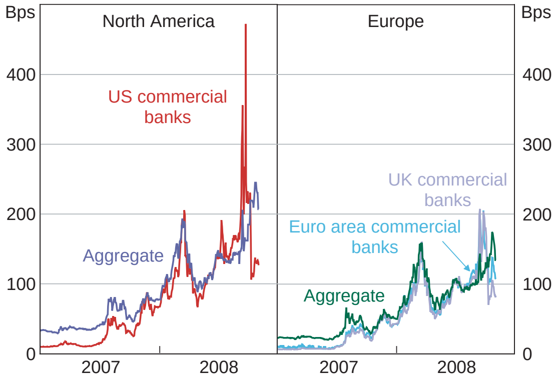
In order to stabilise their financial systems, European governments also announced various measures that included the guarantee of debt issuance and the purchase of equity in banks. For Germany, France, Spain and the Netherlands, the combined value of capital injections and debt guarantee facilities exceeds €1 trillion: the German package will guarantee up to €400 billion of new bank debt and provide up to €80 billion to recapitalise banks; the French Government will guarantee up to €320 billion of new bank debt and provide up to €40 billion to recapitalise banks; the Spanish Government approved measures to guarantee up to €100 billion of new bank debt and authorised the purchase of shares in banks in need of capital; and the Dutch Government will guarantee up to €200 billion of new bank debt. Other European nations have also made various announcements to support their domestic financial systems.

In mid October, the US Government announced a plan to lend further support to its key financial institutions by recapitalising various banks and guaranteeing all senior unsecured debt issued by eligible financial institutions. As part of this, the US Treasury revealed a US$250 billion Capital Purchase Program, made possible under the EESA, which will allow eligible financial institutions to sell senior preferred shares to the US Government. At the time of the announcement, nine major financial institutions had agreed to participate. The US Treasury will invest a maximum of US$25 billion per institution and will receive preference shares paying 5 per cent for the first five years, and 9 per cent thereafter. At the same time, the Federal Deposit Insurance Corporation introduced the Temporary Liquidity Guarantee Program which guarantees newly issued senior unsecured debt of banks, thrifts and certain holding companies for a non-risk-sensitive annualised fee of 75 basis points.

Many central banks, in addition to reducing policy rates (see below), responded to the rising tensions by expanding their existing liquidity facilities. Actions taken included: widening the range of eligible collateral; broadening the list of participants eligible to access these facilities; and lengthening the maturity of market operations. Some also introduced new measures targeting specific markets. To address the dislocation of the foreign exchange swap market, there was a marked increase in the availability of US dollars to non-US central banks through foreign exchange swap facilities with the Fed (Box B). In particular, a number of central banks were willing to provide unlimited US dollars at a fixed price. This step in particular appears to have contributed to a large improvement in the functioning of foreign exchange swap markets.

Some central banks also entered into arrangements tailored to individual financial institutions. Notably, the Swiss National Bank (SNB) and UBS set up a special-purpose vehicle (SPV) to facilitate the orderly liquidation of up to US$60 billion of illiquid securities and other troubled assets held by UBS. In this initiative, the SNB will grant the SPV a loan of up to US$54 billion, secured by

Graph 7



Sources: Bloomberg; RBA; Thomson Reuters

a claim on all the SPV's assets, for a term of 8 years (but extendable to 12 years). UBS will provide the other US$6 billion in equity, serving as a first level of protection against any losses. The loan to the SPV will pay interest at the 1-month US dollar LIBOR rate plus 250 basis points, and profits will be shared according to an agreed formula.

Following the announcement of these policy actions designed to improve confidence in financial systems, US dollar term spreads began to narrow in mid to late October and there has been increased debt issuance in money markets at terms longer than one week. CDS premia on commercial banks in the United States, Europe and the United Kingdom have also narrowed noticeably (Graph 7). In contrast, CDS on non-financials have continued to rise, with aggregate indices remaining around the highest levels seen since the current crisis. However, the CDS market has also been affected by a lack of liquidity, which has reduced the precision of pricing.

Official policy rates

The escalation in financial market turmoil since the previous *Statement* has led a number of central banks in industrialised nations to reduce their policy rates amid rising downside risks to growth and moderating inflationary pressures (Table 1). Expectations of the future path for policy rates have shifted even lower. A number of emerging market central banks also reduced rates for the first time in several years.

Table 1: Changes in Monetary Policy

	Current level Per cent	Most recent change	Expectations for next six months
United States	1.00	↓ Oct 08	↓ 25 bps
Euro area	3.75	↓ Oct 08	↓ 100 bps
Japan	0.30	↓ Oct 08	no change
United Kingdom	4.50	↓ Oct 08	↓ 200 bps
Canada	2.25	↓ Oct 08	↓ 75 bps
New Zealand	6.50	↓ Oct 08	↓ 150 bps
Sweden	3.75	↓ Oct 08	↓ 75 bps
Switzerland	2.50	↓ Oct 08	↓ 50 bps

Sources: Bloomberg; Thomson Reuters; central banks

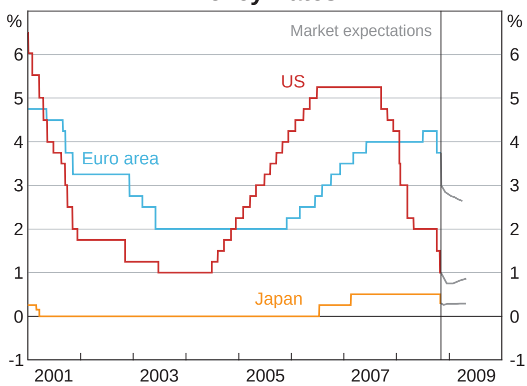
The Fed, the ECB, the Bank of England (BoE), Bank of Canada (BoC), the SNB and the Riksbank all took part in a co-ordinated rate cut in early October. Each central bank reduced their policy rate by 50 basis points. In their joint decision, the central banks noted that downside risks to growth had increased as the financial crisis intensified and inflationary pressures had diminished, warranting some easing in monetary conditions. Most of these central banks also cited a significant tightening in credit conditions in their statements. The Fed and the Riksbank reduced their policy rates by a further 50 basis points and the BoC cut by a further 25 basis points at their next scheduled meetings. While the Bank of Japan (BoJ) did not reduce its policy rate along with these central banks, it expressed strong support for the co-ordinated action. At the end of October, the BoJ cut policy rates by 20 basis points, reflecting deteriorating conditions.

Separately, the Reserve Bank of New Zealand lowered its policy rate by a total of 150 basis points to 6½ per cent in two moves, noting that the domestic economy is experiencing a marked slowdown, primarily due to the deteriorating global outlook. The Norges Bank reduced its policy rate by 100 basis points to 4¾ per cent, but in contrast the central bank in Denmark raised rates to support its currency. With the major dislocation in the Icelandic banking system (whose assets amount to around 10 times the country's GDP), the central bank in Iceland lowered rates by 350 basis points to 12 per cent before raising them two weeks later by 600 basis points as part of an International Monetary Fund (IMF) program.

Notwithstanding reductions in policy rates, expectations of future policy paths have shifted even lower for most industrialised economies, including the United States (Graphs 8 and 9). In the next half year, reductions totalling 100 basis points are expected from the ECB. In the United Kingdom, markets are expecting cuts totalling 200 basis points. The BoC is expected to reduce its policy rate by 75 basis points. In New Zealand, a cumulative 150 basis points of further cuts are expected.

Graph 8

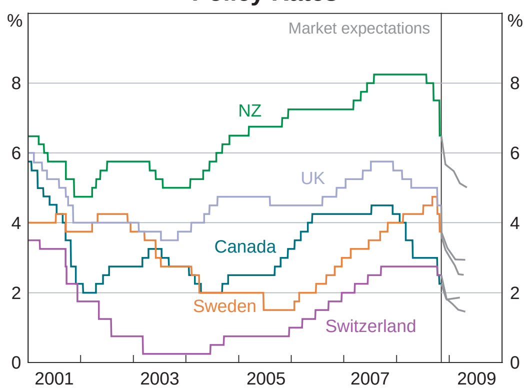
Policy Rates



Sources: Bloomberg; central banks

Graph 9

Policy Rates



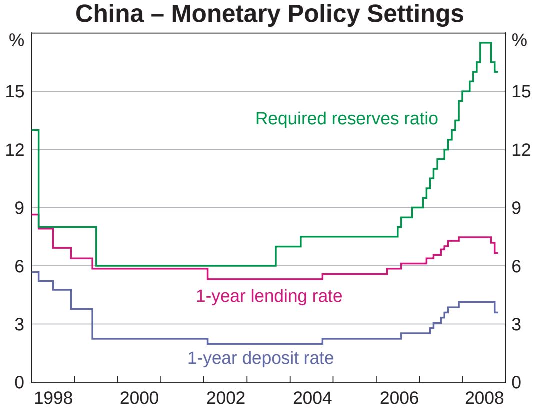
Sources: Bloomberg; Thomson Reuters; central banks

Table 2: Emerging Market Monetary Policy Changes		
	Change since previous *Statement*	Current level
	Basis points	Per cent
Brazil	↑ 75	13.75
Chile	↑ 100	8.25
China	↓ 81	6.66
Czech Republic	↓ 25	3.50
India	↓ 150	7.50
Indonesia	↑ 50	9.50
Israel	↓ 50	3.50
Hong Kong	↓ 200	1.50
Hungary	↑ 300	11.50
Korea	↓ 75	4.25
Mexico	↑ 25	8.25
Philippines	↑ 25	6.00
Taiwan	↓ 62.5	3.00
Thailand	↑ 25	3.75

Sources: Bloomberg; central banks

Graph 10

China – Monetary Policy Settings



Sources: CEIC; The People's Bank of China

Since the previous *Statement*, a number of central banks in emerging markets – especially those in Asia – have eased policy (Table 2). The People's Bank of China (PBoC) lowered its lending and deposit rates for the first time since 2002 to 6.66 per cent and 3.60 per cent respectively, and reduced its required reserves ratio for the first time since 1999 (Graph 10). The central banks of India, Israel, Korea and Taiwan also reduced their policy rates. The Hong Kong Monetary Authority (HKMA) cut the spread between its policy rate and the Fed's policy rate from 150 to 50 basis points which, combined with the Fed's rate reductions, means that the HKMA's policy rate was reduced by a total of 200 basis points over the month. Rates were also reduced in the Czech Republic amid concerns about the koruna's appreciation against the euro.

In contrast, continued inflationary concerns have led Bank Indonesia to raise its policy rate twice since the previous *Statement*. Most Latin American central banks also remained concerned about inflation, with a number of them raising interest rates in recent months. Hungary's central bank raised its policy rate at an unscheduled meeting by 300 basis points to 11.5 per cent to support its currency.

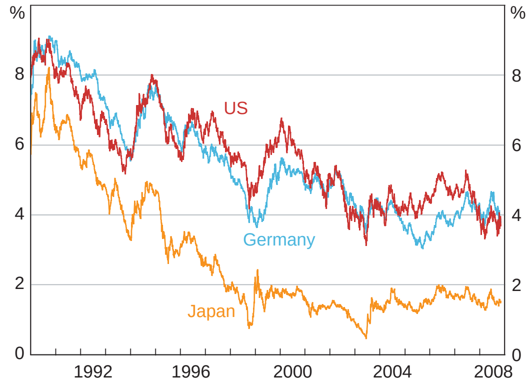
Bond yields

Developments in credit markets have led to sharp movements in bonds yields since the last *Statement*, with volatility higher than it was in March following the collapse of Bear Stearns. Yields were buffeted by the opposing forces of increased concerns about global growth on the one hand, and increased concerns about the fiscal implications of financial rescue packages and other support programs on the other. The increase in volatility was particularly noticeable at shorter maturities, such as 3-month US Treasury bills.

Yields on 10-year US government bonds have traded in a very wide range of 70 basis points since the last *Statement* (Graph 11). Yields declined by over 30 basis points on the day Lehman Brothers collapsed to around levels seen in mid March, while yields on 3-month US Treasury bills and 2-year US government bonds fell by 60 and 50 basis points, respectively. In the wake of the proposed nationalisation of AIG, yields on 3-month US Treasury bills fell by over 60 basis points – for the second time in less than a week – to be below 0.1 per cent for the first time since the early 1940s. Yields on 2-year US government bonds have fallen by over 100 basis points since the last *Statement*. With falls in yields of shorter-term bonds greater than those on longer-dated Treasuries, the yield curve in the United States has steepened since the last *Statement*.

Graph 11

10-year Government Bond Yields



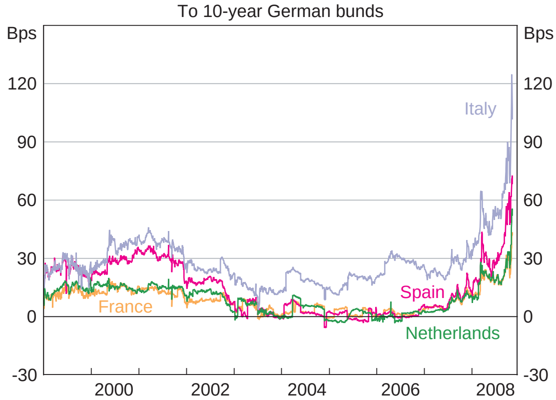
Source: Bloomberg

At the peak of investor concerns, spreads between the yields on sovereign debt in Italy, France, Spain and the Netherlands and yields on German bunds widened to the highest levels seen since the formation of the European Monetary Union (Graph 12). These spreads narrowed somewhat following the unprecedented action by governments and central banks, though they have since moved higher again.

Graph 12

European Government Bond Spreads

To 10-year German bunds



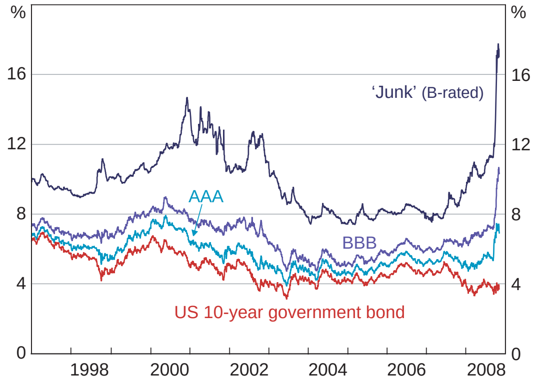
Source: Bloomberg

The deterioration of credit market conditions and the failure of several large financial institutions saw corporate debt yields increase significantly through September and October as default risk concerns escalated. Spreads on corporate debt surpassed their mid-March highs and 2000 peaks, most notably on sub-investment grade debt (Graph 13). Consistent with this, defaults on speculative-grade debt have increased sharply and, if rating agencies' expectations of default on this debt are realised, will rise substantially further.

Graph 13

US Corporate Bond Yields

7–10 years maturity

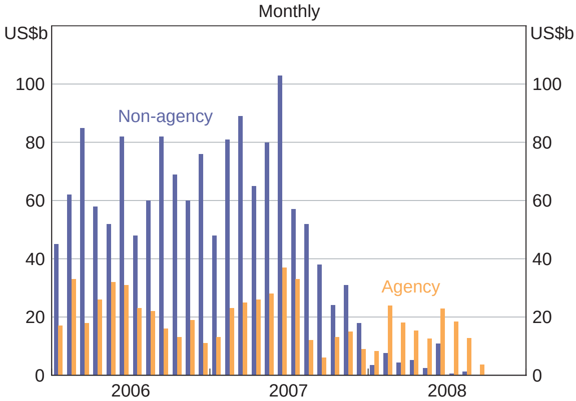


Sources: Bloomberg; Merrill Lynch

Graph 14

US Issuance of Mortgage-backed Securities

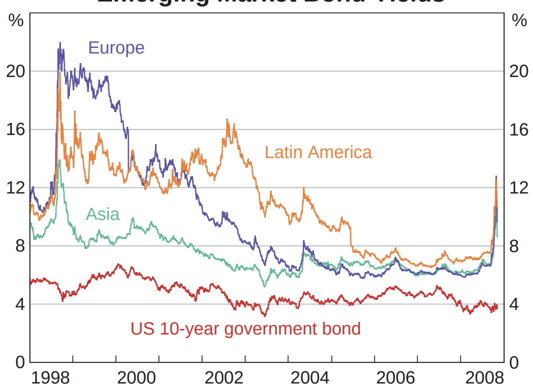
Monthly



Source: Thomson Reuters

Graph 15

Emerging Market Bond Yields



Sources: Bloomberg; Thomson Reuters

Corporate bond issuance in the United States was very weak in the September quarter and well below the already subdued level of issuance seen earlier in 2008; issuance was around three times less than in the June quarter for both financials and non-financials, reflecting the current very difficult conditions for longer-term funding (Graph 14). Issuance of MBS also remains very weak in all countries where financial institutions had previously relied heavily on securitisation. There has been virtually no private issuance in the United States, while agency issuance has slowed considerably. Issuance in the United Kingdom was again boosted by financial institutions creating securities that can be used to access the BoE's liquidity facilities (self-securitisations).

In emerging markets, spreads on US-dollar-denominated sovereign debt rose sharply on heightened risk and global growth concerns (Graph 15). This was particularly true of spreads on Argentina's sovereign debt, reflecting concerns the Government may default on its debt again; late in October the Government announced plans to take over private pension funds. As pressures on emerging markets intensified, the IMF has been approached by several governments for assistance. Assistance packages have been put in place for Hungary, Iceland and Ukraine while a number of other countries are expected to take up some form of international support in the coming months.

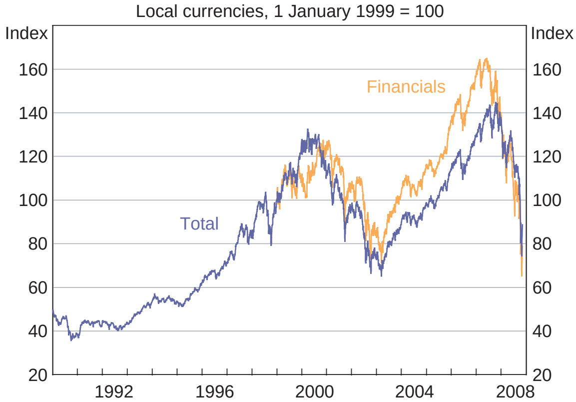
Equities

Global equity markets are sharply lower and have been extremely volatile since the last *Statement*, amid severe turmoil in global financial markets and worse-than-expected economic data raising concerns about the prospects for global economic growth (Graph 16, Table 3). There have been significant declines across all sectors. In the United States and Europe, equity markets fell back to levels briefly reached in 2003 and before then in 1997, while in Japan equities fell back to levels of the early 1980s. The large decline in equity prices has seen the price/earnings (P/E) ratio for the S&P 500 fall back to around its long-term average (Graph 17). P/E ratios in Europe and Japan are well below their average levels.

Graph 16

MSCI World Share Price Indices

Local currencies, 1 January 1999 = 100



Source: Bloomberg

Table 3: Changes in Global Share Prices

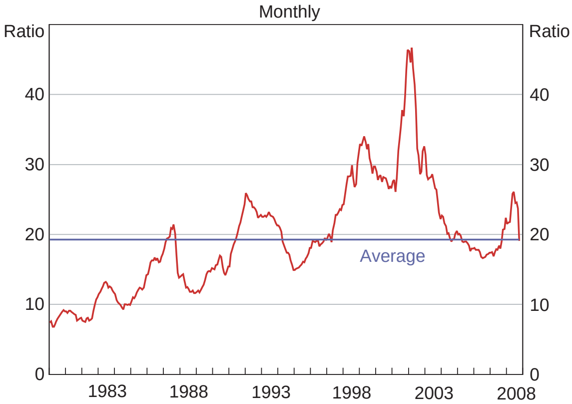
Per cent

	Since recent peak	Since previous *Statement*	Recent trough lowest since
United States			
– Dow Jones	–35	–20	Apr 03
– S&P 500	–39	–25	Apr 03
– NASDAQ	–41	–29	May 03
Euro area			
– STOXX	–44	–22	Jul 03
United Kingdom			
– FTSE	–33	–17	Apr 03
Japan			
– TOPIX	–47	–23	Jan 84
Canada			
– TSE 300	–34	–26	Sep 04
Australia			
– ASX 200	–36	–13	Nov 04
MSCI Emerging Asia	–52	–31	Sep 04
MSCI Latin America	–43	–26	Aug 05
MSCI Emerging Europe	–58	–44	Nov 03
MSCI World	–39	–22	May 03
MSCI World Financials	–52	–25	na

Source: Bloomberg

Graph 17

S&P 500 P/E Ratio*



* Based on reported earnings over the previous four quarters
Source: Standard & Poor's

In the United States, share prices have fallen sharply since the last *Statement* in very volatile conditions. The S&P 500 recorded some of its biggest daily moves in history, with the rebounds on 13 and 28 October being the largest since the 1930s, and the decline on 15 October being the biggest since the 1987 stock market crash (Table 4). The implied volatility of the S&P 500 reached levels not seen since October 1987. European and Japanese markets were similarly volatile.

Emerging market equities have also been subject to sharp falls as economic prospects have deteriorated, with exports to industrialised countries expected to slow further (Graph 18). Share prices in emerging Europe, which includes Russia, have declined rapidly due to the fall in oil and commodities prices, as well as the spill-over of strains in

Table 4: Biggest Daily Percentage Changes in S&P 500 since January 1928

	Increases		Decreases	
Rank	Change	Date	Change	Date
1	16.6	15 Mar 33	–20.5	19 Oct 87
2	12.5	30 Oct 29	–12.3	28 Oct 29
3	12.4	6 Oct 31	–10.2	29 Oct 29
4	11.7	21 Sep 32	–9.6	6 Nov 29
5	11.6	**13 Oct 08**	–9.3	18 Oct 37
6	10.8	**28 Oct 08**	–9.0	**15 Oct 08**
7	9.6	5 Sep 39	–8.9	20 Jul 33
8	9.5	20 Apr 33	–8.8	**29 Sep 08**
9	9.1	21 Oct 87	–8.7	21 Jul 33
10	8.9	14 Nov 29	–8.3	26 Oct 87
11	8.8	3 Aug 32	–8.1	5 Oct 32
12	8.5	8 Oct 31	–8.1	12 Aug 32
13	8.4	11 Feb 32	–7.9	26 Jul 34
14	8.4	13 Feb 32	–7.8	31 May 32
15	8.3	18 Dec 31	–7.6	**9 Oct 08**
16	8.2	24 Jul 33	–7.4	14 May 40
17	7.5	3 Jun 31	–7.3	24 Sep 31
18	7.5	20 Oct 37	–7.2	12 Sep 32
19	7.5	10 Nov 32	–7.0	15 Jun 33
20	7.4	10 Jun 32	–6.9	27 Oct 97

Source: Bloomberg

the financial sector. Large falls saw trading on the Russian exchanges suspended for several days.

Foreign exchange

Volatility in currency markets also picked up to historically high levels in October (Graph 19). There was evidence of deleveraging and flows associated with hedging activity contributing to sharp movements in illiquid markets. The volatility on Friday, 24 October was one of the most extreme, with the US dollar depreciating by as much as 8 per cent against the yen during the day, and the euro depreciating by 12 per cent.

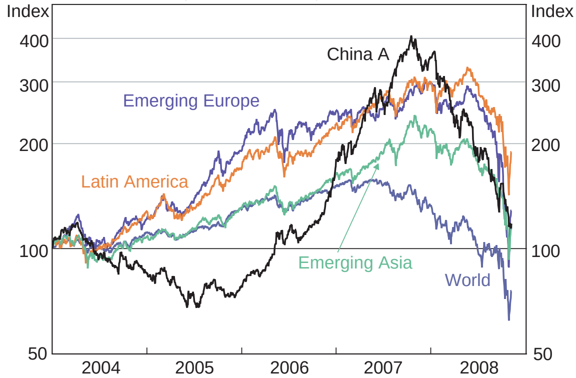
The yen appreciated against all currencies as carry trades were further unwound and Japanese investors repatriated their investments. The US dollar appreciated against most other currencies, except the yen, as US investment vehicles repatriated their investments, in some cases due to forced liquidations, and as foreign investors adjusted their hedges on US dollar assets (Graph 20, Table 5). The appreciation of the US dollar comes after a long period of depreciation. On a nominal trade-weighted basis the US dollar is 15 per cent above the low it reached in March this year, while in real terms it is 16 per cent higher (Graph 21).

Emerging market currencies have depreciated significantly against the US dollar since the last *Statement*. Falling commodity prices and concerns about US economic growth weighed on a number of currencies,

Graph 18

MSCI Share Price Indices

Log scale, 1 January 2004 = 100

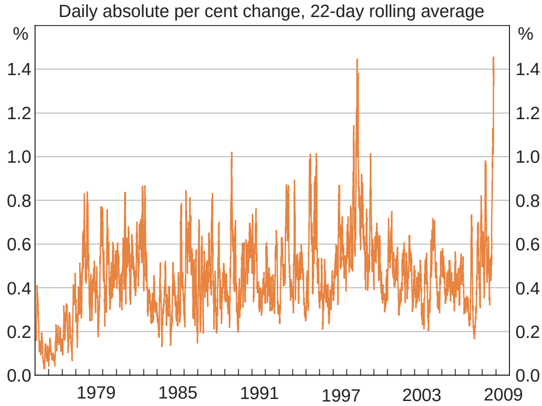


Source: Bloomberg

Graph 19

USD/JPY Volatility

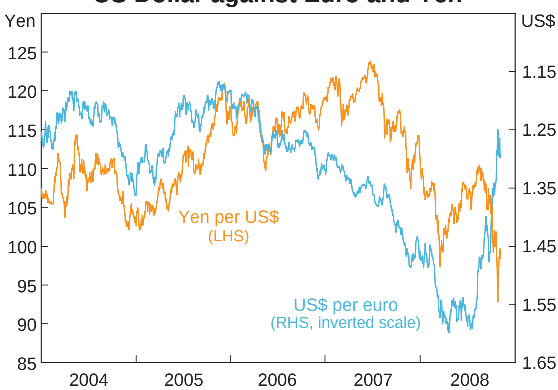
Daily absolute per cent change, 22-day rolling average



Sources: Bank of England; Bloomberg; RBA

Graph 20

US Dollar against Euro and Yen



Source: Bloomberg

Table 5: Changes in US Dollar against Other Currencies
Per cent

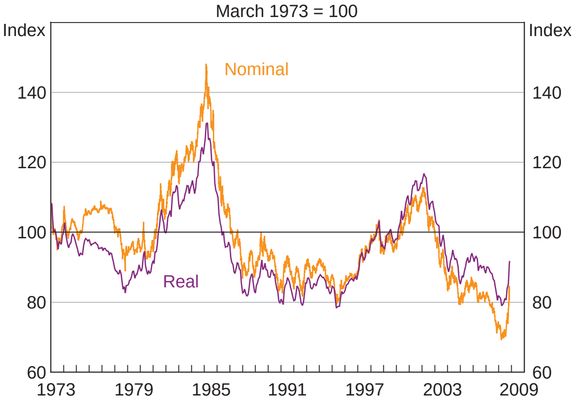
	Year-to-date	Since previous *Statement*
South Africa	50	30
South Korea	40	25
Australia	34	32
United Kingdom	31	22
New Zealand	31	20
Canada	27	11
Brazil	23	33
Sweden	22	27
Indonesia	21	21
India	21	13
Mexico	19	27
Euro area	13	19
Philippines	10	10
Malaysia	6	7
Thailand	3	4
Singapore	2	6
Switzerland	2	9
Taiwan	1	6
China	–8	0
Japan	–14	–10
Majors TWI	**12**	**10**
Broad TWI	**9**	**10**

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

Graph 21

US Major TWI

March 1973 = 100



Source: Board of Governors of the Federal Reserve System

including the South African rand, Brazilian real and Mexican peso. These currencies were also affected by the unwinding of leveraged portfolios. The Korean won continued to depreciate against the US dollar, and in October reached its lowest level since the Asian financial crisis. Foreign repatriation of equities, and concerns over the ability of Korean banks to finance dollar-denominated debt, were important factors weighing on the won. In response, Korean authorities intervened in foreign exchange markets to support the currency. More recently, the Bank of Korea announced that it will undertake foreign exchange swaps directly with financial institutions to address US dollar liquidity issues. Other Asian currencies were generally lower on concerns the global slowdown will dampen domestic growth in the region (Graph 22).

The slow and steady appreciation of the Chinese renminbi against the US dollar, which began with its revaluation in mid 2005, has not continued in recent weeks. While the renminbi has been little changed against the US dollar, it has appreciated significantly against the euro and depreciated sharply against the yen. On a trade-weighted basis, China's currency has appreciated by 9 per cent in nominal terms and by 11 per cent in real terms over the three months to October. For the first time since late 2002, pricing in the non-deliverable forwards market indicates that the renminbi is expected to depreciate over the coming year.

Australian dollar

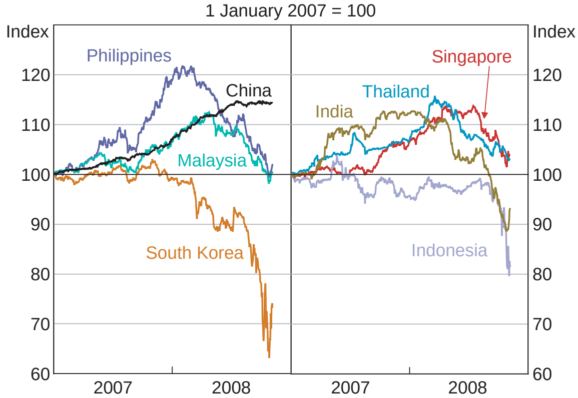
The deterioration in the global growth outlook, declines in commodity prices and general unwinding of leveraged positions caused a further sharp depreciation of the Australian dollar in recent months. Some investors appear to have exited Australian dollar positions as a proxy for unwinding positions in other less liquid markets, including emerging market currencies. At the low point in late October, the dollar had depreciated by as much as 27 per cent on a trade-weighted basis since the last *Statement*. It has since rebounded somewhat, appreciating by 13 per cent against the US dollar and by 9 per cent on a trade-weighted basis to be 6 per cent below its long-run average (Graph 23, Table 6). The dollar has depreciated particularly sharply against the Japanese yen which, as noted above, had been a favoured currency for funding leveraged positions in high-interest-rate currencies.

Volatility in the exchange rate reached unprecedented levels with a number of particularly sharp downward movements in October, largely reflecting risk retrenchment associated with falls in US equity markets (Graph 24). The currency has moved in large intraday ranges in line with general volatility in global equity and foreign exchange markets (Graph 25). The increase in Australian dollar volatility is broadly

Graph 22

Selected Asian Currencies against US Dollar

1 January 2007 = 100

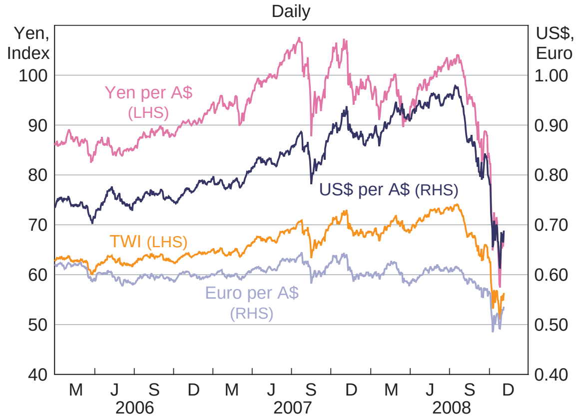


Source: Bloomberg

Graph 23

Australian Dollar

Daily

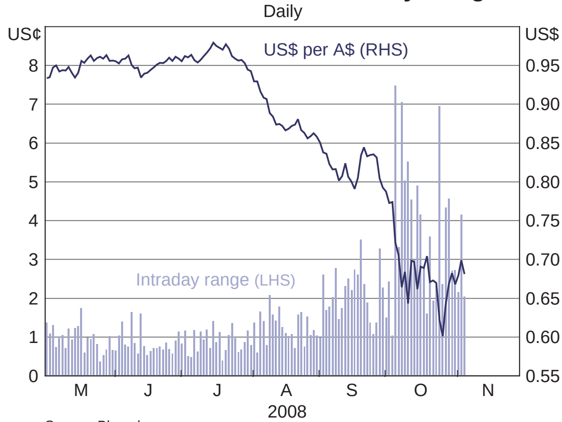


Sources: RBA; Thomson Reuters; WM/Reuters

Graph 24

Australian Dollar and Intraday Range

Daily



Source: Bloomberg

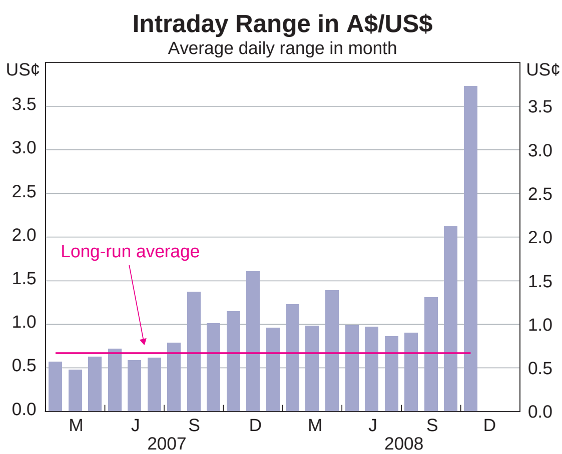
Table 6: Australian Dollar against Selected TWI Currencies

Percentage change

	Year to date	Since previous *Statement*	Deviation from post-float average
South Africa	10	–2	56
South Korea	3	–7	29
UK	–3	–8	–3
New Zealand	–4	–10	–7
Canada	–7	–16	–15
Sweden	–11	–5	0
Indonesia	–12	–10	112
Euro area	–17	–11	–21
Singapore	–25	–20	–20
Taiwan	–25	–21	–1
Switzerland	–26	–18	–27
US	–26	–25	–6
PNG	–32	–26	33
China	–32	–26	0
Japan	–37	–33	–30
TWI	**–23**	**–21**	**–6**

Sources: RBA; Thomson Reuters

Graph 25



Sources: Bloomberg; RBA

comparable with that seen in other commodity-related currencies.

The disorderly conditions in the foreign exchange market on a number of occasions in October led the Bank to use its foreign reserves to provide liquidity to the market. While the US dollar value of foreign reserves declined as a result of these interventions, valuation effects have increased net reserves by $6 billion in Australian dollar terms, to around $45 billion since the last *Statement*.

Box A: Developments in the US Federal Reserve's Instruments

Since the start of September, a number of central banks have made further changes to their policy instruments in light of increased strains in credit and money markets.[1] This has been in addition to ongoing liquidity injections through normal short-term operations and various standing facilities. The Fed in particular has implemented a number of changes that can be broadly categorised as expanding the provision of term funding and alleviating tensions in specific markets. Taken together, these changes have resulted in a significant rise in US dollar liquidity provided by the Fed (Table A1).

Table A1: Federal Reserve Lending Facilities – Outstandings
US$ billion

	As at 3 Sep 2008	As at 29 Oct 2008	Change
Repos	109	80	–29
Discount window	19	111	92
PDCF	0	79	79
TAF	150	301	151
TSLF	116	197	82
AMLF	na	96	96
CPFF	na	145	145
MMIFF	na	na	na
US$ swap facility	62	442	380

Source: Board of Governors of the Federal Reserve System

In response to the deterioration in term money markets, the Fed has extended the availability of term funding in a number of ways. Earlier in the year the maximum duration of loans available through the discount window was lengthened to three months. In contrast, the Primary Dealer Credit Facility (PDCF), which performs a similar role for certain financial institutions that do not qualify for access to the discount window, has remained an overnight facility but the range of accepted collateral has been widened. The Fed has also expanded its Term Auction Facility (TAF) and Term Securities Lending Facility (TSLF) by increasing the total amount available and by broadening the range of securities accepted as collateral. For deposit-taking institutions, the maximum amount available under the TAF was increased to US$600 billion, with US$150 billion provided at each auction for 28- and 84-day funds. Two additional TAF auctions, of US$150 billion each, will be held to provide funding through the year end.[2] For primary dealers, the total amount of US Treasuries that can be made available through the TSLF has been increased from US$175 billion in mid September to US$200 billion.

1 *See Reserve Bank of Australia (2008),* Statement on Monetary Policy, *May, Box A for earlier changes.*

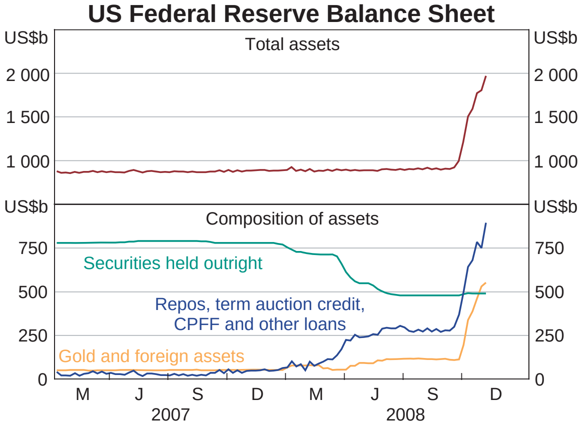
2 *Two TAF auctions have been scheduled in November to make funds available prior to the Christmas break for maturity in the second week of January.*

The Fed has also taken steps to alleviate tensions in specific markets. In light of increasing reluctance by investors to purchase commercial paper and increased redemptions from money market mutual funds, the Fed extended credit to banks to purchase high-quality asset-backed commercial paper (ABCP) from these funds through the ABCP Money Market Mutual Fund Liquidity Facility (AMLF). The Fed has also established the Commercial Paper Funding Facility (CPFF) to provide a liquidity backstop to commercial paper issuers. Under this facility, the Fed will fund the outright purchase of securities through a special purpose vehicle (SPV), thereby removing much of the risk that issuers will be unable to roll over maturing paper. To facilitate the sales of term money market instruments in the secondary market at prices that reflect the underlying value, the Fed subsequently introduced the Money Market Investor Funding Facility (MMIFF). This facility will extend secured loans to private-sector SPVs for the purchase of certificates of deposits, bank notes and financial commercial paper from money market mutual funds. This officially-backed conduit aims to ensure liquidity to meet redemptions by funding vehicles able to hold term paper to maturity. As such, the operation of the MMIFF will complement the operation of the AMLF.

In addition to these facilities, the Fed has started buying the short-term debt of the recently nationalised mortgage agencies to foster liquidity in the agency debt market, while the US Treasury is buying mortgage-backed securities issued or guaranteed by the agencies. Finally, the Fed's foreign exchange swap facility with other major central banks was expanded extensively to ease pressure in offshore US dollar funding markets (see Box B).

The changes in the Fed's operations from late 2007 initially only resulted in changes to the composition of the Fed's balance sheet, as the Fed ran down stocks of securities held outright (Graph A1). However, more recently, there has been a sharp increase in the overall size of the balance sheet, from around US$0.9 trillion at end August 2008 to US$2.0 trillion currently. This expansion has been facilitated by US Treasury funding and the passing of legislation that allows the Fed to pay interest on depository institutions' reserve balances. The Fed now pays the target federal funds rate, which increases banks' demand for reserve balances and helps the Fed to increase its provision of liquidity without putting downward pressure on its policy interest rate. The increase in the Fed's foreign exchange swaps with other central banks (see Box B) has also temporarily expanded the Fed's balance sheet through an increase in gross foreign exchange reserve assets.

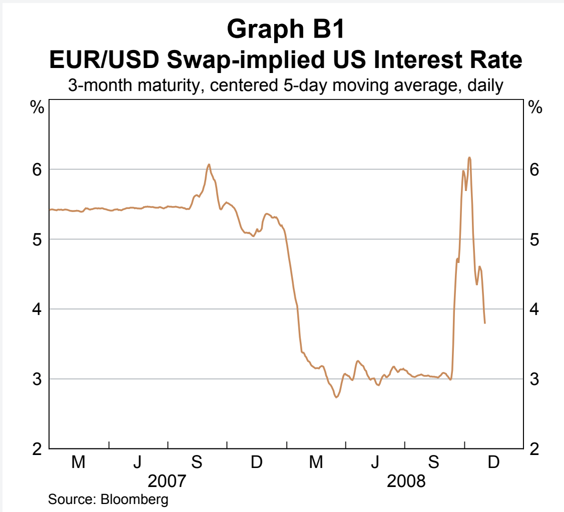
Graph A1
US Federal Reserve Balance Sheet



Source: Thomson Reuters

Box B: US Dollar Swap Arrangements between Central Banks

Since the onset of financial market turbulence in August 2007, the cost of raising US dollars outside the United States has increased relative to funding rates available in local US markets. This is evident in the interest rate premium institutions are paying for US dollars in the euro-US dollar foreign exchange swap market (Graph B1).[1] This situation began to place undue pressure on stable financial institutions outside the United States with no direct exposure to sub-prime related assets or other vulnerabilities currently being experienced in global financial markets.



To ease this pressure, central banks around the world have taken actions to provide US dollar funding to their respective markets using temporary foreign exchange swap lines with the Fed.[2] Initially, in December 2007, these swap arrangements were set up with the European Central Bank (ECB) and the Swiss National Bank (SNB). More recently, these swap lines have been expanded, and new lines have been established with 12 other central banks including the Bank of Japan (BoJ), the Bank of England (BoE) and the Reserve Bank of Australia (RBA) (Table B1). Notably, the decision to provide US dollar funding by some of these central banks, including the RBA, does not reflect vulnerabilities in their own banking sectors; rather, it is intended to alleviate global pressures by improving the distribution of US dollar liquidity across different time zones and locales.

Amounts available under these swap lines with the Fed were increased in several stages over September and October amid continued strains in offshore markets for US dollar funding and strong demand at early US dollar auctions held by some of these central banks. Since mid October, an unlimited amount of US dollar funding has been made available to the ECB,

1 *For more on foreign exchange swaps, see Reserve Bank of Australia (2008),* Statement on Monetary Policy, *February, Box A.*

2 *Also see Reserve Bank of Australia (2008),* Statement on Monetary Policy, *May, Box A.*

Table B1: Amount Available under US Dollar Swap Auction Facilities(a)
US$ billion

	As at 19 Dec 2007	As at 24 Sep 2008	As at 29 Oct 2008	Amount outstanding as at 29 Oct 2008
European Central Bank	20	110	Unlimited	210
Bank of England	–	40	Unlimited	74
Bank of Japan	–	60	Unlimited	70
Sveriges Riksbank	–	10	30	27
Swiss National Bank	4	27	Unlimited	26
Reserve Bank of Australia	–	10	30	18
Danmarks Nationalbank	–	5	15	15
Norges Bank	–	5	15	3
Bank of Canada	–	10	30	0
Banco Central do Brasil	–	–	30	0
Banco de México	–	–	30	0
Bank of Korea	–	–	30	0
Monetary Authority of Singapore	–	–	30	0
Reserve Bank of New Zealand	–	–	15	0
Total	**24**	**277**	**Unlimited**	**442**

(a) Excludes central banks' direct foreign exchange swaps with counterparties
Source: central banks

BoJ, BoE and SNB. These central banks have subsequently been able to lend any amount of US dollars demanded in their respective markets at various maturities of up to three months, against local eligible collateral.

In operational terms, the recipient central bank enters a foreign exchange swap agreement with the Fed in which it borrows US dollars and lends its local currency, and agrees to reverse the transaction at a specified future date. The recipient central bank then auctions the US dollars to its domestic counterparties, typically against local-currency-denominated collateral eligible in its usual domestic liquidity operations. The availability of US dollar funding for sound banks operating outside the United States is therefore less adversely affected by the current turmoil in international financial markets.

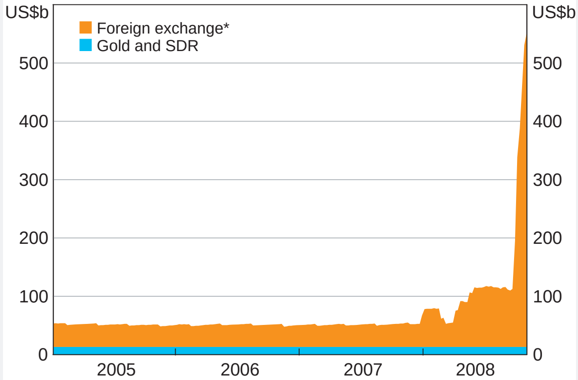
Central bank auctions of US dollars appear to have helped alleviate the upward pressure on overnight interest rates observed in recent weeks. In particular, offshore US dollar rates implied by euro-US dollar swaps fell rapidly, and term LIBOR rates began to fall, following the introduction of fixed-rate auctions for unlimited amounts.

As a result of these swaps, the balance sheet of the Fed has expanded as its gross foreign exchange reserves reflect a temporary increase in foreign currency holdings (Graph B2). The gross foreign exchange reserves of the receiving central banks are unaffected by the swap, as the proceeds are immediately lent out in domestic operations for local currency collateral and are therefore not categorised as official foreign exchange reserve assets. However, the receiving central banks' domestic assets have expanded. ✠

Graph B2

US Federal Reserve – Official Reserve Assets

Assets on the consolidated balance sheet, weekly



* Includes exchange-translation assets, which are revalued daily at market exchange rates.

Source: Thomson Reuters

International Economic Developments

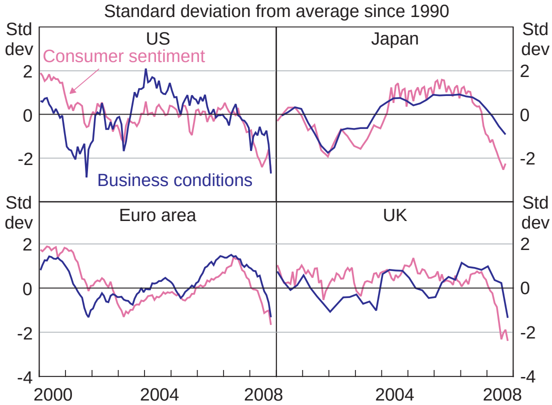
The outlook for the global economy has deteriorated significantly in recent months, with many developed economies in or close to recession and growth slowing noticeably in the emerging economies. This has prompted an easing of monetary policy and expansionary fiscal measures in many countries. While it is too soon to see the full economic impact of the recent intensification of the turmoil in financial markets, it is likely to result in a further softening in economic conditions despite the various policy measures that have been taken to address the problems. Accordingly, global growth forecasts by a range of institutions have been lowered significantly.

The latest data indicate little, if any, growth in most developed economies. In the September quarter, GDP fell by 0.1 per cent in the United States and by 0.5 per cent in the United Kingdom. In Japan and the euro area, where GDP data for the September quarter are not yet available, partial indicators show that economic activity remained very weak, after contracting in the June quarter. While the slowdown in global growth was initially centred on the household sector, conditions in the business sector are now also clearly softening. Labour market conditions have deteriorated noticeably across most developed economies, while data on business and consumer sentiment – which are timelier and generally extend to October – have fallen further from already low levels (Graph 26).

Graph 26

Sentiment and Activity Indicators

Standard deviation from average since 1990



Sources: Bloomberg; CEIC; RBA; Thomson Reuters

Growth also appears to have slowed markedly across east Asia, reflecting both reduced demand for these countries' exports and more subdued domestic demand. Year-ended growth in China fell in the September quarter to a still-rapid 9 per cent, its lowest level since 2003. A number of other east Asian economies have also seen a noticeable moderation in GDP growth recently, and industrial production across the region fell over the six months to August (Graph 27).

The ongoing strains in international financial markets (described in the previous chapter) are increasingly weighing on economic conditions. Bank lending standards have been tightened substantially, particularly for residential mortgages but also for business borrowers (Graph 28). In addition, heightened uncertainty has significantly reduced the appetite of many businesses and households for debt. Global equity markets have fallen dramatically over the past couple of months, adding to earlier losses, and house prices have continued to decline in a number of countries, particularly in the United States and the United Kingdom. As a result, household wealth has fallen in many countries in the June and September quarters, with further substantial falls likely in the December quarter if the current weakness in equity markets is sustained.

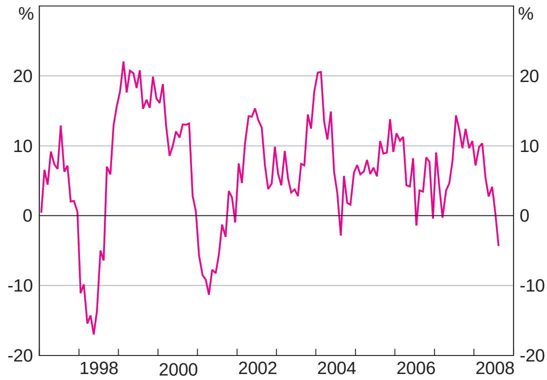
Reflecting these developments, IMF forecasts published in October were for global growth to slow from 5 per cent over the past couple of years to around 4 per cent in 2008 and 3 per cent in 2009. This forecast for 2009 was considerably weaker than that published in July (almost 4 per cent growth), primarily reflecting an expectation that the recent financial turbulence will have significant negative effects on growth in the major developed economies. The Bank's forecasts, detailed in the 'Economic Outlook' chapter, embody a weaker outlook for 2009 than envisaged in most external forecasts (Graph 29).

Consistent with the rapid slowing in global growth and reduced confidence in the outlook, there have been sharp falls in the prices of many commodities over recent months. The fall in oil prices has been particularly rapid, from a peak of US$146 a barrel in early July to be trading recently at around US$65 a barrel. These price falls, together with the weaker outlook for global growth, have seen concerns about the near-term inflation outlook recede in many countries. Although still high, year-ended consumer price inflation has recently fallen in the G7, China and other east Asia.

Graph 27

Other East Asia – Industrial Production*

Annualised six-month-ended percentage change

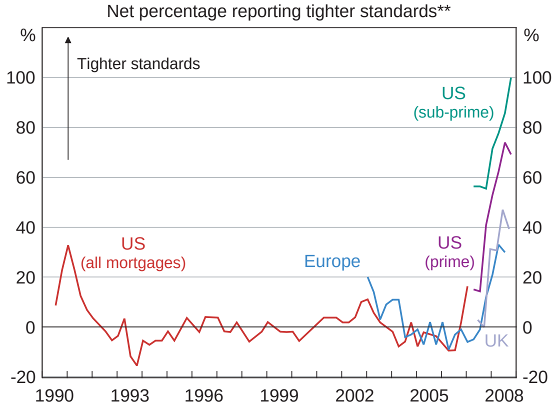


* Excluding Hong Kong and Indonesia due to data issues
Source: CEIC

Graph 28

Credit Standards for Residential Mortgages*

Net percentage reporting tighter standards**

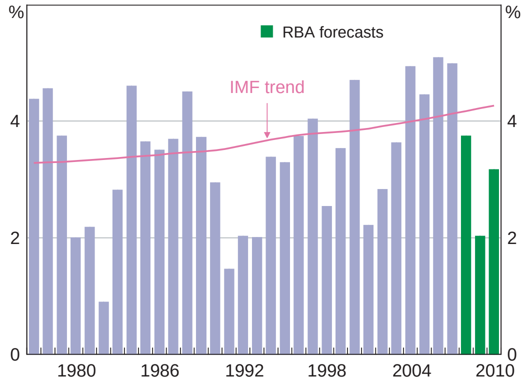


* US and Europe ask whether *lending standards* have changed. UK asks whether the *supply of credit* has changed.
** UK applies twice the weight to a 'considerably' answer relative to a 'somewhat' answer. US and Europe apply an equal weight.
Sources: Bank of England; Board of Governors of the Federal Reserve System; European Central Bank

Graph 29

World GDP Growth

Year-average percentage change

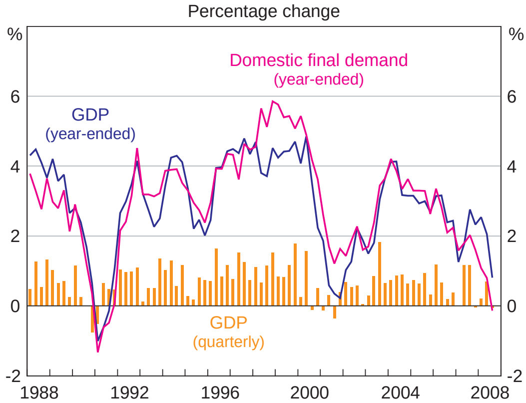


Sources: IMF; RBA

Graph 30

United States – GDP

Percentage change



Source: Thomson Reuters

Major developed economies

In the United States, real GDP fell by 0.1 per cent in the September quarter to be just 0.8 per cent higher over the year (Graph 30). More timely data and forward-looking indicators suggest this weakness has continued into the December quarter. The one area of strength has been exports, which have continued to grow strongly in recent quarters, reflecting the improvement in competitiveness arising from the depreciation of the US dollar from 2002 to early 2008.

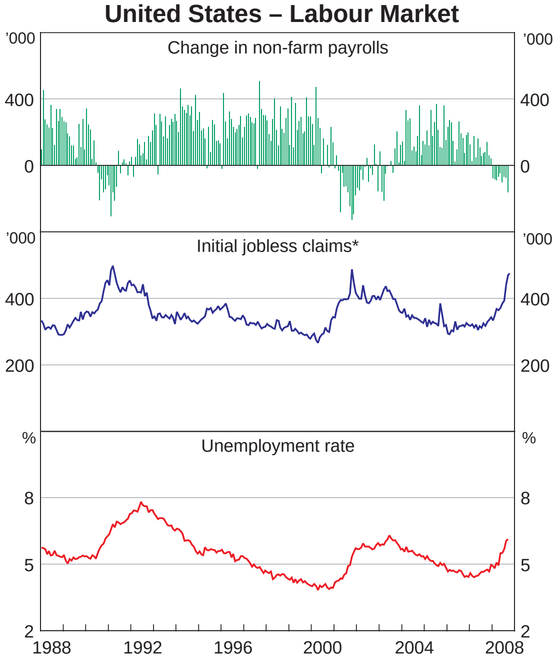
Initially, the weakness in US growth was concentrated in the household sector, beginning with the downturn in housing construction and then spreading to consumer spending. Residential investment has now fallen by more than 40 per cent from its peak in late 2005. Household consumption fell by 0.8 per cent in the September quarter to be unchanged over the year; this was the weakest quarterly outturn for consumption since 1980. The monthly data for consumption spending also show a sharp fall through the course of the quarter, which appears partly to reflect the fading impact of the one-off tax rebates associated with the federal government's stimulus package paid to households largely between late April and the middle of July. More generally, falling house and stock prices, reduced access to credit and a decline in the pace of household income growth are clearly having a significant effect on spending.

More recently, the weakness in the US economy has spread to the business sector. Business investment declined slightly in the September quarter, after expanding at a moderate pace during the first half of the year. Conditions in the labour market have weakened further since the middle of the year, with the unemployment rate rising by 0.6 percentage points over the three months to September and by 1¾ percentage points since the trough in early 2007 (Graph 31). Employment has fallen in each of the first nine months of the year, and data for initial jobless claims have recently picked up sharply.

In Japan, GDP fell in the June quarter, and more recent data suggest economic conditions have remained subdued (Graph 32). The September quarter has seen a further weakening in business sentiment and a fall in industrial production. Slowing economic conditions are flowing through to some softening in the labour market, with the unemployment rate rising slightly and the participation rate falling. Consumer confidence remains low.

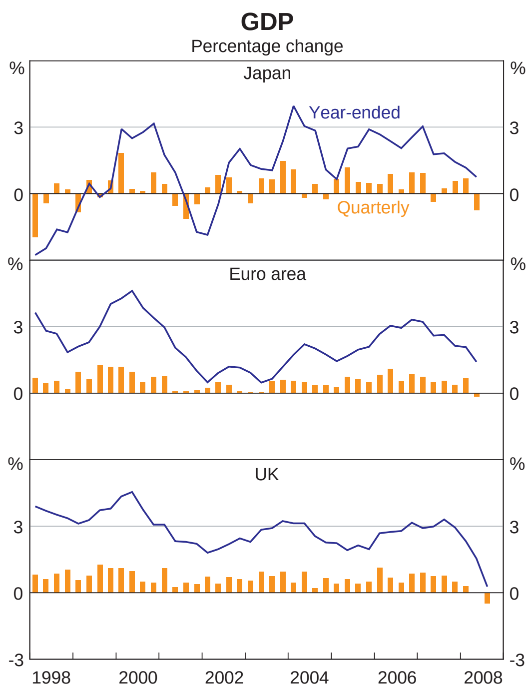
In the euro area, GDP fell by 0.2 per cent in the June quarter and a range of indicators suggest little, if any, growth in the September quarter (Graph 32). Retail sales were unchanged in the September quarter, while industrial production remained weak. Consumer and business sentiment have fallen to around the lows last seen in the early 2000s recession, employment growth has slowed significantly and unemployment has started to drift higher. Conditions are looking particularly weak in the housing sector where overbuilding in some countries has resulted in a significant downturn in euro-area housing approvals for new construction, which have now fallen by nearly 20 per cent over the past year. Together with reduced access to credit, this is putting downward pressure on house prices in a number of countries. The United Kingdom is also undergoing a significant economic slowdown (Graph 32). Real GDP fell by 0.5 per cent in the September quarter after no growth in the June quarter, house prices

Graph 31



* Four-week moving average
Source: Thomson Reuters

Graph 32



Source: Thomson Reuters

have fallen by 15 per cent since October 2007, housing credit growth has slowed sharply and unemployment has increased.

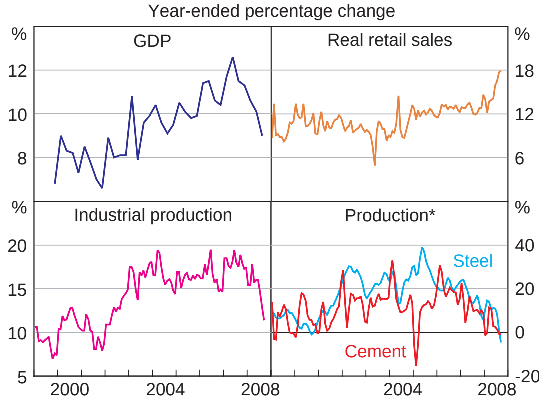
Other major trading partners

The Chinese economy, while still growing at a fast pace, appears to have slowed noticeably, reflecting both weaker demand from developed economies for Chinese exports and the earlier efforts of the Chinese authorities to rein in inflationary pressures. China's GDP rose by 9 per cent over the year to the September quarter, down from more than 12 per cent in mid 2007 and the slowest pace of growth in more than five years (Graph 33). While China does not publish quarter-on-quarter growth rates, growth in the September quarter itself looks to have been quite soft, consistent with anecdotal reports and developments in global freight rates and commodity prices. Chinese data for exports and the corresponding import data for the United States, the euro area and Japan (which collectively account for around one-half of China's exports) also suggest a significant slowing over the past few years (Graph 34). The pace of growth in industrial production has fallen from 18 per cent a year ago to 11 per cent over the year to September – the slowest pace in more than six years – with steel production falling and cement production little changed. On the other hand, growth in real retail sales appears to have accelerated to around 18 per cent over the year to September and growth in fixed-asset investment spending remains strong. While the weakening in some of the Chinese data may be partly due to weather- and earthquake-related disruptions as well as production shutdowns associated with the staging of the Olympics, overall it seems likely that underlying growth has fallen noticeably. Reflecting these developments and the fall in consumer price inflation, the People's Bank of

Graph 33

China – Activity Indicators

Year-ended percentage change

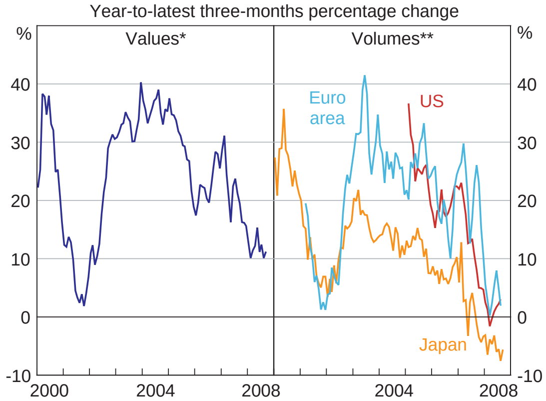


* Smoothed using 5-period Henderson trend
Sources: CEIC; RBA

Graph 34

China – Exports

Year-to-latest three-months percentage change



* Valued in renminbi
** Volume of imports to euro area, Japan and US
Sources: CEIC; Eurostat; Thomson Reuters

China has eased monetary policy, cutting its reserve requirement ratio for banks for the first time since 1999 and lowering its benchmark interest rate.

Growth has also weakened in India, with industrial production growth falling below 5 per cent in smoothed year-ended terms in August for the first time since 2002. With conditions subdued in the agricultural sector, GDP growth slowed to 7.9 per cent over the year to the June quarter, which is the slowest pace since 2004. Partly reflecting concerns about liquidity in the banking system, the Reserve Bank of India has eased monetary policy significantly by reducing its reserve requirement ratio for banks and cutting its benchmark interest rate.

Elsewhere in Asia, growth continues to moderate from its rapid pace of recent years. Preliminary estimates for the September quarter suggest that output contracted for a second consecutive quarter in Singapore and that GDP growth remained subdued in Korea. Over the six months to August the level of industrial production in east Asia (excluding Japan and China) fell slightly, and growth in employment has continued to ease. Declining oil and food prices have relieved inflation pressures somewhat across the region, increasing the scope for central banks to ease policy, with recent cuts to policy rates in Korea, Taiwan, Hong Kong and Vietnam.

The New Zealand economy contracted in the first half of the year, and indicators of activity remained weak in the September quarter. House prices continue to fall, and in September were 6 per cent below their peak in late 2007. While recent personal tax cuts, increased government spending and an easing in drought conditions should provide some boost to activity in coming quarters, the Reserve Bank of New Zealand has cited weakness in the growth outlook in its decisions to reduce the overnight cash rate by a cumulative 175 basis points since mid year.

Commodity prices

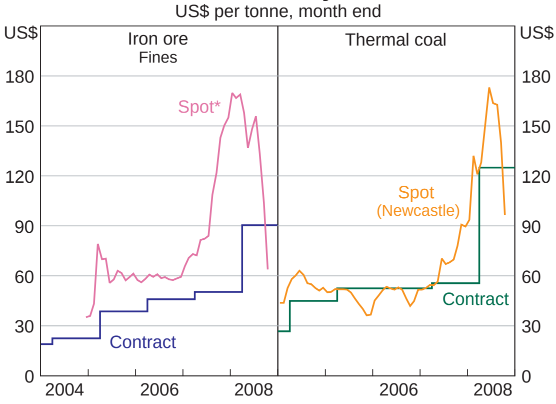
In line with the weakening in the global economy, commodity prices have fallen sharply in recent months. Spot prices for iron ore and coal – Australia's two largest exports – have fallen particularly sharply and there have also been broad-based falls in base metals, rural and oil prices.

The price of iron ore on the spot market has fallen by 60 per cent since the end of July, reflecting a noticeable slowing in growth of steel production and increased global supply. After adjusting for freight costs, the iron ore price on the spot market is now around 30 per cent below the level of the 2008/09 contract price (Graph 35). Thermal coal prices on the spot market have also fallen significantly over recent months, to be around 25 per cent below this year's contract price. As a result, market analysts have

Graph 35

Bulk Commodity Prices

US$ per tonne, month end



* Calculated using the spot import price in China less the spot freight rate from Australia to China

Sources: ABARE; Bloomberg; RBA

significantly revised down their expectations for next year's contract prices for coal and iron ore, with falls now expected.

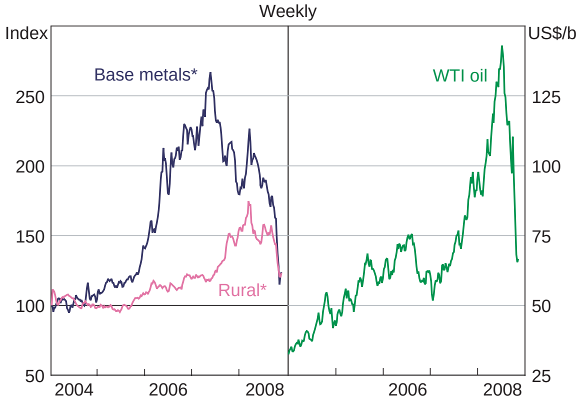
The RBA index of base metals prices has fallen by 30 per cent over the past three months, to be around its lowest level since late 2005 (Graph 36). Evidence of soft demand, including a sizeable increase in inventory levels, has contributed to a sharp fall in copper and aluminium prices. Nickel prices have also fallen sharply since the August *Statement*, to be 75 per cent below their peak recorded in May last year. Nickel prices have fallen below the production cost of some producers, leading to the temporary closure of several operations. Meanwhile, gold prices have held up somewhat better, benefiting from demand as a 'safe-haven' asset during the recent volatility in financial markets. Oil prices have fallen by 45 per cent since the time of the August *Statement*, and by 55 per cent from their peak of US$146 a barrel in early July, to be currently trading at around US$65 a barrel (Graph 36).

Rural commodity prices have generally fallen over recent months, led by a 15 per cent fall in wheat prices (Graph 36). Expectations of a strong increase in global wheat production this season continue to weigh on prices, with recent forecasts pointing to a record global crop of roughly 680 million tonnes, more than 10 per cent above last season's crop. Wool prices have also softened noticeably in recent months, primarily reflecting softer demand.

Graph 36

Commodity Prices

Weekly



* 2 January 2004 = 100, SDR terms
Sources: Bloomberg; RBA

Domestic Economic Conditions

After an extended period of strong growth, the pace of economic activity has now slowed noticeably. GDP increased by 0.3 per cent in the June quarter, to be 2.7 per cent higher over the year, a marked step down from the strong rates seen during 2007 (Graph 37, Table 7). More timely indicators suggest that activity has remained soft, a trend broadly confirmed in the Bank's business liaison program.

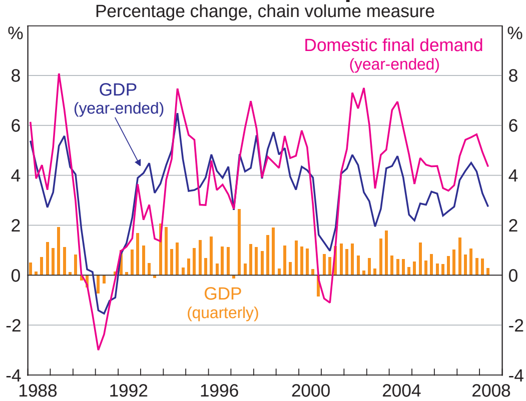
The easing so far has been most evident in the household sector (Graph 38). Retail sales have been weak since early in the year, consumer sentiment has been falling, the pace of household borrowing has slowed, and conditions in the housing market have softened. In contrast, increases in commodity prices in recent years have provided a significant boost to business profits and investment. Nonetheless, as in the household sector, survey measures of confidence in the business sector have been softening and the pace of business borrowing has slowed significantly.

Looking ahead, weaker global growth and the recent sharp falls in financial and commodity markets are likely to lead to a further slowing in activity, including a scaling-back of investment plans in the mining, construction and

Graph 37

Demand and Output

Percentage change, chain volume measure



Source: ABS

Table 7: Demand and Output

Percentage change

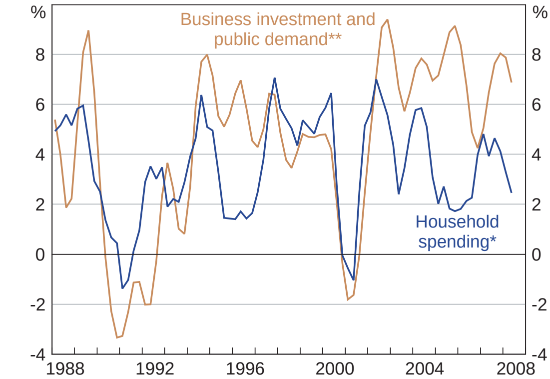
	March quarter 2008	June quarter 2008	Year to June quarter 2008
Domestic final demand	1.1	0.9	4.3
GNE[(a)]	1.3	0.3	4.4
Net exports[(b)]	–0.7	0.0	–1.8
GDP	0.7	0.3	2.7
Non-farm GDP	0.7	0.5	2.5
GDP adjusted for changes in the terms of trade	1.0	3.3	6.3

(a) Adjusted for the statistical discrepancy
(b) Contributions to GDP growth
Sources: ABS; RBA

Graph 38

Components of Domestic Final Demand

Year-ended percentage change



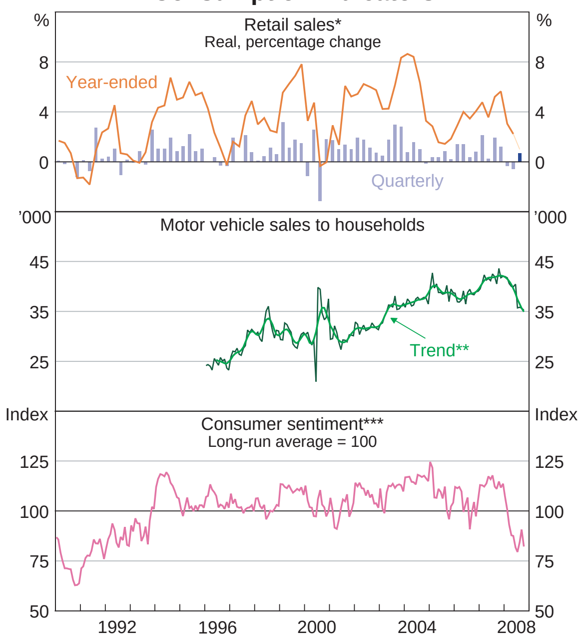
* The sum of household consumption, dwelling investment and ownership transfer costs

** Smoothed using a 7-period Henderson trend

Sources: ABS; RBA

Graph 39

Consumption Indicators



* RBA estimate for September quarter 2008

** 13-period Henderson trend

*** Average of Roy Morgan Consumer Confidence Rating and Westpac-Melbourne Institute Consumer Sentiment Index

Sources: ABS; FCAI; Melbourne Institute and Westpac; RBA; Roy Morgan Research

other sectors. Business surveys as well as information from the Bank's liaison suggest that difficulty accessing finance is also a growing constraint on firms' investment plans. However, working in the opposite direction, the recent large depreciation of the exchange rate and the easing of monetary policy will support economic activity, with the Government's fiscal measures – amounting to a little less than 1 per cent of GDP in 2008/09 – boosting consumption and home-building in particular.

Household sector

Household spending slowed significantly in the first half of 2008. Consumption fell by 0.1 per cent in the June quarter, the first quarterly decline since 1993. This weakness was consistent with ongoing tightness in financial conditions, high petrol prices and subdued consumer confidence. More timely data as well as the Bank's liaison suggest that consumption remained weak in the September quarter and into the month of October. Real retail sales appear to have increased by only around ½ per cent in the quarter, and motor vehicle sales declined by 8 per cent in the three months to October. While measures of consumer sentiment have been volatile, they remain around the low levels last seen in the early 1990s (Graph 39). However, the Government's stimulus package – the bulk of which represents one-off payments to pensioners, carers and low-to-middle income families – is expected to support household consumption in the December and March quarters.

The weakness seen in household spending is in line with the slowing growth in real household disposable income and a decline in household net worth. Growth in real household disposable income, after subtracting interest payments, was 2.5 per cent over the year to the June quarter, which is the slowest pace since early 2003. Interest payments peaked at 14½ per cent of disposable income in the June quarter, although the recent cuts in interest rates and slower growth in household debt could see this ratio fall back to around 13 per cent by end 2008. Total household net wealth is estimated to have fallen by around 8 per cent from its level at the end of 2007. This mostly reflects a large decline in the value of equity wealth (Graph 40).

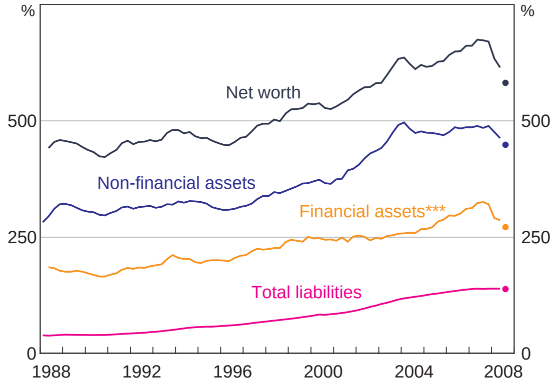
In response to the tight financial conditions and falls in equity prices, growth in household borrowing has slowed. The pace of household credit growth declined to an annualised rate of 6 per cent over the six months to September from an average of around 15 per cent over the past decade (Graph 41). This reflected weaker growth in housing credit and a contraction in personal credit, especially for margin lending. New lending for housing has slowed markedly, although the pace of decline has stabilised in recent months. Housing loan approvals in August were 26 per cent below their mid-2007 peak; as a ratio to the total value of the dwelling stock, new housing loans have fallen to their lowest level since the mid 1990s.

As a result of tighter financial conditions, residential property markets across the country have also weakened over 2008. According to the ABS measure, house prices fell by 1.8 per cent in the September quarter, with growth over the year slowing to 2.8 per cent (Table 8, Graph 42). Other house price measures, which use different techniques to control for changes in the composition of property transactions, display similar falls. Residential auction clearance rates, which are timely indicators of housing market conditions, have remained well below average levels in Sydney and Melbourne through October.

Graph 40

Household Net Worth*

Per cent of household disposable income**

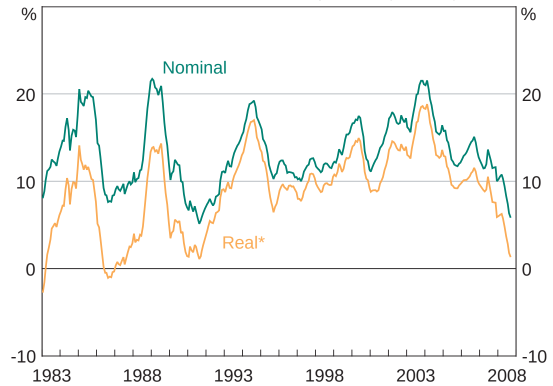


* Dots are September quarter 2008 estimates
** Before the deduction of interest payments
*** Includes financial assets of unincorporated enterprises
Sources: ABS; RBA

Graph 41

Household Credit

Six-month-ended annualised percentage change



* Deflated by trimmed mean CPI
Source: RBA

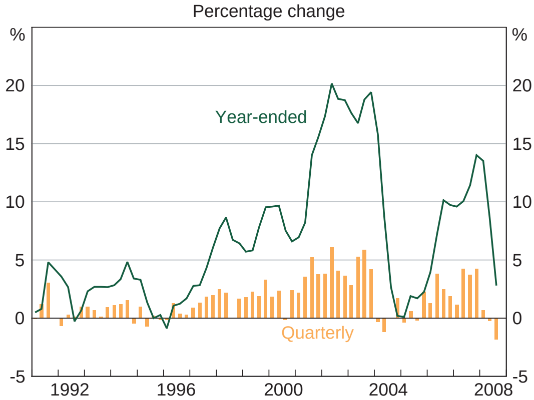
Table 8: National House Prices
Percentage change

	June quarter 2008	September quarter 2008	Year to September quarter 2008
ABS	–0.2	–1.8	2.8
RP Data-Rismark	–1.6	–1.6	0.9
APM	–1.0	–1.6	1.4

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

Graph 42

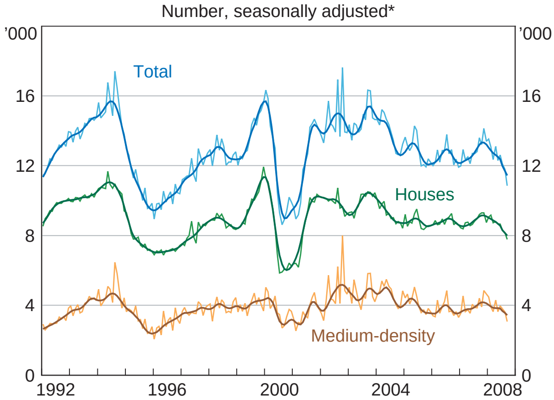
House Prices
Percentage change



Source: ABS

Graph 43

Building Approvals
Number, seasonally adjusted*



* Smoothed line is the ABS measure of trend
Source: ABS

Housing construction activity has been subdued. Total dwelling investment increased modestly in the June quarter, reflecting a rise in the construction of new dwellings that more than offset a contraction in renovation activity. Forward-looking indicators and the Bank's liaison point to ongoing softness in construction, particularly in New South Wales and Queensland. The number of private building approvals fell by 8.5 per cent in the September quarter, driven by falls in both houses and the medium-density sector (Graph 43). The Bank's liaison suggests that housing construction is being constrained by reduced access to finance and subdued consumer confidence, although the recent falls in interest rates and the fiscal stimulus package – which includes an increase in the First Home Owner Grant for purchases of existing and new dwellings – are expected to boost conditions in this sector in the coming year.

Business sector

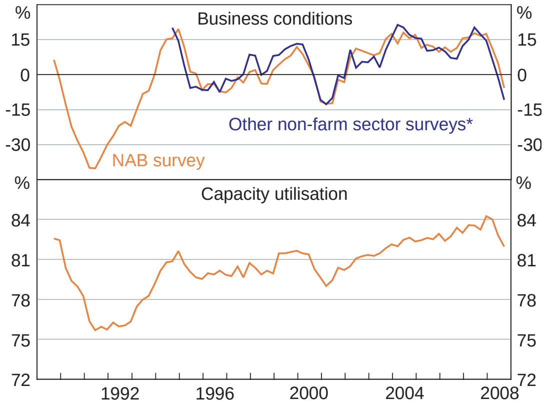
Conditions in the business sector have eased, although this is more evident in information from business surveys and the Bank's liaison program than in the less timely macroeconomic data available. The most recent data for aggregate profits are for the June quarter and showed an increase of 13 per cent over the year – reflecting the surge in global resource prices – taking the profit share to 32 per cent of GDP, its highest level since the 1970s. However, surveys suggest overall business conditions have softened to be below average levels (Graph 44). Survey measures of business confidence have fallen to levels that are well below long-run averages; mining sector confidence and conditions had been significantly stronger than in other sectors, but they too fell in the September quarter as global commodity prices declined. The NAB survey's capacity utilisation measure also eased in the quarter.

Buoyed by strength in the mining sector, business investment has recently been at a very high level as a share of GDP (Graph 45). However, forward-looking indicators of investment have been mixed. The latest capital expenditure (Capex) survey, conducted in July and August, pointed to strong growth in 2008/09, in the mining sector and a range of other sectors. In contrast, private-sector surveys suggest the pace of investment growth could weaken materially, with the net balance of firms planning to increase investment over the coming period at below the long-run average in

Graph 44

Business Surveys

Net balance; deviation from long-run average



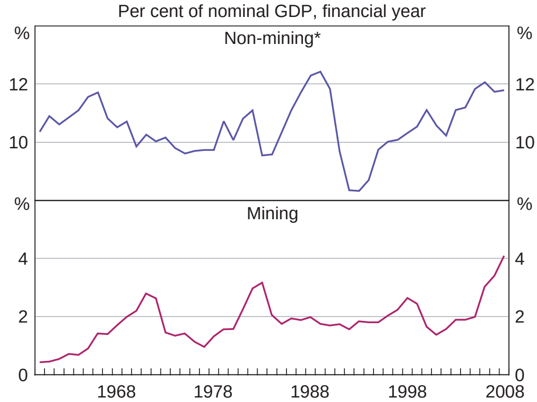
* Weighted average of data from other business surveys, scaled to match the NAB series

Sources: ACCI; CBA; NAB; RBA; Sensis

Graph 45

Business Investment

Per cent of nominal GDP, financial year



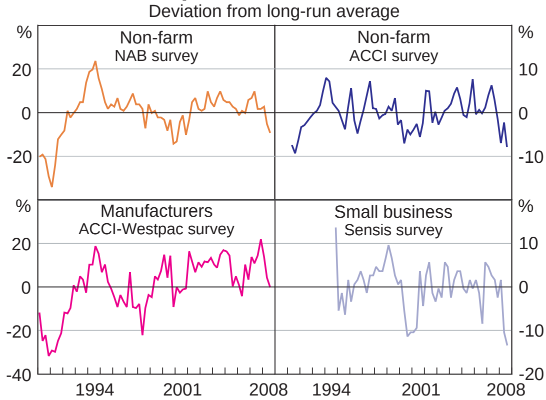
* Excluding livestock; adjusted for the privatisation of Telstra and for second-hand asset transfers between the private and other sectors.

Sources: ABS; RBA

Graph 46

Expected Investment

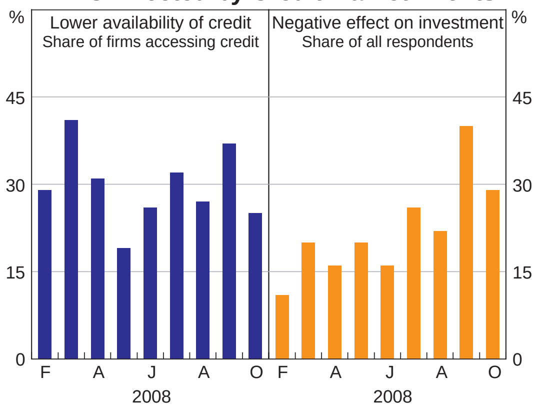
Deviation from long-run average



Sources: ACCI; ACCI-Westpac; NAB; Sensis most surveys (Graph 46). The Bank's liaison suggests that many commercial building projects in the early stages of planning have been put on hold and, consistent with this, the value of non-residential building approvals has weakened over recent months. The Bank's liaison suggests that some mining investments at the early stage of development may also be postponed.

Graph 47

Firms Affected by Credit Market Events*



* From RBA liaison; construction share of sample held constant
Source: RBA

Growth in businesses' external funding has slowed sharply over the past six months – in response to the higher cost of debt, tighter lending standards and restricted access to funding markets – which will weigh on investment activity. Business debt funding grew by 8 per cent in six-month annualised terms over the year to September, down from average annual growth of 13 per cent over the prior five years. Firms have indicated in business surveys and the Bank's liaison that they are having more difficulty obtaining finance and that this is having an impact on their investment plans (Graph 47). Nonetheless, at the aggregate level, balance sheets in the non-financial corporate sector remain in good shape; corporate gearing is around the average of the past 15 years, and aggregate net interest payments as a share of profits remain at low levels (see also the 'Domestic Financial Markets' chapter).

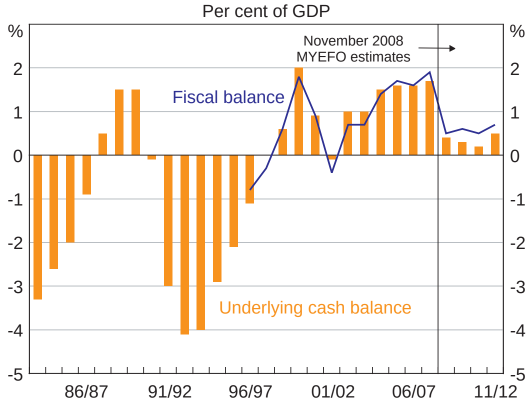
Australian Government Budget

The Australian Government released updated economic forecasts and budget estimates in the *Mid-Year Economic and Fiscal Outlook*. The expected underlying cash surplus for 2008/09 was revised down compared with the May Budget, to $5.4 billion, or 0.4 per cent of GDP (Graph 48). The downward revisions mainly reflected lower expected taxation revenue and the fiscal stimulus package. In subsequent years, the Budget surplus has also been revised down compared with the May Budget, largely reflecting a weaker outlook for the global and domestic economies.

Graph 48

Australian Government Budget Balance

Per cent of GDP



Source: Australian Treasury

Farm sector

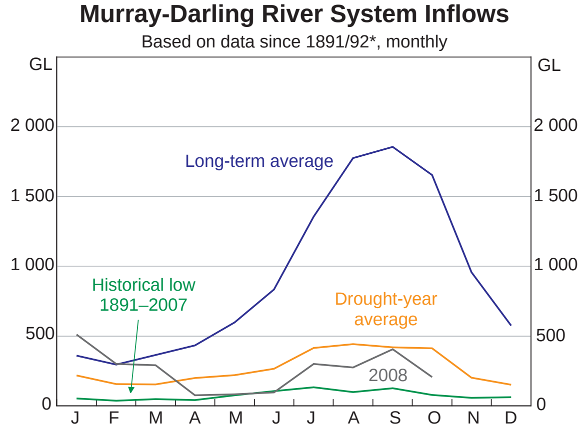
Conditions in the rural sector have deteriorated slightly over the past few months, as a number of regions – particularly in South Australia and Victoria – experienced below-average rainfall in recent months. As a result, a number of rural agencies have revised down production forecasts for wheat and other winter crops. Flows into the Murray-Darling river system have been low, suggesting that water availability for irrigation is likely to remain modest (Graph 49). Based on information from the Australian Bureau of Agricultural and Resource Economics (ABARE) and other rural agencies, farm output is expected to rise by 14 per cent in 2008/09, mainly reflecting an increase in wheat and other cereals crops (Graph 50).

External sector

The large increases in this year's bulk commodity contract prices have provided a significant boost to export revenue. As a consequence, the trade balance has moved from a deficit of 2½ per cent of GDP in early 2008 to an estimated surplus of ½ per cent of GDP in the September quarter, and the current account deficit has narrowed (Graph 51).

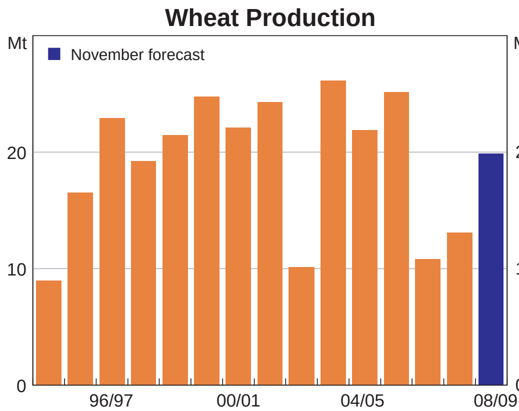
This turnaround in Australia's trade accounts can mainly be traced to a more than 50 per cent rise in the value of mining exports over the year to the September quarter (Graph 52). While this primarily reflects the recent large increase in the 2008/09 contract prices for iron ore and coal exports, resource

Graph 49



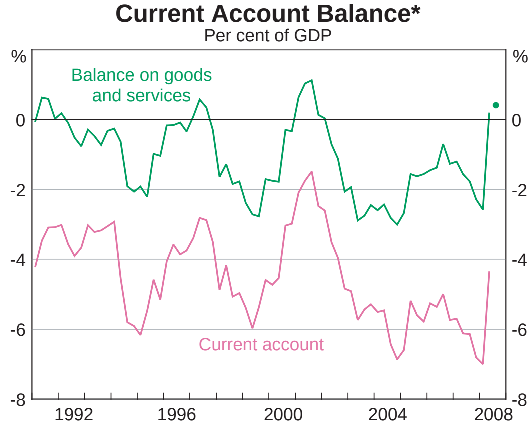
* Excludes Snowy releases
Source: Murray-Darling Basin Commission

Graph 50



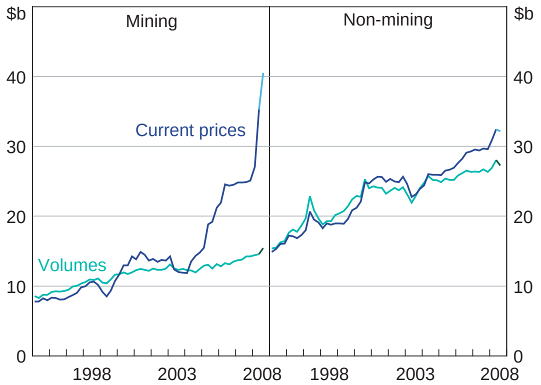
Source: ABARE

Graph 51



* Excludes RBA gold transactions; RBA estimate for September quarter
Sources: ABS; RBA

Graph 52
Exports*



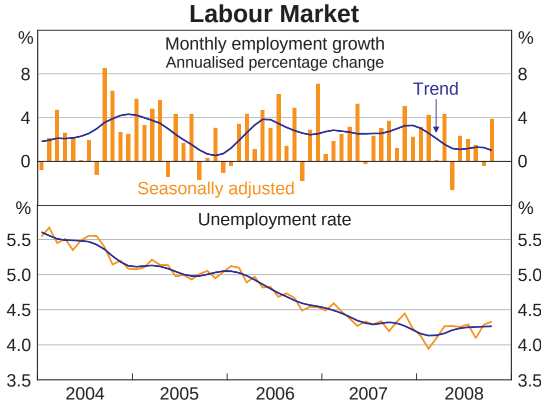
* Volumes data re-referenced to 2003/04 prices; RBA estimate for September quarter
Sources: ABS; RBA

volumes are estimated to have also increased in the September quarter. Looking forward, ABARE forecasts the volume of iron ore exports to rise by 15 per cent in 2009 as a number of projects begin production. LNG exports are expected to be boosted by the completion of a number of gas fields in late 2008 and early 2009, with the largest being the Angel gas field that will supply the recently completed North West Shelf Project's fifth compression train.

Import volumes are estimated to have increased by around 2 per cent in the September quarter, to be roughly 12 per cent higher over the year. The moderation in the quarter is broadly consistent with the slowdown in the pace of domestic demand growth, with solid growth in capital imports partly offset by a decline in consumption imports.

The sharp decline in the value of the Australian dollar has been reflected in a 21 per cent fall in the real trade-weighted index since its peak in June 2008. The index is now around its post-float average after a protracted period above that level. The large depreciation of the exchange rate will provide a stimulus to export volumes over the period ahead, particularly for manufactured and service exports, providing some offset to the effect from the slowing growth in Australia's trading partners (see 'Box C: The Exchange Rate and the Economy'). It is also expected to boost demand in the import-competing sector. While the terms of trade increased by almost 20 per cent over the year to the September quarter, they are expected to fall back over 2009 in response to falling global commodity prices (for further details, see the 'Economic Outlook' chapter).

Graph 53
Labour Market



Source: ABS

Labour market

Labour market conditions have eased in recent months. Employment grew by 0.4 per cent in the three months to October, down from a quarterly pace of around 0.7 per cent through 2007. After falling significantly over 2006 and 2007, the unemployment rate has remained broadly constant for much of this year, at around 4¼ per cent (Graph 53).

Recent employment growth has been weakest in New South

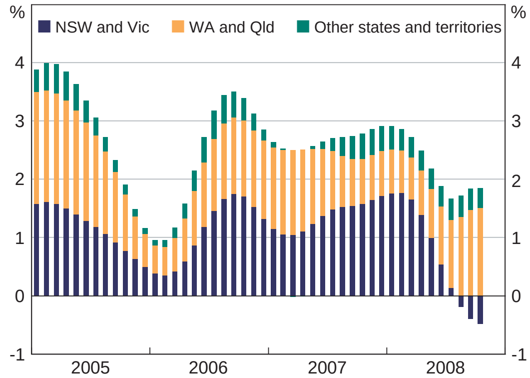
Wales and Victoria, while the unemployment rate in the former has been trending upwards since early this year (Graph 54). In contrast, the resource-rich states of Western Australia and Queensland continue to record firm employment growth and the lowest unemployment rates among the mainland states.

Forward-looking indicators of labour demand have also eased, suggesting the market will soften further in the period ahead. Job vacancies, as reported by the ANZ Bank, have declined significantly since the start of the year, with both the number of newspaper and internet advertisements falling. Reports of softer hiring intentions are becoming more widespread in the Bank's liaison, and business surveys indicate that firms' hiring intentions have eased to a little below long-run averages (Graph 55).

Graph 54

Contributions to Trend Employment Growth*

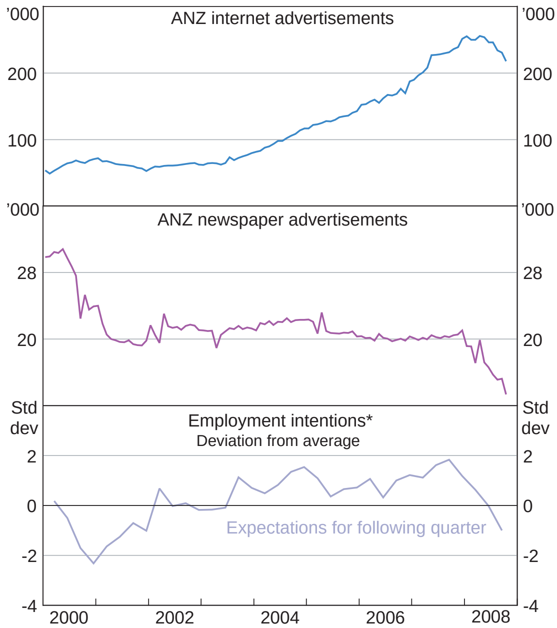
Six-month annualised percentage change



* Sum of state contributions may not equal total due to additivity issues
Source: ABS

Graph 55

Labour Market Indicators

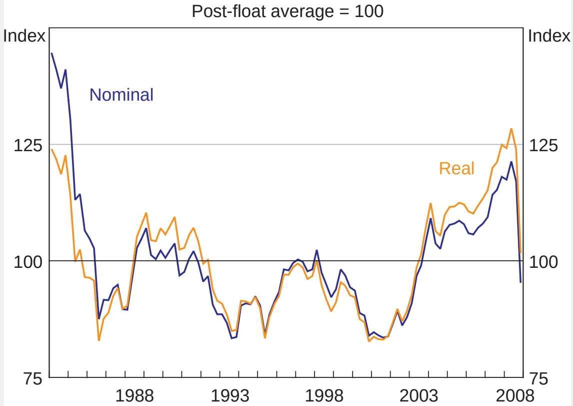


* Weighted average of data from various business surveys, with weights calculated by the RBA using the principal component method
Sources: ACCI; ANZ; CBA; NAB; RBA; Sensis; Westpac

Box C: The Exchange Rate and the Economy

The exchange rate has depreciated sharply since the August *Statement*, with the Australian dollar depreciating against all major currencies. The trade-weighted index (TWI) has fallen by 20 per cent since August, amongst the largest change in any three-month period since the currency was floated in December 1983 (Graph C1). The level of the real TWI is now at a five-year low, and is around its post-float average. This large depreciation reflects a range of factors, including the recent rapid deterioration in the outlook for world growth, the sharp fall in commodity prices, the narrowing of the interest rate differential between Australia and the rest of the world, and the generalised scaling-back of international investments (see also the 'International and Foreign Exchange Markets' chapter).

Graph C1
Australian TWI
Post-float average = 100



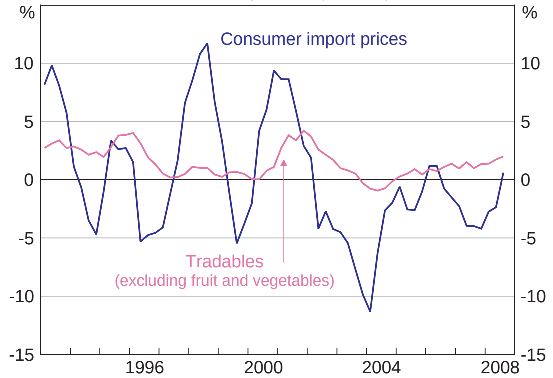
Source: RBA

The depreciation of the exchange rate will have significant implications for the domestic economy, with the effects flowing through several channels. First, the depreciation will boost the prices of imported goods and services and (holding other factors constant) will put upward pressure on consumer price inflation, feeding through rapidly into the prices of some goods, such as petrol, but more slowly for many others. Traditionally, estimates of the extent of the aggregate exchange rate pass-through into the CPI were quite large, but recent experience suggests the exchange rate effect on inflation has become more muted and protracted over time.[1] For example, the large cycles in import prices in recent years appear to have been reflected in much smaller swings in tradables inflation at the consumer level (Graph C2). Of course, any upward pressure on inflation in the current episode will be offset somewhat to the extent that the depreciation has been associated with a general slowing in the world economy and falls in global commodity prices (including oil).

Second, the depreciation can have effects on businesses with foreign-currency-denominated assets and liabilities and foreign-currency income streams or servicing obligations. Australian financial institutions and many large corporates with foreign currency borrowings typically

1 *Recent empirical work suggests that, holding other effects constant, a 10 per cent increase in import prices boosts consumer prices by around 1 per cent, with the effect spread over about three years. For further discussion of this issue, see Heath A, I Roberts and T Bulman (2004), 'Inflation in Australia: Measurement and Modelling', in C Kent and S Guttmann (eds),* The Future of Inflation Targeting, *Proceedings of a Conference, Reserve Bank of Australia, Sydney, pp 167–207.*

hedge their exchange rate exposures, largely insulating themselves from the effects of exchange rate changes on their balance sheets.[2] However, non-financial companies follow a range of policies regarding hedging of foreign revenues and expenses, and based on experiences in previous episodes we can expect that some companies will report hedging losses or gains in their accounts.



Third, holding other factors constant, the depreciation will benefit import-competing and export industries, which will experience an improvement in their international competitiveness. Exporters that are price-takers in international markets (for example commodity exporters with prices denominated in US dollars) will benefit from higher profitability and will have an incentive to increase supply. Exporters such as the tourism and education industries where prices are set in Australian dollar terms will benefit from increased foreign demand, given that their prices will have fallen relative to suppliers in other countries. By themselves, these effects will be stimulatory for growth and will show up in the national accounts as an increased contribution to growth from net exports (and a reduction in the current account deficit). Of course, it must be remembered that the depreciation is occurring in an environment of slowing world growth, lower commodity prices, and a reduction in Australia's income and growth prospects, which will work in the opposite direction to the stimulatory effects of the depreciation.

More generally, during the post-float period the exchange rate has acted as a form of shock absorber for the Australian economy. The recent depreciation follows a period when the exchange rate appreciated substantially, in line with the historically large run-up in the terms of trade. That appreciation was contractionary for the economy, but helpful in that it contributed to holding down inflation and reducing pressures on resource utilisation at a time of strong growth in domestic incomes. During the Asian crisis in the late 1990s the depreciation of the currency was a key part of the adjustment mechanism that helped the economy to continue to weather that storm, despite a sharp decline in growth in a number of our key trading partners. The recent large depreciation will also be helpful in reducing the impact of the marked deterioration in the outlook for world growth and the associated fall in global commodity prices.

2 *See Becker C and D Fabbro (2006), 'Limiting Foreign Exchange Exposure through Hedging: The Australian Experience', RBA Research Discussion Paper No 2006-09.*

Domestic Financial Markets

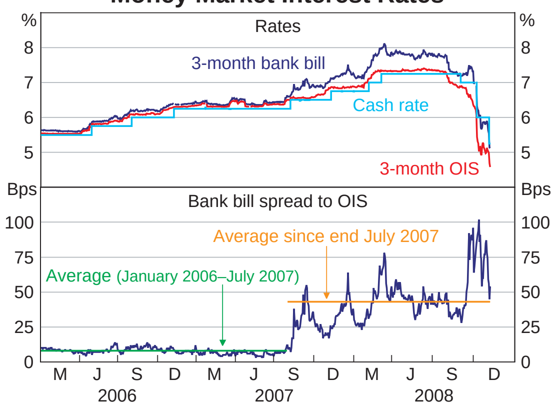
Money market and bond yields

The escalation of pressures in international markets in recent months has been reflected in Australian markets, although generally to a lesser extent. Term funding rates for banks increased toward the middle of September, as the US authorities intervened to support Fannie Mae, Freddie Mac and AIG, and Lehman Brothers filed for bankruptcy. The spread between 3-month bank bills and the expected cash rate increased sharply, doubling from 40 to 80 basis points. This rise in spreads occurred following the Reserve Bank's reduction in the target for the cash rate by 25 basis points in early September to 7.0 per cent, and despite the market's anticipation of further policy easing. The strains on the domestic market were amplified when offshore commercial paper markets effectively closed.

The Board's decision to reduce the cash rate by 100 basis points in early October – double the market's expectation – resulted in some reduction in bank bill rates, but the global rise in risk aversion limited the decline in money market yields, with the 3-month spread increasing to over 100 basis points (Graph 56). More recently, as authorities (including those in Australia) have announced more aggressive measures to support financial markets and economic activity, bill spreads have narrowed considerably. After the cash rate target was reduced to 5.25 per cent in early November, the 3-month bill rate declined to 5.15 per cent, more than 200 basis points below its level of three months ago.

Graph 56

Money Market Interest Rates



Sources: RBA; Tullett Prebon (Australia) Pty Ltd

The reductions in the cash rate by the Reserve Bank and the market's expectations of further falls to come have seen longer-term interest rates decline significantly. The 10-year swap rate has fallen from 7.0 per cent in early August to be around 5.8 per cent. This decline has exceeded that in government bond yields, as the swap spread has fallen in line with those in most currencies.

In its market operations, the Bank has continued to encounter heightened demand for funding from banks and other financial institutions. Given the increased size of central bank operations – including the US dollar swap discussed below – and to give institutions greater flexibility in managing their liquidity in this period of distressed markets, the Bank announced in early October that 'related-party' residential mortgage-backed securities (RMBS) and asset-backed commercial paper (ABCP) could be pledged as collateral on repurchase agreements with the Bank. The Bank also began offering 6- and 12-month funding terms each day in its operations – previously such long terms had only been offered sporadically. Since then, a combined value of around $20 billion of liquidity has been injected at these longer terms. To improve liquidity in markets more broadly, the pool of eligible collateral was expanded further to include highly-rated commercial paper, most ABCP and AAA-rated securities in early November. These arrangements will remain in place until June 2009.

In accommodating the market's demand for funding, the Bank has significantly expanded the size of its balance sheet. When tensions amplified in mid September, the Bank increased aggregate exchange settlement (ES) balances from $1½ billion to reach a peak of more than $11 billion in mid October. More recently, as conditions have stabilised somewhat, the Bank has acted to reduce settlement balances to around $6 billion. The reduction in ES balances has in part been achieved by the Bank commencing in late September to offer term deposits to its counterparties. Under this facility, institutions can bid to hold short-term deposits at the Bank (generally, for periods of up to two weeks). Offering term deposits enables the Bank to expand its demand for private-sector securities, so assisting banks' funding, and to satisfy financial institutions' demand for risk-free, liquid assets, without increasing ES balances too far which might impede the efficient operation of the cash market.

In September, the Bank also began auctioning US dollars to domestic market participants, taking Australian dollar-denominated securities as collateral. These operations were funded by a US$30 billion swap facility with the Federal Reserve, similar to those the Fed has arranged with other central banks (see Box B). To date the RBA has held three auctions. These facilities are designed to alleviate the shortage of US dollar funding for institutions that usually rely on the foreign exchange swap market (through which they exchange one currency for another, with an agreement to unwind the flows at a later date). Foreign exchange swap markets had become quite dysfunctional during September, with the implied cost of borrowing US dollars rising sharply against all other currencies. The co-ordinated central banks' actions were effective in lowering the cost of US dollar funding, including against Australian dollars. As noted in the chapter on 'International and Foreign Exchange Markets' and in Box B, this improvement in foreign exchange swap markets was particularly noticeable after a number of central banks began providing unlimited US dollars at a fixed price under these facilities.

Equities

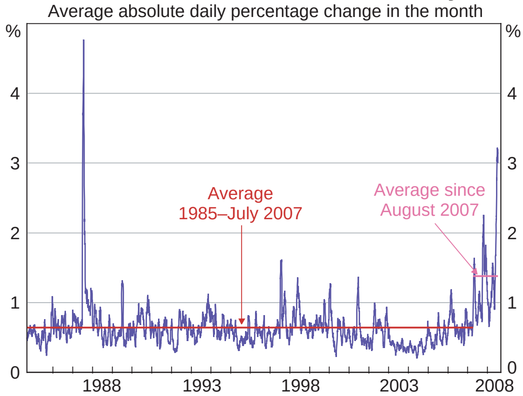
The past couple of months have been the most volatile for the Australian share market since 1987, as has been the case in share markets in most countries. Over the past month, aggregate daily share price movements have averaged just over 3 per cent – about five times above the pre-crisis average of 0.6 per cent (Graph 57). Volatility has been elevated since late 2007. This is an exceptionally long period of heightened volatility, with almost one-half of the 40 largest daily price movements since 1980 occurring this year.

The ASX 200 has experienced a substantial decline since the last *Statement*, falling by 16 per cent to be 39 per cent below its peak in November last year and its lowest level since June 2005 (Graph 58). The fall in Australian equities from their peak last year is of a similar magnitude

Graph 57

Australian Share Market Volatility

Average absolute daily percentage change in the month

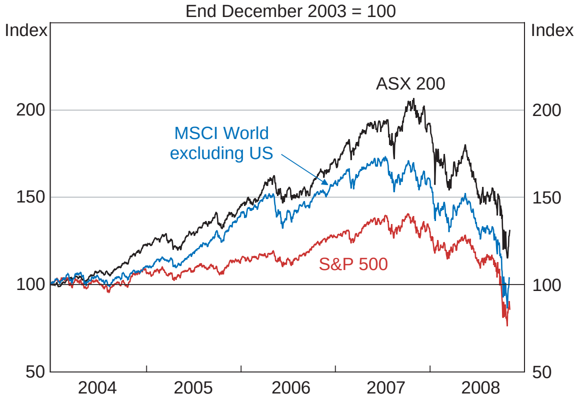


Sources: Bloomberg; RBA

Graph 58

Share Price Indices

End December 2003 = 100



Sources: Bloomberg; Thomson Reuters

to those in international equities, despite the fact that profits have held up much better than in most other countries.

In response to the volatile market conditions and similar actions by international regulators, ASIC temporarily banned short selling of all listed stocks for 30 days from 22 September. The initial ban has been extended until 18 November 2008 for non-financials and 27 January 2009 for financials; other aspects of the original ban remained unchanged, including the exceptions for market-makers and hedging of existing positions. Once these bans are lifted, disclosure of short sales will be required. ASIC noted that while short selling ordinarily plays a valuable role, recent market conditions and extensive short selling of stocks created the risk of unwarranted price fluctuations which, if left unchecked, could threaten the operation of fair and orderly stock markets.

While all three broad sectors of the Australian share market have fallen over the past three months, there have been particularly large falls in resource companies' share prices on sharp declines in commodity prices and expectations of slower economic growth in developing economies. Since the last *Statement,* resource companies' share prices have fallen by 32 per cent, to be 44 per cent below their peak in May this year (Table 9). In contrast, financials have fallen by 7 per cent over the past three months, less than the 35 per cent falls in equivalent indices overseas. The relatively sound capitalisation and profit outlook of Australian banks, as well as a range of domestic policy announcements – including the Australian Government's broad guarantee of deposits and wholesale funding, and the larger-than-expected falls in the cash rate – contributed to the relatively good performance of Australian financials.

Profits announced by listed Australian companies in the recent reporting season were broadly in line with expectations so there was little aggregate impact on share prices. Underlying profit – which excludes significant items and asset revaluations/sales – increased by just 1 per cent in the most recent half year compared to the corresponding period in 2007. This compares with average profit growth of 23 per cent over the previous three years.

Table 9: Sectoral Movement in the ASX 200

	Per cent change since		
	End Jul 2008	End 2007	**Lowest since**
Resources	–32.1	–33.3	January 2007
Financials	–7.4	–38.0	August 2004
All other sectors	–12.5	–29.9	May 2005
ASX 200	–16.3	–34.2	June 2005

Source: Bloomberg

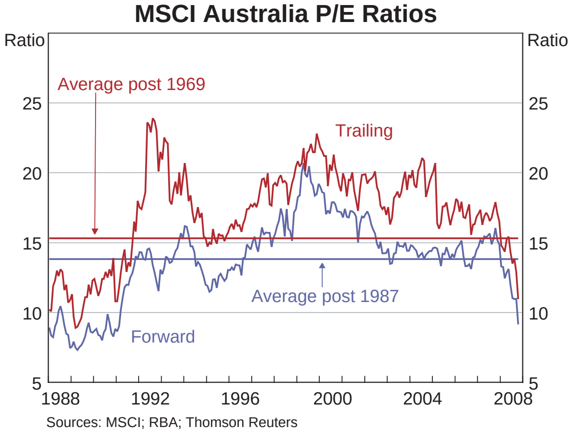
By sector, the increase in profits was driven by resources and other non-financial companies. The profits of resource companies rose 21 per cent, reflecting strong growth in production volumes and high commodity prices. For other non-financial companies, profits increased by 36 per cent. This was offset by losses for real estate investment trusts (REITs) and diversified financials, and a lower level of profits for insurance companies, reflecting increased debt funding costs and a decline in revenue associated with falls in asset markets. The credit market strains have seen entities with complex financial structures and high leverage come under pressure, with many of these entities looking to deleverage their balance sheets.

The impact of the credit market turmoil was evident in companies' latest profit results. For many companies, interest payments increased sharply, reflecting the higher cost of borrowing. Announced buybacks were limited, with companies choosing to retain cash. Some companies scaled back dividends, particularly REITs that were previously borrowing against appreciating asset values to fund part of their dividend payments.

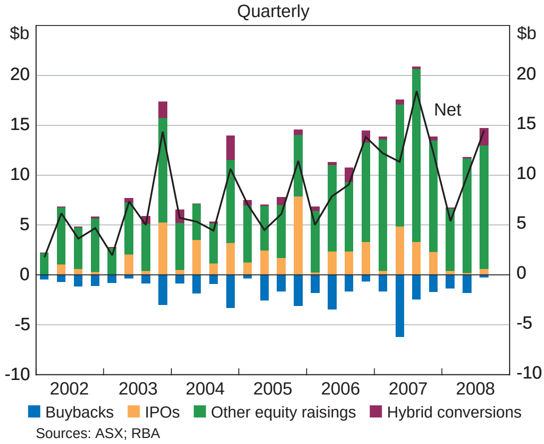
The large Australian banks continue to be less affected by the financial market turbulence than the large banks in other countries. The five largest banks' 2008 full-year underlying profits were little changed from the previous year at $17 billion, though profits in the second half were 15 per cent lower than in the first half. The banks' after-tax return on equity declined, but remains in line with its decade average at 16 per cent. Strong growth in net interest income, reflecting solid asset growth, was partially offset by a decrease in non-interest income (wealth management, insurance, trading and fee income) and a sizeable rise in the bad and doubtful debts expense. The Australian operations typically performed better than the UK and NZ operations, mainly reflecting the stronger Australian economy. The banks remain well capitalised, with all five banks reporting capital adequacy ratios that are well above regulatory minima.

Analysts' forecasts for resource companies' earnings growth – formed after the profit reporting season – remain strong. The strength in forecasts of resource companies' profits in 2008/09 reflects large increases in iron ore and coal contract prices and the depreciation of the Australian dollar. The recent falls in spot commodity prices and expectations for weaker world growth suggest that these forecasts are likely to be revised down. Forecast profit growth for non-resource companies was scaled back a little on expectations of a slowing domestic economy. The most recent report of analysts' expected profit growth for the ASX 200 is 27 per cent in 2008/09, slowing to 9 per cent the following year.

Graph 59



Graph 60



The falls in the share market over the past three months have resulted in a continued decline in the trailing P/E ratio, which is based on earnings for the past year. The forward P/E ratio, which is based on expected earnings for the coming year, has experienced a similar decline but would pick up somewhat if earnings expectations are revised down (Graph 59). Both the forward and trailing P/E ratios remain well below their long-run averages and around the lowest levels since 1991. P/E ratios for all three broad sectors of the share market are also below their long-run averages.

Net equity raisings in the September quarter were $14½ billion, well above the average of $11 billion (Graph 60). Equity raisings by financials were above average, in part due to banks increasing their capital levels through underwritten dividend reinvestment plans and hybrid conversions; equity raisings by non-financial companies were also solid, as these companies used equity to fund investments (including M&A activity) and pay down debt. Buybacks weakened further and remain well below average, with companies preferring to retain cash to strengthen balance sheets given the uncertain outlook. IPOs also remain weak given volatile equity markets.

Despite the volatility in markets, M&A activity has been solid with $43 billion of deals announced since end June. M&A activity over the past year has been driven by a number of large deals, including BHP Billiton's bid for Rio Tinto (in February), Westpac's bid for St. George (May), ConocoPhillips' 50 per cent acquisition of a subsidiary of Origin Energy (September) and BG Group's bid for Queensland Gas (October). M&A activity has been increasingly equity-funded with little debt financing.

The falls in share prices continue to weigh on superannuation fund returns. Australian superannuation funds had an average return of –8 per cent over the 2007/08 financial year, the lowest annual return in at least two decades, and returns are estimated to be around –10 per cent in the 2008/09 financial year to date.

Financial intermediaries

The ongoing turbulence in capital markets continues to affect the cost and composition of financial intermediaries' funding, with smaller, lower-rated financial institutions, and institutions that rely relatively heavily on capital market funding – particularly securitisation – being most affected.

Reflecting the dislocation in markets and the announcement of similar schemes in other countries, in October, the Australian Government introduced a range of measures designed to ensure that most financial intermediaries have ongoing access to funding. The Government will guarantee deposits held at eligible authorised deposit-taking institutions (ADIs) for a period of three years. There will be no fee on the guarantee for deposits less than $1 million. The Government has also offered to guarantee wholesale funding, and large deposits, for these institutions in return for a fee, which will vary depending on the credit rating of the borrower.[1] Subject to certain conditions, branches of foreign banks are also covered in these arrangements, thereby minimising any potential disruptions to the short-term money markets and to corporate lending. The Government guarantee on wholesale funding will be withdrawn when market conditions normalise. The guarantee scheme will commence on 28 November; up until that date, eligible deposits and wholesale funding will be guaranteed without charge.

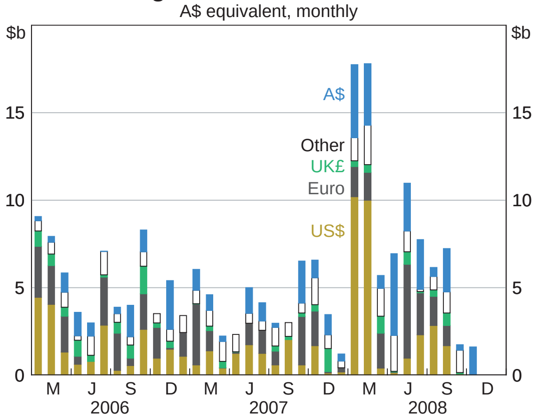
Although bond issuance by the five largest banks remained strong in August, it slowed sharply in September and October amid the severe disruption to global markets (Graph 61). In September, just $1.7 billion was raised by the five largest banks, with a further $1.6 billion raised in October, well down from the $4½ billion monthly average before the credit crisis. The lower issuance in September and October, combined with around $7½ billion of maturing bonds, has seen the outstanding value of banks' bonds fall slightly. Despite limited issuance over the past couple of months, the five largest banks remain well ahead on their funding plans because of the strong net issuance early in the year. Lower-rated banks have had more limited access to the bond market.

About one-half of bond issuance by the five largest banks over the past couple of months has been into the domestic market, with little participation by non-resident investors in these transactions. There was no bond issuance overseas in October, the first month in which this has occurred since December 1999, reflecting the extreme risk aversion among many investors.

Graph 61

Five Largest Banks' Bond Issuance*

A$ equivalent, monthly



* Data to 5 November 2008

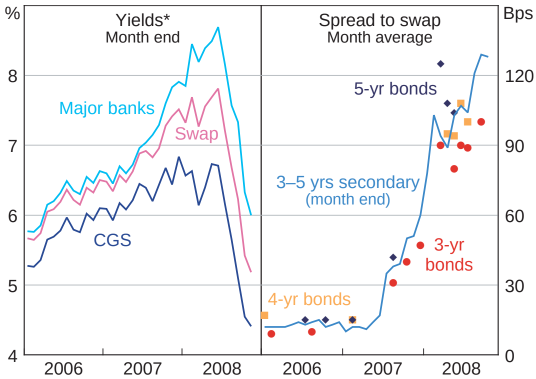
Source: RBA

1 *For AA-rated entities, the annual fee is 70 basis points. For A-rated entities, the annual fee is 100 basis points. For BBB-rated and unrated entities, the fee is 150 basis points.*

Graph 62

Major Banks' Bond Pricing

Domestic



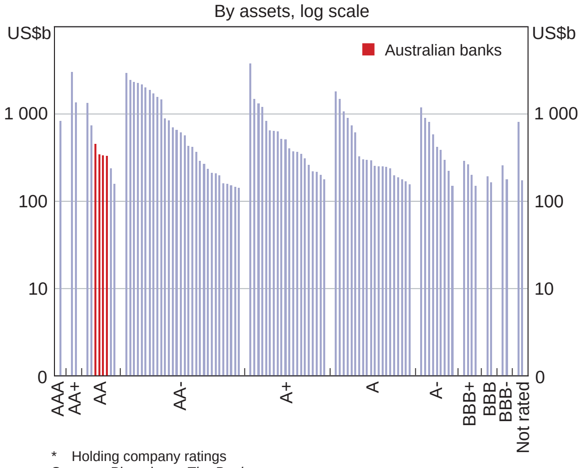
* Yields on bonds issued by the Australian Government and swap rates are 3-year maturities. Major bank yields are a weighted average of bonds with remaining maturities of 1 to 5 years.

Sources: Bloomberg; RBA; UBS AG, Australia Branch

Graph 63

Credit Ratings of the Largest 100 Banks*

By assets, log scale



* Holding company ratings

Sources: Bloomberg; *The Banker*

For the major banks, bond spreads at issuance have picked up a little in recent months. One bank issued 2- and 3-year bonds into the domestic market in early October at spreads above swap of 75 basis points and 100 basis points respectively. This is about 10 basis points higher than comparable issues in August. Secondary market pricing indicates that spreads are up 10 basis points since the last *Statement*; however, with swap rates falling 205 basis points, banks' bond yields have fallen sharply to around 6 per cent – around 270 basis points below the peak in June (Graph 62).

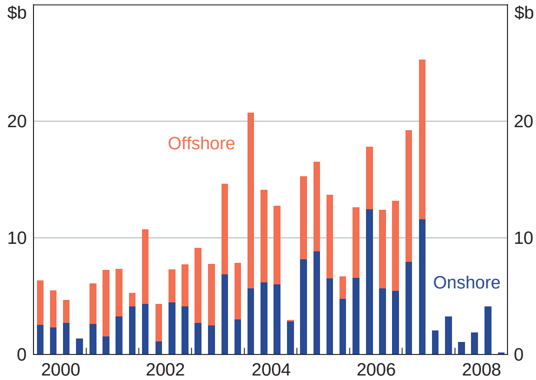
Rating agencies downgraded several smaller Australian financial institutions, or negatively revised their outlook. These changes largely reflected their reduced funding options resulting from the heightened market turbulence, lower forecast earnings, and – in the case of some foreign-owned banks – poor performance of their parents. S&P affirmed the credit ratings of the five largest Australian banks, citing their 'conservative stance' and limited exposure to the US sub-prime crisis. The four largest banks in Australia are rated AA; of the world's largest 100 banks, only a few have higher ratings (Graph 63). Unlike some of the large financial institutions abroad and a couple of the foreign-owed banks operating in Australia, no Australian-owned bank has had its rating downgraded since the onset of the credit turmoil.

Activity in securitisation markets continues to be limited, with only a few public RMBS deals taking place. Since mid 2007, quarterly RMBS issuance has averaged around $2 billion compared to an average of $18 billion in the year prior to the credit crisis (Graph 64). The average deal size remains small ($400 million compared to $1.6 billion pre-credit turmoil), with deals frequently tailored to specific investors. All RMBS issuance has been onshore since the onset of the credit turmoil. As a result, the stock of Australian RMBS outstanding offshore has fallen by substantially more than the stock onshore since mid 2007 (36 per cent versus 10 per cent). Aggregate Australian RMBS outstanding has fallen 25 per cent since its peak in June 2007.

Graph 64

RMBS Issuance*

A$ equivalent, quarterly



* Data to 5 November 2008

Source: RBA

The little RMBS issuance there has been in recent months suggests that spreads have edged higher. RMBS spreads at issuance are around 130–160 basis points over BBSW for the AAA-rated tranche. At these spreads and current mortgage rates, RMBS are unlikely to be a viable funding source for many lenders. The Australian Government announced a program for the Australian Office of Financial Management (AOFM) to purchase new RMBS directly from issuers. The AOFM will invest a total of $8 billion in AAA-rated RMBS, with half of this amount to be directed to mortgage managers; the first purchases are to be made later this year.

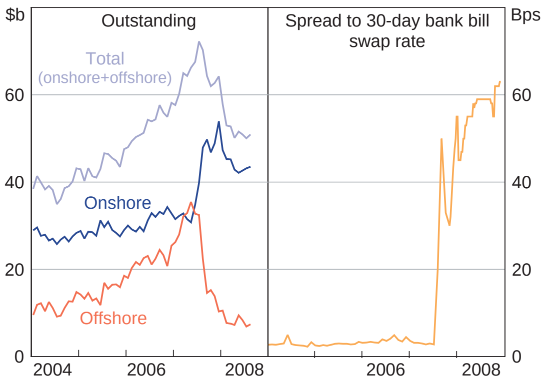
Recently issued RMBS have been structured with sufficient subordination so that the senior tranche is independent of lenders' mortgage insurance (LMI). QBE recently acquired PMI Australia, which provides LMI to around 40 per cent of securitised mortgages in Australia. The rating agencies have affirmed PMI's AA- rating, as QBE has stated it will 'quarantine' PMI from the rest of QBE to maintain its capitalisation. As a consequence, there are not expected to be any flow-on effects to RMBS ratings.

Losses on RMBS picked up in the June quarter, though remain low as a share of outstandings at around 5 basis points on an annual basis. Investors in prime Australian rated RMBS have never borne any losses of principal; losses after the sale of property have been covered by LMI and excess spread. In September, a non-conforming RMBS suffered a small loss on its lowest-rated tranche ($600 000 on a tranche of $7.7 million). This is the first time a rated tranche in Australia has experienced a loss. The loss resulted from the poor performance and high rates of delinquency of the loans in this pool, and disputed LMI claims.

Developments in global financial markets led to some tightening in short-term securitisation markets, with spreads on Australian ABCP widening a little after remaining steady, albeit elevated, in recent months. The total stock of outstanding paper remained flat over the past few months to August – the latest data available. Total outstanding ABCP is 30 per cent below its peak in mid 2007 (Graph 65).

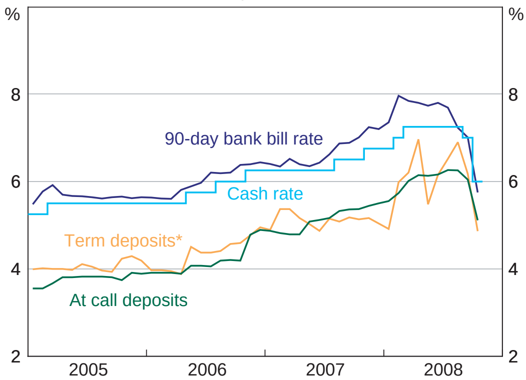
Deposit growth remained strong in the September quarter, aided by ongoing demand for low-risk assets from households and non-financial corporates and robust competition for

Graph 65
Australian ABCP



Sources: nabCapital; Standard & Poor's

Graph 66
Deposit Rates
$10 000 deposits, end month



* Average of 3-, 6- and 12-month terms
Source: RBA

deposit funding from financial institutions. This has contributed to strong growth in M3 and broad money.

The average interest rate on the major banks' 3-, 6- and 12-month term deposits has fallen by 165 basis points since end July, primarily reflecting the marked decline in bank bill rates – which are a pricing benchmark for term deposits – but also some unwinding of 'special' rate offers (Graph 66). The average rate on financial intermediaries' at-call deposits – including online savings, cash management and bonus saver accounts – has fallen by 114 basis points over the three months to end October, a little less than the decline in the cash rate over this period.

Household financing

At the time this *Statement* was finalised, the November decrease in the cash rate had only just started to flow through to borrowing rates. Nevertheless, interest rates on loans to households have fallen markedly since end July, with financial intermediaries passing on most of the cash rate reductions to their variable housing loans (Table 10). Variable indicator rates on prime full-doc housing loans have fallen by an average of 120 basis points in the three months to end October to 7.74 per cent. On average, banks have reduced their interest rates by considerably more than mortgage originators, credit unions and building societies (CUBS). Interest rates on prime low-doc loans have decreased by 117 basis points.

The five largest banks' average 3-year fixed rate on prime full-doc housing loans has fallen by 213 basis points since the end of July 2008, and is currently 7.29 per cent. The share of owner-occupier approvals at fixed rates has continued to decline over recent months; it was 3½ per cent in September, the lowest share in at least 17 years and well below the decade average of 12 per cent.

There has been little pass-through of the cash rate cuts to personal loans. Since the end of July, average variable interest rates on unsecured personal loans and margin loans have

Table 10: Intermediaries' Variable Lending Rates
Per cent

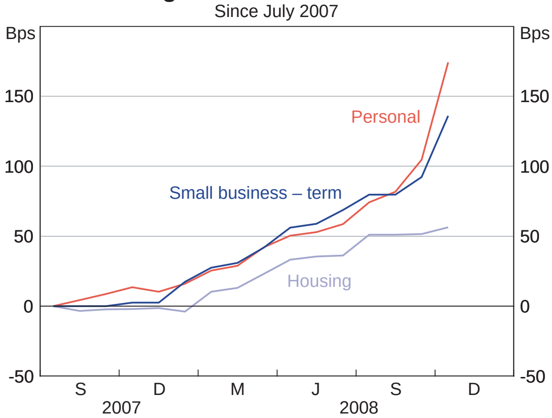
	Level at	Change since:	
	End Oct 2008	End Jul 2008	End Jul 2007
Cash rate[(a)]	6.00	–1.25	–0.25
Housing loans			
Prime-full doc			
Banks	7.71	–1.22	0.27
CUBS	7.89	–0.91	0.52
Mortgage originators	8.26	–0.85	0.91
Prime low doc			
Banks	8.19	–1.19	0.51
Mortgage originators	8.82	–0.97	1.02
Non-conforming	11.71	0.00	2.09
Personal loans			
Margin loans	10.12	–0.43	1.15
Standard credit cards	19.75	0.08	1.96
Low-rate credit cards	13.23	0.34	2.06
Unsecured term loans	14.84	–0.06	2.22
Small business			
Term loans			
Residentially secured	9.41	–0.69	1.11
Other security	10.01	–0.68	1.12
Overdraft			
Residentially secured	10.16	–0.72	1.22
Other security	11.10	–0.68	1.26
Average actual rate[(b)]	9.46	–0.69	0.82
Large business			
Average actual variable rate	8.17	–0.80	0.61
Average actual bill rate[(b)]	7.52	–0.91	0.43

(a) Reduction of cash rate on 4 November not included
(b) RBA estimate
Sources: ABS; APRA; RBA

decreased by 6 basis points and 43 basis points respectively, while rates on standard and low-rate credit cards have risen by 8 basis points and 34 basis points respectively. As with housing loans, the banks have tended to reduce their rates by more than other financial institutions. The incomplete pass-through of recent cash rate cuts has seen the spreads to cash for personal loan indicator rates widen by about 175 basis points since July 2007, compared with the 55 basis point widening in the spread on housing loans (Graph 67).

Graph 67

Cumulative Change in Spreads between Lending Rates and the Cash Rate
Since July 2007

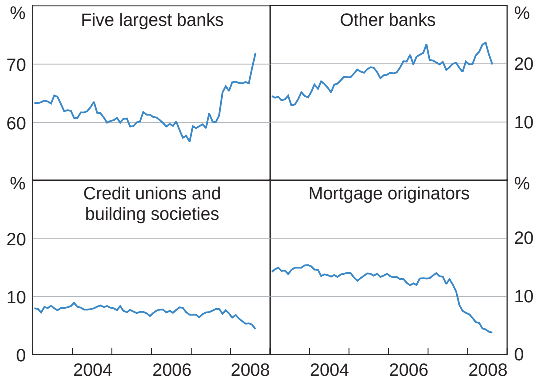


Source: RBA

Graph 68

Share of Owner-occupier Loan Approvals

By lender, seasonally adjusted

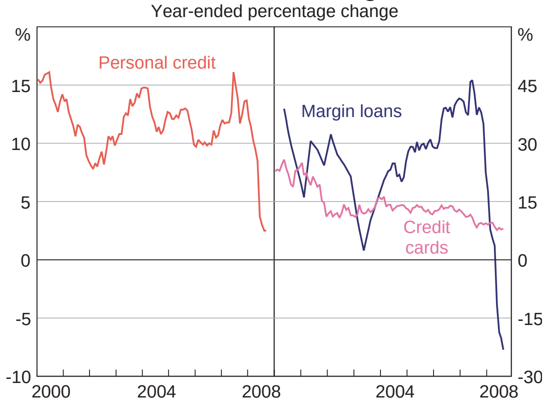


Sources: ABS; APRA

Graph 69

Personal Lending

Year-ended percentage change



Sources: APRA; RBA

Overall, we estimate that the average interest rate on outstanding household loans has fallen by about 73 basis points over the three months to end October 2008, and is about 35 basis points above its post-1993 average.

Reflecting the earlier increases in borrowing costs and some tightening of lending standards for riskier borrowers, the value of housing loan approvals has fallen sharply over 2008 to date, and in August, was around 26 per cent below the peak last year. The share of owner-occupier loans approved by the five largest banks has risen by a further 5 percentage points to 72 per cent over recent months; the market shares of the smaller banks, CUBS and mortgage originators have fallen (Graph 68).

The decline in housing loan approvals is in line with the easing in housing credit growth over the year. Over the September quarter, housing credit grew at an average monthly pace of 0.5 per cent, down from an average monthly growth rate of 0.9 per cent in 2007.

Personal credit fell significantly in the September quarter, as continued stock market volatility weighed on investors' appetite for margin debt and credit card lending slowed (Graph 69). In annualised terms, personal credit fell by 5.1 per cent over the September quarter, compared with average annual growth of 11.3 per cent over the past decade.

The number of margin calls rose to 4.3 calls per day per 1 000 clients in the September quarter, the highest frequency since March 2003 (Graph 70). The frequency of margin calls increased even further in October. Sustained falls in share prices over the past year have pushed up investors' gearing levels, and this, combined with the extreme market volatility, has increased the frequency of margin calls.

Business financing

The cost of business borrowing has also fallen since the last *Statement*. Variable interest rates on large business loans – which are mostly priced off bank bills – are estimated to have fallen by 80 basis points since end July, while variable indicator rates for small business loans have declined by around 70 basis points. These rates are currently 60 and 110 basis points higher than their mid-2007 levels respectively, despite the cash rate declining by 25 basis points over this period.

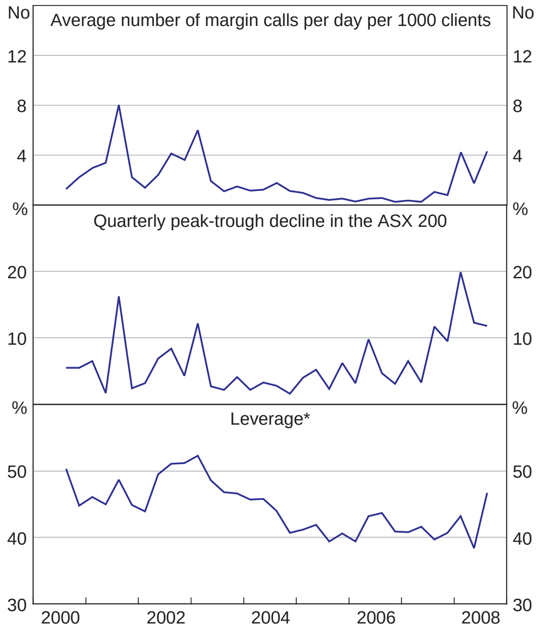
Rates on new 3-year fixed small business loans have decreased by 185 basis points since end July, broadly in line with the fall in the 3-year swap rate. At 7.60 per cent, the 3-year fixed small business rate is currently at its lowest level since early 2006.

Overall, we estimate that the average interest rate on all outstanding business loans has fallen by 70 basis points in the three months to end October, but at 8.15 per cent, remains around 30 basis points above its post-1993 average (Graph 71).

Growth in total business debt has slowed sharply over 2008, as a result of the higher cost of borrowing as well as tighter lending standards for some businesses (Graph 72). Total debt slowed to an annualised growth rate of 7½ per cent in the six months to September, compared with 18 per

Graph 70

Margin Calls

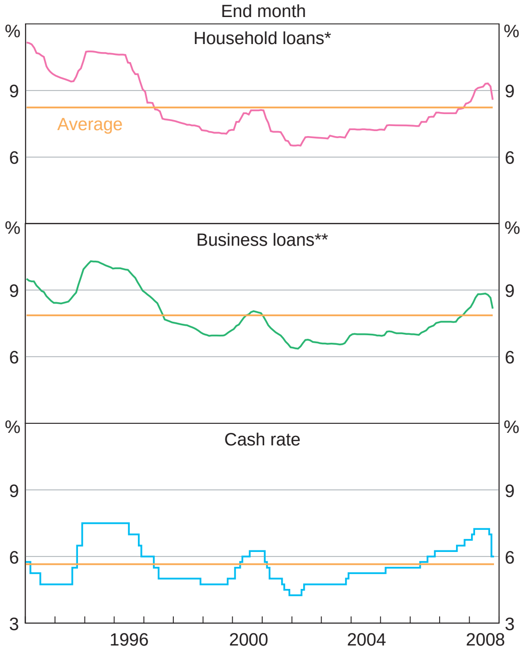


* The total value of margin loans outstanding divided by the total value of the underlying securities
Sources: Bloomberg; RBA

Graph 71

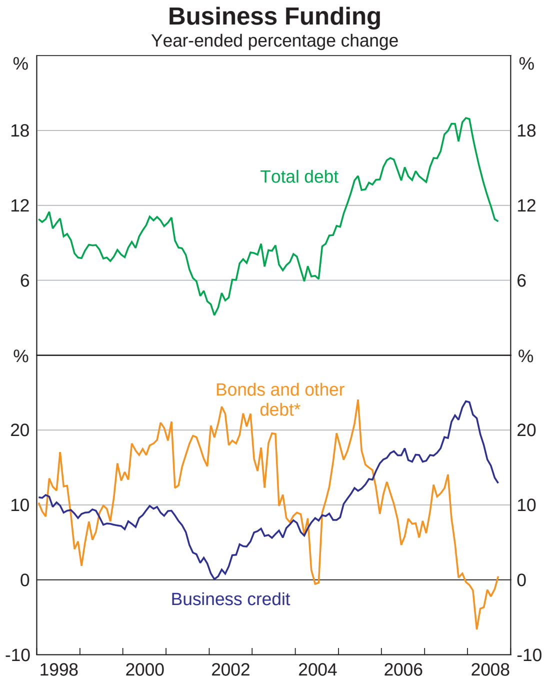
Interest Rates on Outstanding Loans

End month



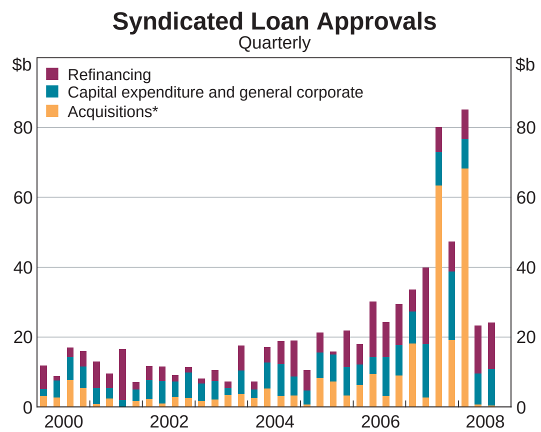
* RBA estimates prior to 2001
** RBA estimates prior to 1994
Sources: ABS; APRA; Perpetual; RBA

Graph 72



* Exclusive of promissory notes held by AFIs
Sources: ABS; ASX; Austraclear; RBA

Graph 73



* Data for the March quarter 2008 and the September quarter 2007 are each affected by one large transaction
Source: Thomson Reuters

cent in the same period in 2007. The slower growth in business debt over 2008 largely reflects an easing of growth in intermediated business credit. However, business credit growth picked up in the September quarter, to an average monthly rate of 0.9 per cent from an average monthly pace of 0.3 per cent in the June quarter. The stock of non-intermediated debt is little changed over the past year, partly reflecting reduced access to capital markets. Commercial loan approvals have levelled out in recent months, following significant declines earlier in the year.

The pick-up in business credit growth in the September quarter was most evident for loans greater than $2 million, although loans to small businesses also rose moderately. The growth in loans greater than $2 million was likely driven by mid-sized firms, with syndicated loan approvals data suggesting that lending to large corporates remained subdued. Syndicated loans for acquisition-related purposes remained especially low, with M&A activity continuing to be equity-funded instead (Graph 73). The pick-up in business borrowing in the September quarter appears to have been relatively broad-based across sectors.

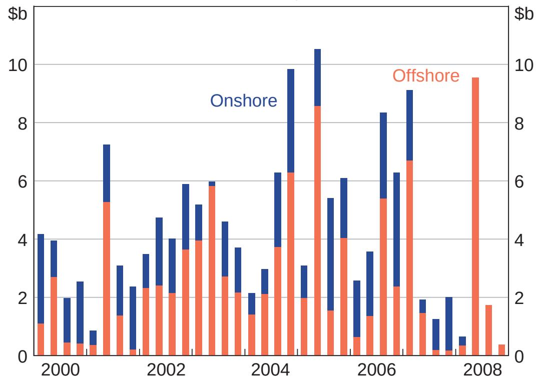
Corporate bond issuance has remained low in recent months (Graph 74). Thirteen small bonds were issued in the September quarter, totalling around $1¾ billion. This is significantly lower than the average quarterly issuance of around $5½ billion before the credit turmoil. Two small corporate bonds were issued in October. As has been the case with most corporate issues in 2008, all of the recent deals were issued offshore.

Three non-resident institutions with bonds outstanding in the domestic market have defaulted over the past couple of months. Lehman Brothers had $600 million of Kangaroo bonds outstanding in the Australian market, and two Icelandic banks had a further $315 million outstanding; together these make up less than 1 per cent of all domestic bonds issued by non-residents. These are the first bond defaults in the Australian market since 2004, and the first defaults by Kangaroo issuers.

Secondary market bond yields for Australian corporates have fallen by around 65 basis points since the last *Statement* to be around the same levels as at the start of the year (Graph 75). This fall was driven by a sharp decline in the swap rate, offset by an increase in spreads. Market contacts indicate that the secondary market has become more illiquid during the recent heightened turbulence, with few trades taking place.

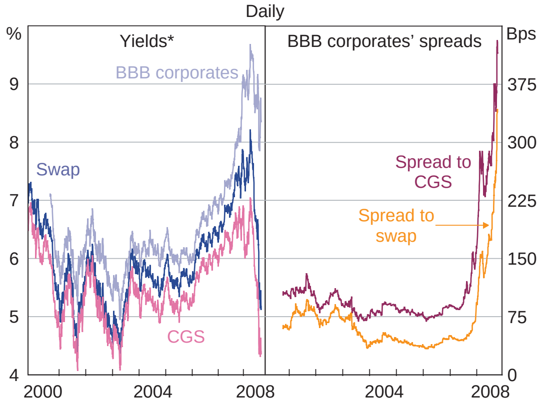
Australian businesses' balance sheets generally remain in good shape despite the strains in markets. Some companies, particularly those with complex structures and those that are highly leveraged or exposed to declining asset valuations, have come under pressure. The book value gearing ratio – the ratio of debt to shareholders' equity – of listed non-financial companies was broadly unchanged at 83 per cent in the June half 2008, after increasing sharply in the second half of 2007 due to Rio Tinto's debt-funded purchase of Alcan (Graph 76). Excluding Rio Tinto, gearing was unchanged at 71 per cent, a little above the long-run average but well below the levels reached in the late 1980s. Most of the highly leveraged companies are utilities and industrial companies that typically have fairly stable

Graph 74
Corporate Bond Issuance
Quarterly*



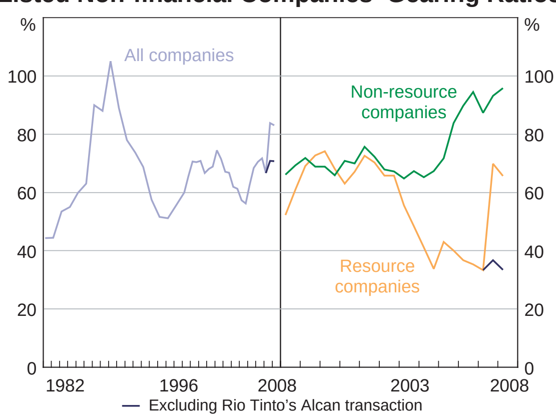
* Data for December quarter 2008 to 5 November
Source: RBA

Graph 75
Australian Corporate Bond Pricing
Daily



* Yields on bonds issued by the Australian Government and swap rates are 3-year maturities. Corporate bond yields are a weighted average of bonds with remaining maturities of 1 to 5 years.
Sources: Bloomberg; RBA; UBS AG, Australia Branch

Graph 76
Listed Non-financial Companies' Gearing Ratios*



* Gross debt/shareholders' equity; book value; excludes foreign companies and listed property trusts
Sources: ABS; Aspect Huntley; RBA; Statex

cashflows. By sector, resource companies reduced their gearing slightly, while non-resource companies' leverage rose slightly.

The market value measure of gearing (excluding Rio Tinto) – which incorporates expectations about future profits that can be used to service debt – increased, driven by a fall in share prices with debt outstanding being broadly unchanged.

Companies' response to the credit turmoil was evident in their balance sheets. Corporates that were highly geared reduced their leverage over the June half, and there was a fall in the relative use of short-term debt. Overall, there does not appear to be a significant risk to the Australian non-financial corporate sector, although there may be further instances of individual companies running into difficulties rolling over debt. The share prices of some companies with high gearing or reliance on short-term debt have already been marked down heavily. On average, companies with high reliance on short-term debt do not tend to be highly geared.

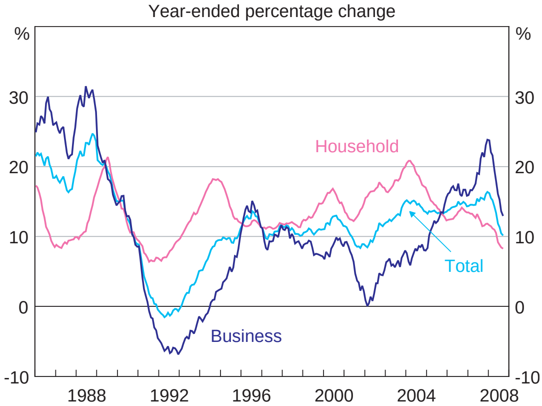
Aggregate credit

Financial conditions tightened in the first three quarters of 2008, reflecting both higher lending rates and tighter lending standards. As a result, average monthly growth in total credit has slowed from a peak of 1.3 per cent in the December quarter 2007 to 0.6 per cent in the September quarter (Table 11, Graph 77). Year-ended growth has slowed from 16 per cent over 2007 to 10 per cent over the year to September. All components of credit have slowed. The slowing in total credit growth is consistent with other domestic demand indicators as discussed in the 'Domestic Economic Conditions' chapter. The recent easing in financial conditions resulting from declines in interest rates is yet to be reflected in the lending data.

Graph 77

Credit

Year-ended percentage change



Source: RBA

Table 11: Credit Aggregates

Average monthly growth, per cent

	December quarter 2007	March quarter 2008	June quarter 2008	September quarter 2008
Total credit	1.3	0.9	0.5	0.6
Household	0.9	0.8	0.6	0.4
– Owner-occupier housing	0.9	1.0	0.7	0.5
– Investor housing	0.8	0.7	0.6	0.5
– Personal	1.3	0.0	0.0	–0.4
Business	1.8	1.0	0.3	0.9

Source: RBA

Price and Wage Developments

Recent developments in inflation

The CPI data for the September quarter showed that inflation remained high, with the CPI increasing by 1.2 per cent in the quarter and by 5.0 per cent over the year (Table 12, Graph 78). However, inflation appears to have levelled out in quarterly terms, with a range of measures suggesting that underlying inflation was around 1.2 per cent for the third consecutive quarter. In year-ended terms, underlying inflation looks to have been a little over 4½ per cent in the September quarter.

Table 12: Measures of Consumer Prices
Percentage change

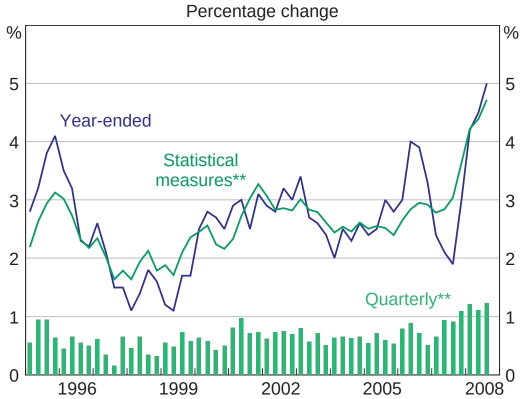
	Quarterly		Year-ended	
	June quarter 2008	September quarter 2008	June quarter 2008	September quarter 2008
CPI	1.5	1.2	4.5	5.0
– Tradables	1.5	0.7	2.9	3.4
– Tradables (ex food and fuel)	1.1	0.1	1.0	1.1
– Non-tradables	1.4	1.6	5.6	6.1
Underlying measures				
Weighted median	1.0	1.3	4.5	4.8
Trimmed mean	1.2	1.2	4.3	4.6
CPI ex volatile items[a]	1.3	1.1	4.2	4.6

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

Price pressures continued to be relatively broad-based, with over 70 per cent of items in the CPI (by expenditure weight) growing at an annualised rate of more than 2.5 per cent in the September quarter (Graph 79). Large contributions to the quarterly outcome came from housing, a wide range of food items, travel, petrol and financial & insurance services. These were only partly offset by falls in the cost of child care (due to an increase in the child care rebate),

Graph 78

Consumer Price Inflation*
Percentage change

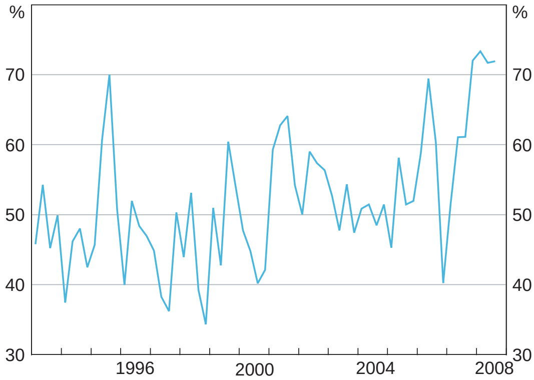


* Excluding interest charges prior to the September quarter 1998 and adjusted for the tax changes of 1999–2000
** Average of the trimmed mean and weighted median
Sources: ABS; RBA

Graph 79

CPI Items Rising Faster than 2.5 Per Cent*

Proportion of all CPI items, by weight



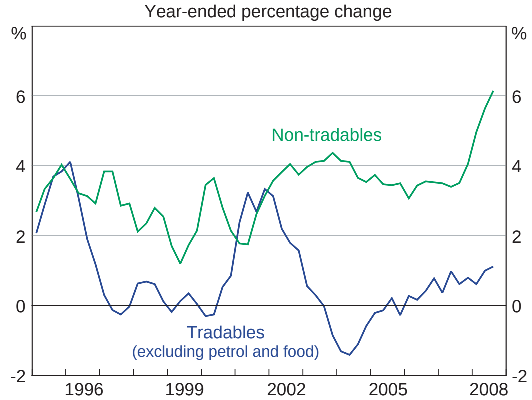
* Based on seasonally adjusted data; CPI items with annualised quarterly growth greater than 2.5 per cent

Sources: ABS; RBA

Graph 80

Tradables and Non-tradables Prices*

Year-ended percentage change



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

Sources: ABS; RBA

pharmaceuticals and a range of consumer discretionary items.

Non-tradables inflation continued at a fast pace, at 1.6 per cent in the quarter and 6.1 per cent over the year (Graph 80). The main contributor was housing, with the various components all rising strongly in the quarter: rents rose by 2.1 per cent (and by 8.2 per cent over the year), reflecting low rental vacancy rates; house purchase costs increased by 1.3 per cent, as rising materials costs added to price pressures; and utilities recorded very large rises to be 10.8 per cent higher over the year, with a particularly large rise in water and sewerage prices. The cost of deposit & loan facilities also continued to grow strongly, and most other services components of the CPI recorded above-average increases.

Tradables inflation was 0.7 per cent in the September quarter and 3.4 per cent over the year. Fuel prices made the largest contribution to this group, rising by 2.0 per cent in the quarter and by 25 per cent over the year. Food prices rose by 1.4 per cent in the quarter to be 3.4 per cent higher over the year. Excluding food and fuel, tradables inflation remained modest at 1.1 per cent over the year, but continued to show signs of an upward trend. Given the recent sharp depreciation in the Australian dollar, tradables inflation is likely to pick up significantly in coming quarters as higher import prices gradually flow through into retail prices.

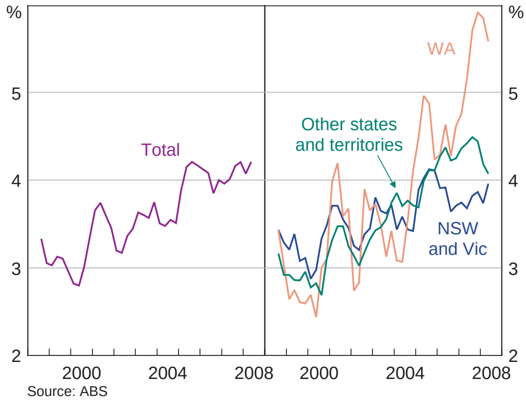
Costs and margins

Growth in labour costs remains at elevated levels, reflecting recent tightness in the labour market, but continues to show little sign of acceleration. The wage price index (WPI) rose by 1.2 per cent in the June quarter, with year-ended growth remaining firm at 4.2 per cent (Graph 81). Growth in the private-sector component of the WPI has been higher, with delays in renegotiating several public-sector collective agreements contributing to slightly softer outcomes in the public-sector component: growth in the latter is likely to pick up somewhat as these new agreements flow through. At the state level, Western Australia continued to record substantially stronger wage growth than the other states, with the WPI rising by 5.6 per cent over the year.

Graph 81

Wage Price Index

Year-ended percentage change

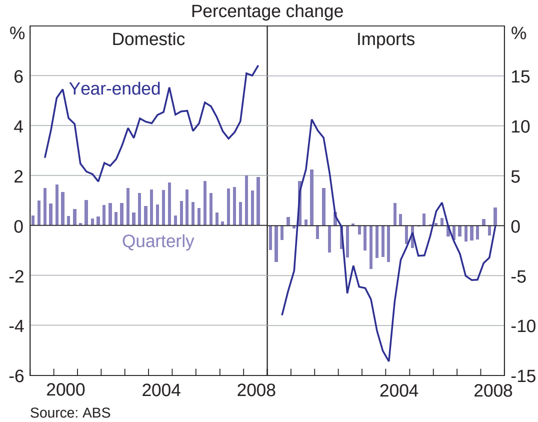


Other measures of wage growth have provided a somewhat mixed picture of growth in labour costs. The national accounts measure of average earnings, which is conceptually the broadest measure of earnings but very volatile, rose by 1.8 per cent in the June quarter to be 4.0 per cent higher over the year. The average annualised increase for new federal enterprise bargaining agreements formalised in the June quarter was also 4.0 per cent, which is in line with the average since 2003. However, measures from the average weekly earnings survey moderated slightly in the June quarter, with growth in ordinary-time earnings recorded at 0.7 per cent in the quarter and 3.7 per cent over the year. Broader measures of labour costs from business surveys show that wage pressures remained stable at above-average levels.

Graph 82

Producer Prices at Final Stage of Production

Percentage change



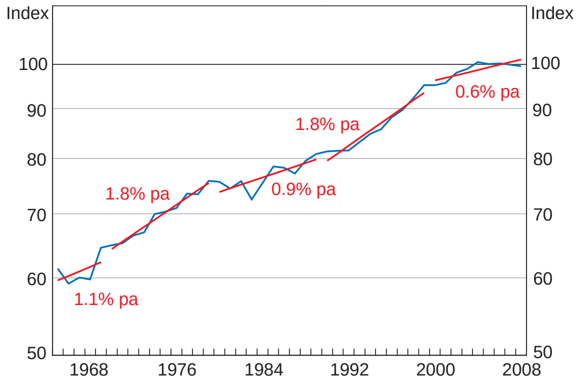
Producer price data suggest that upstream price pressures intensified in the September quarter and that this was broad-based across categories. Persistent strength in domestic goods inflation was accompanied by a turnaround in import prices reflecting the depreciation of the exchange rate (Graph 82). All stages of production recorded their largest quarterly and year-ended increases in the ten-year history of the series. At the preliminary stage, prices rose by 5.5 per cent in the quarter (or by 3.7 per cent after abstracting from a trebling in coal prices flowing from the earlier increase in export contract prices) and 13 per cent over the year: while resource-related prices increased sharply (and were yet to show any signs of moderation from recent falls in spot commodity prices on global markets), non-resource price inflation also picked up further. At the final stage, prices rose by 2.0 per cent in the quarter and by 5.6 per cent over the year, with most items posting sizeable rises.

At the industry level, all sectors recorded strong increases in prices. Construction sector prices rose by 1.8 per cent in the quarter and by almost 7 per cent over the year as firms passed on

Graph 83

Market Sector Multifactor Productivity

2007 = 100, log scale

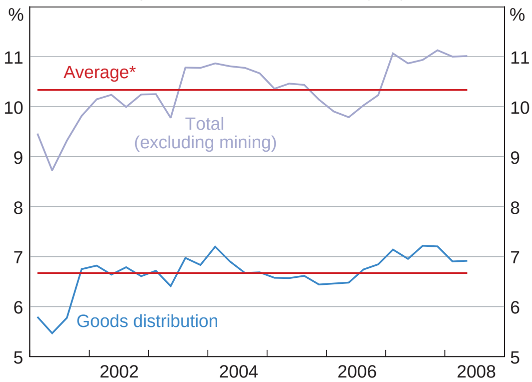


Source: ABS

Graph 84

Business Margins

Gross profit to sales ratio, seasonally adjusted



* Since 2001

Sources: ABS; RBA

part of earlier sharp increases in raw material costs (particularly steel). Manufacturing prices (excluding oil) rose by almost 6 per cent over the year, with metals, chemicals, food and a range of other goods all contributing. Property & business services prices were up by 6 per cent over the year and transport & storage prices increased by nearly 8 per cent.

While rising input costs have contributed significantly to higher producer and consumer inflation in recent years, a slowing in medium-term productivity growth may also have been a factor. Since 2000, trend multifactor productivity in the market sector has grown by only 0.6 per cent per year, compared with 1.8 per cent over the 1990s (Graph 83). The combination of steep rises in input costs and weaker productivity growth implies that growth in business costs per unit of output has picked up in recent years.

Recent data on business margins have provided mixed signals. Estimates based on ABS profits data suggest that margins in both the broader economy and the goods distribution sector – which includes retail & wholesale trade and transport – were stable in the June quarter at above-average levels (Graph 84). In contrast, data for the September quarter from the NAB survey suggest that margins fell in the June and September quarters.

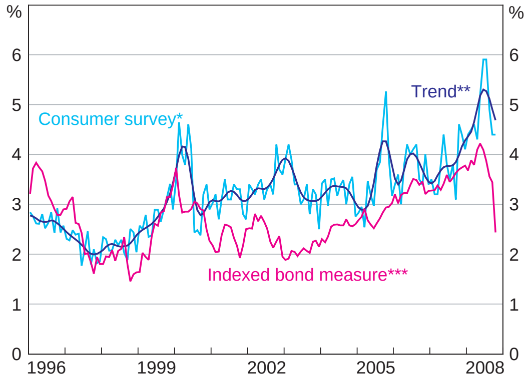
Inflation expectations

Indicators of inflation expectations remain elevated, although there has been some evidence of moderation in recent months. According to the Melbourne Institute survey of households, the median expectation for CPI inflation over the year ahead was 4.4 per cent in October, down from the mid-year peak of nearly 6 per cent (Graph 85). Medium-term inflation expectations implied by indexed bond yields and inflation swaps have also declined noticeably, to be around 2½ per cent. However, the limited liquidity of these markets makes it difficult to infer too much from derived series for inflation expectations.

Market economists surveyed by the Bank following the release of the September quarter CPI continue to expect above-average inflation in the near term, although medium-term expectations have eased. The median expectation for headline inflation over the year to the June quarter 2009 is now 3.4 per cent, compared with 3.3 per cent in August (Table 13). Over the year to the June quarter 2010, the median inflation expectation is 2.6 per cent, down from 2.8 per cent in August. Surveys of both businesses and union officials generally suggest that inflation expectations remain elevated.

Graph 85

Indicators of Inflation Expectations



* Median consumer's expectation of average annual inflation over the next year
** 13-period Henderson trend of consumer expectations
*** Break-even 10-year inflation rate on indexed bonds
Sources: Melbourne Institute of Applied Economic and Social Research; RBA

Table 13: Median Inflation Expectations
Per cent

	Year to June 2009			Year to June 2010	
	May 2008	August 2008	November 2008	August 2008	November 2008
Market economists[(a)]	3.0	3.3	3.4	2.8	2.6
Union officials[(b)]	4.0	4.0	4.5	3.6	4.0

(a) RBA survey
(b) Workplace Research Centre

Economic Outlook

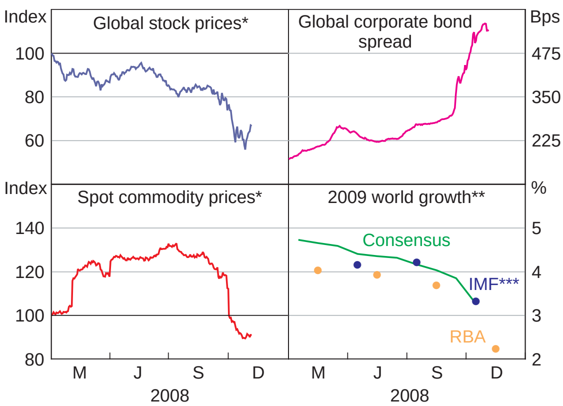
The outlook has changed significantly since the time of the August *Statement*. Conditions in financial markets, both globally and domestically, have worsened in a number of key aspects. This has prompted measures to provide support to financial institutions in some of the major economies, as well as measures to guarantee bank liabilities both domestically and abroad. There has also been a significant deterioration in the outlook for global growth. Commodity markets have weakened materially, which has contributed to a sharp depreciation of the Australian dollar. Monetary policy has been eased in many countries, and expansionary fiscal measures have also been taken in some countries.

Overall, the domestic growth forecasts have been revised down, reflecting the deterioration of the global outlook and price falls in commodity markets. The extent of the weakening in growth will be moderated, but not fully offset, by the easings that have occurred in monetary and fiscal policy and by the large depreciation of the exchange rate. Inflation is forecast to fall gradually from its current elevated level, returning to the Bank's medium-term target range in 2011.

As previously, these forecasts do not incorporate any effects, particularly on inflation, from the Government's Carbon Pollution Reduction Scheme (CPRS). Once the precise details of the CPRS are determined, which will influence the starting price of carbon and its trajectory over time, the Bank will incorporate estimates of initial and ongoing effects of the CPRS into its forecasts.

Graph 86

Global Indicators



* SDR prices; 31 December 2007 = 100
** Australia's trading partners weighted using merchandise export shares
*** Latest IMF forecast is as at the October 2008 *World Economic Outlook*
Sources: ABS; Consensus Economics; IMF; Merrill Lynch; RBA; Thomson Reuters

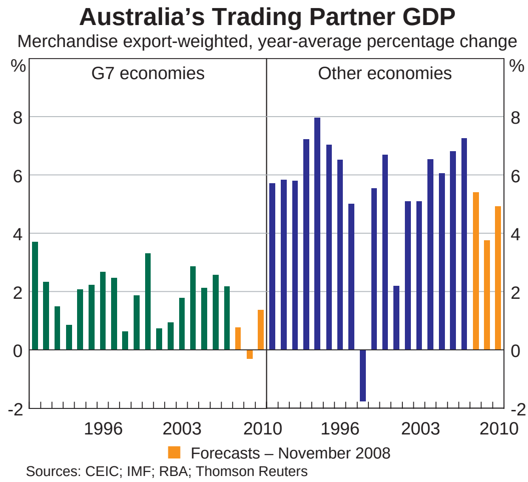
The international economy

The international environment has weakened considerably. Global equity prices are around 20 per cent lower since the August *Statement* and 38 per cent lower than their peak in October 2007 (Graph 86). Credit spreads have widened in global financial markets, and financial institutions have tightened lending standards. These developments will have a significant contractionary effect on the global economy, and will exacerbate the slowdown already evident in many countries in the monthly indicators of real activity.

The Bank's forecasts incorporate a projection that, on an export-weighted basis, year-average growth in Australia's major trading partners will slow sharply from around 3¾ per cent in 2008 to around 2¼ per cent in 2009. This compares with average growth of 5¼ per cent in 2006 and 2007. Weighted by output at market exchange rates, trading partner growth is projected to be below 1 per cent in 2009, which would generally be considered a global recession. A gradual recovery is projected for 2010.

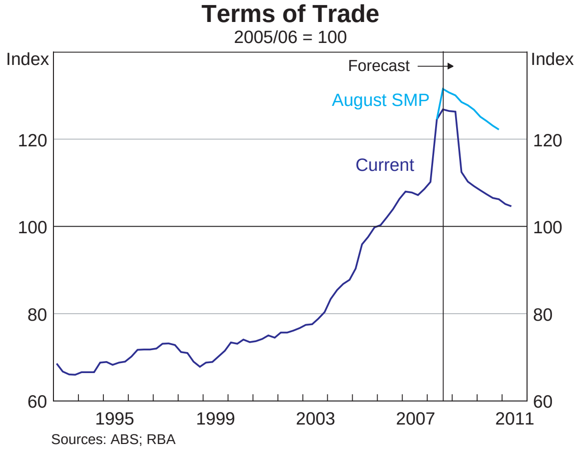
Economic activity in the United States and Europe is expected to contract further in the near term. Growth in the emerging economies of Asia is forecast to remain stronger than in the leading developed economies, but it too will slow markedly from the rapid rates of recent years due to weakening external and domestic demand (Graph 87). Growth in China has already slowed, and in 2009 is expected to be well below the levels seen in recent years. These projections for global growth in 2009 are below the latest published Consensus and IMF forecasts, especially for the Asian region.

Graph 87



Commodity prices have fallen sharply recently, which is expected to lead to a larger decline in Australia's terms of trade than had previously been assumed (Graph 88). Recent falls in base metals and rural prices will be reflected almost immediately in Australia's export prices. In addition, spot prices for coal and iron ore – which currently make up a third of the value of exports – have fallen steeply. Spot prices are now below the current contract prices, mainly reflecting slowing demand, particularly in the steel industry. With global growth expected to remain weak for some time, and supply expected to pick up due to the high level of mining investment over recent years, contract prices in US dollar terms are assumed to decline significantly from mid 2009 for coal and iron ore exports. Nevertheless, given the earlier large run-ups and the recent depreciation of the exchange rate, prices of many commodities in Australian dollar terms are likely to remain at comparatively high levels.

Graph 88



Domestic activity

The forecasts for the domestic economy are based on the technical assumption of a cash rate of 5.25 per cent throughout the forecast period to June quarter 2011, although they allow for some reduction in bank deposit and lending rates to reflect the impact of the recent government guarantees of liabilities of authorised deposit-taking institutions. As usual, the forecasts are also based on the technical assumption that the price of oil and the level of the exchange rate remain around current levels throughout the projection period.

In addition to their effect on household and business confidence, the recent global developments are expected to feed through into the domestic economy through two main channels. First, the fall in the stock market has significantly reduced household wealth, which will dampen household spending. Although estimates of the effect of wealth on consumption spending are subject to a high degree of uncertainty – some estimates suggest that a change in household wealth of one dollar results in a long-run change in consumption of around 4 cents – the fall in wealth that has occurred is sufficiently large to have a material effect on household spending over the coming period.

Second, as noted earlier, some unwinding of the boom in commodity prices, which significantly boosted incomes and demand over the past five years, appears to be occurring. The unwinding of much of the recent price increases is expected to result in a scaling-back of mining-related investment. A number of resource companies are reconsidering their capital expenditure intentions for 2009, and smaller mining firms in particular are likely to cut back their investment. Reduced spending in the resources sector would flow through into slower activity in other sectors of the economy.

Overall, growth in non-farm GDP is expected to slow from 2.5 per cent over the year to the June quarter 2008 to around 1 per cent over the year to the June quarter 2009. The expected global recovery, the recent exchange rate depreciation and easier monetary policy should contribute to a subsequent gradual pick-up in growth, to around 3 per cent over the year to the June quarter 2011 (Table 14). With farm sector output partly recovering from the drought over 2008/09, total GDP growth is forecast to be somewhat stronger than non-farm growth over the next year or so. These rates of output growth imply a significant easing in capacity pressures in the economy. The Bank's forecasts for growth in 2008 and 2009 have previously been well below most private-sector forecasts, but the latter have recently been lowered significantly and are now relatively close to the revised Bank forecasts.

Much of the softening in growth is expected to be felt in a slower pace of domestic spending. Household spending is expected to grow only modestly over the next year, although there will be some stimulus in the December and March quarters from the one-off payments in the Government's fiscal package. Growth in household spending is expected to gradually pick up later in the forecast period as the effects of the fall in household wealth ease. Dwelling investment is expected to be boosted over 2009 by the increase in the First Home Owner Grant scheme and by the decline in interest rates.

Business investment is forecast to gradually fall over most of the forecast period. Whereas the forecasts in the August *Statement* previously contained only weakness in non-residential building, lower commodity prices and restricted access to finance are now expected to also flow through into investment more broadly in the resources sector and elsewhere. Business investment has recently been very high as a share of the economy. This share would be expected to fall back to more average levels over the forecast period. Public demand growth is expected to be moderate as a result of some fiscal consolidation by state governments, although the federal government's plans for infrastructure spending are expected to support public investment from mid 2009.

Weak demand in Australia's major trading partners is expected to weigh on export growth. However, this will be offset to some extent by the sharp depreciation of the Australian dollar and strong increases in resource exports following the ramp-up in mining investment in recent years. Towards the end of the forecast period, non-rural export growth is expected to strengthen to its fastest pace in a decade. Import growth will be subdued throughout most of the forecast period in line with the expected weak pace of growth in domestic demand.

In line with the forecast slowing in domestic activity, labour demand is expected to ease significantly during the next two years, following a period of considerable strength in recent years. The level of employment is forecast to be broadly flat over 2009 before employment growth picks up gradually as the economy recovers, and the unemployment rate is expected to rise over the forecast period.

Inflation

Relative to the August *Statement*, the inflation forecasts incorporate a weaker outlook for global and domestic growth and lower oil prices, but a significantly lower exchange rate. The net effect has been a modest upward revision to the inflation forecasts.

The current elevated level of underlying inflation is mostly a reflection of high inflation in the non-tradables component of the CPI, where prices rose by 6.1 per cent over the year to the September quarter. While there are specific items (such as the housing and financial services components) that have grown particularly rapidly, the breadth of the price increases suggests that the strong pace of non-tradables inflation is largely a reflection of the high level of resource utilisation over recent years. Some decline in non-tradables inflation can be expected in the period ahead as the economy slows and capacity pressures ease, but it is likely that there will be significant inertia in this component.

In contrast, tradables inflation has been quite low in recent years, especially for measures that exclude petrol and food. Indeed, import prices in mid 2008 were lower than six years earlier, due to the significant appreciation of the Australian dollar from 2002 to mid 2008, and to a lesser extent to the low level of inflation in global manufactures over this period. However, with the recent large depreciation of the exchange rate, import prices are expected to rise sharply and tradables inflation will gradually increase.

The combination of rising tradables inflation and slowly declining non-tradables inflation is likely to keep underlying inflation at close to its current year-ended rate in the near term. Over time, however, overall inflation is expected to gradually fall, with the significant slowing in global and domestic activity implying a further easing of capacity pressures, and some reduction in the pricing power of businesses (including the extent to which firms can pass on higher prices for imports). Wage pressures are also likely to abate. Inflation expectations have moderated, and the falls in the prices of oil and other commodities will also help to dampen inflationary pressures.

Overall, underlying inflation is expected to remain at around 4½ per cent over the year to December 2008 and then to decline gradually, reaching 3¼ per cent by mid 2010 and 2½ per cent by mid 2011. Recent falls in petrol prices and a possible fall in the financial services component of the CPI are expected to contribute to a fall in CPI inflation in the near term, but CPI inflation would subsequently be expected to move broadly in line with the forecast for underlying inflation (Table 14).

Table 14: Output and Inflation Forecasts[(a)]
Percentage change over year to quarter shown

	Jun 2008	Dec 2008	June 2009	Dec 2009	June 2010	Dec 2010	June 2011
GDP	2.7	1½	1½	1¾	2	2½	3
Non-farm GDP	2.5	1½	1	1¾	2	2½	3
CPI	4.5	4¼	3	3½	3¼	3	2½
Underlying inflation	4.4	4½	4	3½	3¼	3	2½

(a) Actual data to June 2008. Underlying inflation refers to the average of trimmed mean and weighted median inflation. For the forecast period, technical assumptions include A$ at US$0.70, TWI at 57, cash rate at 5.25 per cent, and WTI crude oil price at US$70 per barrel and Tapis crude oil price at US$72 per barrel.

Sources: ABS; RBA

These central forecasts reflect a judgment as to the net effect of a number of powerful influences, some contractionary and some stimulatory, on the Australian economy. Given the recent changes to the external environment – as reflected in sharp falls in financial and commodity markets and large downward revisions to the global growth forecasts – as well as the large depreciation of the exchange rate, the extent of uncertainty surrounding the forecasts is larger than usual.

With the ongoing stresses in financial markets, it is possible that the deterioration in the external environment could continue. Even if this did not occur, the effects on domestic activity of the deterioration that has already occurred could be deeper or more persistent than expected in this outlook. In particular, a more rapid unwinding of the resources boom than has been assumed would have significant negative effects throughout the economy, resulting in softer growth in domestic incomes and spending. If so, there would be a quicker moderation in inflation. Furthermore, there is a risk that developments in capital markets could result in a sharper than foreshadowed reduction in the availability of credit to Australian households and businesses, thereby exacerbating the slowing in domestic activity.

On the other hand, the global economy could rebound faster than currently anticipated. Governments and central banks around the world have responded to the market turmoil and global slowdown with numerous policy initiatives, and further actions may well be forthcoming. In addition, the recent sharp falls in commodity markets could prove to be overdone. If so, the slowing in the domestic economy, especially in the resources sector, could be smaller than forecast here, and the decline in inflation would be more modest.