STATEMENT ON MONETARY POLICY

Inflation in Australia picked up over the past year in an environment of limited spare capacity and earlier strong demand. In these circumstances, a significant slowing in the growth of demand from the rapid pace of 2007 will be needed in order to return inflation to the target over time. There are signs that such moderation is now occurring.

Whether or not this more moderate pace is sustained will depend on the net effect of a range of contrasting forces likely to be affecting the economy in the period ahead. Several factors, including a slowdown in global growth, continuing strains in world financial markets and tight domestic financial conditions, are working to dampen demand. Working in the other direction, a further increase in Australia's terms of trade this year will provide a substantial stimulus to incomes and spending. Given the nature of these forces, their net effect is subject to significant uncertainty. On balance, the Board's judgment at this stage is that growth in domestic demand will remain moderate this year, and that this will help to reduce inflation over time.

The slowing in the global economy has to date been most pronounced in the United States. Recent data have indicated little growth in the US economy in the March quarter, with consumer spending slowing and housing construction activity still a significant drag on growth. Falling house prices could continue to dampen the US household sector for a while yet, although expansionary monetary and fiscal policy measures taken in the recent period will help to support activity. Conditions in the other major advanced economies have also softened this year. In the euro area, business conditions and consumer sentiment have declined, although moderate growth in demand and activity is continuing. Japan similarly is experiencing softer conditions this year.

In contrast, growth in the developing world at this stage remains strong. The Chinese economy has continued to grow at a pace of more than 10 per cent, and indicators of spending and production around the rest of the east Asian region have showed little sign of slowing in recent months. Reflecting these varying developments, official and private sector observers are generally expecting below-trend growth in the world economy this year and next, with weak conditions in the major advanced economies being cushioned by relatively high growth in the developing world.

Sentiment in global financial markets has fluctuated considerably over recent months, reaching its low point in mid March around the time of the Bear Stearns rescue, and subsequently improving somewhat. The problems surrounding Bear Stearns added to liquidity strains already existing in global financial markets. In response, major central banks pursued a number of co-ordinated initiatives to ease the situation and, in the United States, the Federal Reserve made a significant set of further changes to its operating procedures in the money market.

A general improvement in global financial market sentiment since around mid March has been evident in several developments. While financial institutions continued to report large writedowns on credit products in their recent first quarter earnings results, this was accompanied

in a number of cases by the announcement of large capital raisings. There has been less evidence recently of asset sales resulting from de-leveraging. The general shift in sentiment during this period has also been seen in rising government bond yields, a decline in credit default swap premia, and a firming in global share markets. Nevertheless, sentiment remains fragile.

The primary exception to this improvement has been in short-term money markets, where spreads remain at high levels in major countries. However, the Australian money market has been less affected by these global strains. While the spread between the bank bill rate and the expected cash rate in Australia is still noticeably higher than it was a year ago, it has narrowed recently to around 45–50 basis points from its peak of 80 basis points in mid March. Reflecting the recent improvement in market conditions, the Bank has been able to wind back the amount of funds provided in its domestic operations, with exchange settlement balances declining to less than $2 billion from around $5.5 billion at the end of March.

While global growth prospects have softened since last year, inflation remains a concern in many countries. Pressure has been particularly evident in prices of food and a range of resource commodities. Oil prices have risen further in recent months, and base metals prices have also been at high levels. The main factor behind the continued strength in resource commodity prices seems to be the strength of Chinese demand, in combination with a relatively limited supply response to the higher prices to date.

The contrast in economic conditions between parts of the developed world and the emerging economies has been reflected in the actions of central banks. In the United States, successive interest rate cuts in response to the economic slowdown have brought the fed funds rate down to 2 per cent, and interest rates have also been reduced in the UK and Canada. In contrast, central banks in a number of emerging economies including China, Brazil, India and South Africa have tightened policy in response to inflationary pressures.

In Australia, national accounts data confirmed that the economy grew strongly during 2007. GDP growth was 3.9 per cent over the year, while domestic demand grew at an unsustainably fast pace of 5.7 per cent. Australia's economic expansion has continued over a prolonged period, and this has resulted in surplus productive capacity being progressively wound back. A range of indicators of capacity utilisation and labour market tightness all point to spare capacity now being very limited. These conditions, combined with the strong growth in demand that prevailed through to the end of 2007, have contributed to an increase in Australia's inflation rate. Evidence of stronger inflation emerged in the second half of 2007, and the year-ended inflation rate rose further in the March quarter this year, both in terms of the CPI and underlying measures. The CPI increased by 1.3 per cent in the quarter and by 4.2 per cent over the latest year. While some pick-up in year-ended inflation had been anticipated, the March quarter result was higher than expected. Strong contributions came from food, fuel and housing costs, though the price increases were broadly based and encompassed both tradable and non-tradable items in the CPI.

While domestic sources of inflationary pressure have clearly increased over the past year, the rise in inflation has been partly a result of global factors, notably a general increase in commodity prices. Reflecting this, preliminary-stage producer prices rose by 7 per cent over the latest year. Since rising raw materials prices are a global phenomenon, it is not surprising

that consumer price inflation rates have picked up recently around the world. Nonetheless, inflation in Australia has for some time been above the average for the advanced economies, and this margin has increased recently. This has reflected the much stronger demand conditions prevailing in Australia for most of the recent period.

Against this background, the Board has been seeking to slow the growth of aggregate demand in order to reduce inflation. To that end, the Board raised the cash rate on two occasions in the second half of 2007 as well as at its February and March meetings this year. Market developments since mid 2007 have added to the tightening in domestic financial conditions. Australian financial intermediaries have experienced increases in funding costs, which have been passed on to borrowers. Some tightening in credit standards for more risky borrowers has also occurred.

The available economic data for 2008 suggest that a significant moderation in domestic spending is now occurring. After strong growth last year, the volume of retail sales is estimated to have fallen slightly in the March quarter, and this has occurred against the background of a sharp decline in consumer sentiment. Indicators of housing construction activity have also fallen in recent months. In the business sector, surveys point to a noticeable fall in confidence in early 2008, though trading conditions at this stage are reported to have softened only modestly. Labour market indicators, at the time of writing, have for the most part remained strong in recent months, with employment continuing to expand in the March quarter and unemployment remaining close to recent lows.

Developments in financing activity and in the established housing market are generally pointing to more subdued demand this year. Housing loan approvals have fallen in recent months and, to a lesser extent, there has been a slowing in the growth of housing credit outstanding. In the established housing market, auction clearance rates have fallen from last year's high levels, while average house prices in the capital cities slowed in the March quarter after strong rises through 2007. In addition, after a period of very rapid growth, finance to businesses has slowed noticeably in recent months. Hence, while it is still too early to gauge the full effects of the tightening in financial conditions, the evidence to date is that a noticeable restraining impact is being exerted on household and business borrowing and on overall domestic demand.

In assessing the outlook for demand and growth, an important countervailing consideration is the stimulus that will come this year from Australia's rising terms of trade. Based on the latest contract negotiations for coal and iron ore, it is likely that the terms of trade will rise by around 20 per cent this year as the new contracts come into effect. This is well above the average increase over the past four years, and higher than appeared likely a few months ago. Given current capacity constraints and the large increases in investment that have already occurred, it is possible that the mining companies and governments that receive the revenue gains may find it more difficult than in previous years to make major expansions to their investment spending in the near term. Even so, the projected increase in Australia's terms of trade represents a substantial boost to national income.

Hence, in summary, prospects for growth of the Australian economy and for inflation will depend on the net impact of several contrasting factors, including the slowdown in the major advanced economies, the ongoing turmoil in world financial markets, tight domestic financial

conditions and, working in the other direction, the forthcoming stimulus from Australia's rising terms of trade. Given the opposing forces at work, their overall net effect on demand and inflation is subject to considerable uncertainty. The recent evidence is that a significant moderation in domestic demand is now occurring. The full effects of the recent tightening in domestic financial conditions are yet to become apparent although, on the other hand, the stimulus from this year's terms-of-trade increase is also still in the future.

On balance, the Board's assessment is that a period of below-trend growth in the Australian economy is now in prospect. If sustained, this will mean a gradual easing in capacity pressures, which in turn can be expected to have a restraining influence on inflation over time. On this basis, while inflation is likely to remain high in the short term, it is forecast to start to decline towards the end of 2008, reaching a rate of around 2¾ per cent at the end of the forecast period. This assessment would need to be reviewed if the expected moderation in domestic demand does not occur, or if expectations of high ongoing inflation begin to affect wage and price setting.

At its most recent meeting, the Board considered whether the current stance of monetary policy was sufficiently restrictive to reduce inflation over time. On balance, the Board judged that the setting of monetary policy was appropriate for the time being. The Board will continue to monitor developments, and will make adjustments to policy as needed to ensure that inflation returns over time to the medium-term target. ✠

International Economic Developments

Growth in the world economy has slowed in recent months, as economic conditions in the United States have deteriorated, growth in other major countries has moderated, and global financial markets have remained turbulent. However, economic activity has remained fairly strong in emerging market economies, particularly in China and the smaller east Asian economies where, despite recent falls in equity prices, financial conditions are generally supportive of domestic demand.

Official and private sector forecasts of global growth have been revised down since the start of the year. A period of weak economic conditions is expected in the G7 economies along with a mild slowdown in emerging Asian economies, which have grown rapidly in recent years. In early April the IMF lowered its forecasts for global growth by ½ percentage point for 2008 and 2009 compared with those published in late January (Graph 1 and Table 1). The most significant downward revision has been to the

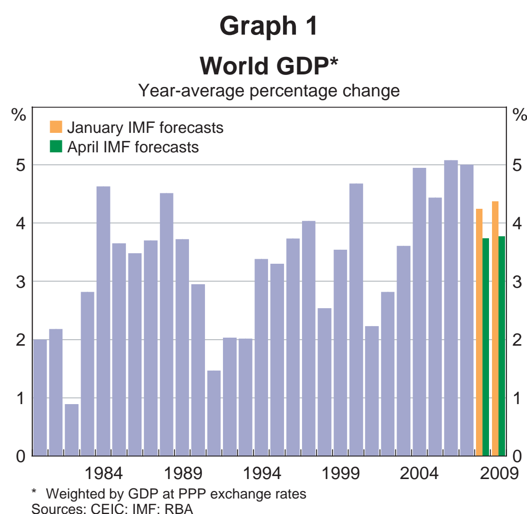
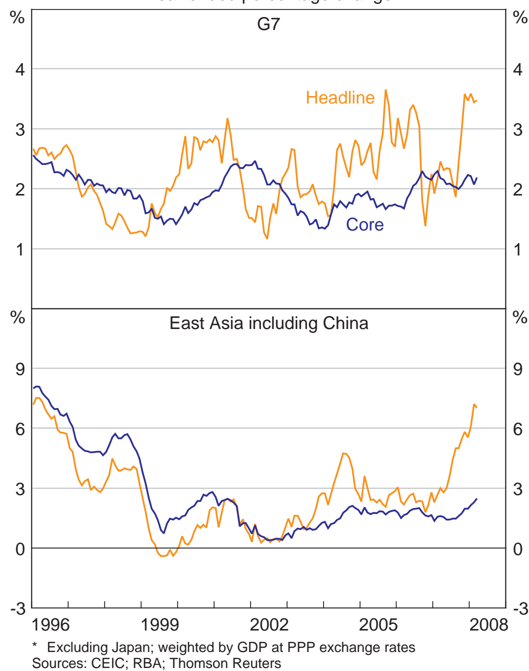


Table 1: World GDP
Year-average percentage change(a)

	2006	2007	2008	2009
			IMF forecasts (April 2008)	
United States	2.9	2.2	0.5	0.6
Euro area	2.9	2.6	1.4	1.2
Japan	2.4	2.1	1.4	1.5
China	11.6	11.9	9.3	9.5
Other east Asia(b)	5.5	5.7	4.6	4.9
India	9.7	9.1	7.9	8.0
Emerging Europe	6.6	5.8	4.4	4.3
Latin America	5.3	5.6	4.3	3.6
World	**5.1**	**5.0**	**3.7**	**3.8**
Australia's trading partners(c)	5.1	5.4	4.0	4.2

(a) Aggregates weighted by GDP at PPP exchange rates unless otherwise specified
(b) Weighted using GDP at market exchange rates
(c) Weighted using merchandise export shares
Sources: CEIC; IMF; RBA; Thomson Reuters



outlook for the US economy, with the IMF now expecting GDP to fall by 0.7 per cent over the year to the December quarter 2008 before picking up by 1.6 per cent over 2009. Growth forecasts for emerging market economies have also been lowered. The global forecasts, which are similar to the Bank's, are discussed further in the 'Economic Outlook' chapter. While these forecasts would imply the slowest pace of world growth in five years, growth would still be well above the rate recorded during the global slowdown in 2001.

Consumer price inflation has picked up globally in recent months, mainly as a result of rising oil and food prices (Graph 2). Oil prices have reached new highs in US dollar terms, with West Texas Intermediate trading at around US$120 per barrel in early May, around 35 per cent higher than its level at the time of the February *Statement*. Despite this, 'core' measures of inflation have remained fairly contained in the industrial countries. In east Asia, CPI inflation has been more affected by the sharp increase in the price of food, which accounts for a relatively large share of the consumption basket in low- and middle-income countries, but measures of underlying inflation that exclude food have also been on a rising trend. Monetary policy has been tightened in China, Indonesia and Singapore in recent months, and several Asian countries have implemented trade restrictions in an effort to minimise increases in the local retail price of food.

In addition to oil and food, other commodity prices have also increased noticeably over the past three months. Base metals prices have generally strengthened, led by increases in copper and aluminium prices, and Australian resource producers have secured substantial increases in contract prices for 2008/09, which will provide another large boost to Australia's terms of trade in the coming year.

Major developed economies

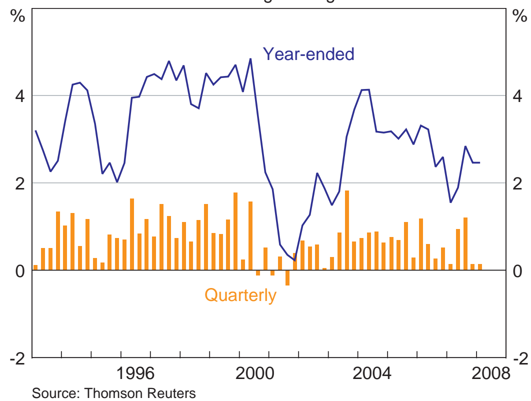
The March quarter national accounts indicate that economic activity was subdued in the United States in the quarter, and other recent indicators confirm the weakness of the economy. Real GDP has now grown by 0.1 per cent in each of the past two quarters, and a range of indicators are suggesting that the slowdown – which had for some time been confined to the housing sector – has now spread to other areas of spending (Graphs 3 and 4). Household consumption increased by 0.2 per cent in the March quarter – its slowest pace in 13 years – and consumer sentiment weakened further in April. Residential and business investment fell in the quarter and forward-looking indicators suggest more weakness in coming months. In contrast, solid growth in exports has continued, supported by the depreciation of the US dollar and firm growth in many of America's trading partners.

The labour market has also weakened significantly since the start of the year, with payrolls employment declining by around 250 000 jobs. Employment in the construction and manufacturing industries has fallen further, and employment growth in the rest of the private sector has also weakened (Graph 5). The unemployment rate has risen by 0.6 percentage points from its trough in early 2007, to be 5.0 per cent in April.

Graph 3

United States – GDP

Percentage change

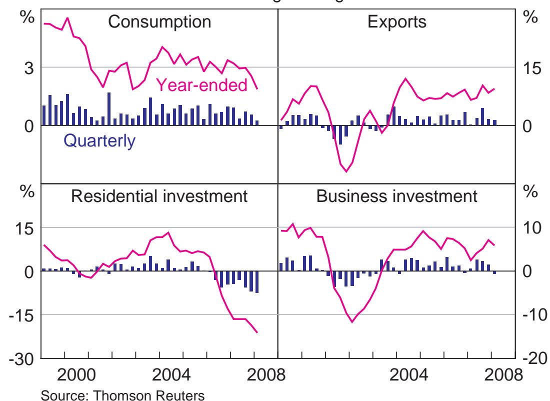


Source: Thomson Reuters

Graph 4

United States – National Accounts

Percentage change

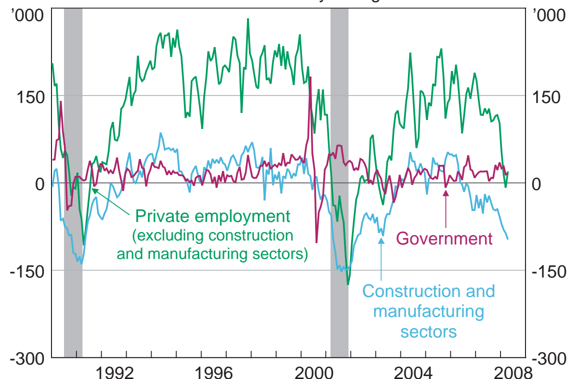


Source: Thomson Reuters

Graph 5

United States – Employment Growth

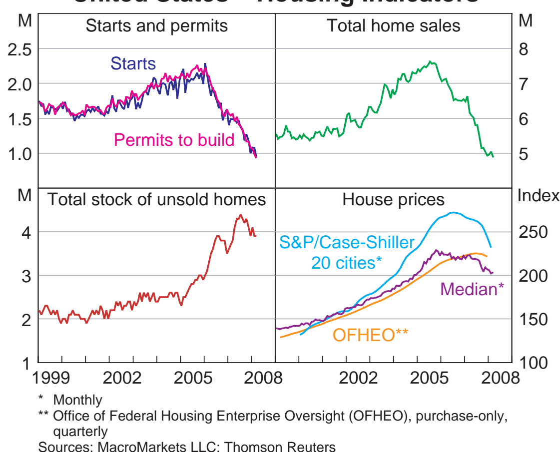
Smoothed monthly change*



* Three-month moving average; shading shows NBER recession periods
Source: Thomson Reuters

Graph 6

United States – Housing Indicators



* Monthly
** Office of Federal Housing Enterprise Oversight (OFHEO), purchase-only, quarterly
Sources: MacroMarkets LLC; Thomson Reuters

Conditions in the housing market remain weak, with housing starts and permits down by around 60 per cent from their peaks around the end of 2005, and the number of home sales falling to its lowest level in over a decade (Graph 6). The stock of unsold homes remains elevated, which is putting downward pressure on house prices. The Case-Shiller measure of house prices, which covers houses sold in 20 major cities, has fallen by 15 per cent from its peak in mid 2006 and the National Association of Realtors measure of the median house price has also declined significantly. The ongoing falls are likely to further dampen household spending through their impact on household wealth and confidence. They are also affecting banks' willingness to lend; the Federal Reserve's Senior Loan Officer Survey reported that an increasing number of banks tightened their lending standards in the three months to April and that demand for credit eased further during this period.

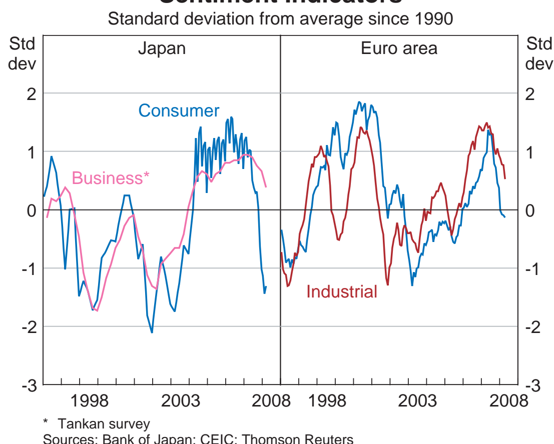
In response to the deterioration in the outlook, the Federal Reserve cut the fed funds rate by a further 100 basis points in March and April, to 2 per cent, and has introduced new operating procedures designed to boost liquidity in the financial sector (see the 'International and Foreign Exchange Markets' chapter for details). While the Fed has noted concerns about inflation – consumer price inflation was 4 per cent over the year to March while the core measure was 2.4 per cent – it continues to expect a moderation in coming quarters.

Conditions have also moderated in other major developed economies. In Japan and the euro area household and business sentiment have declined further in recent months, although business sentiment remains more positive than household sentiment in both regions (Graph 7). Business conditions have been supported by continued growth in exports, particularly to emerging economies. Conditions have also softened in the United Kingdom, particularly in the housing sector where prices have started to decline. In response to the deteriorating outlook, the Bank of England has cut its policy rate by 50 basis points over the past three months, to 5 per cent.

Graph 7

Sentiment Indicators

Standard deviation from average since 1990



* Tankan survey
Sources: Bank of Japan; CEIC; Thomson Reuters

Other major trading partners

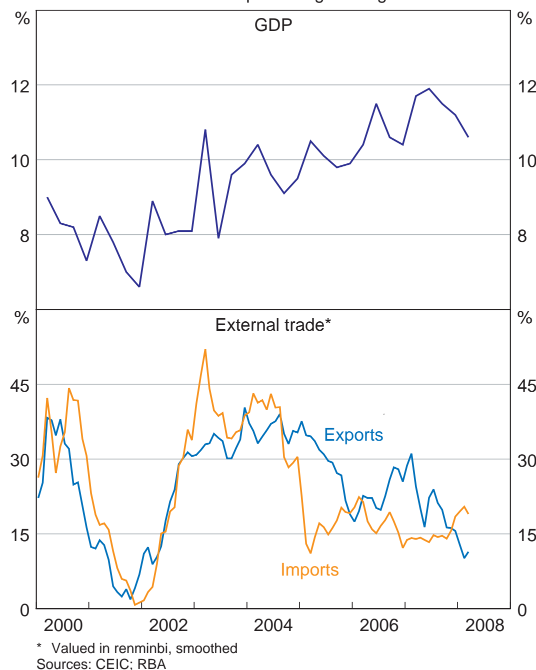
In contrast to the developed countries, conditions have remained strong across the Asian region. Growth in China's GDP was estimated to be 10½ per cent over the year to the March quarter, down somewhat from the exceptionally rapid pace recorded in the past two years (Graph 8). The slowing appears to be concentrated in the external sector, with growth in exports moderating and imports growth picking up. The available indicators suggest that domestic demand growth remains strong; nominal spending on fixed-asset investment increased by 27 per cent over the year to March and retail sales volumes are estimated to have grown by around 14 per cent over the same period. Growth in industrial production has recently been volatile due to severe weather that disrupted activity early this year, but appears to remain firm.

Growth remains solid elsewhere in the Asian region; preliminary estimates of GDP growth in the March quarter suggested a strong outcome for Singapore but a more moderate one for Korea. Growth in industrial production and exports has picked up since the start of the year and has been broad-based across the region; industrial production in east Asia (excluding China) increased by 11 per cent over the year to February and the value of exports grew by 19 per cent over the same period (Graph 9). While growth in exports to the United States and the other major developed economies has slowed, this has been more than offset by a pick-up in exports to other emerging economies, including China, Russia and the Middle East (Graph 10). In India, GDP growth was 8.5 per cent over the year to the December quarter, with little evidence of any emerging weakness in the available data for 2008.

Graph 8

China – Activity Indicators

Year-ended percentage change

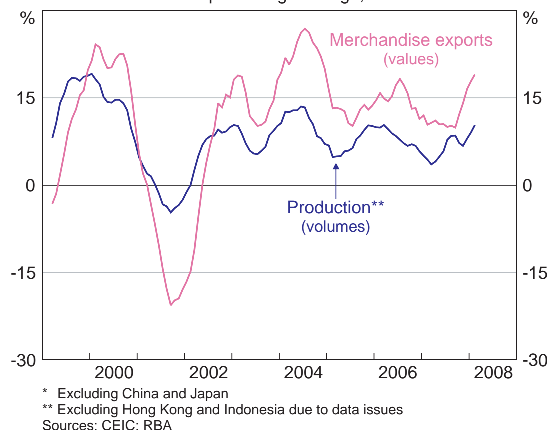


* Valued in renminbi, smoothed
Sources: CEIC; RBA

Graph 9

East Asia* – Business Indicators

Year-ended percentage change, smoothed

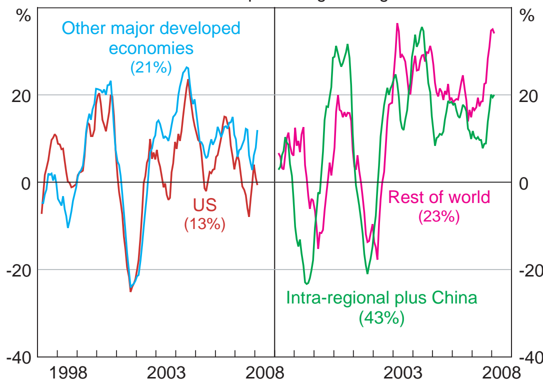


* Excluding China and Japan
** Excluding Hong Kong and Indonesia due to data issues
Sources: CEIC; RBA

Graph 10

East Asia* – Exports Growth

Year-ended percentage change



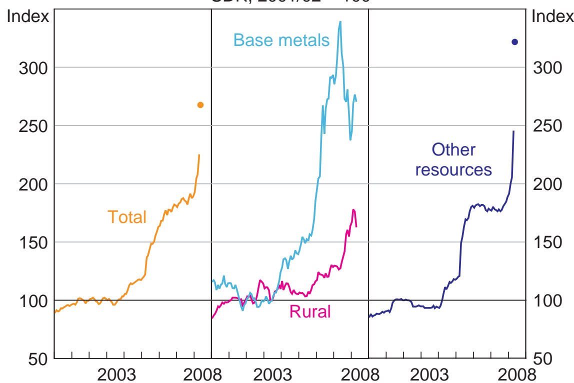
* Excluding China, Indonesia and the Philippines; brackets show export shares in 2007

Sources: CEIC; RBA

Graph 11

RBA Index of Commodity Prices*

SDR, 2001/02 = 100



* Data for coal and iron ore export prices for April are not yet available; the estimate reflects expected partial pass-through of higher 2008/09 contract prices. The dot shows the likely impact on the index once the full effect of the contract price increases are realised.

Source: RBA

Commodity prices

Overall commodity prices have strengthened in recent months, as higher prices for coal and base metals have more than offset declines in wool and wheat prices. The RBA's index of commodity prices has risen by 17 per cent (in SDR terms) since January, and has doubled over the past four years (Graph 11). Further gains in the index are expected over coming months, due to substantial increases in coal and iron ore contract prices for 2008/09.

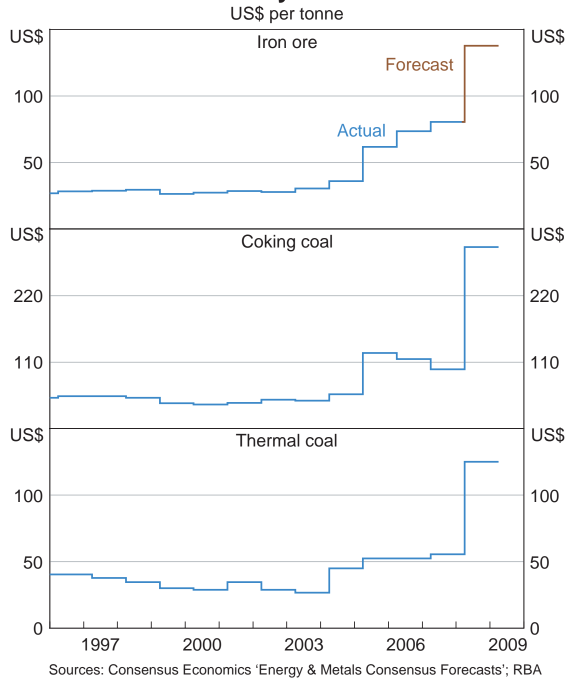
Coal contract prices have been settled by a number of Australian companies at significant premiums over 2007/08 prices, the result of tight supply and continuing strong demand from developing Asia (Graph 12). Contract prices for coking coal – for which Australia accounts for almost 60 per cent of world exports – will increase by more than 200 per cent, well above market analysts' expectations from a few months ago. Thermal coal contract prices are set to rise by around 125 per cent, with power shortages in South Africa and temporary restrictions on coal exports from China accentuating existing supply concerns. Iron ore contract price increases of at least 65 per cent appear likely based on various agreements to date, although negotiations between Australian exporters and foreign steel producers have not been concluded. These developments by themselves imply an increase of around 20 per cent in the level of the terms of trade over 2008.

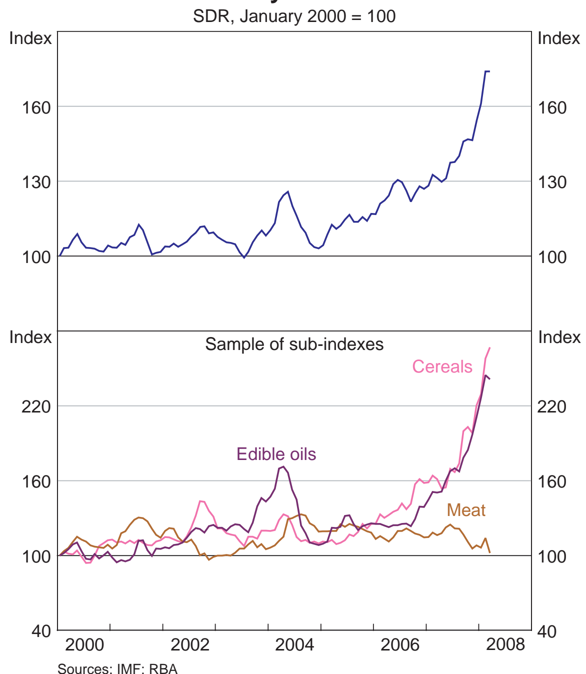
The RBA index of base metals prices has risen by 10 per cent over the past three months, pushed up by strong gains in copper and aluminium prices. Copper prices have increased by 19 per cent since January, partly reflecting falling inventories, which are around historically low levels. Aluminium prices have risen in response to disruptions to production in South Africa and China as well as rising energy costs (aluminium production is highly energy intensive). Gold prices have been volatile, reflecting the turbulence in financial markets; prices reached a (nominal) record of just over US$1 000 per ounce in early March, before falling back to a

level similar to that at the time of the February *Statement*.

Rural commodity prices fell by 3 per cent over the three months to April due to weaker wool and wheat prices. After increasing strongly over the second half of 2007, wool prices have fallen by 6 per cent since January, reflecting the uncertainty surrounding future demand in the developed world and the improving outlook for production in Australia. Wheat prices have been volatile in response to the ongoing uncertainty over the size of this year's global wheat crop; overall, prices have fallen in recent months but remain at relatively high levels. As discussed in the February *Statement*, wheat inventories are around historical lows, and prices are around 60 per cent higher than a year ago.

The high wheat price has occurred against a backdrop of rises in other global food prices. The IMF Commodity Food Price Index has increased by 33 per cent over the past year in SDR terms, driven by broad-based strength in crop prices (Graph 13). In addition to wheat, world prices for maize, soybeans, rice and palm oil recorded increases of between 30 and 90 per cent over the past year. Crop failures and food export restrictions in some countries, combined with growing demand for food in developing countries and from biofuel producers, have been cited as the main determinants behind the strength in these prices.





International and Foreign Exchange Markets

Sentiment in financial markets has fluctuated considerably since the last *Statement*. It deteriorated markedly in February and March as banks tightened or withdrew funding to highly leveraged investors, triggering the forced sale of assets. Confidence reached its nadir when Bear Stearns, the fifth largest Wall Street securities firm, had to seek substantial emergency funding from the US Federal Reserve and was ultimately sold to JPMorgan. However, the Fed's action with regard to Bear Stearns helped stabilise markets. Since then there has been some further improvement in market sentiment as a number of financial institutions have successfully raised capital following a further round of write-downs of impaired credit exposures.

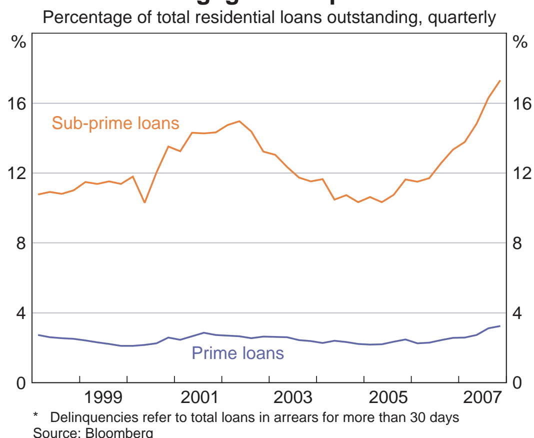
Credit and money markets

The current credit crisis has its origins in the poor performance of securities backed by US mortgages, particularly sub-prime mortgages. Reflecting this, the ongoing deterioration in the US housing market continues to weigh on financial markets. Data for the fourth quarter released since the last *Statement* show a further sharp rise in delinquency rates for sub-prime mortgages, while delinquencies on prime loans also reached multi-year highs (Graph 14). Delinquencies on mortgages originated in 2006 are notably higher than those on earlier vintages, while those on 2007 mortgages already appear to be higher again (Graph 15). This suggests that delinquencies in aggregate still have some way to rise. Credit default swap prices[1] suggest that the market value of lower rated sub-prime residential

Graph 14

US Mortgage Delinquencies*

Percentage of total residential loans outstanding, quarterly



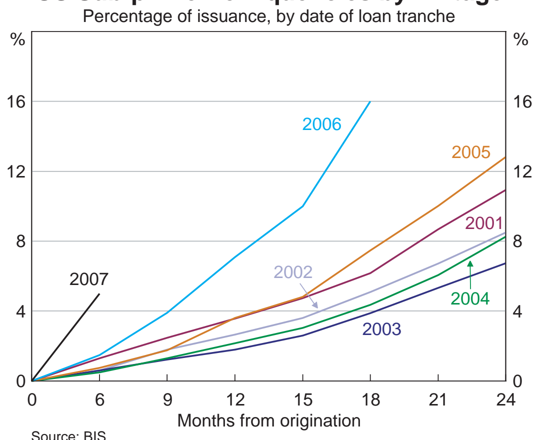
* Delinquencies refer to total loans in arrears for more than 30 days

Source: Bloomberg

Graph 15

US Sub-prime Delinquencies by Vintage

Percentage of issuance, by date of loan tranche



Source: BIS

1 *For more details, refer to 'Box B: The ABX.HE Credit Default Swap Indices', RBA* Financial Stability Review, *March 2008, pp 18–22.*

Table 2: Selected Bank Announcements
US$ billion

	Q1 2008 write-downs	Q1 actual and planned capital raisings
UBS	19.1	15.1
Citigroup	15.2	10.5
Merrill Lynch	11.8	2.6
Royal Bank of Scotland	11.8	23.9
HBOS	5.6	7.9
Credit Suisse	5.2	
Deutsche Bank	4.3	
Washington Mutual	3.5	7.0
Wachovia	2.8	7.0
JPMorgan	2.5	6.0
Lehman Brothers	2.4	4.0
Morgan Stanley	2.3	
Mizuho	2.2	
BayernLB[(a)]	2.1	
Goldman Sachs	2.0	
Wells Fargo	2.0	
Bank of America	1.9	
National City	1.4	7.0
Nomura	1.3	
CIT	0.3	1.0
WestLB[(a)]		7.8
Total	**99.7**	**99.8**

(a) For the year 2007
Source: company reports

mortgage-backed securities (RMBS) has continued to decline over recent months, though prices for the highest-rated instruments appear to have stabilised.

The decline in value of mortage-related assets, along with the decline in the value of other credit-related asset classes, has seen major global banks report write-downs for the first quarter of around US$100 billion (Table 2). This takes total write-downs since August to around US$280 billion. In addition, reflecting the turn in the broader credit cycle, banks have increasingly set aside larger provisions for a more generalised deterioration in asset quality.

In response to these losses, international banks have announced new capital raisings also totalling around US$100 billion in recent months. Many of these new capital raisings were secured or underwritten before public announcements were made, which appeared to contribute to the improvement in market sentiment in April. Many institutions also cut dividend payments to preserve capital.

In a number of instances public funds have been employed to support troubled institutions, the most prominent being Bear Stearns. The Federal Reserve announced mid March that it had provided emergency funding to Bear Stearns through JPMorgan. This followed a rapid withdrawal of client funds over several days of intensifying market rumours about the investment bank's solvency. Subsequently, as part of a rescue package, the Fed agreed to provide US$29 billion in financing for the 'less-liquid' assets on Bear Stearns' balance sheet for a term of 10 years which helped facilitate the acquisition by JPMorgan of the failed investment bank. JPMorgan has committed to honouring all Bear Stearns' liabilities and will incur the first US$1 billion in the event of loss on the assets funded by the Fed. In the United Kingdom, Northern Rock was taken into public ownership in February after the government rejected inadequate bids from the private sector. In Germany, the government has pledged an additional US$2.2 billion to IKB Deutsche Industriebank in its third assistance package since last year.

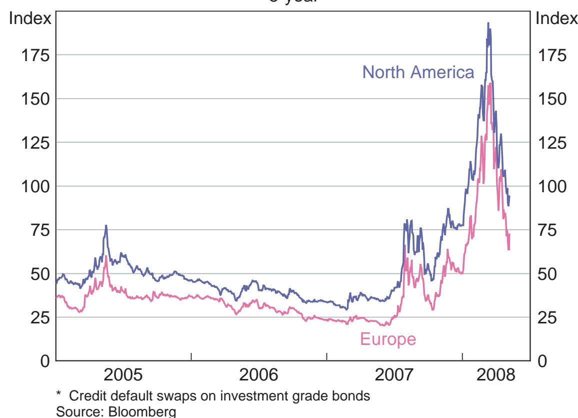
The heightened market strains around the time of the Bear Stearns rescue were evident in a number of markets. Part of the dislocation reflected forced selling by hedge funds as banks

tightened their margin requirements for leveraged investors. A number of funds, including Carlyle Capital, defaulted on debt after being unable to refinance RMBS investments. These negative developments saw spreads on credit default swaps spike in mid March as the traditional sellers of credit protection, including monolines and investment banks, reduced their participation in the market (Graph 16). Spreads have subsequently narrowed considerably as market sentiment has improved, although they still remain near their highs of 2007.

Graph 16

Credit Default Swap Index*

5-year



* Credit default swaps on investment grade bonds
Source: Bloomberg

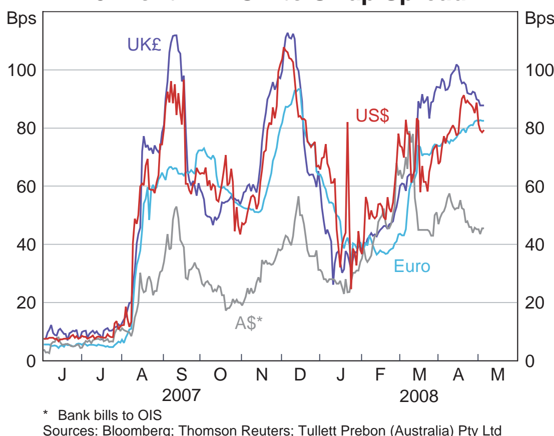
Concerns have persisted around the state of the monoline bond insurers which have generally been unable to underwrite new issuance as their own credit ratings have been downgraded. One consequence of this has been that credit risk has risen on the possibility that monolines will be unable to make payments on the guarantees they have made in the past. These concerns have been associated with disruptions in municipal bond markets and issues of securities backed by student loans. Interest rates in the auction-rate bond market used by local government borrowers remain elevated as a result. Higher borrowing costs have pushed some US counties close to bankruptcy and lenders have also stopped writing some types of student loans.

Money markets and central bank operations

Conditions in key money markets have remained strained, in contrast to the improvement in most other financial markets (Graph 17). Tensions increased towards the end of the March quarter reflecting concerns about the availability of funds through that period. However, unlike in September and December when such quarter-end tensions eased soon after the event passed, this has not been the case for all markets in the most recent episode despite the general improvement in financial market sentiment. The London Interbank Offered Rate (LIBOR) for US dollars continued to rise in April amid concerns that banks were understating their borrowing costs. The British Bankers' Association,

Graph 17

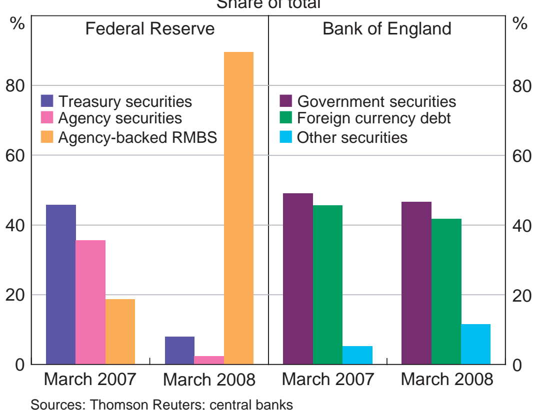
3-month LIBOR to Swap Spread



* Bank bills to OIS
Sources: Bloomberg; Thomson Reuters; Tullett Prebon (Australia) Pty Ltd

which compiles the LIBOR, indicated that it would take action against any bank mis-quoting. US dollar LIBOR spreads have since narrowed somewhat.

The tightening in money market conditions occurred despite extensive use of new liquidity facilities introduced by the Fed and other major central banks to ease the strains in term money and repo markets (see Box A for a summary of changes to the Fed's market operations). Central banks have been willing to provide liquidity at longer maturities, against a wider range of collateral and, in the case of the Federal Reserve, with a wider range of counterparties. However, these operations have generally not significantly increased the level of system liquidity (exchange settlement balances in the Australian case). Where liquidity has been injected at one maturity, it has generally been offset by the withdrawal of liquidity at another maturity.



The Fed and the Bank of England (BoE) have also joined the European Central Bank (ECB) in accepting a wider range of collateral, notably highly-rated mortgage backed securities, in their repurchase transactions (Graph 18). In late April the BoE announced a Special Liquidity Scheme (SLS) that would enable it to swap UK Treasury bills for mortgage-backed securities. Since the Treasury bills will be issued by the UK Debt Management Office rather than drawn from the central bank's own holdings, this will lead to a grossing up of the BoE balance sheet, while leaving overall system liquidity unchanged. These operations are intended to remove less-liquid and lower-rated securities from the balance sheet of financial institutions at a time when market strains are making it difficult to use these assets to generate the required cash flow. Central banks also expanded their use of co-ordinated actions involving foreign exchange 'swap lines' between the US Federal Reserve, the ECB and the Swiss National Bank.

Official policy rates

Since the previous *Statement*, three major central banks have continued to ease monetary policy to address the growing downside risks to growth stemming from the ongoing disturbances in financial markets (Graphs 19 and 20). In marked contrast, inflation remains the predominant concern in a number of European countries and many emerging market economies, some of which have tightened policy in recent months.

In the United States, the Federal Open Market Committee (FOMC) lowered the policy rate by 75 basis points in March and a further 25 basis points in April, taking the cumulative policy easing since August 2007 to 325 basis points. With the size of the easing to date and a number

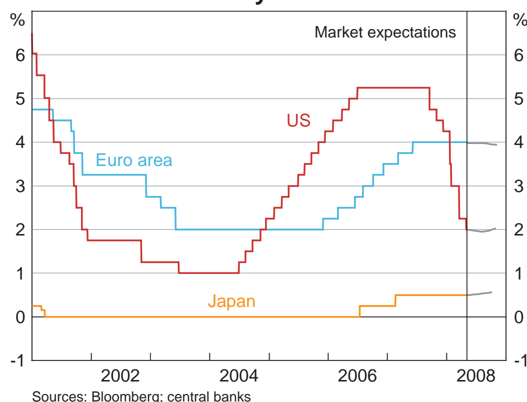
of FOMC members signalling their concern about the outlook for inflation, the market currently expects no further easing in policy.

In the euro area, inflation concerns have led the ECB to keep its policy rate unchanged at 4 per cent. Despite acknowledging heightened uncertainty and increased downside risks to growth as a result of financial market disruptions, the ECB continued to emphasise inflation risks posed by potential second-round effects stemming from elevated energy and food prices. With the focus on the upside risks to medium-term inflation, markets have pared back earlier expectations of policy easing, such that no change is expected in the policy rate for the coming half year.

The Bank of Japan (BoJ) also kept its policy rate on hold at ½ per cent. Nonetheless, the BoJ's assessment of the economy has deteriorated over the past three months, with growth seen to slow as a result of higher input costs. No change to the policy rate is expected by the market in coming months.

Graph 19

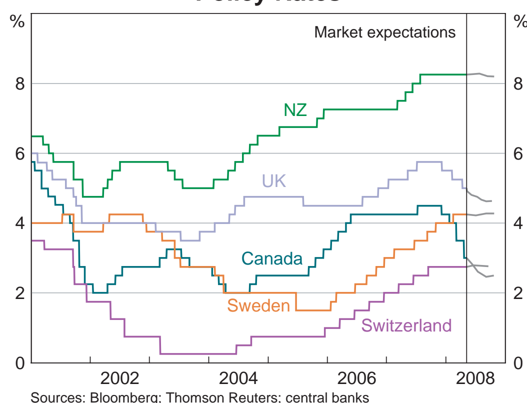
Policy Rates



Sources: Bloomberg; central banks

Graph 20

Policy Rates



Sources: Bloomberg; Thomson Reuters; central banks

In the United Kingdom, the BoE reduced its policy rate on two occasions since the previous *Statement*, each time by 25 basis points (Graph 20). In the accompanying statements and minutes to the decisions, the BoE judged the downside risks posed by market disruptions in the UK financial system to outweigh upside risks from higher energy and food prices. The market expects policy to be eased by a further 25 basis points over the next six months. Similarly, the Bank of Canada cut its policy rate twice by a cumulative 100 basis points to 3 per cent since the previous *Statement*. The market currently expects two additional rate cuts of 25 basis points each.

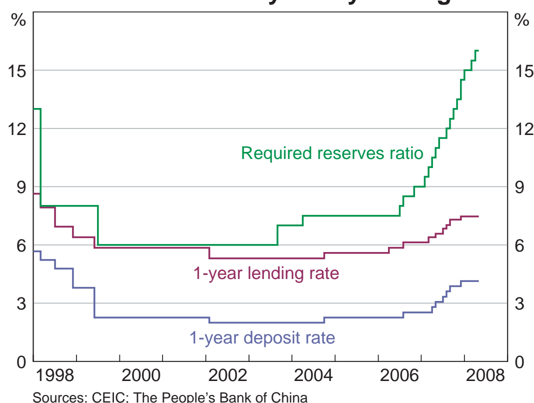
Elsewhere, growing inflation concerns in Sweden and Norway have led the central banks to increase their policy rates by 25 basis points to 4¼ per cent and 5½ per cent respectively. Policy rates remained unchanged in Switzerland at 2¾ per cent.

The Reserve Bank of New Zealand (RBNZ) left its policy rate unchanged at 8¼ per cent. In the accompanying statements, the RBNZ acknowledged increased uncertainty, with economic activity having slowed more rapidly than expected, while inflation remains elevated. No change in rates is anticipated over the coming months.

For many emerging market economies, inflation has continued to be the dominant concern amidst further increases in energy, commodity and food prices. The People's Bank of China raised its reserve requirement ratio for banks by a cumulative 100 basis points to 16 per cent as inflation remained near its 11-year high (Graph 21). The latest move marked the third increase in the ratio this year, with the cumulative increase since 2006 amounting to 850 basis points. The central bank of India has also raised its reserves ratio several times since the last *Statement*. A worsening inflation outlook led the central banks of Indonesia, Taiwan, the Czech Republic, Hungary, Poland, Russia, Brazil and South Africa to raise their policy rates. Similar concerns have led the Monetary Authority of Singapore to shift its currency trading band upwards to slow the pace of inflation, which reached a 26-year high in February. In contrast, the central banks of Turkey and Israel both eased policy rates over the period amidst concerns of a slowdown in trading partner growth.

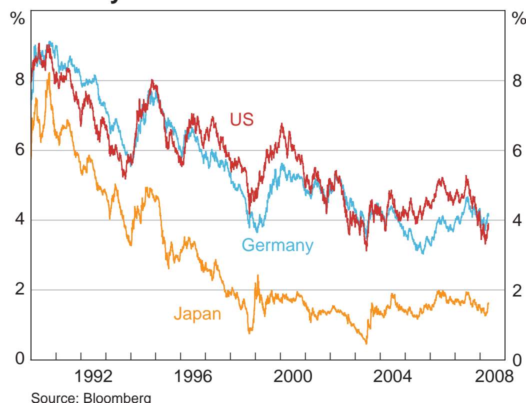
Graph 21

China – Monetary Policy Settings



Graph 22

10-year Government Bond Yields



Bond yields

Over the past three months there has been considerable volatility in US government bond yields, particularly at shorter maturities (Graph 22). US bond yields traded in a 60 basis point range over the period. In mid March, 10-year yields fell to their lowest level since mid 2003 as general economic and credit market concerns were heightened by news of the Fed-assisted takeover of Bear Stearns. Yields subsequently recovered in April as financial market sentiment improved.

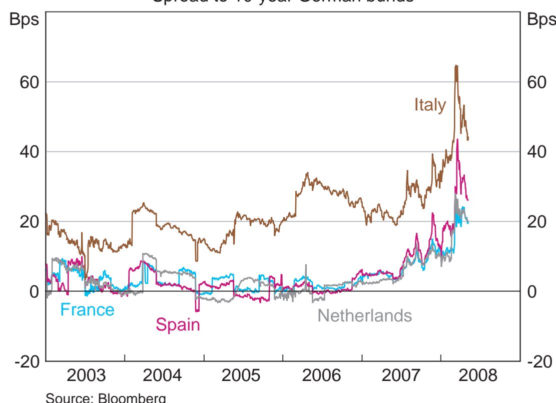
The spread between German and US 10-year yields widened to be the highest since end 2002, reflecting the contrasting developments in the two economies. De-leveraging among a number of highly geared institutions resulted in some dislocation in secondary European

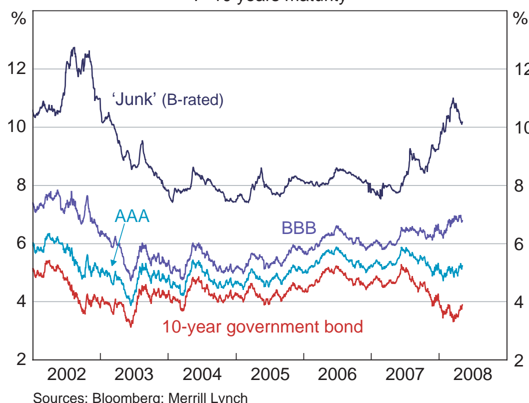
sovereign debt markets in mid March (Graph 23). Relative to German government bonds, the spread of sovereign bonds in Italy, France, Spain, and the Netherlands widened significantly. These spreads had previously amounted to no more than a few basis points.

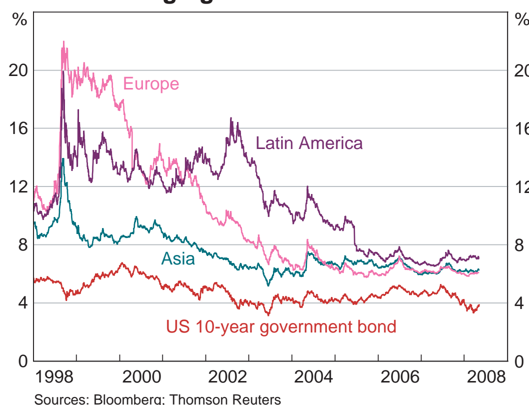
With credit market disturbances evident in March, investor appetite for high-yield debt diminished, raising spreads on corporate debt to highs not seen since 2002 (Graph 24). However, only the level of the more risky corporate yields with most exposure to the economic cycle and funding pressures has risen noticeably since the middle of 2007.

Corporate bond issuance in the US remained low in the March quarter, particularly for non-financial companies who resorted to other sources for funding. However, issuance picked up in April, led by financial corporations. The ability of institutions to issue new debt for funding, as well as replenish their capital positions following substantial write-downs, has been a key factor in shoring up financial market sentiment in recent weeks.

The yield on sovereign debt in emerging Asia, Europe and Latin America has moved little since the middle of last year, and there have been no major developments since the last *Statement* (Graph 25). The spread on emerging market debt has been almost exclusively driven by movements in US government bond yields.







Equities

There has been a modest recovery in global equity markets since the last *Statement*, though volatility remains elevated (Table 3). The stock price of financials fell sharply due to concern over the availability of funding amid the deterioration of liquidity in the banking system (Graph 26). These strains peaked in mid March when Bear Stearns sought emergency funding. Since then, the release of first-quarter earnings reports has seen a recovery in share prices despite major financial institutions announcing more write-downs on credit instruments. Investor sentiment appears reassured by announcements that banks have been able to raise additional capital despite difficulties in several key markets. Broader global equity markets have also been supported by gains in energy and material sector stocks, following renewed strength in oil and commodity prices.

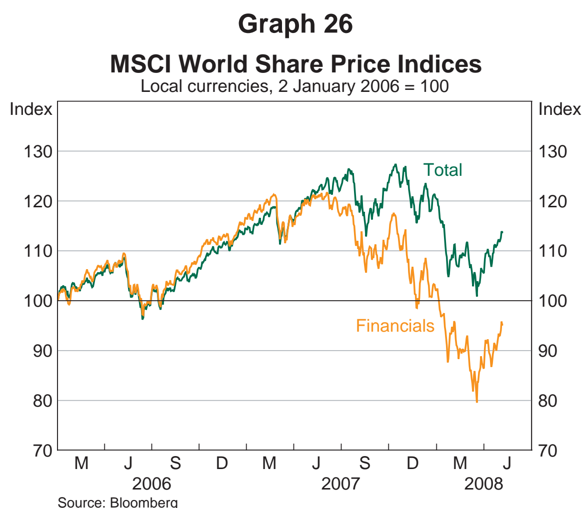


Table 3: Changes in Global Share Prices
Per cent

	Since 2000 peak	Past year	Since previous *Statement*
United States			
– Dow Jones	11	–2	6
– S&P 500	–7	–6	6
– NASDAQ	–51	–3	8
Euro area			
– STOXX	–21	–14	5
United Kingdom			
– FTSE	–10	–5	9
Japan			
– TOPIX	–22	–21	6
Canada			
– TSE 300	27	4	12
Australia			
– ASX 200	63	–10	2
MSCI Emerging Asia	61	20	7
MSCI Latin America	292	26	16
MSCI World	–2	–6	7

Source: Bloomberg

Better-than-expected profit reports for non-financial corporates in the US have seen earnings rise by around 10 per cent from the same period a year ago. Positive surprises have outnumbered unexpectedly poor results, suggesting that the slowdown in economic activity to date has had less impact on earnings than investors had previously feared.

Emerging market share prices have generally recovered somewhat from their lows earlier in the year. The exception has been China, where shares have fallen on concern that interest rates may have to rise significantly to contain inflation. Renminbi denominated China-A shares are down around 40 per cent since their peak in October 2007, prompting local authorities to cut transaction taxes in an effort to stem the decline.

Exchange rates

The major development in foreign exchange markets in the period since the last *Statement* is the continued depreciation of the US dollar against most other major currencies (Table 4). On a nominal trade-weighted basis the dollar reached a three-decade low, while the real effective exchange rate is close to the trough reached in 1995 (Graph 27). The dollar reached a post-war low against the euro during April before rebounding in recent weeks (Graph 28).

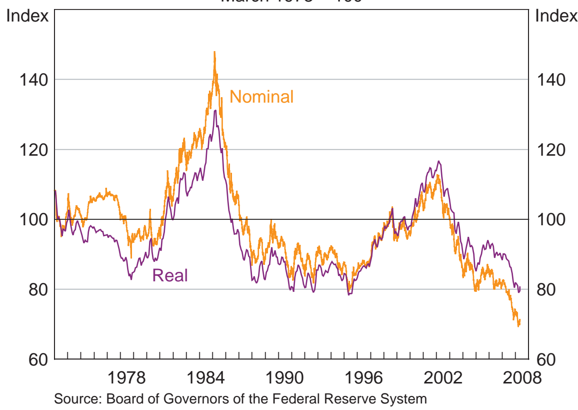
The Japanese yen also appreciated against the US dollar, reaching its highest level since the trough of 1995. Growing risk aversion over ongoing strains in financial markets and the state of the US economy resulted in an unwinding of carry trade positions. This was reflected in an increase in the volatility of low-yielding currencies such as the Japanese yen and Swiss franc. As the de-leveraging process progressed, the Swiss franc exceeded parity

Table 4: Change in US Dollar against Other Currencies
Per cent

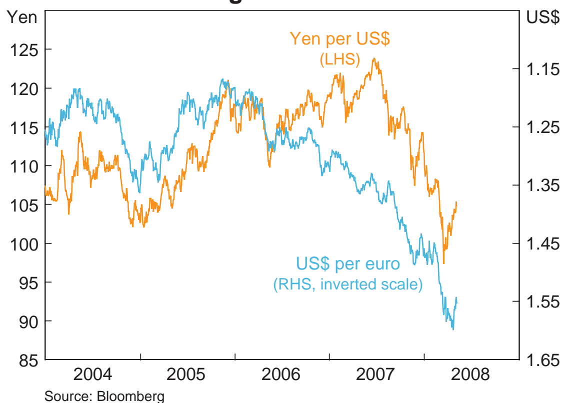
	Past year	Since previous *Statement*
Brazil	–18	–6
Australia	–13	–5
Switzerland	–13	–4
Japan	–13	–2
Euro area	–12	–6
Sweden	–11	–7
Philippines	–11	5
Singapore	–10	–4
Thailand	–9	–4
China	–9	–3
Canada	–9	0
Malaysia	–8	–2
Taiwan	–8	–5
New Zealand	–7	0
Mexico	–3	–3
India	0	4
United Kingdom	1	–1
Indonesia	4	0
South Africa	9	–3
South Korea	10	7
Majors TWI	**–10**	**–3**
Broad TWI	**–8**	**–2**

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

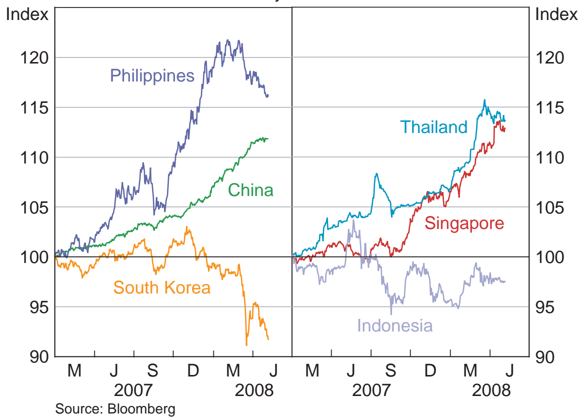
Graph 27



Graph 28



Graph 29



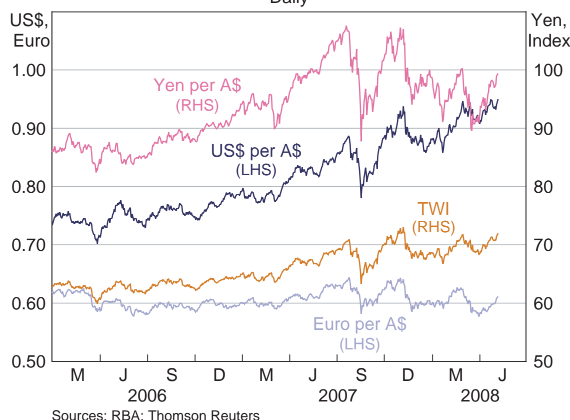
against the dollar for the first time. However, the improvement in sentiment towards the US dollar in April has seen the dollar pare back losses against these low interest rate currencies.

Emerging market currencies have been mixed against the US dollar (Graph 29). The Chinese renminbi continued its slow but steady appreciation against the US dollar. Pricing in the non-deliverable forward market indicates that the market currently expects the renminbi to appreciate by a further 8 per cent over the next year. The Brazilian real appreciated after interest rates were raised for the first time in around three years. The Singapore dollar gained after the central bank raised the trading range on the currency. In contrast, the South Korean won depreciated sharply against the dollar, as foreign investors sold equities on general risk aversion and concerns the slowdown in the US will dampen external demand.

Australian dollar

The Australian dollar has appreciated against most major currencies since the last *Statement*, reaching a 24-year high against the US dollar of just under 95½ cents in April (Graph 30, Table 5). The appreciation reflects both the broad-based US dollar depreciation and a general increase in investor risk appetite, although the currency remains sensitive to developments in global financial markets, particularly equity markets.

This is reflected in the continued high correlation between the Australian dollar and equity market indices (Graph 31). On a trade-weighted basis, while rising by 5 per cent since the last *Statement*, the Australian dollar is still below the multi-year highs reached late last year.



Over the past 3 months, the Australian dollar has also been supported by strong commodity prices, including the announcement of higher contract prices for iron ore and coal, which led to expectations of a strong increase in the terms of trade in 2008. As has been the case in recent years, positive interest rate differentials and strength in the local economy also provided support. These factors have attracted private capital inflow, although this slowed noticeably in the second half of 2007 (the most recent data available), largely reflecting the turmoil in global financial markets.

Table 5: Australian Dollar against Selected TWI Currencies
Percentage change

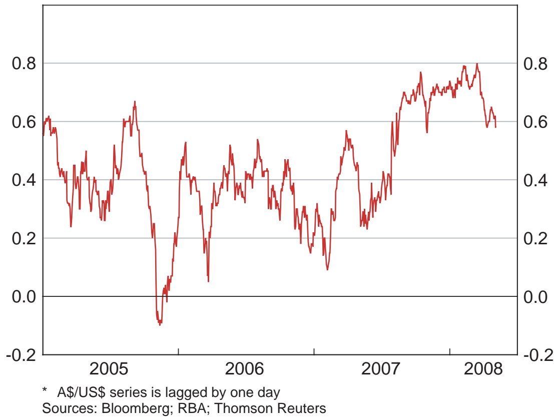
	Past year	Since previous *Statement*	Deviation from post-float average
South Korea	25	13	43
South Africa	25	3	70
Indonesia	19	6	156
UK	17	6	9
US	15	6	32
New Zealand	7	6	–2
Taiwan	6	1	29
PNG	5	3	99
Canada	4	6	2
China	4	4	44
Singapore	3	2	3
Sweden	3	–1	8
Euro area	1	0	–8
Japan	1	5	4
Switzerland	0	2	–7
TWI	8	5	22

Sources: RBA; Thomson Reuters

Graph 31

MSCI World Equities Index and Australian Dollar*

2-month rolling correlation

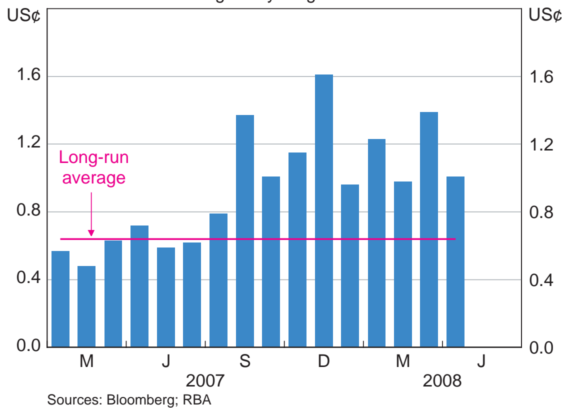


* A$/US$ series is lagged by one day
Sources: Bloomberg; RBA; Thomson Reuters

Graph 32

Intraday Range in A$/US$

Average daily range in month



Sources: Bloomberg; RBA

Australian dollar volatility increased in March, but remained below the peaks reached in late November 2007. Since then, volatility has declined, and is now at around its post-float average. There have been substantial intraday movements in the local currency in both directions from around mid 2007. Since the last *Statement*, the Australian dollar has traded in an average daily range of US1.1 cents. This is modestly lower than the preceding three-month period, but still above the long-term average (Graph 32).

With the Australian dollar reaching a 24-year high against the US dollar, the Bank has continued to purchase foreign exchange. The Bank has made net foreign exchange purchases of around $660 million since the previous *Statement*, and net reserves now stand at around $36½ billion.

Box A: Recent Changes to US Federal Reserve Instruments

In recent months, the US Federal Reserve (Fed) has implemented a number of policy changes to address liquidity strains associated with the deterioration in credit markets. The latest initiatives are an extension of the changes introduced since August and provide the Fed with greater flexibility with respect to the term of operations, the range of eligible counterparties and collateral, as well as the mix between direct provision of liquidity and auction facilities.

The first set of changes can be broadly categorised as lowering the cost of funds through interest rate reductions. In March, the Fed narrowed the gap between the discount rate and the federal funds rate by a further 25 basis points, making direct loans from the central bank to major depository institutions cheaper. The Fed has subsequently lowered the discount rate by a further 100 basis points in line with the federal funds rate. Since the onset of the financial market turbulence in August, the Fed has cut the discount rate by a cumulative 400 basis points and the federal funds rate by 325 basis points.

Prior to the recent changes, only a limited set of core institutions were able to obtain funding from the discount window. To address this, the recent changes have expanded the number of eligible counterparties by introducing some new facilities, extended the term of operations, and relaxed the criteria for eligible collateral.

To bolster the provision of liquidity to depository institutions, the Fed lengthened the term of the discount window facility from 30 days to 90 days in March. This extended the changes made in August 2007, when the term was lengthened from overnight to 30 days. In addition, the Fed announced an increase in the maximum amount available under its Term Auction Facility (TAF) from an initial US$60 billion to US$150 billion. The TAF has the advantage of circumventing the negative stigma associated with accessing emergency funding through the discount window since funds are obtained through competitive biding against the same set of collateral as the discount window, which includes highly rated private-label asset-backed securities (ABS). Until late March, the bid-rates paid on funds borrowed through the TAF had remained around the target federal funds rate. However, the bid-rates for the last four TAF auctions have risen above official rates. The bid-rate also rose above the corresponding LIBOR for the first time in early April.

The discount window and TAF are both limited to depository institutions. This means that around half the primary dealers, such as investment banks not involved in retail banking, are unable to access funds through these means. There were concerns that the liquidity provided through these facilities was not being distributed adequately to those institutions which needed it. In order to directly assist primary dealers, the Fed supplemented its existing facilities by introducing the 'Primary Dealer Credit Facility' (PDCF) mid March. The PDCF provides overnight loans to primary dealers at the discount rate in exchange for a broad range of

investment-grade collateral, and functions in a similar manner to the discount window facility. The facility has been available since 17 March, and will be in place for at least six months. Since its inception, primary dealers have accessed a considerable amount of funding through this facility. The Fed has also initiated a series of 28-day repurchase transactions with primary dealers against collateral eligible in its normal market operations, with the transactions expected to amount to US$100 billion. These operations are in addition to regular operations, which typically have a shorter term of up to 14 days.

To promote market liquidity in the ABS and particularly mortgage-backed securities (MBS) markets and aid the process of price-discovery, the Fed introduced a 'Term Securities Lending Facility' (TSLF) to lend up to US$200 billion of Treasury securities to primary dealers for a wide range of asset-backed collateral, including private-label commercial and residential MBS. The TSLF is an expansion of the existing securities lending program, and has a term of 28 days rather than overnight. Because the Fed conducts TSLF operations by lending out securities that it already holds, overall system liquidity is unaffected by these weekly operations. The initial TSLF auctions were oversubscribed, but with the Fed already holding a large share of the market's private-label assets, demand for Treasuries at the later auctions has been undersubscribed. This may reflect a preference by primary dealers for obtaining direct funding through the PDCF.

The Fed has also increased the temporary currency swap lines with the European Central Bank (ECB) and the Swiss National Bank (SNB) to provide US dollar funding to non-resident financial institutions in other markets. Non-resident institutions had been creating tensions early in the New York trading day in attempting to secure US dollar funding. The Fed will now provide up to US$50 billion to the ECB and US$12 billion to the SNB as required through to 30 January 2009. This will allow institutions to access US dollar funding in the European trading day.

Domestic Economic Conditions

The December quarter national accounts confirmed the picture of strong growth in the Australian economy through 2007, driven by rapid growth in domestic spending. Real GDP rose by 0.6 per cent in the December quarter, to be 3.9 per cent higher over the year, while domestic final demand increased by 5.7 per cent over the year (Graph 33, Table 6). However, more recent information, including from the Bank's business liaison, suggests that there has been a noticeable slowing in the pace of growth in demand and output over the past few months in response to the tightening in financial conditions. Consumer and business sentiment have fallen sharply. Retail sales declined slightly in real terms in the March quarter, motor vehicle sales and home-building approvals have fallen, and there has been a cooling in the established housing market. There are also indications of a slowing in the rate of growth in household and business borrowing. In the labour market, conditions have thus far remained tight. Very large increases in contract prices for iron ore and coal are in prospect, which will provide a considerable boost to national income. Following some good rainfall in recent months, the outlook for the rural sector has also improved.

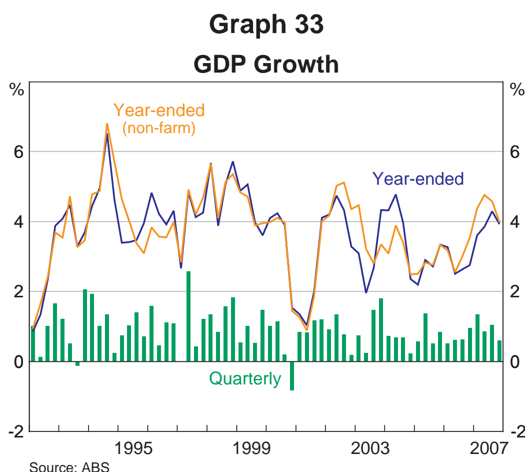
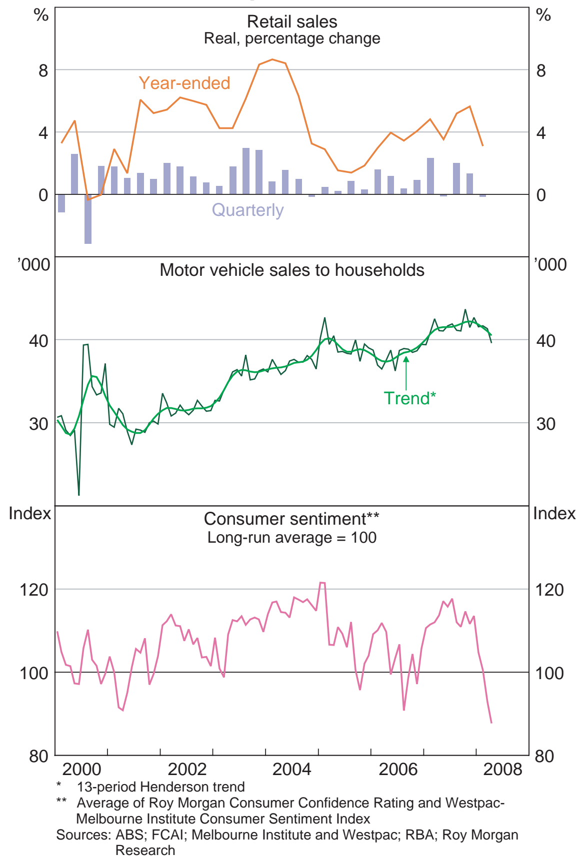


Table 6: Demand and Output
Percentage change

	September quarter 2007	December quarter 2007	Year to December quarter 2007
Domestic final demand	0.7	1.6	5.7
GNE[(a)]	1.2	1.5	5.6
Net exports[(b)]	–0.2	–1.0	–1.8
GDP	1.1	0.6	3.9
Non-farm GDP	0.7	0.7	4.0
Farm GDP	19.7	–2.4	1.2
Memo item:			
Real GDP adjusted for changes in the terms of trade	0.9	0.7	4.2

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



Household sector

The tightening in financial conditions and reduced confidence about future economic conditions have resulted in households reining in their spending on consumption and housing in the early part of 2008. While consumption grew strongly through 2007, more timely indicators suggest a noticeable slowing in the March quarter (Graph 34). Real retail sales fell by 0.1 per cent in the quarter to be 3.1 per cent higher over the year, after growth of around 5 per cent in 2007. In the Bank's liaison with retailers, it was reported that sales had been particularly soft in the month of March, although this was not apparent in the published ABS data, which take account of the effect on monthly sales of the precise timing of Easter. Nevertheless, retailers report that trading conditions generally remained subdued in April, while motor vehicle sales to households have also softened recently, falling by 2.5 per cent in the three months to April. Measures of consumer sentiment have fallen significantly to be about 10 per cent below average in April, suggesting that households have become more cautious about the future and less willing to spend.

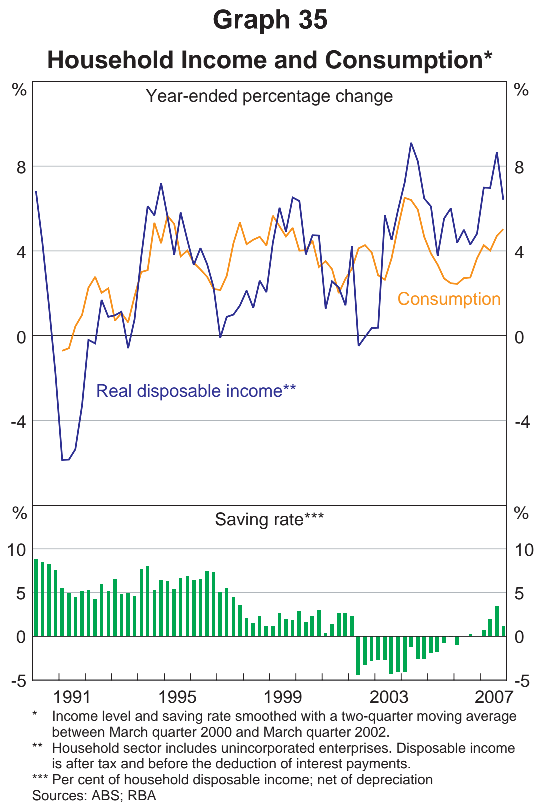
Although consumer spending has moderated, the financial position of the household sector remains sound. The tight labour market has supported real household disposable income, which rose by 6.4 per cent over 2007 and is likely to have increased again in the March quarter given continued strong employment growth (Graph 35). Household net worth has grown rapidly in recent years, rising by around 10 per cent over 2007, although it is likely to have fallen in the March quarter given the significant decline in equity markets. While household indebtedness is high by historical standards, relatively few households are in arrears on their loans, with non-performing loans accounting for around 0.4 per cent of the value of housing loans on banks' domestic books in March. There are, however, some areas of greater stress, as outlined in the March 2008 *Financial Stability Review*, and loan arrears are likely to rise as the economy slows. The aggregate rate of household saving has increased over the past few years.

While house prices rose strongly in 2007, the housing market has softened in early 2008. This is particularly evident in the auction market with clearance rates having fallen, especially in Sydney and Melbourne where they are now at below-average levels (Graph 36). House price growth has also slowed noticeably, with ABS data showing that capital city house prices rose by 1 per cent in the March quarter, down from average quarterly rates of around 3 per cent in 2007 (Table 7). For Australia as a whole, other measures of house prices, such as the RP Data-Rismark hedonic measure, the APM composition-adjusted measure, and the Residex repeat-sales measure show a similar picture. However, there was considerable variation across the different measures for individual capital cities in the March quarter, making it harder to assess recent city-level house price movements. Over the year to the March quarter, house prices in Adelaide, Brisbane and Melbourne increased by around 20 per cent, Sydney experienced more moderate growth of around 6 per cent, and Perth prices were broadly flat after roughly doubling from mid 2003 to late 2006.

Housing finance data also indicate that the tightening in financial conditions has affected demand for housing. The flow of new loan approvals has fallen noticeably since the first half of 2007, while growth in the stock of housing credit has slowed from an annual rate of nearly 14 per cent in early 2007 to around 11 per cent in March. The recent pace of housing credit growth is around

Graph 35

Household Income and Consumption*

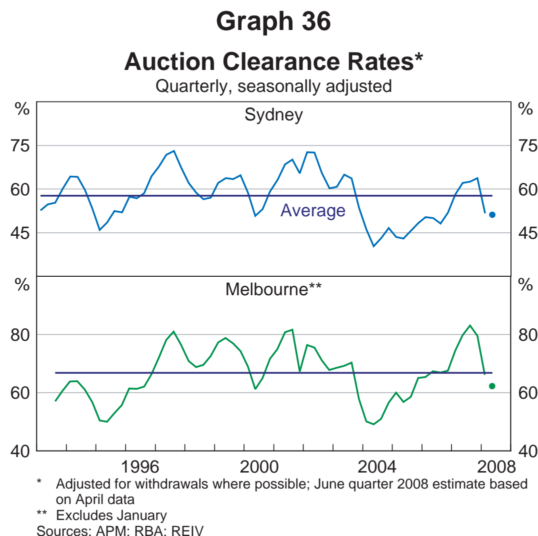


* Income level and saving rate smoothed with a two-quarter moving average between March quarter 2000 and March quarter 2002.
** Household sector includes unincorporated enterprises. Disposable income is after tax and before the deduction of interest payments.
*** Per cent of household disposable income; net of depreciation
Sources: ABS; RBA

Graph 36

Auction Clearance Rates*

Quarterly, seasonally adjusted



* Adjusted for withdrawals where possible; June quarter 2008 estimate based on April data
** Excludes January
Sources: APM; RBA; REIV

Table 7: National House Prices
Percentage change

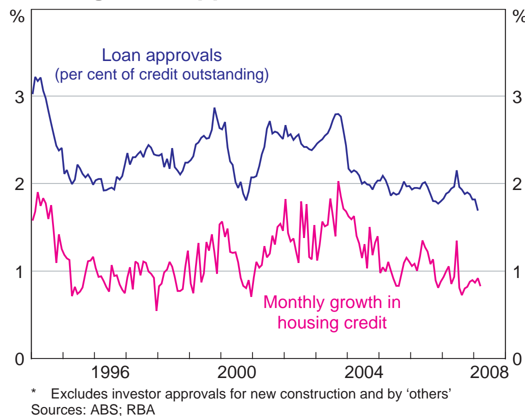
	December quarter 2007	March quarter 2008	Year to March quarter 2008
ABS	4.1	1.1	13.8
RP Data-Rismark	2.8	1.1	11.0
APM	3.8	0.4	10.7

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

the slowest since the early 1990s, although it is still a bit stronger than would be expected given the extent of the fall in loan approvals (Graph 37). This suggests that net housing loan repayments have fallen over the period, possibly partly because households' capacity to make excess repayments has declined as interest rates have risen, although it is difficult to draw firm conclusions about this given the volatility in the data.

Graph 37

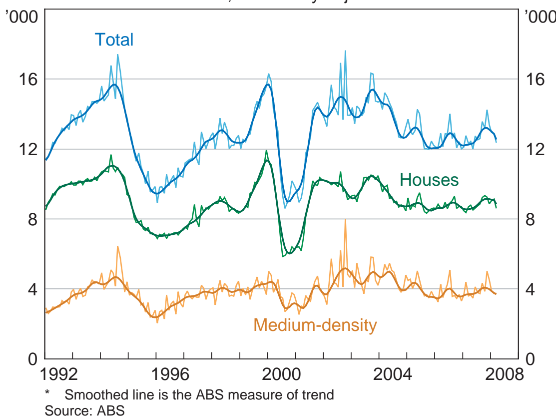
Housing Loan Approvals* and Credit Growth



* Excludes investor approvals for new construction and by 'others'
Sources: ABS; RBA

Graph 38

Building Approvals
Number, seasonally adjusted*



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

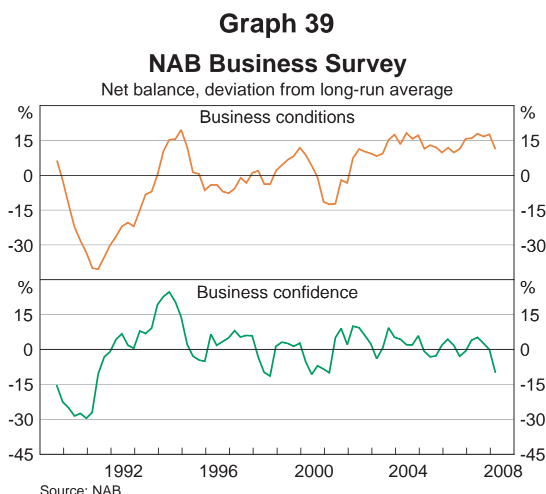
Housing construction activity remains relatively subdued. Dwelling investment rose by 1.6 per cent over 2007, but remained below its 2004 peak, and leading indicators suggest new dwelling construction is likely to remain soft for some time. The number of approvals declined by 6½ per cent in the March quarter with weakness in both houses and the medium-density sector (Graph 38). Revisions to the data have significantly increased the level of approvals for the period from December to February, and approvals now show a steady decline over this period rather than an initially reported sharp fall in December. The Bank's liaison with builders suggests some further softening is likely over coming months as the full effect of higher interest rates is felt.

Housing rental markets across the country are facing increasing pressure from the growing shortfall

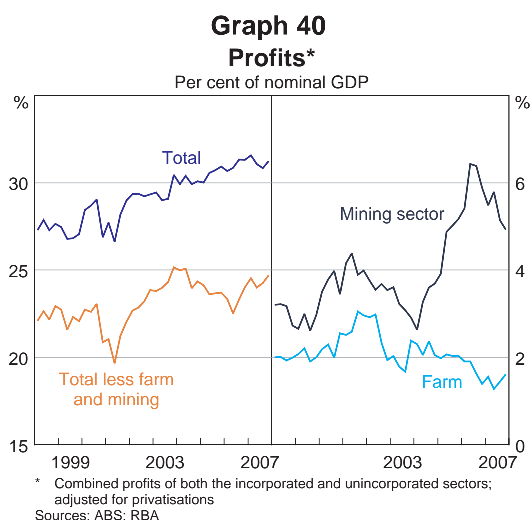
in the supply of new dwellings relative to underlying demand. Vacancy rates are at historical lows at just over 1 per cent; a rate of around 3 per cent is generally considered to indicate a reasonably balanced rental market. The CPI measure of rents rose by 7.1 per cent over the year to the March quarter, which is the largest increase in that measure since late 1989, while data from the state Real Estate Institutes suggest that rents for newly negotiated agreements have grown by 13½ per cent over the past year.

Business sector

Private-sector surveys suggest that business conditions have weakened over the past few quarters although they remain relatively strong (Graph 39). Consistent with above-average conditions and the strength of the labour market, the NAB survey reported that non-farm capacity utilisation is still close to record high levels. Business confidence fell significantly in the March quarter, though it should be recognised that confidence measures tend to be quite volatile and often are not a good guide to future developments.



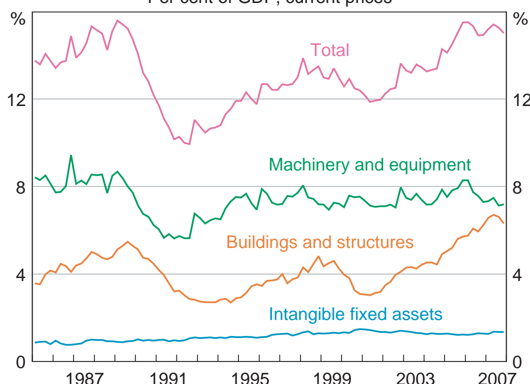
Businesses' internal funding remained strong at the end of 2007, with the aggregate profit share close to a three-decade high, at 31 per cent of GDP (Graph 40). Total private-sector profits grew by around 7 per cent over 2007, following growth averaging 10 per cent over the previous two years. Profits outside of the mining sector drove growth, with mining sector profits easing from very high levels due to slower growth in commodity prices over the period, continuing cost pressures and the stronger Australian dollar. Looking ahead, equity analysts have lowered their profit forecasts in recent months, consistent with the easing in business conditions reported in the private-sector surveys. However, mining sector profits are likely to rise sharply around the middle of this year given the very large increases in coal and iron ore contract prices that are in prospect.

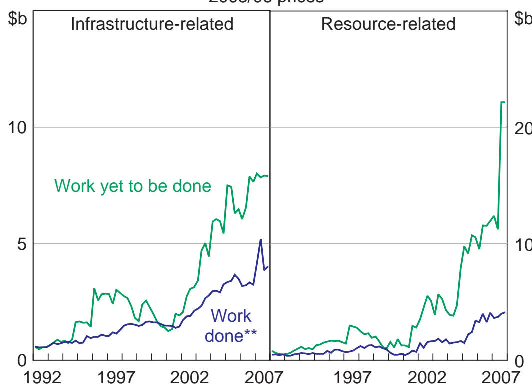


On the external funding side, the cost of debt funding has increased substantially since mid 2007 and

businesses' access to capital markets has been much reduced. Bank lending standards have also been tightened. Although businesses continued to source funds through banks at a rapid pace over the second half of 2007, the pace of growth in intermediated borrowing has slowed in recent months, as discussed further in the 'Domestic Financial Markets and Conditions' chapter.

New business investment rose by 0.6 per cent in the December quarter to be around 8 per cent higher over 2007 as a whole (abstracting from the reclassification of Telstra). Growth in the quarter was driven by increased spending on machinery & equipment while investment in building & structures declined (although this is a volatile series reflecting the inevitably lumpy nature of the work). Looking through this volatility, much of the growth in investment over the past three years has come from buildings & structures, particularly heavy engineering construction related to the mining sector. This has resulted in business investment as a share of GDP being around its highest level since the late 1980s (Graph 41). By boosting the growth rate of the capital stock, this investment is significantly expanding the productive capacity of the economy (for further details see 'Box B: Investment and the Productive Capacity of the Economy', February 2008 *Statement on Monetary Policy*).

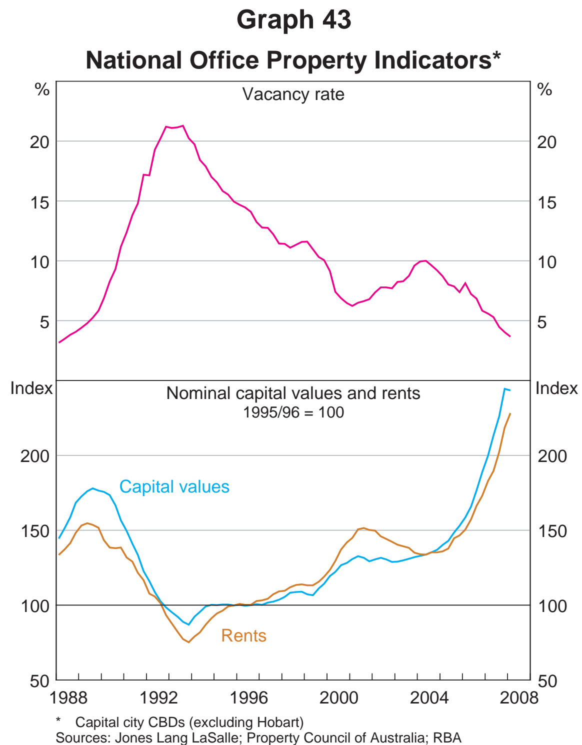




Notwithstanding the recent increase in business funding costs and slowing in the pace of business borrowing, the near-term outlook for business investment remains strong, largely due to the positive outlook for the mining sector. The most recent capital expenditure survey, which was taken in January and February, pointed to strong growth in firms' spending on buildings & structures in 2007/08 and solid growth in spending on machinery & equipment, while early indications were that investment would continue to expand in 2008/09. Much of this growth was expected to be resource or infrastructure-related, reflecting the large pipeline of work that has commenced but is yet to be done (Graph 42). Project-based indicators suggest that more large engineering projects (particularly in the mining, transport and utilities sectors) are

due to commence in the near future. Nevertheless, the further tightening in financial conditions in the early part of this year, coupled with recent declines in business confidence, may mean some scaling-back of the investment intentions signalled in the capital expenditure survey.

A significant amount of office construction is also in the pipeline, although the outlook has become more uncertain due to the ongoing stresses in global financial markets. While conditions in the office property market remain very tight – the latest data from Jones Lang LaSalle point to a further fall in the national vacancy rate in the March quarter to 3.7 per cent, its lowest level since the late 1980s (Graph 43) – the higher cost of funding, difficulties refinancing short-term debt, and the sharp swing in sentiment against highly leveraged companies have all weighed on investor demand. As a result, national capital values are estimated to have been broadly flat in the March quarter, after rising by almost 80 per cent over the previous three years, and some office construction projects have reportedly been delayed. Nevertheless, the fundamentals underpinning the office property market remain favourable, with strong demand and only very limited vacant office space resulting in strong growth in rents.



Farm sector

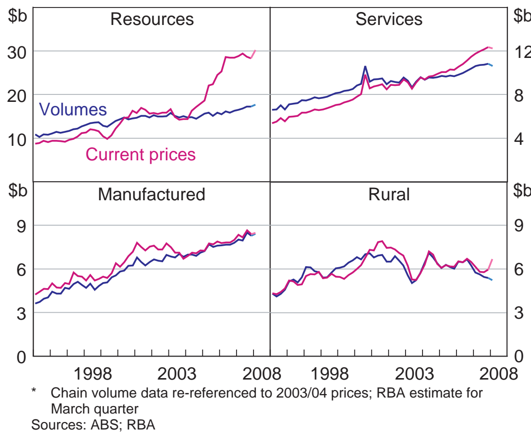
While conditions in the rural sector remain weak, the outlook has improved somewhat in recent months. The Bureau of Meteorology predicts that over coming months (the winter planting period) most agricultural areas in Australia have at least an even chance of above-average rainfall. Given this outlook, there is a good probability of significantly higher cereals output than in 2007 and that graziers will rebuild livestock numbers. While there has been good rainfall over the first four months of the year, flows into the Murray-Darling river system have been lower than is usual for that time of the year and the extent of the rebound in production remains highly dependent on good winter rainfall.

External sector

Export volumes are estimated to have increased solidly in the March quarter, to be around 3 per cent higher over the year, with growth in non-rural exports more than offsetting the sharp fall in rural exports due to the drought (Graph 44).

Graph 44

Exports*



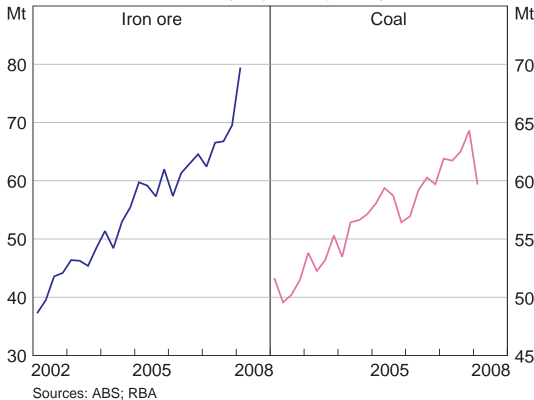
* Chain volume data re-referenced to 2003/04 prices; RBA estimate for March quarter

Sources: ABS; RBA

Graph 45

Resource Export Volumes

Seasonally adjusted, quarterly



Sources: ABS; RBA

Resource export volumes are estimated to have risen solidly in the March quarter. Floods in Queensland in January and February disrupted mine production and the transport network resulting in a fall of 7 per cent in the volume of coal exports in the March quarter (Graph 45). These supply problems have contributed to the dramatic increases in spot prices for coal. Iron ore export volumes rose strongly in the quarter, partly reflecting a relatively mild cyclone season in Western Australia. Coal exports should recover in coming months from the flood damage, and the first iron ore shipments from Fortescue Metals' Pilbara project are expected this month. Further ahead, the volume of resource exports is likely to grow strongly as mine and infrastructure expansion boost overall capacity, and export values will jump sharply when the very large increases in coal and iron ore contract prices take effect (for more details, see the 'International Economic Developments' chapter).

Services export volumes are estimated to have fallen in the March quarter, to be little changed over the year. Exports of travel services have slowed noticeably since mid 2007, following a period of solid growth underpinned by strength in education exports. After declining in the December quarter, manufactured exports are estimated to have risen in the March quarter to be around 5 per cent higher over the year, reflecting increased exports of transport equipment.

Import volumes are estimated to have increased by 3½ per cent in the March quarter to be around 11 per cent higher over the year. While the strength in imports over the past year or so is not surprising given the strong growth in domestic demand in 2007, the growth in the March quarter suggests that domestic demand may not have been quite as soft as some of the recent indicators had implied.

The current account deficit widened to 7.0 per cent of GDP in the December quarter, and seems likely to have risen further in the March quarter given stronger growth in import values than in export values in the quarter. Assuming no change in the net income deficit, the increase

in the trade deficit implies a current account deficit of around 7½ per cent of GDP.

The real trade-weighted exchange rate has risen slightly to be 27 per cent above its post-float average (Graph 46). While the appreciation of the exchange rate over recent years has adversely affected some parts of the traded sector, the economy as a whole has benefited from the associated increase in Australia's terms of trade. Indeed, over the past few years, Australia has experienced an extraordinary run-up in the terms of trade (Table 8). Once the increases in annual iron ore and coal contract prices take effect around mid-year, the terms of trade are projected to be around 65 per cent higher than five years ago.

Labour market

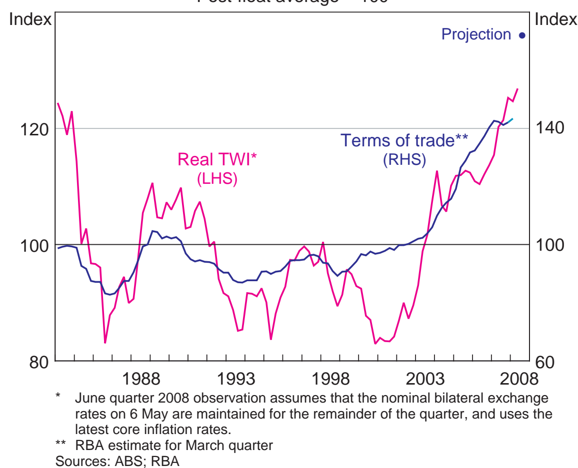
Labour market conditions remained strong in the March quarter with no sign at this stage of slowing in employment growth. Employment increased by 0.8 per cent in the March quarter and by 2.8 per cent over the year (Graph 47). Over the past two years, full-time employment growth has been particularly strong and outpaced the growth of part-time employment, whereas over the past couple of decades part-time employment has usually grown more quickly. The participation rate was unchanged through the March quarter, at 65.2 per cent, which is the highest rate on record. The unemployment rate reached a new multi-decade low in February, but increased a little in March, to stand at 4.1 per cent. The divergence between the strong labour market and the softening in some of the other domestic data is likely to partly reflect the fact that employment generally lags changes in spending and activity slightly.

Employment growth has been strong across a wide range of industries. Over the year to the March quarter, manufacturing, property & business services, retail and health & community

Graph 46

Real Exchange Rate and Terms of Trade

Post-float average = 100



* June quarter 2008 observation assumes that the nominal bilateral exchange rates on 6 May are maintained for the remainder of the quarter, and uses the latest core inflation rates.

** RBA estimate for March quarter

Sources: ABS; RBA

Table 8: Terms of Trade

Percentage change; March Qtr 2003–Dec Qtr 2007

Country	Change
Russia	64
Norway	44
Australia[(a)]	39
Canada	18
New Zealand	18
Sweden	1
Germany	–1
United Kingdom	–1
Italy	–2
France	–5
United States	–5
South Korea	–11
Japan	–23

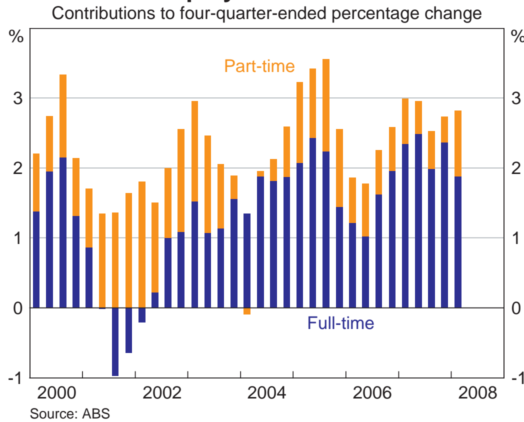
(a) Does not include the effect of this year's contract re-negotiations. If this is included, the cumulative increase since March quarter 2003 is estimated to be approximately 65 per cent.

Sources: OECD; State Statistical Office (Russia)

Graph 47

Employment Growth

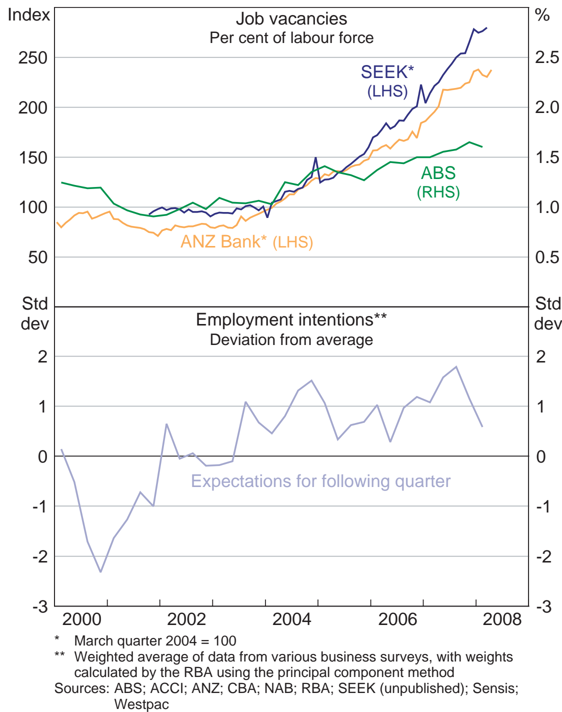
Contributions to four-quarter-ended percentage change



Source: ABS

Graph 48

Labour Market Indicators



* March quarter 2004 = 100

** Weighted average of data from various business surveys, with weights calculated by the RBA using the principal component method

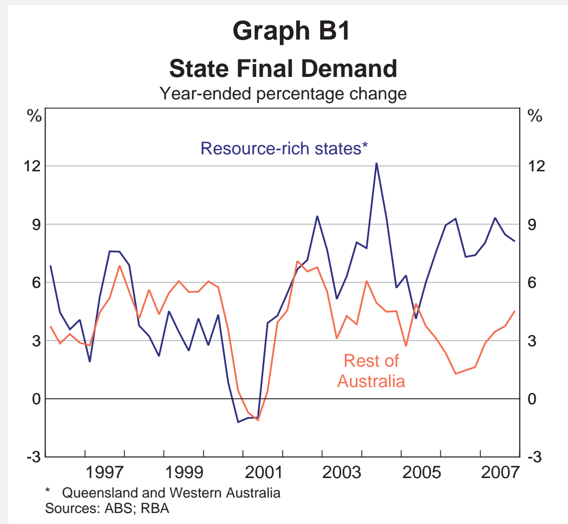
Sources: ABS; ACCI; ANZ; CBA; NAB; RBA; SEEK (unpublished); Sensis; Westpac

services were among the fastest growing sectors. As discussed in 'Box B: Regional Economic Performance', labour market conditions have remained strong across the states.

Some recent easing in the forward-looking indicators of the labour market provides tentative evidence that conditions might have begun to soften. Job vacancies as measured by the ABS survey of employers fell slightly in the three months to February, although the vacancy rate remained close to its three-decade high (Graph 48). The ANZ measure of job advertisements remained broadly flat in the three months to April, and growth in the SEEK measure slowed in the March quarter. The ANZ and SEEK measures of newspaper and internet vacancies have been significantly affected by changes in the way vacancies are advertised in recent years, which complicates their interpretation as indicators of labour demand. Nevertheless, the various business surveys also report that firms' employment intentions have eased, although the demand for labour remains relatively strong.

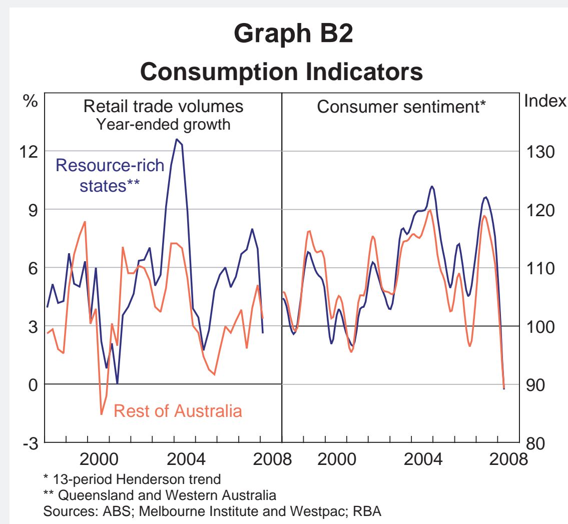
Box B: Regional Economic Performance

The current economic expansion has been broadly based across the country. Over the past few years, growth has been strongest in the resource-rich states of Western Australia and Queensland, although recently a range of indicators, including state final demand, suggest the gap with the other states has narrowed somewhat (Graph B1).



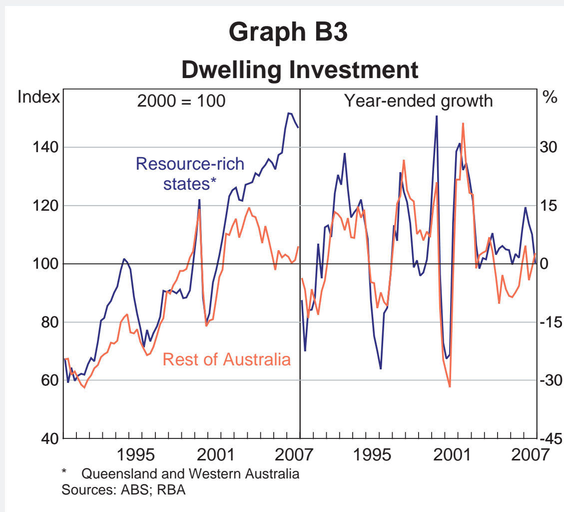
Household sector

Household consumption growth accelerated in all states and territories over 2007, supported by broadly-based strength in employment and wages growth. In the non-resource states, consumption growth picked up from less than 2 per cent in mid 2006 to an average of 4½ per cent over the year to the December quarter, while in the resource states consumption grew by more than 6 per cent.



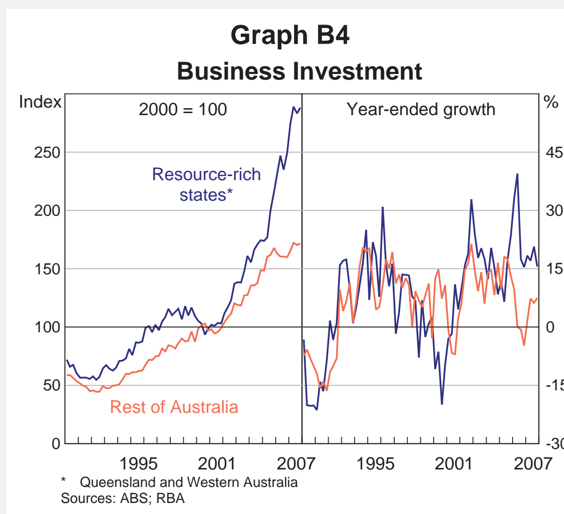
However, more timely indicators show that the pace of retail spending growth slowed in the first quarter of 2008 (Graph B2). This was particularly marked in Western Australia, which may reflect the abrupt ending of the boom in Perth house prices. Indeed, after an extended period of significantly more rapid growth than the rest of the country, real retail spending growth in the mining states has slowed to be around the same as the average of the other states over the year to March. There has also been a sharp fall in consumer sentiment in all states over recent months.

After a period of significant divergence, growth in housing investment converged somewhat over 2007, as growth in Queensland slowed from very high rates, growth in Victoria picked



up, and conditions in NSW stabilised (Graph B3). More recent indicators of the housing market, such as new home sales and building approvals, suggest a broadly-based softening in early 2008, as the impact of tighter financial conditions is felt across all states.

There have been significant divergences in house price developments across the major capitals in recent years. The end of the boom in 2003 resulted in a significant slowing in price growth in most capitals. Sydney was most affected, with prices falling by around 10 per cent between late 2003 and early 2006, before resuming growth in 2007. Perth prices were least affected and subsequently reaccelerated, with growth of around 100 per cent between mid 2003 and late 2006. Since then, prices in Perth have been roughly flat. Price growth in Melbourne, Adelaide and Brisbane was relatively subdued between late 2003 and late 2006, before picking up strongly to around 20 per cent over 2007. Data on prices in early 2008 and the decline in auction clearance rates suggest that house price growth has slowed across the states in the face of tighter financial conditions.



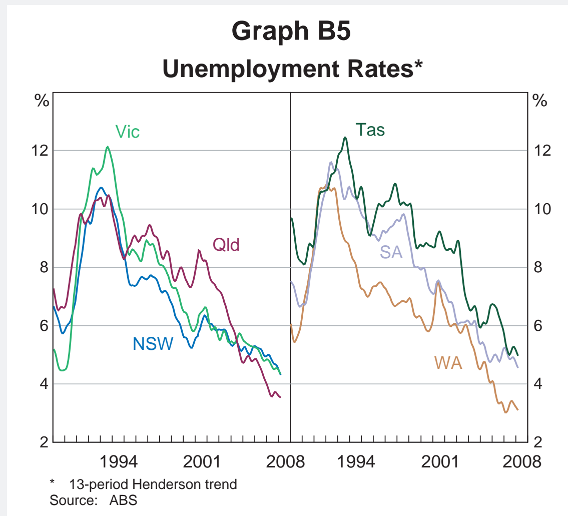
Business sector

Divergences between the states have been perhaps largest in business investment spending, in large part due to the extraordinary growth in mining-related investment spending in Western Australia and Queensland (Graph B4). Nevertheless, business investment growth was relatively strong across all the states over 2007, with the gap between growth in the resource-rich states and the remainder of Australia narrowing as investment in NSW and Victoria recovered and growth eased in Queensland. The Bank's liaison indicates that growth in business investment remains strong into 2008, particularly for mining and infrastructure-construction related projects.

Growth in non-residential building construction also remains firm, although there are some signs of moderation, as uncertainty over the macroeconomic outlook and tighter financing conditions have begun to adversely affect firms' investment plans.

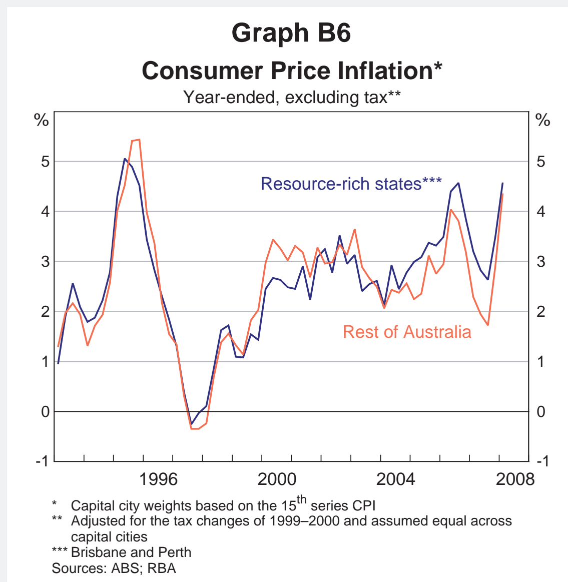
Business surveys provide further evidence that the strength of the economy over recent years has been broadly based, with business conditions well above average in all states. However, there appears to have been a moderation over the first few months of 2008 in most states.

The strength in the economy over recent years has also been evident in the labour market. All states have experienced above-average employment growth over the past few years, and this has seen unemployment fall to around 30-year lows in all states (Graph B5). While the unemployment rate remains lowest in the resource-rich states, it has also fallen to very low levels in NSW and Victoria. Strong labour demand has also contributed to increases in labour force participation rates. While the participation rate in the resource-rich states has increased the most over the past few years, it has also risen in all other states.



Inflation

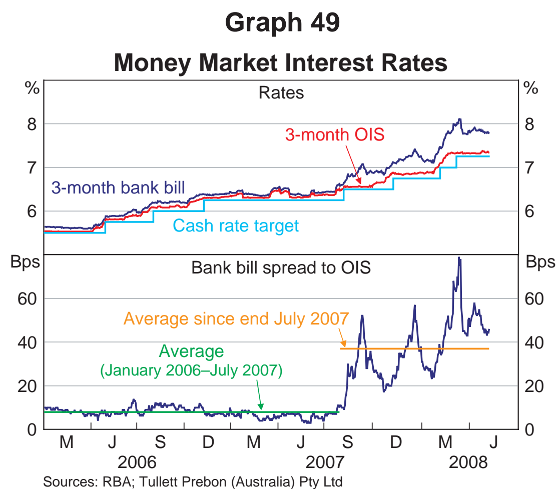
Historically there has been little variation in inflation rates across the capital cities, with average outcomes over the low-inflation period ranging from 2.3 per cent to 2.7 per cent. Not surprisingly, inflation has been highest in the resource-rich states in recent years. However, the gap between the resource-rich and other states narrowed significantly over the year to the March quarter and all capital cities experienced inflation well above 3 per cent (Graph B6).



Domestic Financial Markets and Conditions

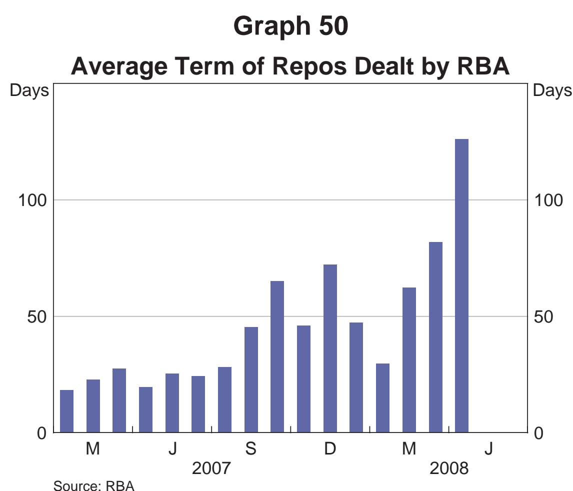
Money market and bond yields

As has been the case internationally, conditions within the domestic money market have been volatile in recent months. There have been two main factors driving the movements in money market rates: tensions in the money market embodied in the spread between bank bill rates and the expected cash rate (OIS) and changes in market expectations about the future course of monetary policy. While short-term rates rose throughout February and early March, reflecting expectations of further policy tightening, yields on bank bills rose by a greater amount than the expected cash rate. In early March, 90-day bill rates reached a peak of 8.10 per cent as the spread to OIS increased to as high as 80 basis points, up from 30 basis points in early February (Graph 49). The increase in the spread reflected strains in global money markets associated with the end of the March quarter, but appears to have been exacerbated by uncertainty surrounding the expiry of the benchmark March bill futures contract. As this was resolved, 90-day bill yields quickly fell back to around 7.80 per cent. The spread between the 90-day bill yield and OIS has since averaged around 50 basis points. Following the increase in the cash rate in March to 7.25 per cent, market expectations about future cash rate movements have fluctuated between expecting a further tightening and pricing in an easing by the end of the year. Currently, the market expects the cash rate to remain at its current level for the foreseeable future.

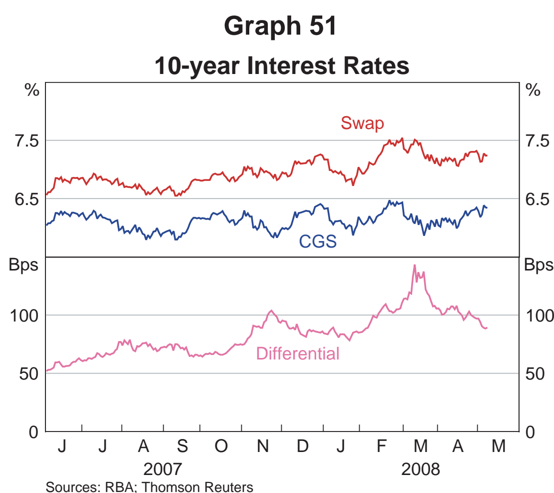


Since August last year, the Bank has responded to the pressures in the domestic money market by varying the supply of exchange settlement (ES) balances, dealing in a wider range of collateral and lengthening the term of its open market operations. Through March the aggregate volume of ES balances was increased from around $2 billion to a peak of more than $5 billion as the Bank acted to offset end-quarter funding pressures. As these pressures passed and with the general improvement in financial market sentiment, ES balances have been reduced to below $2 billion. Throughout this period, the primary objective of the Bank's money market operations has been to maintain the cash rate at the target set by the Reserve Bank Board and this has been achieved on all days in the period since the last *Statement*.

Graph 50
Average Term of Repos Dealt by RBA



Graph 51
10-year Interest Rates



The average term of the Bank's repurchase agreements ('repos') with market participants increased from around 25 days prior to the market turmoil, to around 50 days late last year (Graph 50). This lengthening of maturity was aimed at addressing the greater tensions at longer maturities in money markets. In April, on several days of large dealing to offset private sector payments to the Government, the Bank dealt at maturities as long as 12 months. Some of these longer-term repo operations involved residential mortgage-backed securities (RMBS) as collateral and were aimed at improving the functioning of the secondary RMBS market (see below).

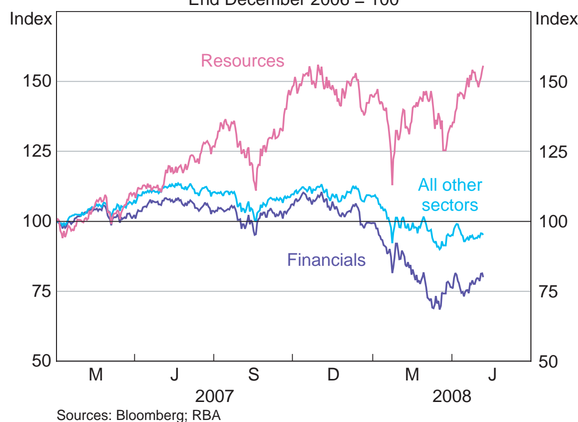
Long-term interest rates have risen since the last *Statement*, largely in line with movements in international yields but also reflecting revised domestic short-term interest rate expectations. The yield on the 10-year government bond has increased by about 25 basis points to be 6.35 per cent (Graph 51). Spreads between government bond yields and swap rates are little changed from the time of the last *Statement*, despite widening dramatically in early March. Although this pattern was evident in most other currencies, as has been the case since mid 2007, the movement in Australian dollar spreads was larger.

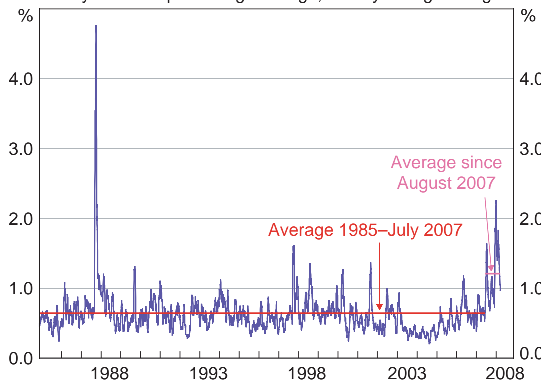
Equities

After rising more than other major indices over 2007, the ASX 200 has underperformed this year; it is down 10 per cent so far this year and 17 per cent from its peak late last year. There has been significant divergence across sectors – share prices of resource companies are around the levels seen in late 2007, while those of financial companies have fallen 30 per cent since the peak last year (Graph 52). Resource stocks have been supported by strong commodity prices and BHP's bid for Rio Tinto. Financial stocks were marked down with the global banking sector and following some increased provisions for bad and doubtful debts by Australian banks.

The ASX 200 has been volatile since the start of the financial turmoil, with daily movements averaging as much as 2 per cent (Graph 53). While the average daily change has been smaller than at the time of the 1987 stock market crash, the current episode is notable for the sustained period of volatility. Volatility returned to average levels about six months after the 1987 stock market crash. In contrast, in the current episode volatility has been well above its long-run average for nine months, with average daily changes exceeding 1 per cent since August.

Profits announced by listed Australian companies in the recent reporting period remain at a high level, though they were slightly lower than expected, putting some downward pressure on their share prices. Around one-half of companies that recently reported profits were below analyst expectations (with 10 per cent in line with expectations and 40 per cent above). Underlying profit – which excludes significant items and asset revaluations/sales – was 3 per cent lower than in the corresponding period in 2006.

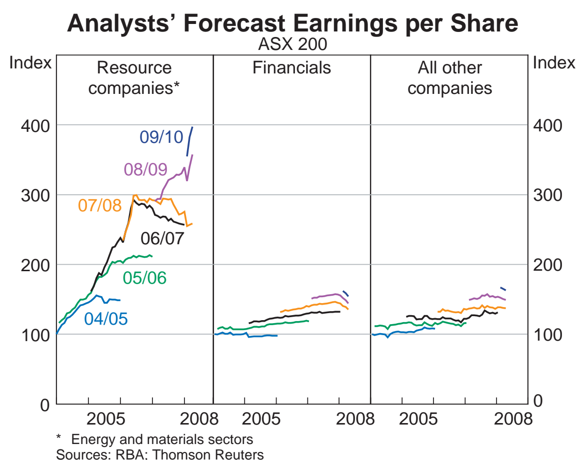




By sector, the profits of resource companies were 10 per cent lower in the December half year than in the corresponding period of 2006, reflecting the effect of the appreciation of the Australian dollar and rising input costs. Underlying profits of financial institutions declined by 3 per cent. This mostly reflected a fall in investment income among insurance and diversified financial companies, with banks reporting moderate profit growth. For the several larger banks that have recently announced their financial results, aggregate underlying profits were 4 per cent higher than in the previous corresponding period. Net interest income rose strongly, with robust balance sheet growth more than offsetting a decline in the net interest margin. Higher earnings from trading operations boosted non-interest income. Banks' bad and doubtful debt expense increased, due to higher provisions on loans to several distressed broking and property companies. But overall asset quality remains strong, with total loan provisions still a low share of loans and advances. Profits in other sectors rose by 12 per cent, led by a few large companies.

Graph 54

Analysts' Forecast Earnings per Share



* Energy and materials sectors
Sources: RBA; Thomson Reuters

Analysts have revised down their forecasts of earnings growth for 2007/08 (Graph 54). Earnings are expected to be broadly flat for resources in 2007/08 before increasing 37 per cent in 2008/09 (revised up from 33 per cent) as supply constraints ease and contract prices for bulk commodities increase substantially. Financial sector earnings growth is expected to be around 3 to 7 per cent over each of the next three years. The profits of other companies are expected to increase by 10 per cent next year after moderate growth in 2007/08.

Despite the volatility in markets, M&A activity continues to be strong, with around $93 billion of deals pending. Most of the activity reflects proposed consolidation among resource companies, including BHP's offer for Rio Tinto. The average deal size has increased, with a number of large deals announced in addition to BHP's offer for Rio Tinto. There is also significant proposed M&A activity in the insurance sector.

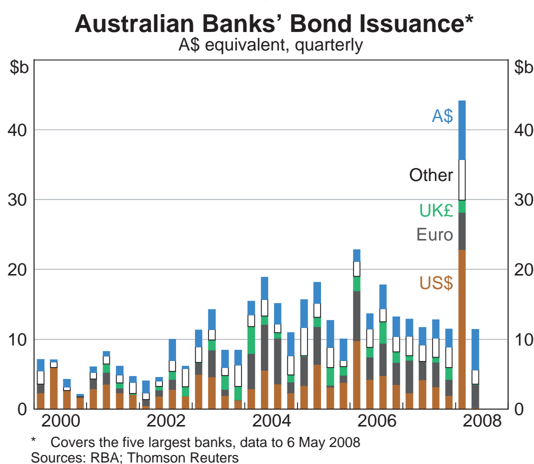
Financial intermediaries

The turbulence in capital markets continues to affect the cost and composition of financial intermediaries' funding. Institutions that rely heavily on capital markets, particularly securitisation, to fund their lending have been more affected than institutions that have sizeable deposit bases.

Bond issuance by the Australian banks has been very strong so far in 2008 (Graph 55). At around $45 billion, issuance in the March quarter was the largest on record and around three times the usual quarterly issuance. Issuance remained relatively strong in April, though it has slowed from the record levels reached in January and February.

Graph 55

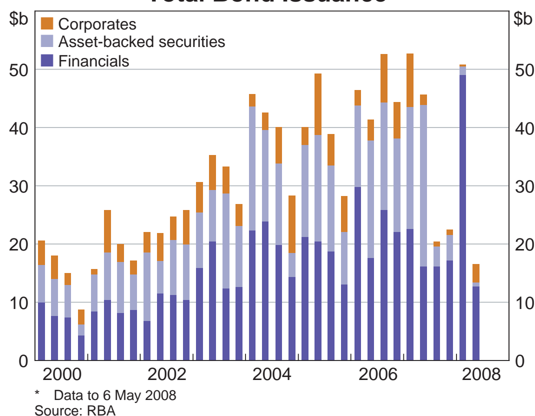
Australian Banks' Bond Issuance*



* Covers the five largest banks, data to 6 May 2008
Sources: RBA; Thomson Reuters

In part, the increased bond issuance reflects the major banks undertaking a larger share of financing for the non-government sector (reintermediation) (Graph 56). Until recently, corporates have been borrowing almost exclusively through banks as bond markets have remained closed to them.

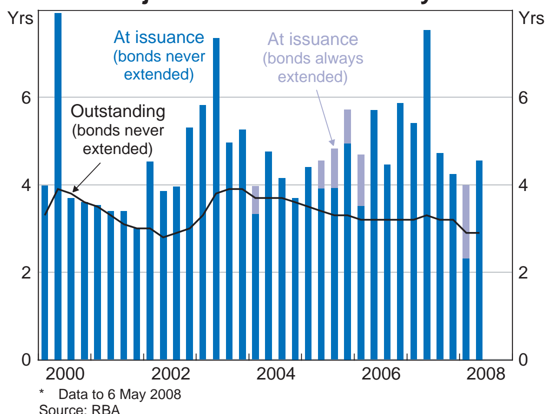
Moreover, with almost no issuance of asset-backed securities, the major banks have been undertaking an increased share of housing lending and providing increased funding to non-bank lenders. In total, non-government bond issuance in the March quarter was around the quarterly levels of 2006 and the first half of 2007. A number of the banks have indicated that they are ahead on their funding plans for the financial year.



Much of the banks' bond issuance in the March quarter has been offshore, with a large share through extendible bonds in the US private placement market. These bonds have an initial maturity of 13 months and are extendible at the option of the investor with 12 months' notice, and a final maturity of five or six years. While they tend to be a little cheaper than an ordinary bond, there is a greater refinancing risk. In recent months, all of the majors have, for the first time, issued in the Samurai bond market (issuance in yen into the Japanese market by non-residents). This has not only diversified their source of funds, but has also enabled them to issue bonds at longer tenors (typically five years) than in the US market.

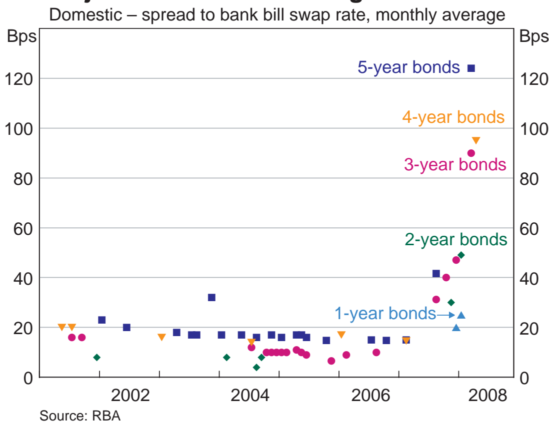
In the December and March quarters, the average tenor of bonds issued by the Australian banks declined, especially so if the extendible bonds are taken at their shortest possible maturity (Graph 57). However, in April, the banks have issued bonds at longer tenors (four years). This was due to longer tenors being issued domestically, with the first issuance of 5-year bonds by the major banks since September 2007, and the Samurai issuance. The current maturity of outstanding bonds has only declined a little, to 3 years from 3½ years prior to the recent disturbances.

Spreads at issuance on the Australian banks' domestic bonds have continued to rise (Graph 58). The 5-year bonds were priced at an average spread of 124 basis points over swap, well above the average spread of 42 basis points in September 2007 and the average spread of 15 basis points prior to July 2007. The banks issued 3-year bonds in April at spreads of around 90 basis points, double the spreads in January. Offshore spreads also rose in the March quarter.



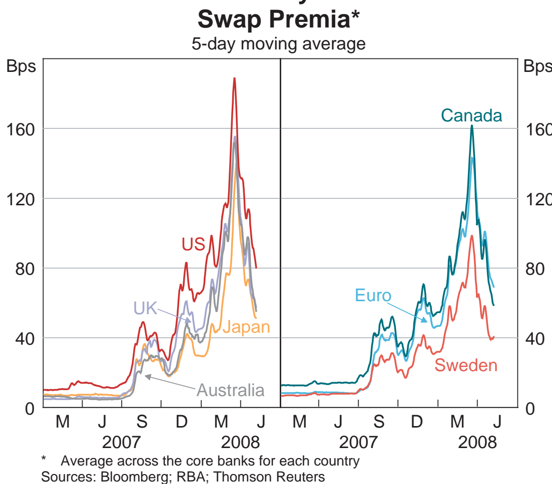
Graph 58

Major Banks' Bond Pricing at Issuance



Graph 59

Commercial Banks' 5-year Credit Default Swap Premia*



In contrast, banks' credit default swap (CDS) premia have decreased significantly from the peak in mid March following the rescue of Bear Stearns (Graph 59). Australian banks' CDS premia have fallen by 95 basis points, though are still elevated at around 55 basis points. Though CDS premia have increased more for US banks since the onset of the strains in markets, premia across commercial banks worldwide have moved together closely, suggesting that investors are not greatly differentiating between banks globally.

In contrast to banks' on-balance sheet capital market funding, the volume of securitisation remains very low. There have been no public RMBS this year and only two private placements although there are a number of new issues in the pipeline. Secondary market spreads on RMBS rose sharply in early 2008, reportedly on forced selling of RMBS by distressed leveraged offshore investors, mainly structured investment vehicles (SIVs, which bought around one-third of Australian RMBS prior to the credit crisis) and, to a lesser extent, foreign banks. While there has been little distressed selling in the past two months, spreads have remained elevated amidst very illiquid conditions. With few transactions observed, and wide bid-ask spreads, it is difficult to gauge current spreads. Most estimates suggest that spreads on AAA-rated prime RMBS are around 150–200 basis points.

The elevated RMBS spreads reflect investor caution toward securitisation, and the general credit conditions, rather than concerns about losses on Australian RMBS. Investors in rated tranches in Australia have never suffered any loss of principal – any losses on the underlying loans after the sale of the property have been covered by lenders' mortgage insurance, the profits of the securitisation vehicles, and to a lesser extent unrated tranches. Although losses on prime loans increased in 2007, they are still extremely low as a share of loans outstanding at 4 basis points.

A number of banks have recently converted some mortgages on their balance sheet into RMBS to be retained on balance sheet. These RMBS are able to be used in the RBA's domestic market operations, providing the banks with an additional source of liquidity should they need it. This follows the RBA's widening of the list of securities eligible for repurchase agreements in October 2007 to include highly rated RMBS and asset-backed commercial paper (ABCP) backed by prime mortgages.

During April, S&P downgraded the Australian mortgage insurance operations of PMI to AA- from AA. PMI's Australian operations, which provide mortgage insurance to around 45 per cent of securitised mortgages, remain on credit watch negative due to the two notch downgrade of the parent (to A+ from AA). While PMI Group suffered losses this year, the Australian operations remained profitable and PMI has indicated that it intends to 'quarantine' PMI Australia so that it maintains its rating. Following the downgrade of PMI's Australian operations, S&P downgraded around 175 subordinated RMBS tranches to AA– from AA. Subordinated tranches make up only a few percentage points of the value of an RMBS and so this action has little practical consequence for the RMBS market. The ratings of almost all senior tranches (AAA) were affirmed as they have sufficient protection from subordination.

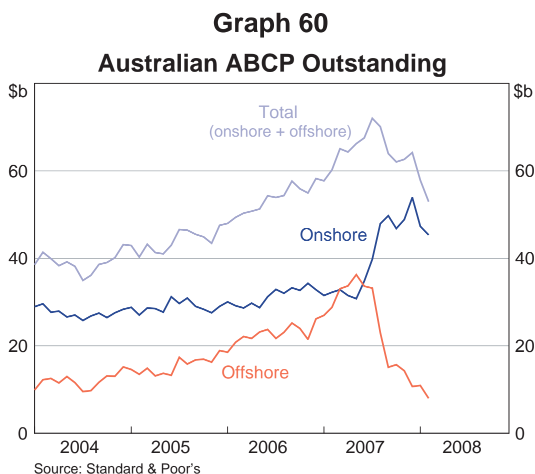
In contrast to the absence of issuance in the RMBS market, there have been two auto loan securitisations in 2008. The AAA tranches priced at 150–170 basis points, well above the spread for issues prior to 2008.

Conditions also continue to be strained in the ABCP market, with the spread to the bank bill rate remaining elevated at over 50 basis points compared to only a few basis points prior to the turbulence. Liaison suggests that some programs are only able to issue at maturities as short as 14 days. However, two of the major banks have recently set up additional ABCP programs; these programs will have greater than usual transparency in terms of disclosure of the underlying assets and sellers of the assets. Three small ABCP programs were placed on credit watch negative as a result of the PMI downgrade (the programs are currently rated A1+).

The amount of ABCP outstanding continued to decline in February, falling by $5 billion to $53 billion, 26 per cent below the peak in July 2007 (Graph 60). Around half of the decline in February was due to the full repayment of RHG's (formerly RAMS) program, which was refinanced through other means. The majority of Australian ABCP has now been issued onshore, with market participants indicating that the offshore market remains largely closed to Australian issuers, with only a small amount of ABCP able to be rolled over.

Graph 60

Australian ABCP Outstanding

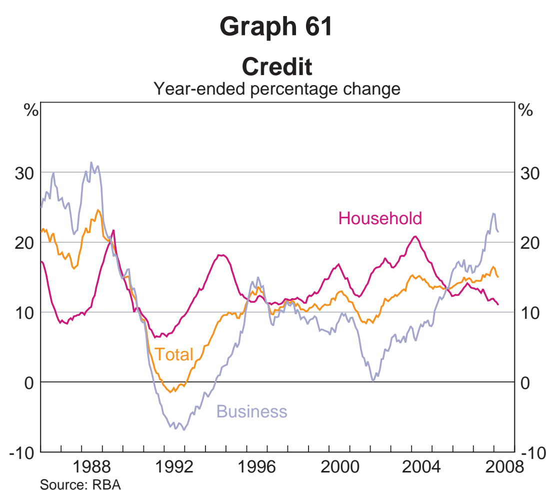


Source: Standard & Poor's

Some of the (non-major) banks who are significant participants in the Australian ABCP market have announced that they intend to scale back their programs, some of which are used to provide warehouses for mortgages prior to securitisation. As a result, some mortgage originators will need to find a new source of funding for their warehouses. Liaison suggests that other banks are likely to provide replacement warehouses for some of this funding, but at a higher price. Some originators are being squeezed between the closure of the securitisation market and this higher cost of warehouse funding and have consequently scaled back their new loan growth.

Strains in securitisation and wholesale funding markets are affecting the ratings of smaller institutions who rely on these markets. Standard & Poor's recently affirmed the ratings of most Australian financial institutions, though they downgraded two building societies, and reduced the outlook for several other small lenders that rely heavily on securitisation.

In summary, banks, which supply about 85 per cent of intermediated finance, continue to have access to funding, albeit at a higher cost than prior to the capital market turbulence. Over the March quarter, their deposits and foreign liabilities grew at a solid pace, though their domestic capital market liabilities were little changed after growing very strongly in late 2007. The share of household and business debt that is funded by financial intermediaries has risen noticeably since the onset of the market turbulence in mid 2007, as asset-backed securities markets have been effectively closed, and corporates have found it difficult and expensive to issue bonds (see 'Box C: Trends in Intermediation').



Credit growth has slowed in the March quarter, with monthly growth in total credit averaging 0.8 per cent, down from 1.3 per cent over 2007 (Graph 61, Table 9). While the monthly credit figures can be

Table 9: Credit Aggregates
Average monthly growth, per cent

	June quarter 2007	September quarter 2007	December quarter 2007	March quarter 2008
Total credit	1.4	1.1	1.3	0.8
Household	1.2	0.7	0.9	0.7
– Owner-occupier housing	1.1	0.8	0.9	1.0
– Investor housing	1.0	0.7	0.7	0.6
– Personal	2.1	0.0	1.2	–0.2
Business	1.8	1.9	1.9	0.9

Source: RBA

quite volatile, the most recent data are consistent with other signs discussed in the 'Domestic Economic Conditions' chapter that demand slowed in the March quarter. Growth in broad money has also slowed in recent months from the rapid rates seen over 2007 (for further details see 'Box D: Recent Developments in Broad Money').

Household financing

Over the past three months, the interest rates on loans to households have continued to rise, reflecting both increases in the cash rate and the higher cost of funds faced by financial intermediaries.

Variable indicator rates on prime full-doc housing loans have risen by an average of 74 basis points since the end of January 2008, 24 basis points more than the increase in the cash rate (Table 10). Mortgage originators have increased their rates by about 12 basis points more than banks. The average variable rate on prime, full-doc housing loans is now 8.83 per cent, 139 basis points higher than at the end of July 2007. Interest rates on riskier housing loans have also

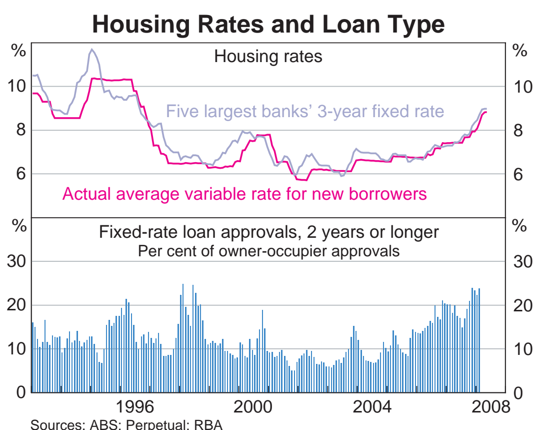
Table 10: Intermediaries' Variable Lending Rates
Per cent

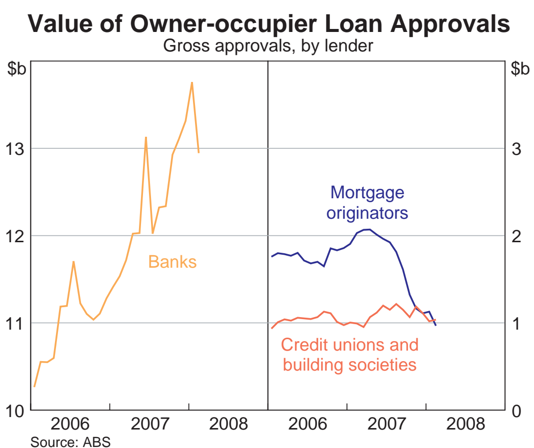
	Current level	Change since:	
	6 May 2008	End Jan 2008	End Jul 2007
Cash rate	7.25	0.50	1.00
Housing loans			
Prime-full doc			
Banks	8.83	0.74	1.39
Credit unions and building societies	8.72	0.76	1.35
Mortgage originators	8.92	0.86	1.54
Prime low doc			
Banks	9.27	0.79	1.51
Mortgage originators	9.49	0.95	1.69
Non-conforming	12.01	0.75	2.26
Personal loans			
Margin loans	10.40	0.74	1.44
Standard credit cards	19.38	0.81	1.59
Low-rate credit cards	12.54	0.77	1.37
Unsecured term loans	14.65	0.76	2.03
Small business			
Term loans			
Residentially secured	9.89	0.81	1.59
Other security	10.48	0.81	1.59
Overdraft			
Residentially secured	10.65	0.86	1.71
Other security	11.55	0.86	1.71
Average actual rate[a]	9.91	0.70	1.35
Large business			
Average actual rate[a]	8.20	0.65	1.28

(a) RBA estimate for end of April
Sources: ABS; APRA; RBA

continued to rise. The average variable rates on prime low-doc loans (7 per cent of outstanding housing loans) and non-conforming loans (1 per cent of outstanding loans) have increased by more than 75 basis points since the end of January 2008.

The five largest banks' average 3-year fixed rate on prime full-doc housing loans is currently 8.97 per cent, 50 basis points higher than at the end of January 2008, slightly above the variable rate and the highest level since 1996 (Graph 62). The share of owner-occupier loan approvals at fixed rates remained at about double its decade average.





Overall, we estimate that the average interest rate on outstanding household loans has risen by about 60 basis points since the previous *Statement*, to be around 90 basis points above the post-1993 average.

Reflecting the increase in borrowing costs and some tightening of lending standards, particularly for riskier borrowers, the value of new housing loans written has fallen over the second half of 2007 and early 2008. The share of loans approved by the banks has increased by 7 percentage points to just over 85 per cent, while mortgage originators' share has halved to 6 per cent (Graph 63).

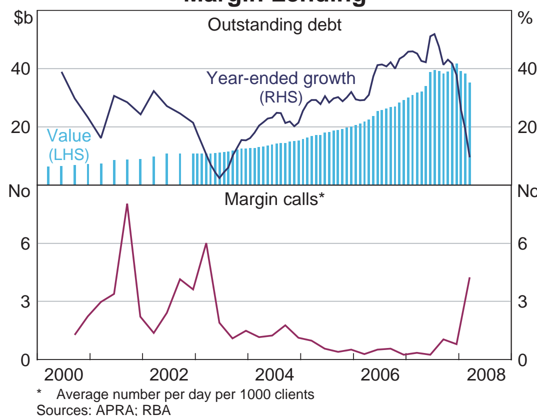
Housing credit growth has slowed over the past year from an annual pace of around 14 per cent in early 2007 to 11 per cent over the year to March. The decline in loan approvals suggests that credit growth may slow further.

Interest rates on personal loans have risen over recent months. Average variable interest rates on margin loans, unsecured personal loans and credit cards have increased by 75–80 basis points since the end of January 2008. Partly reflecting this, personal credit growth has slowed noticeably during the first quarter of 2008, but is still 10 per cent higher over the year. A 14 per cent fall in margin lending accounted for much of the slowing in personal credit growth in the March quarter (Graph 64). Declining equity prices and increased investor risk aversion have seen borrowers pay down their existing margin loans.

Financial difficulties at several small brokers that offered margin loans have also emerged. These margin lenders did not restrict their lending to just the larger listed companies but lent against a wide range of smaller, less liquid listed equities, often at high loan to valuation ratios. Further, some of their clients had substantial holdings in some small companies. The volatility in the Australian share market in the March 2008 quarter has caused margin calls to rise sharply to an average of four calls per day per 1 000 clients. This is the highest frequency since the share market trough in March 2003.

Graph 64

Margin Lending



* Average number per day per 1000 clients

Sources: APRA; RBA

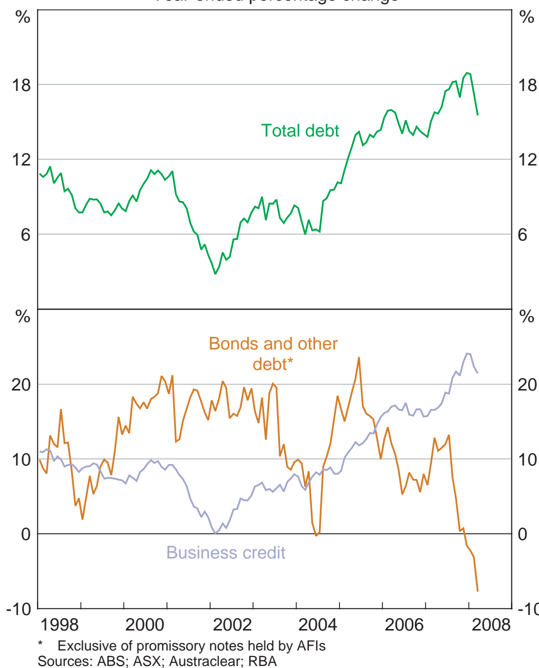
Business financing

Total business debt expanded by a rapid 15 per cent over the year to March. This masks divergent trends in intermediated and non-intermediated borrowing. Business credit grew by 21 per cent over the year, while difficulties in issuing directly into turbulent capital markets have resulted in the stock of outstanding bonds falling over the year (Graph 65).

Graph 65

Business Funding

Year-ended percentage change



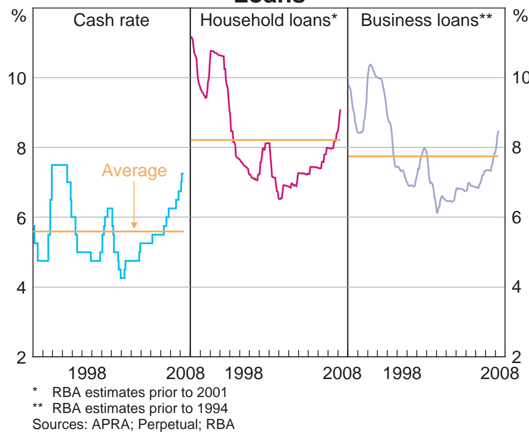
* Exclusive of promissory notes held by AFIs

Sources: ABS; ASX; Austraclear; RBA

Growth in business credit eased noticeably in February and March partly due to higher borrowing interest rates, but also reflecting some slowing in the pace of reintermediation. This slowdown was most evident for large borrowers, who had recorded very strong growth in borrowing over the second half of 2007. Variable rates on large business loans, which are largely priced off bank bill rates, have increased by about 65 basis points since the end of January. Variable indicator rates on small business loans have risen by 81 basis points, and 3-year small business fixed rates have increased by 82 basis points over the same period. Overall, the average interest rate on outstanding business loans at the end of April was around 75 basis points above its long-run average (Graph 66).

Graph 66

Average Interest Rates on Outstanding Loans

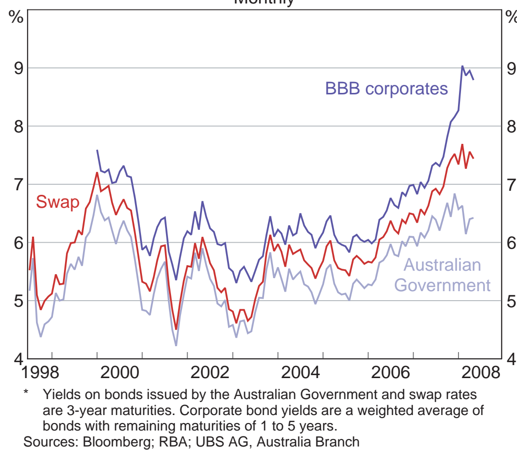


* RBA estimates prior to 2001
** RBA estimates prior to 1994
Sources: APRA; Perpetual; RBA

Graph 67

Australian Corporate Bond Yields*

Monthly



* 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

In contrast, there have been some signs of improvement in the corporate bond market, with around $3 billion of bonds issued in April, all offshore. The four issuers are all large well-known companies that find it easier to tap wholesale funding than many other corporates. The spreads at issuance on these bonds were well above the levels these companies issued at prior to the credit crisis and the terms were not all as long as initially planned. The large spread on the Wesfarmers issue has led it to cancel plans to issue more debt and instead use equity and bank loans to refinance existing debt.

The corporate bond market was also affected by Fitch's downgrade of bond insurer MBIA to AA from AAA. Around 7 per cent of non-government Australian bonds are insured, and MBIA has just under half of this market. Consequently, Fitch also downgraded bonds insured by MBIA to AA.

In secondary markets, yields on corporate bonds have remained at elevated levels over the past couple of months after increasing sharply since late last year (Graph 67). Swap and CGS yields have come down a little, resulting in spreads widening.

Net equity raisings were low in the March quarter at around $5 billion, well below the quarterly average over the past year of $12 billion, and a number of floats were deferred amidst the volatility in equity markets. Share buybacks were also at a low level, probably reflecting companies taking a conservative approach to retaining cash in the current environment.

Overall, Australian businesses are in a strong position, with high levels of profits and continued access to debt and equity funding, despite the turmoil in financial markets. Measures of gearing – the ratio of debt to shareholders' equity – and the share of short-term debt confirm the healthy position of the aggregate business sector.

The market value measure of gearing – which incorporates expectations about future profits that can be used to service debt – was broadly unchanged in the December half year, with the increase in share prices offsetting the rise in debt. Falls in equity prices and continued strong growth in debt this year will have pushed the market value gearing measure up. In contrast, on a book value basis, the gearing ratio of listed non-financial companies rose by around 20 percentage points to 85 per cent in the December half year 2007, to be at the highest level in almost 20 years. However, the increase was mostly a result of Rio Tinto's debt funded takeover of Alcan. Rio Tinto intends to pay down its debt over the next two years through asset sales and its strong cash flows. Excluding Rio Tinto, gearing increased to be 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 cash flows.

On average, companies' reliance on short-term debt at the end of December 2007 was moderate with around 20 per cent of gross debt due to mature within 12 months. Companies with high reliance on short-term debt do not tend to be highly geared. Although there may be further cases of corporates running into difficulties rolling over their short-term debt, overall this does not appear to be a large risk to the Australian non-financial corporate sector.

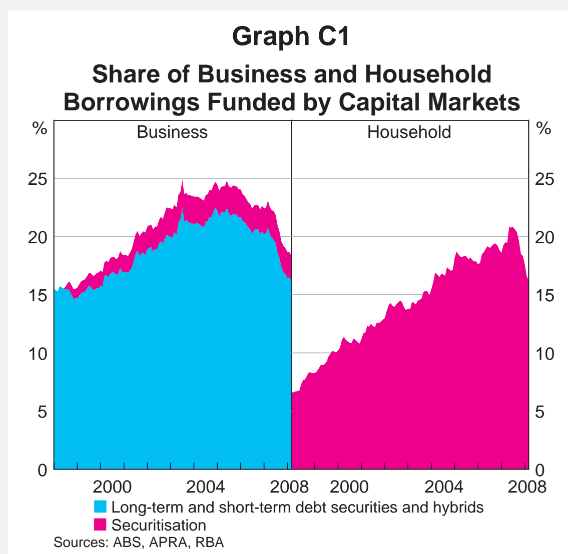
Box C: Trends in Intermediation

About 17 per cent of household and business borrowing is funded directly through capital markets, compared with 11 per cent a decade ago. In recent months, this process of disintermediation has been partly reversed as businesses have resorted to borrowing from banks with capital markets largely closed, and as the temporary absence of securitisation markets has seen a larger share of household borrowing being funded directly from the balance sheets of financial intermediaries.

Table C1: Funding of Business and Household Debt

	Outstandings ($ billion)		Per cent of total outstandings	
	Mar 1998	Mar 2008	Mar 1998	Mar 2008
Total debt	**596**	**1 956**	**100**	**100**
Borrowed by:				
– Businesses	318	867	53	44
– Households	278	1 089	47	56
Funded by:				
– Intermediaries	529	1 620	89	83
– Securitisation	19	196	3	10
– Corporate debt	49	141	8	7

Sources: ABS; APRA; RBA



The share of business borrowing that is funded directly through capital markets rose from about 15 per cent in 1998 to a peak of about 25 per cent in mid 2005 (Graph C1). This was mainly due to strong growth in bond and hybrid security issuance by large corporates; smaller businesses continued to rely on banks for funding as the fixed costs and minimum practical size for capital market funding are prohibitively high. Demand from corporates for debt funding, a switch by banks away from traditional lending to facilitating customers' participation in capital markets, and strong

demand for debt securities from institutional investors all contributed to the shift towards non-intermediated debt.

The onset of the capital market turbulence in mid 2007 saw corporate bond and hybrid security issuance fall sharply, as investors were only willing to purchase highly rated debt. With the fall in corporate debt issuance being largely offset by an increase in borrowing from banks, the share of business borrowing that is non-intermediated has fallen by 5 percentage points to 16 per cent. The share of business borrowing that is securitised – largely small business loans and equipment finance – has risen slowly over the past decade to a little over 2 per cent. This too has contracted slightly over the past nine months.

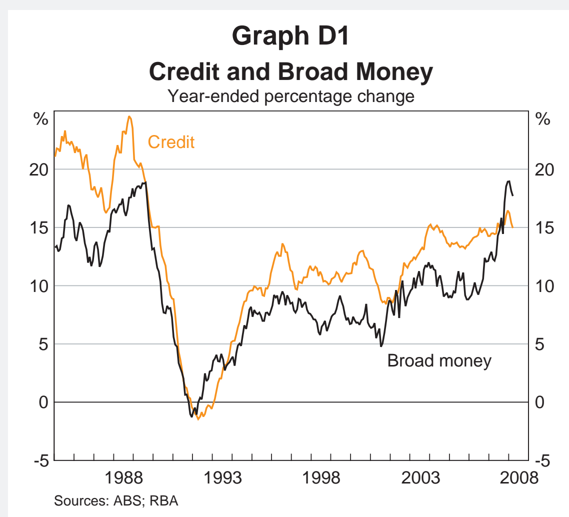
The value of loans to households directly funded through capital markets has grown rapidly over the past decade. The outstanding value of securitised housing loans – funded by both residential mortgage-backed securities (RMBS) and asset-backed commercial paper (ABCP) – has grown at an average annual rate of around 25 per cent since March 1998, rising from 8 per cent of housing loans outstanding to peak at 24 per cent in mid 2007. While total housing credit growth was strong through the late 1990s and early 2000s, the rapid growth of the share funded by securitisation was driven by institutional investors' demand for highly rated debt securities which resulted in relatively cheap funding for mortgages through securitisation. With this accessible source of funding, specialist mortgage originators and smaller banks gained market share with highly competitive interest rates. The value of personal loans that are securitised has also increased, but remains a small share of total personal loans outstanding.

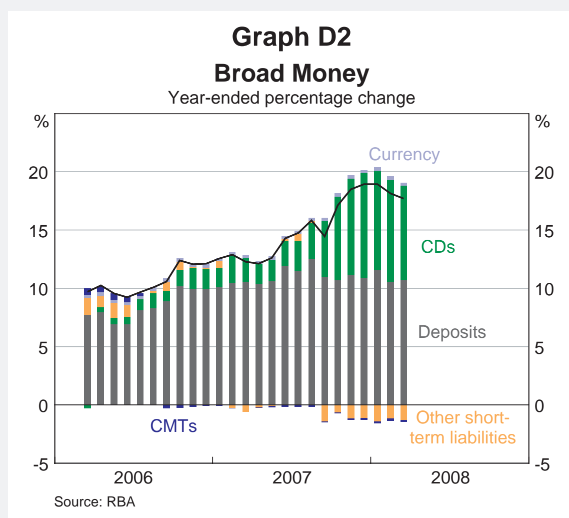
Asset-backed securities have been at the forefront of the difficulties in credit markets. Since July 2007, there has been virtually no issuance of RMBS and a reduced amount of ABCP has been rolled over. Combined with the rapid repayment of securitised mortgages, at about 25 per cent each year, the share of outstanding housing loans funded through securitisation has fallen to around 18 per cent. New housing lending has been financed largely on the balance sheets of financial intermediaries, particularly the five largest banks. This has occurred through increases in their share of the housing finance market, and through loans to fund warehouse facilities used by smaller lenders.

With most commentators expecting little securitisation this year, the share of lending funded directly through capital markets is likely to fall further. But with the underlying drivers of the shift towards capital market funding – intermediaries' lending growing faster than their deposits, strong demand for highly rated bonds from institutional investors, and a sophisticated and successful securitisation industry – still in place, it is likely that securitisation will recover. Issuance of debt securities by large corporates would also be expected to pick up in calmer markets. ✠

Box D: Recent Developments in Broad Money

Over the past decade credit has generally grown faster than broad money. However, since the middle of 2007 growth in broad money, which has the widest coverage of the monetary aggregates, has picked up sharply.[1] Over the year to March, broad money grew by 18 per cent, compared with an average of around 9 per cent over the past decade, surpassing the 15 per cent growth in credit over the year to March (Graph D1).





While there has been a significant increase in broad money growth, it is important to note that broad money is an incomplete measure of financial institutions' overall funding. In particular, broad money captures little of the funding sourced from capital markets, which has accounted for more than half of the total funding base of financial institutions in recent years. As a result, growth in broad money can be significantly affected by shifts in the way financial institutions fund themselves.

Following the onset of the financial turmoil in mid 2007, the increased difficulty in obtaining long-term funding from capital markets prompted financial institutions to shift towards more short-term funding, in particular by issuing certificates of deposit (CDs) to institutional investors and competing more aggressively for deposits. CDs held outside the financial sector grew by more than 50 per cent over the year to March and, given that CDs represent around one-fifth of broad money, accounted for around half of the growth in broad money over the year (Graph D2). Deposits, which

1 *Broad money is defined as currency (that is, notes and coins held by the private non-bank sector) and highly liquid assets held at financial institutions by the private sector, including deposits, cash management trusts (CMTs) and certificates of deposit (CDs).*

account for most of the remaining 80 per cent of broad money, increased by 15 per cent over the year to March.

Such shifts in the composition of funding have no necessary implications for the overall growth in bank lending. Growth in credit, which measures financial institutions' lending to households and businesses, picked up more modestly over 2007 than growth in money. Since the start of 2008, the pace of growth of credit, deposits and CDs has slowed. For more details on trends in bank lending see 'Box C: Trends in Intermediation'.

Price and Wage Developments

Recent developments in inflation

The CPI outcome for the March quarter showed a continuation of the high inflation observed in the second half of 2007. The CPI increased by 1.3 per cent in the quarter and by 4.2 per cent over the year. The largest contributors in the quarter were increases in automotive fuel, housing costs, food, financial & insurance services, and seasonal increases in electricity, health and education costs, offset partly by falls in the prices of clothing and household goods. A range of measures suggest that underlying inflation increased to around 1.2 per cent in the quarter, and to more than 4 per cent over the year (Table 11, Graph 68).

Table 11: Measures of Consumer Prices
Percentage change

	Quarterly		Year-ended	
	December quarter 2007	March quarter 2008	December quarter 2007	March quarter 2008
CPI	0.9	1.3	3.0	4.2
– Tradables	0.3	0.8	1.4	3.3
– Tradables (ex food and petrol)	0.0	–0.2	0.8	0.6
– Non-tradables	1.3	1.7	4.1	5.0
Underlying measures				
Weighted median	1.1	1.3	3.8	4.4
Trimmed mean	1.0	1.2	3.4	4.1
CPI ex volatile items[(a)]	1.0	1.2	3.0	3.6

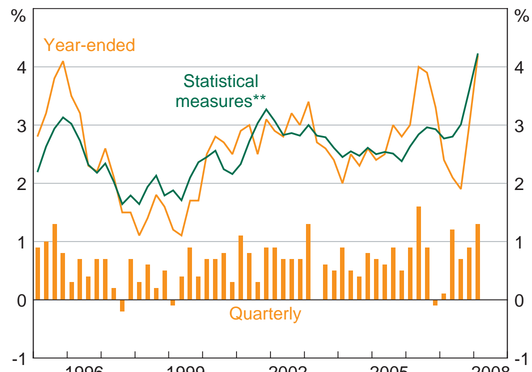
(a) Volatile items are fruit, vegetables and petrol
Sources: ABS; RBA

The strong inflation outcome over the quarter and the rising trend over the past year have reflected broad-based price pressures. At the geographic level, all capital cities have recorded inflation outcomes of 3½ per cent or more over the past year, for both CPI and trimmed mean inflation (Graph 69).

Inflation has also been broad-based when looking across the different items in the CPI. There

Graph 68

Consumer Price Inflation*

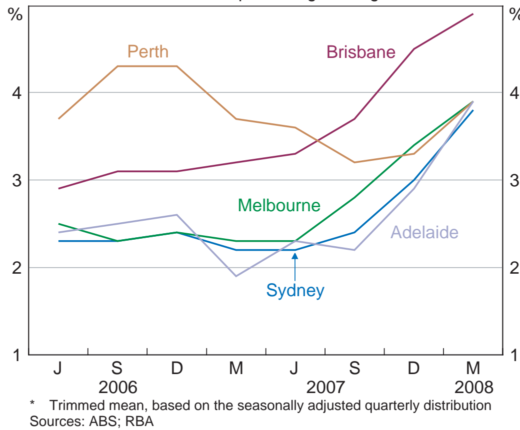


* Excluding interest charges prior to the September quarter 1998 and adjusted for the tax changes of 1999–2000
** Average of the trimmed mean and weighted median
Source: ABS

Graph 69

Major Capital City Underlying Inflation*

Year-ended percentage change



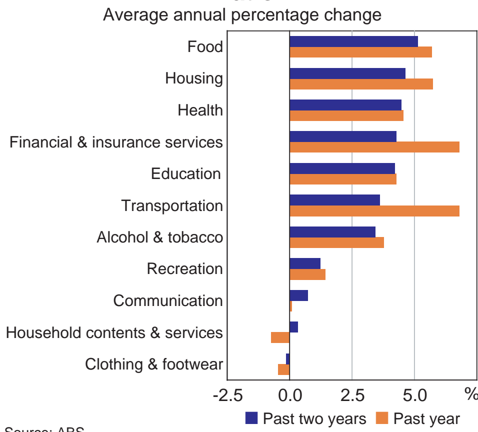
* Trimmed mean, based on the seasonally adjusted quarterly distribution

Sources: ABS; RBA

Graph 70

Inflation

Average annual percentage change

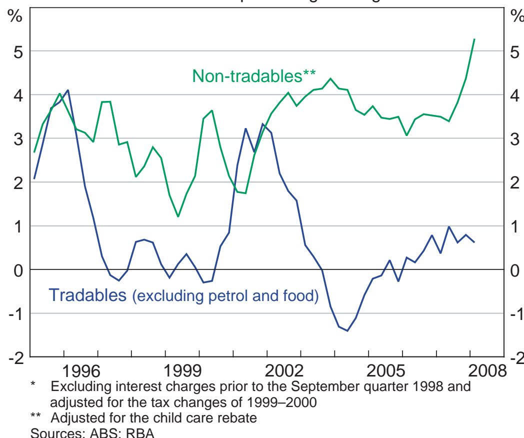


Source: ABS

Graph 71

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

** Adjusted for the child care rebate

Sources: ABS; RBA

are a number of factors that help to explain the recent price increases for some groups. For example, the 19 per cent annual increase in petrol prices reflects the pick-up in world oil prices, partly dampened by the appreciation of the exchange rate; the increase of nearly 6 per cent in food prices partly reflects the impact of the drought and global food price rises; the 7 per cent increase in rents reflects the current low vacancy rates; and the 7 per cent increase in financial services prices reflects that rising house prices have boosted real estate fees and that mortgage rates have risen by more than household deposit rates. Nevertheless, looking across the broad expenditure groups in the CPI, seven of the eleven groups (representing three-quarters of the CPI by weight) have grown by significantly more than 2½ per cent per annum over the past two years, with the groups that have grown more slowly being ones where prices have been held down by global trends, including the effect of China and other emerging economies on the prices of manufactured goods (Graph 70).

Dividing the CPI into 'tradables' and 'nontradables' items shows that a large number of non-tradable items have recorded significant price increases. Overall non-tradables prices (which are primarily services) increased by 1.7 per cent in the quarter and by 5.3 per cent over the year (adjusted for the changes to the treatment of the child care rebate in mid 2007), its fastest year-ended pace since September 1991 (Graph 71).

Nearly 90 per cent of non-tradables prices (by expenditure weight) have grown by more than 2.5 per cent over the past year (Graph 72). While tradables prices increased by 3.3 per cent over the year, much of this reflected higher fuel and food costs; excluding these volatile items, year-ended tradables inflation was 0.6 per cent. Inflation for this group of tradables (representing around one-quarter of the CPI) has been below 1 per cent for more than five years, reflecting the trend appreciation of the exchange rate and global developments in the prices of manufactured goods.

Costs and margins

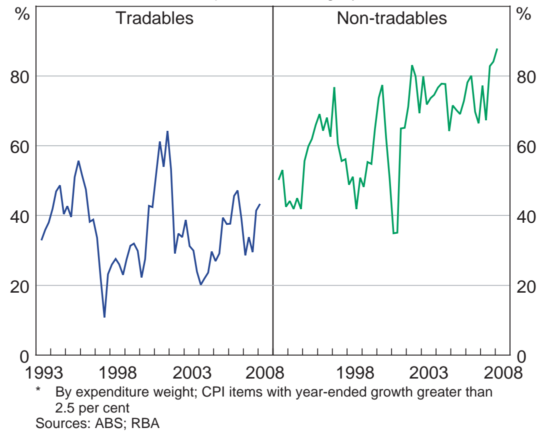
The broad-based nature of the current price pressures reflects the high level of capacity utilisation in the economy, strong growth in labour costs and other input prices, and the increase in inflation expectations over the past year.

Labour costs have continued to increase solidly, due to the tight labour market and shortage of suitable labour. The wage price index (WPI) rose by 1.1 per cent in the December quarter, with year-ended growth at 4.2 per cent, which is around the highest rate seen over the ten-year history of this series (Graph 73). Within the overall WPI, year-ended growth for the private sector picked up to reach 4.3 per cent, its fastest pace of growth in the series' history (Graph 74). Private sector WPI growth has steadily increased over the past three years, consistent with business surveys and

Graph 72

CPI Items Rising Faster than 2.5 Per Cent*

Proportion of category



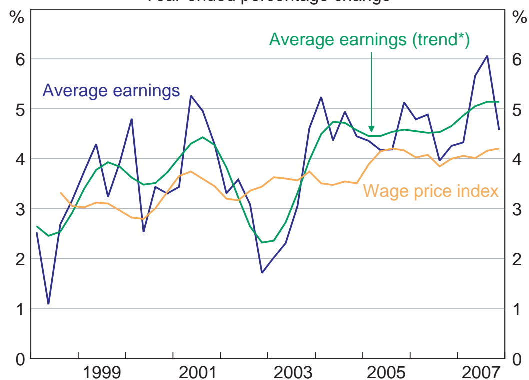
* By expenditure weight; CPI items with year-ended growth greater than 2.5 per cent

Sources: ABS; RBA

Graph 73

Wage Growth

Year-ended percentage change



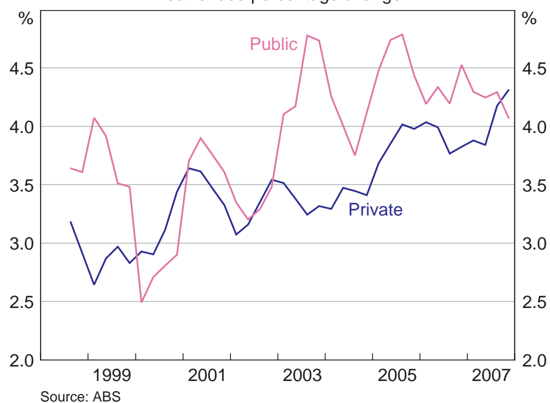
* 13-period Henderson trend

Sources: ABS; RBA

Graph 74

Wage Price Index

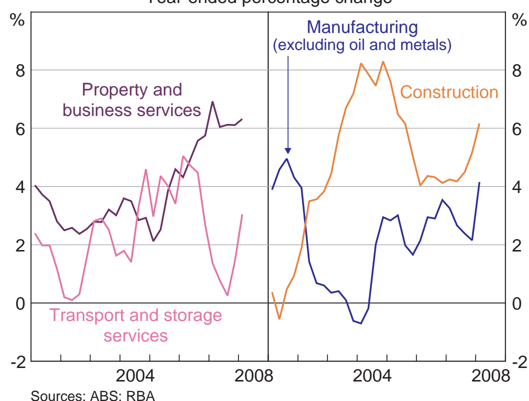
Year-ended percentage change



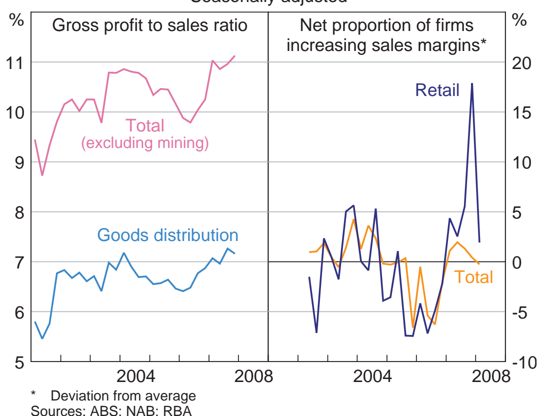
Source: ABS

the Bank's liaison. Average earnings as indicated by the national accounts – a broader measure of labour costs than the WPI – were unchanged in the December quarter but were up by 4.6 per cent in year-ended terms. In trend terms, which abstracts from the volatility in this series, annual growth in average earnings remained around 5 per cent.

Upstream cost pressures intensified in the March quarter, according to the producer price index. Final-stage prices increased by 1.9 per cent in the quarter, to be 4.8 per cent higher over the year; this is the largest quarterly increase since the series began in 1998. The sharp increase in the quarter partly reflected increases in oil prices, which intensified in the early part of the June quarter; the price of Tapis recently reached a record high of US$126 per barrel, following a number of supply disruptions. However, prices of non-oil, final-stage producer goods and services also increased significantly. The strength was broad-based across different sectors, with the largest contribution coming from the construction sector, which includes both housing and non-residential construction costs (Graph 75). Prices of manufactured goods and transport & storage services picked up markedly, while growth in property and business services costs remained high.

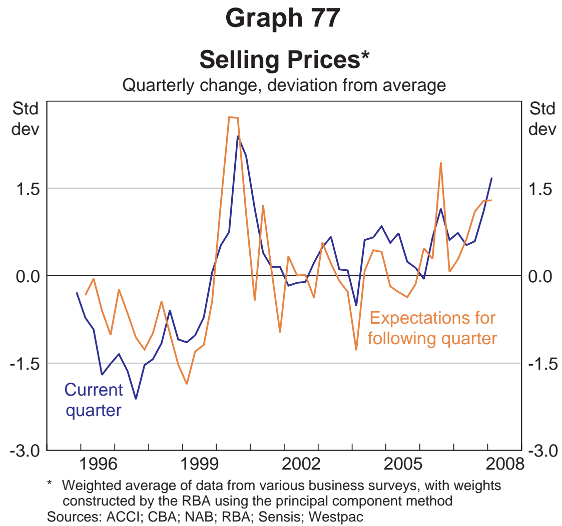


Notwithstanding the strong growth in input costs, business margins appear to have remained strong, consistent with the strength of demand. Estimates based on ABS profits data suggest that margins in both the broader economy and goods distribution sector – which includes retail and wholesale trade and transport – were at comparatively high levels in the December quarter (Graph 76). The NAB survey reports that the net balance of respondents increasing margins has been somewhat above average in recent quarters, although this has been a volatile indicator. The Bank's liaison also suggests margins have expanded over recent quarters.



Inflation expectations

Inflation expectations remain relatively high. Business surveys report that the proportion of businesses expecting to increase prices in the near term remains above long-run average levels (Graph 77).



The median expectation for consumer price inflation for the year ahead, as measured by the Melbourne Institute survey of households, was high in April at 4.3 per cent. This measure has exceeded 4 per cent for seven consecutive months, well above the average expectation of around 3 per cent over the inflation-targeting period. Market economists surveyed by the Bank following the release of the March quarter CPI have also increased their inflation forecasts. The median expectation for headline inflation over the year to the June quarter 2009 is now 3.0 per cent, up from 2.8 per cent in February (Table 12). Over the year to the June quarter 2010, the median inflation expectation is 2.8 per cent. In addition, union officials have increased their inflation expectations.

Table 12: Median Inflation Expectations
Per cent

	Year to June 2009			Year to June 2010
	November 2007	February 2008	May 2008	May 2008
Market economists[(a)]	2.6	2.8	3.0	2.8
Union officials[(b)]	3.0	3.5	4.0	3.5

(a) RBA survey
(b) Workplace Research Centre

Economic Outlook

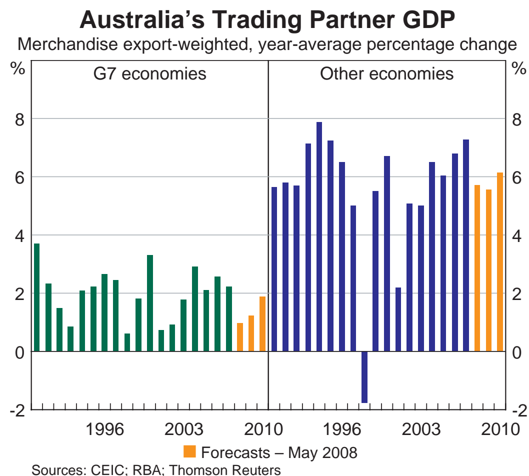
The international economy

The Bank's forecasts for the domestic economy are based on the assumption that growth in Australia's major trading partners slows to a little below 4 per cent in 2008 and 2009, down from 5¼ per cent in 2007. This outlook is largely unchanged from that presented in the February *Statement*. It is also broadly in line with the IMF forecasts published in early April, which contained a significant downward revision. Growth in the G7 economies is expected to be well below trend in both 2008 and 2009, reflecting a slowing in all the major economies and a mild recession in the United States (Graph 78). In the emerging economies, growth is expected to slow from the rapid rates of recent years, but to remain strong, supported by continued solid growth in domestic demand.

Graph 78

Australia's Trading Partner GDP

Merchandise export-weighted, year-average percentage change



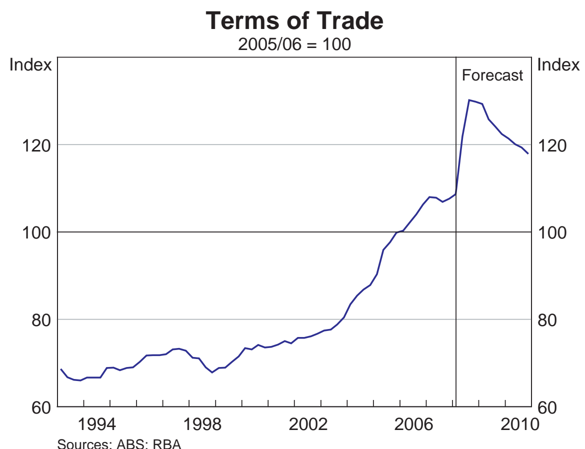
Sources: CEIC; RBA; Thomson Reuters

With nearly 65 per cent of Australian exports going to Asia and commodities representing around 60 per cent of total exports, the outlook for Asia and for commodity markets will be key determinants of how developments in the global economy affect the Australian economy. So far, there is only limited evidence of a slowing in the Asian economies, and commodity markets have tended to strengthen over recent months. Nevertheless, the slowing in developed economies and the difficulties in global financial markets will continue to have some dampening effect on Australian growth.

Graph 79

Terms of Trade

2005/06 = 100



Sources: ABS; RBA

The large rises in prices for coal and iron ore in the 2008/09 contract year are expected to result in an increase of around 20 per cent in the terms of trade over the next few months (Graph 79). These increases will bring the run-up in the terms of

trade over the past five years to around 65 per cent. Although the prospect of further tightening in commodity markets cannot be ruled out, the Bank's forecasts assume a medium-term easing in the terms of trade, reflecting the slowing in global growth in 2008 and the expected response of demand and supply to the current high commodity price levels over time.

Domestic activity

The forecasts for activity and inflation in Australia are based on the technical assumption that the cash rate and the exchange rate will remain at their current levels.

The outlook reflects the interaction of a number of opposing forces. On the one hand, the global slowdown and the significant tightening in financial conditions are clearly contractionary for the economy. Variable lending rates to households and businesses have risen by nearly 50 basis points since the time of the February *Statement* and by nearly 150 basis points since mid 2007. There has been some additional contractionary effect from tighter lending standards and reduced access to capital markets. These financial factors have been reflected in the observed fall in the rate of growth of borrowing by households and businesses. They have also contributed to the falls in measures of consumer and business sentiment and to the slowing in the domestic economy that is apparent in information from the Bank's liaison program and a number of the indicators of domestic spending, including retail sales.

On the other hand, the recent large price increases for coal, iron ore and other commodities are likely to boost national income by up to 3 per cent and can be expected to support domestic growth through a number of channels. The surge in export prices will boost the earnings of mining companies and the revenues of federal and state governments (especially corporate income tax revenues and royalty-type payments). Although foreign-ownership of the minerals sector is significant, a sizeable fraction of after-tax profits will accrue to domestic shareholders and to the extent that this lifts dividends or share prices, it will support household wealth and spending over time. Indeed, share prices in the resources sector have risen by around 16 per cent since the time of the previous *Statement*, in contrast to the non-resources sector where share prices have fallen by around 8 per cent over this period. To the extent that the recent boost to commodity prices results in expectations of higher average prices in the medium term, it could be also expected to provide a significant boost to investment over the medium term, with the attendant multiplier effects in terms of higher demand for labour and for goods and services from firms in both the resource-rich and other states.

The net effect of these forces is quite uncertain. The Bank's current assessment is that the near-term outlook for domestic demand is for moderate growth. Growth in non-farm GDP is forecast to slow from the rate of 4 per cent seen over the year to the December quarter 2007 to around 1¾ per cent over 2008, before rising somewhat to 2½ per cent over 2009 and 2¾ per cent over 2010 (Table 13). With farm sector output expected to recover over the next year or so, total GDP growth is forecast to be slightly stronger over this period. Excluding production in the mining and farm sectors, where outcomes are predominantly driven by changes in supply, output growth over the forecast period is expected to slow to around 1½ per cent over 2008 before rising to around 2¼ per cent. Given the recent and projected strong growth in the capital stock, these rates of output growth imply a significant easing in capacity pressures in the economy.

Much of the forecast slowing in 2008 is attributable to an expected slowing in household spending. Measures of consumer sentiment have fallen significantly in the wake of the tightening in financial conditions and the weakness in financial markets, and the growth of retail sales has slowed noticeably in early 2008. The recent increases in petrol prices will also weigh on consumption growth in the near term. While growth in consumption is expected to remain well below its earlier strong pace, impending tax cuts and the stimulus flowing from higher commodity prices should lend support to household spending, with a firming expected later in the forecast period. Dwelling investment is expected to contract over the coming year in response to higher interest rates, but is then expected to recover gradually, supported by the strong demand for housing as reflected in rising rents.

While the further rise in commodity prices is expected to sustain growth in mining investment over coming years, investment in the non-mining sector is forecast to slow as the current large pipeline of work yet to be done is gradually completed. The slowdown is expected to be most pronounced in building construction, where the tightening of financial conditions appears to be weighing on plans for new development; some weakness in this sector should free up resources for mining investment, allowing total business investment to remain at a high level as a share of GDP. Public demand growth is assumed to moderate somewhat from the relatively strong pace of recent years, reflecting slower growth in spending by both the Commonwealth and state governments. In the near term, export growth is expected to be constrained by supply disruptions to resource exports and the fall in rural production from the drought. In addition, the strength of the Australian dollar and the slowing in the growth of some of Australia's major trading partners are expected to slow exports of services and manufactures. However, resource exports are expected to pick up gradually over the forecast period, as new production comes on line.

The forecast slowing in GDP growth implies an easing of growth in labour demand from the considerable strength seen in recent years. Reflecting this, annual growth in employment is forecast to slow and the unemployment rate to increase somewhat, having fallen over the past several years.

Inflation

The inflation forecasts have been revised to reflect both the stronger than expected consumer price inflation outcome in the March quarter and the softer outlook for the economy. The high rate of underlying inflation in the March quarter indicates that the demand pressures that have been evident for some time are continuing to have a significant effect on pricing in the economy and are allowing increases in input costs to be passed through into final prices. A reduction in inflation over time will require a significant slowing in domestic demand. As discussed above, there is now evidence that demand growth has slowed, but it will take time for this to have a substantial impact on inflation.

In the short term, the higher starting point for underlying inflation means that inflation over 2008 is forecast to be somewhat higher than previously expected. Underlying inflation is expected to be around 4 per cent over the year to the December quarter 2008 (Table 13). Headline CPI inflation over the same period is expected to be higher, at 4½ per cent, largely reflecting the sharp

increase in oil prices so far this year. Further out, inflation is forecast to fall gradually, although year-ended inflation is expected to remain outside the target band for the next two years or so. The point forecast is for CPI and underlying inflation to be around 2¾ per cent by the end of the forecast period in December 2010. This reflects the expected slowing in demand growth and a gradual easing in capacity pressures, which are expected to reduce the pricing power of businesses. Wage pressures are also likely to ease in due course, as the rate of unemployment is forecast to increase, in line with the slower growth in activity and employment.

Table 13: Output and Inflation Forecasts[(a)]
Percentage change over year to quarter shown

	Dec 2007	Mar 2008	June 2008	Dec 2008	June 2009	Dec 2009	Jun 2010	Dec 2010
GDP	3.9	3	2½	2¼	2¾	2½	2½	2¾
Non-farm GDP	4.0	3	2¼	1¾	2¼	2½	2½	2¾
CPI	3.0	4.2	4¼	4½	3½	3¼	3	2¾
Underlying inflation	3.6	4.2	4¼	4	3½	3¼	3	2¾

(a) Actual GDP data to December 2007 and actual inflation data to March 2008. Underlying inflation refers to the average of trimmed mean and weighted median inflation. For the forecast period, technical assumptions include A$ at US$0.94, TWI at 71, cash rate at 7.25 per cent, and WTI crude oil price at US$116 per barrel and Tapis crude oil price at US$120 per barrel.

Sources: ABS; RBA

Risks to these forecasts can be identified in both directions. A further deterioration in the outlook for global growth would be the main source of downside risk to the forecasts for domestic activity. In particular, if the weakness in the major developed economies were to lead to a large moderation in growth in China and India, it is likely that the outlook for the Australian economy and commodity markets would deteriorate significantly. This could be expected to lead to lower growth of domestic incomes, spending and activity, and hence some further moderation in inflation over time. In addition, there is some risk that the current dislocations in capital markets could worsen and result in a more significant reduction in credit availability to households and businesses.

There are also upside risks to the domestic growth and inflation forecasts. It is possible that the recent weakness in consumer sentiment and domestic spending will prove to be mostly temporary, especially in light of the large boost to national income arising from the terms of trade. If demand were to be stronger than expected, the forecast moderation in the inflation rate would probably not eventuate. In addition, the persistence of inflation at relatively high rates for some time could result in inflation expectations becoming entrenched at higher than acceptable levels, which could feed back into wage- and price-setting behaviour. ✠