RESERVE
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FINANCIAL STABILITY REVIEW

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Reserve Bank

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Overview

The operating environment facing many financial institutions around the world, particularly in the United States, is more difficult than it has been for many years. Risk aversion has increased markedly, confidence in a number of the world's largest financial institutions has fallen considerably, and the prices of most financial assets have declined. In mid September, uncertainty in financial markets became particularly acute due to concerns about the viability of a number of large financial institutions in the United States. In response, the US authorities announced a series of significant measures aimed at bolstering the stability of the US financial system. While these measures have helped stem the deterioration in confidence, conditions remain strained.

The problems in the global financial system are proving to be much more pervasive and costly than was anticipated by many observers a year ago. While the losses associated with the sub-prime problems are equivalent to only a small fraction of global wealth, these losses have been concentrated on the balance sheets of highly leveraged institutions, particularly banks, amplifying their effects. Somewhat paradoxically, the growth of the securitisation and credit transfer markets over the past decade – which was supposed to lead to credit risk being more widely dispersed throughout the global financial system – has contributed both to an increase in aggregate credit risk and to significant concentrations of this risk on some highly leveraged balance sheets.

The recent difficulties have been compounded by a straining of the bond of trust between many banks and investors. Given the difficulties with valuing structured credit products, many investors remain wary about the valuations being used by some banks. While standards of disclosure have improved over the past year, further improvements are required to rebuild the trust that is a cornerstone of a well-functioning financial system. Concerns about the capital position of some banks are also weighing on investor confidence, with bank share prices down considerably and the spreads that banks pay when raising funds up significantly on the levels of just over a year ago.

Reflecting these developments, the smooth functioning of the credit supply process has been disrupted in some countries. This has increased the risk of a damaging feedback loop running from the financial sector to the economy and back to the financial sector. How powerful this loop ultimately turns out to be will depend to a significant extent on what happens to property prices in the United States over the period ahead, as well as on the ability of banks to retain the confidence of investors. From this perspective, recent support efforts by the authorities in the United States are to be welcomed.

The Australian financial system has coped better with the recent turmoil than many other financial systems. The banking system is soundly capitalised, it has only limited exposure to sub-prime related assets, and it continues to record strong profitability and has low levels of problem loans. The large Australian banks all have high credit ratings and they have been able to continue to tap both domestic and offshore capital markets on a regular basis. Credit standards

in Australia over the past decade were not eased to anywhere near the same extent as in the United States. In Australia, non-conforming housing loans – the closest equivalent to US sub-prime loans – account for less than 1 per cent of outstanding housing loans, with virtually all of these loans made by specialist non-bank lenders. Moreover, arrears rates on prime Australian mortgages have historically been lower than in many other countries and remain so.

Notwithstanding this positive position, the Australian financial system has felt the impact of the difficulties in the global financial system. As has occurred internationally, bank share prices are down considerably and banks' funding costs have increased significantly. The general increase in uncertainty has also meant that most banks are taking a more cautious attitude to lending and paying increased attention to their funding. Some banks have also recently reported higher provisions, largely reflecting exposures to a relatively small number of highly geared firms, as well as some indirect exposures to the sub-prime problems in the United States. It is important to note, however, that the ratio of banks' problem loans to total assets remains below the average since the mid 1990s, a period of unusually low credit losses.

The tighter financial conditions have resulted in the household sector entering a period of balance-sheet consolidation, although households are continuing to benefit from a firm labour market and solid growth in nominal incomes. Reflecting this consolidation, the demand for credit has slowed, as has the pace of consumption growth. While some households are facing more difficult financial conditions than has been the case for some time, the overall arrears rates on housing loans has shown little change over the past year, and remains low by historical and international standards. In the business sector, the various indicators suggest that the balance sheets of most firms remain in good shape, having benefited from strong profit growth over recent years. There are, however, a relatively small number of companies, particularly those that are highly leveraged and that have relied heavily on short-term funding, that have found the current financial environment particularly difficult.

Overall, the past year has been a very challenging one for many financial systems. A return to more settled conditions will require a rebuilding of confidence in many overseas financial institutions and further steps to strengthen their balance sheets. In this difficult environment, Australia has benefited from having strong and profitable financial institutions with few problem assets on their balance sheets, and a sound regulatory regime. While the Australian financial system has not been completely insulated from developments abroad, it is weathering the current difficulties much better than many other financial systems.

The Global Financial Environment

Over the past year, the US financial system has faced its most challenging conditions for many decades, prompting exceptional responses from the US authorities. In the early phases of the turmoil, the main concern was liquidity, with inter-bank spreads, particularly at longer terms, increasing sharply. The Federal Reserve, and other central banks, responded to these tensions with a number of measures that helped alleviate tensions in money markets. Attention then turned to specific institutions' difficulties associated with sub-prime related products. These pressures prompted the US authorities to: assist with the sale of the investment bank Bear Stearns; place the government sponsored housing enterprises, Fannie Mae and Freddie Mac, under conservatorship; and provide the world's largest insurer, American International Group, with a secured line of credit up to US$85 billion. More recently, the authorities have announced several major initiatives intended to provide a comprehensive approach to relieving systemic stress in the financial system. These initiatives include a plan to purchase up to US$700 billion of troubled assets from banks with significant operations in the United States, and insurance arrangements for short-term money market funds. In addition, and reflecting spillover effects to the global financial system, the Federal Reserve, in collaboration with other central banks, has introduced new international swap agreements.

At the time of writing, it appears that the most recent announcements by the US authorities have seen sentiment improve somewhat in a number of markets. Nonetheless, conditions remain strained, with uncertainty and risk aversion still at elevated levels and concerns persisting about the capital strength of a number of the world's largest financial institutions.

At the centre of the problems in the global financial system has been a marked reduction in confidence in many financial institutions. One important reason for this is that investors have been uncertain as to the exact value of the assets on many financial institutions' balance sheets and, as a result, about these institutions' underlying capital strength. As many commentators have noted, reducing the opacity of banks' assets and increasing the level of capital in the global banking system are key to resolving the current problems.

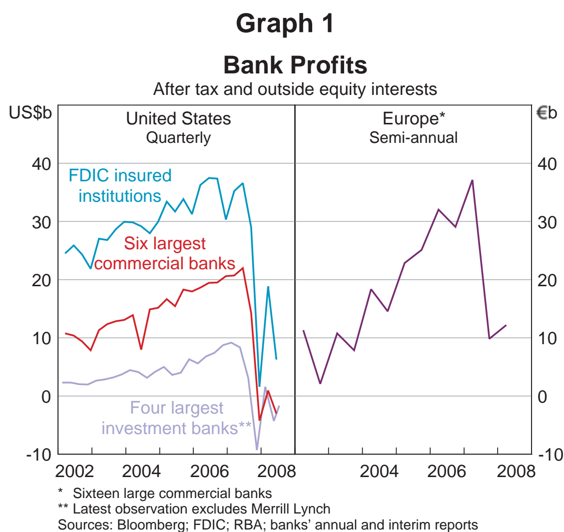
The recent difficulties and the high level of risk aversion come after a number of years in which investors were prepared to borrow heavily to buy risky assets at fine margins. With the pendulum now having swung the other way, the adjustment is proving to be more difficult and costly than many had expected a year ago. Risk margins on many financial assets have increased to historically high levels, and investors are seeking to reduce leverage and are eschewing asset classes which up until a year or so ago were in extremely strong demand. This cycle has been reinforced by financial institutions which up until recently were eager to provide, on very favourable terms, the leverage that investors sought but are now tightening lending standards and becoming much more cautious about providing credit to both households and businesses.

An important factor weighing on a return to more normal conditions is the deterioration in various property markets, particularly the residential property market in the United States.

Declines in property prices, together with the greater uncertainty within the financial system, have increased the risk of a damaging feedback loop running from the financial sector to the real economy and back to the financial sector. Rebuilding confidence in the financial system is obviously important here. From this perspective, the recent initiatives by the US authorities are to be welcomed.

Profitability, Capital and Balance Sheets of the Banking System

The ongoing fall-out from the sub-prime problems has resulted in a very large decline in bank profitability in both the United States and in parts of Europe. Since July 2007, large financial institutions have reported around US$520 billion of writedowns, mostly related to holdings of sub-prime mortgage-backed securities, CDOs backed by sub-prime securities and exposures to monoline insurers. Largely reflecting these writedowns, over the nine months to June 2008 the aggregate profits of all US institutions insured by the Federal Deposit Insurance Corporation (FDIC) were down by around 75 per cent on the equivalent period a year earlier (Graph 1). While the sharp decline in profitability has been widespread, it has been most pronounced for the US investment banks and the larger commercial banks; since August 2007, the investment banks as a whole have recorded a loss of around US$14 billion, while the six largest commercial banks have recorded a combined loss of around US$7 billion. In Europe, there has also been a marked decline in bank profitability, although the decline has not been as widespread as in the United States. For a group of 16 large European banks that have recently published half-year results, profits were down nearly 70 per cent on the level of a year ago.



The large writedowns, together with the increase in risk aversion, have led to a significant contraction in some banks' balance sheets. As an illustration, between September 2007 and June 2008, the combined balance sheet of Citigroup, UBS, Morgan Stanley and Merrill Lynch declined by US$960 billion, or 13 per cent (Table 1). Many troubled banks are attempting to offload risky, capital-intensive assets, often at sharply reduced prices, in an effort to deleverage and 'de-risk' their balance sheets. Some are also selling 'non-core' assets, such as wealth management units and insurance arms. This process has weighed on the prices of many financial assets, and the desire to preserve capital has contributed to a tightening of lending standards (see below).

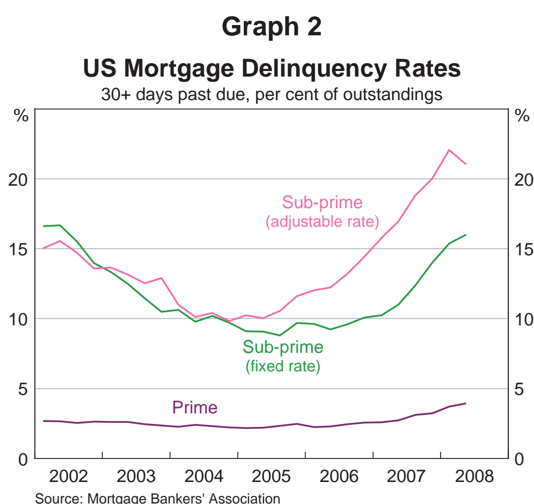
As has been well documented, the catalyst for these problems was a sharp rise in arrears rates on sub-prime loans in the United States, particularly those with adjustable rates. The 30+ days arrears rate on adjustable-rate mortgages began to increase in mid 2005 and currently stands at

Table 1: Financial Position and Performance of Selected Large International Banks

	Assets		
	At June 2008 US$b	Change since September 2007 Per cent	Pre-tax profit/loss since Sept 2007 US$b
RBS[a]	3 882	2.5	-1.4
Deutsche	3 136	5.9	2.9
BNP Paribas[a]	2 863	7.2	7.5
Barclays[a]	2 721	11.3	5.5
HSBC[a]	2 547	8.2	10.2
Citigroup	2 100	-10.9	-30.5
UBS	2 121	-16.4	-29.2
JPMorgan[b]	1 776	-5.5	10.4
Bank of America	1 717	8.7	5.8
Société Générale[a]	1 695	0.4	4.8
HBOS[a]	1 358	2.2	1.7
Goldman Sachs[c]	1 088	4.1	10.0
Morgan Stanley[c]	1 031	-13.0	-2.1
Merrill Lynch	966	-11.9	-26.3
Wachovia	812	7.7	-11.8
Lehman Brothers[c]	639	-3.0	-2.2
Total	**30 454**	**0.4**	**-44.7**

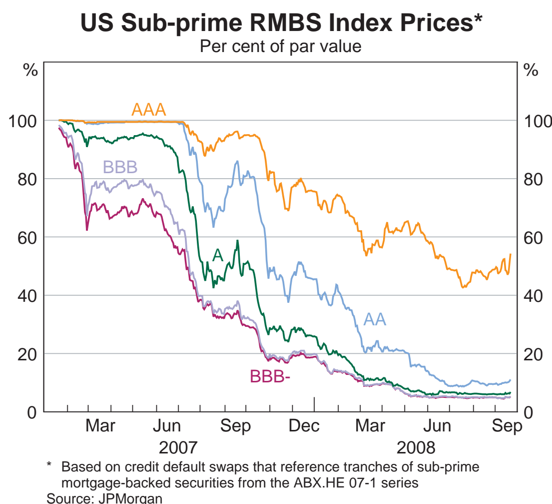
(a) Balance sheet change and profits data are six months to June 2008
(b) Includes Bear Stearns
(c) Balance sheet change and profits data are nine months to May 2008
Sources: Bloomberg; banks' annual reports

around 21 per cent (Graph 2). The arrears rate on fixed-rate sub-prime loans has also increased markedly since early 2007, and arrears on prime loans have also risen. As a result, foreclosure rates on both sub-prime and prime mortgages have more than doubled over the past year, to be at ten-year highs, with 12 percent of sub-prime loans currently in foreclosure. Underlying this marked deterioration in credit quality was a significant reduction in credit standards by mortgage lenders in the United States in the middle part of this decade. The reasons for this reduction were discussed in some detail in the March 2008 *Review*.



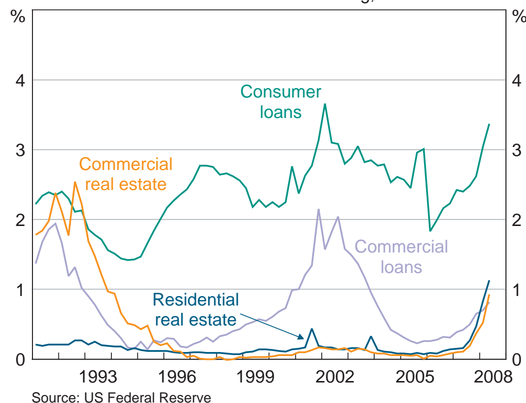
While internationally comparable data on housing arrears are limited, the available data suggest that there has also been an increase in arrears rates in a number of other countries,

although the increases are considerably less than those seen in the United States, where the 30+ days arrears rate on all mortgages has risen from 4.3 per cent in mid 2005 to 6.4 per cent in June 2008. In the United Kingdom, for example, the share of rated (prime) securitised mortgages that are 30+ days in arrears has risen from 2.3 per cent in 2005 to 2.9 per cent in mid 2008. In Spain, another country that had experienced a very large run-up in house prices over a number of years, the 30-to-90 day arrears rate on rated securitised mortgages has risen from 1.2 per cent in 2005 to 2.5 per cent in March 2008.



* Based on credit default swaps that reference tranches of sub-prime mortgage-backed securities from the ABX.HE 07-1 series
Source: JPMorgan

For many institutions the losses arising from sub-prime problems have been amplified by the structured nature of the securities that they hold and the very large changes in the market value of these securities. For example, the ABX index of AAA-rated tranches of sub-prime RMBS that began trading in the first half of 2007 has lost half its value, while lower-rated tranches have incurred much larger price falls (Graph 3). These sharp declines reflect not just a reassessment of default probabilities, but also a significant increase in the uncertainty surrounding these probabilities, as well as a rise in the compensation that investors require for holding a given level of risk. In the early months of the turmoil, there was an expectation by some that these mark-to-market losses might be partly reversed, and while this remains a possibility, many institutions have, as discussed above, responded to the protracted nature of the turmoil by attempting to remove these assets from their balance sheets.



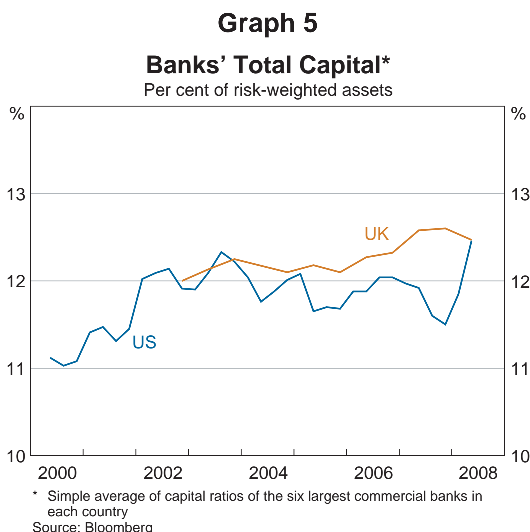
Source: US Federal Reserve

While the writedowns and losses that have occurred to date have been largely related to assets backed by sub-prime mortgages, there are signs of a more general deterioration in loan performance arising from the slowdown in the major economies and tighter financial conditions. This is most evident in the United States, where charge-off rates on banks' consumer loans have risen considerably (Graph 4). There has also been an increase in charge-off rates on commercial loans, although they remain well below the peak

experienced after the dot-com boom. In Europe, reported loan charge-offs have been relatively unchanged but are likely to rise in the period ahead.

Given the large declines in some asset prices that have taken place, a central concern over the past year has been the overall capital position of the banking system and, in particular, the capital position of the institutions experiencing the largest losses. Indeed, many of the swings in financial prices seen this year can be directly related to the ebb and flow of these concerns. In some cases, the writedowns have made very large dents in capital levels and, in at least one prominent case, they exceeded the bank's total capital as at the middle of 2007. The US investment banks have been particularly affected, given their high leverage and the fact that some had built up sizeable portfolios of structured credit products as they moved away from their more traditional business of corporate advice and underwriting activities. Reflecting the difficulties, only two of the five large US investment banks that existed at the start of this year now exist as stand-alone entities, with both of these having been given approval to become commercial banks.

Notwithstanding the problems in the investment banking industry, for most of the past year the banks that have experienced large losses have been able to raise new capital, with total raisings by the largest banks since July 2007 amounting to around US$370 billion. These raisings, together with balance sheet contraction and ongoing net income generated from regular operations, have meant that many banks have been able to maintain or, in some cases, increase, their regulatory capital ratios. For example, for the six largest commercial banks in the United States, the ratio of capital to risk-weighted assets rose by almost 100 basis points over the 6 months to June, with strong capital raisings in the first half of 2008 significantly exceeding losses (and risk-weighted assets having been flat) (Graph 5). In the United Kingdom, the aggregate capital ratio for the largest six banks has declined only slightly.



* Simple average of capital ratios of the six largest commercial banks in each country
Source: Bloomberg

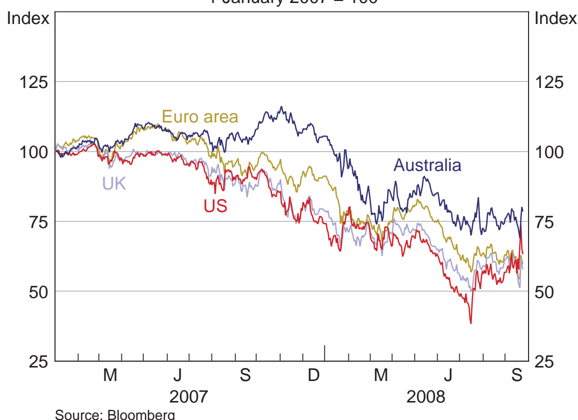
Despite the capital that has been raised, the past couple of months have seen increased concerns regarding the health of the financial sector, particularly in the United States. These concerns reflect the continuing high level of uncertainty, and the fact that investors have incurred losses on some previous capital injections. In the United Kingdom, the difficulties were highlighted when a number of new equity issues were significantly undersubscribed, with the underwriters having to take up the shortfall. These concerns intensified in early September, contributing to the US Government's decision to appoint a conservator to Fannie Mae and Freddie Mac and to support the insurer American International Group (AIG), and to the quickly arranged sales of Merrill Lynch and HBOS.

Reflecting the difficult operating environment of the past year, bank share prices in the major countries are down by 35 to 45 per cent since mid 2007, and 5 to 15 per cent over the past six months (Graph 6). Volatility of bank share prices has also been at or near record highs over the past month, leading to concerns about the fair and orderly operation of equity markets. In response, the authorities in a range of countries, including the United States, the United Kingdom, Australia, France, Germany, Ireland and Canada have in the past week introduced temporary restrictions on the short sale of equities.

Graph 6

Banks' Share Prices

1 January 2007 = 100

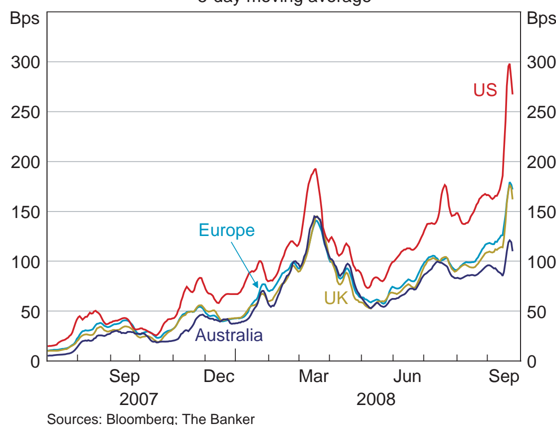


Source: Bloomberg

Graph 7

Banks' Senior 5-year CDS Premia

5-day moving average



Sources: Bloomberg; The Banker

Credit default swap premia for banks are also markedly higher than they were in the first half of last year (Graph 7). These spreads increased significantly around the time of the Bear Stearns problems, and then declined in the immediate aftermath of the 'rescue' before rising again since May. In recent weeks there have been particularly large increases in these spreads, as markets reacted to a run of bad news, in particular the bankruptcy of the investment bank Lehman Brothers.

The difficult operating environment has also resulted in a significant number of credit downgrades. Of the 50 largest rated banks in the world, 12 have had their ratings downgraded since end June 2007, and 18 are on negative outlook. Also, after a number of years in which there were few, if any, bank failures in the United States, 13 banks have failed this year, and there has been an increase in the number of institutions that the FDIC considers to be troubled.

Recent months have also seen the spotlight on the capital position of monoline insurers and lenders' mortgage insurers (LMIs), both of which have considerable exposure to residential mortgages through credit protection sold to institutions, including banks and the government sponsored enterprises (GSEs). Many of these insurers have been downgraded by the ratings agencies, and have seen their share prices fall by 75 to 95 per cent since mid last year. The downgrades of monolines and LMIs in June 2008 had a flow-on effect to around US$350 billion of structured finance securities, mostly in the United States.

Policy Responses in the United States

The difficulties in the US financial system have led to unprecedented actions by the US authorities to preserve financial stability (Table 2). As noted above, initial measures focused on easing liquidity pressures; in August 2007 the Federal Reserve reduced the cost of funding (relative to the target Fed funds rate) through its Primary Credit Facility and allowed term lending for up to 30 days. Further measures concerning liquidity were announced in December 2007 and in March and September 2008.

The first institution-specific measure was taken in March 2008, when the authorities became concerned that the failure of Bear Stearns could generate a widespread firesale of financial assets, with very serious flow-on implications for other financial institutions. In response, they assisted with the sale of Bear Stearns to JPMorgan Chase, with the Federal Reserve providing liquidity assistance and, importantly, purchasing (via a special purpose vehicle) close to US$30 billion of Bear Stearns' most illiquid assets. The Federal Reserve also introduced the Primary Dealer Credit Facility, which provided, for the first time, liquidity to primary dealers, including investment banks. In September 2008, the eligible collateral for this new facility was broadened and the continued operation of the facility extended to January 2009.

In July and August, the authorities then became very concerned about the growing loss of confidence in Fannie Mae and Freddie Mac, the government sponsored housing enterprises. Even though these entities were privately owned, the implicit government support that had existed for many years had allowed them to borrow at lower rates than their financial position would have otherwise allowed. The GSEs' management had used this ability to build large, highly leveraged balance sheets, so that by mid 2008, they had exposures to around 45 per cent of the outstanding stock of US residential mortgage assets, both directly and through guarantees and securitisation. While most of the mortgages they have exposures to are prime mortgages with loan-to-valuation ratios less than 80 per cent, the GSEs also have sizeable exposures to riskier sub-prime, Alt-A and high loan-to-valuation ratio mortgages written at the peak of the housing boom.

As concerns about the solvency of the two agencies increased due to expectations of further losses from their exposure to the US housing market, confidence in them deteriorated significantly, with their share prices falling by around 90 per cent from mid-2007 to early September. Given the deteriorating situation and the important role that these entities play in the US housing market and in many investors' bond portfolios, the US Government stepped in with a rescue package in early September, with the package having the following four key elements: (i) Fannie Mae and Freddie Mac have been placed in conservatorship, under the control of the Federal Housing Finance Agency which will work to return them to a sound condition; (ii) the US Treasury has been issued with US$1 billion of senior preferred stock in each entity and has been granted the authority to inject additional capital into each entity of up to US$100 billion, while it can exercise warrants to acquire an equity interest of almost 80 per cent; (iii) the US Treasury has been granted the authority to purchase GSE mortgage-backed securities in the open market, with the size and timing to be determined by market conditions; and (iv) a new, short-term secured credit facility has been created for these agencies.

Table 2: Key US Policy Responses

Date	Action
17 Aug 07	- Spread between the Primary Credit Facility (discount window) rate and the target federal funds rate lowered from 100 basis points to 50 basis points. - Discount window terms increased from overnight to 30 days.
12 Dec 07	- Term Auction Facility established for depository institutions, enabling the provision of term funding secured against a range of collateral. - Reciprocal swap arrangements established with the European Central Bank and the Swiss National Bank.
11 Mar 08	- Term Securities Lending Facility established for primary dealers, enabling the lending of US Treasuries for a term of 28 days secured by a broad range of collateral.
16 Mar 08	- Primary Dealer Credit Facility established to provide overnight loans to primary dealers, secured against a broad range of collateral. - Spread between the primary credit rate and the target federal funds rate lowered from 50 basis points to 25 basis points. - Terms of discount window facility for depository institutions increased from 30 days to 90 days. - Federal Reserve assisted with sale of Bear Stearns to JPMorgan Chase by purchasing (via a special purpose vehicle) close to US$30 billion of Bear Stearns' most illiquid assets.
13 Jul 08	- Treasury announced a three part plan to: increase the liquidity available to the GSEs; ensure they have sufficient capital by allowing Treasury to purchase equity; and give the Federal Reserve a consultative role in regulating the two firms.
7 Sept 08	- Fannie Mae and Freddie Mac placed into conservatorship under the control of the Federal Housing Finance Agency with a number of measures taken to help these agencies maintain positive net worth and to support the MBS market.
14 Sept 08	- Primary Dealer Credit Facility collateral broadened to closely match the types pledged in the tri-party repo systems of the two major clearing banks. - Term Securities Lending Facility collateral expanded to include all investment-grade debt securities, and frequency of certain auctions under this facility increased.
16 Sept 08	- AIG supported with US$85 billion line of credit from the Federal Reserve in return for the US Government taking a near 80 per cent equity stake.
18 Sept 08	- Reciprocal currency arrangements expanded, with further limit increases for European Central Bank and Swiss National Bank and new swap lines established with Bank of Japan, Bank of England and Bank of Canada.
19 Sept 08	- Announcement of plan to purchase up to $700 billion of troubled assets from banks with significant operations in the United States. - Announcement of temporary insurance arrangements for short-term money market funds.
24 Sept 08	- New swap lines established with the Reserve Bank of Australia, Riksbank, Danmarks Nationalbank and Norges Bank.

In the case of AIG, the authorities again judged that, in the prevailing circumstances, its failure could have destabilised the financial system, particularly given its size and complexity. Under the rescue package, the Federal Reserve Bank of New York will lend AIG up to $US85 billion, secured by AIG's assets, at an interest rate of 3-month LIBOR plus 850 basis points. In addition, the US Government will be granted an equity interest of almost 80 per cent in the company, substantially diluting the interests of existing shareholders.

On 19 September, the US authorities announced several major initiatives intended to provide a comprehensive approach to relieving the stresses in financial institutions and markets. First, in an effort to free banks' balance sheets of highly illiquid troubled assets, the US Treasury proposed that the government purchase up to US$700 billion of residential and commercial mortgage-related assets, comprising loans and mortgage-backed securities, from certain financial institutions. To qualify for the program, assets must have been originated or issued on or before 17 September 2008 and participating financial institutions must have significant operations in the United States. It is intended that the assets will be managed by private entities, under the direction of the Treasury, and may be sold off or held to maturity.

Second, in response to concerns that redemptions from money market mutual funds were causing severe strains, the US Treasury announced that it will draw on US$50 billion available through the Exchange Stabilization Fund (created in the 1930s) to temporarily insure the holdings of any money market mutual funds, at both the retail and institutional levels, that pay a fee to participate in the program. The intention is to ease investor concerns of losses on investments in these funds, thereby stemming the flow of redemptions.

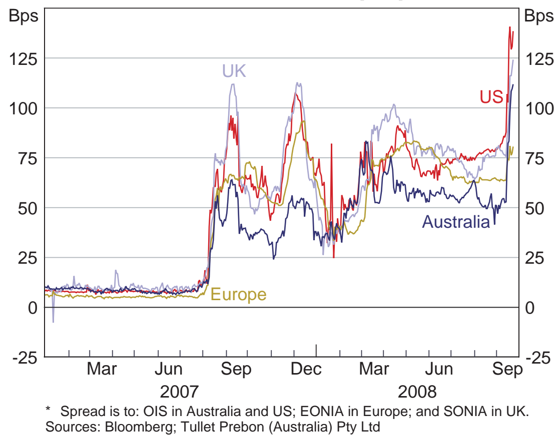
In addition to these measures, the US Treasury announced two further actions to provide more support for housing finance. In particular, Fannie Mae and Freddie Mac will increase their purchases of mortgage backed securities, and the Treasury will expand its own program of MBS purchases.

Finally, on 22 September, the US Federal Reserve announced that the two remaining large investment banks, Goldman Sachs and Morgan Stanley, will become bank holding companies. To assist during the transition to their new structure, the Federal Reserve will grant their broker-dealer subsidiaries immediate access to the Primary Credit Facility for depository institutions. (Access to the Primary Dealer Credit Facility for investment banks was granted in March.)

Funding Conditions

The ongoing waves of concern about the health of the banking system in the United States has caused credit spreads in money markets to remain elevated, with these spreads rising and falling on the ebb and flow of news. Conditions in longer-term funding markets also remain difficult, primarily reflecting concerns about the capital strength of counterparties. Not surprisingly, in this environment, many banks around the world have tightened their lending standards and are seeking to preserve and strengthen their liquidity.

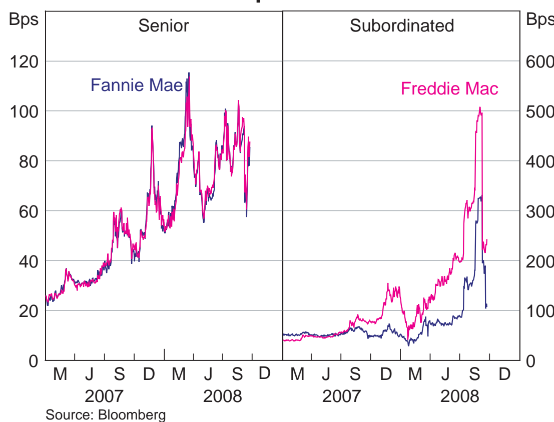
Spreads in short-term money markets rose significantly around the time of Bear Stearns' problems but then declined over the following months, only to again increase sharply in mid September, following the Lehman Brothers bankruptcy (Graph 8). In the United States, the spread between the 3-month LIBOR rate and the OIS rate rose to as high as 140 basis points



in mid September, compared with an average of around 10 basis points in the first half of 2007. Throughout the past year, conditions in short-term money-markets have been assisted by the domestic market operations of central banks and, in particular, by the willingness of central banks to take illiquid assets under repo and, in exchange, provide the banking system with assets that have more favourable liquidity characteristics. In the United States, for example, the Federal Reserve's holdings of US Treasuries have declined from around $740 billion in early January 2008 to $480 billion in September 2008, and correspondingly the holdings of other, less liquid, assets have increased.

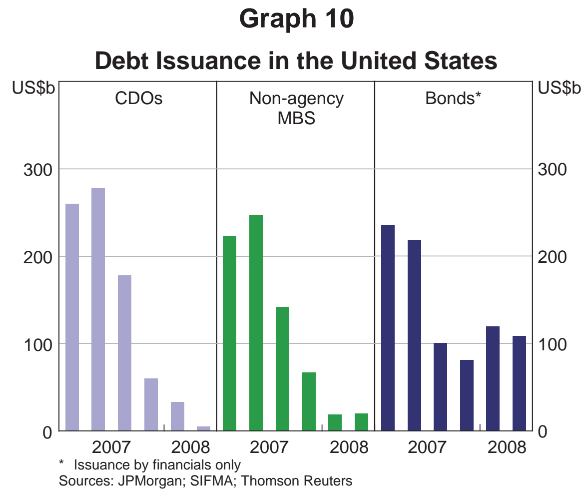
In mid September, many financial markets experienced very strained conditions, as investors became much less willing to take counterparty risk. Bid-ask spreads increased in many markets and trading conditions were very difficult. One illustration of the extreme conditions that prevailed at the time was that the interest rate on 3-month Treasury bills in the United States fell almost to zero for a short time, as investors sought assets with very high credit quality and very high liquidity. In part, this reflected the difficulties in the money-market mutual fund sector, with large redemptions from many funds as investors became concerned about the capital value of their investments.

Over the past year, credit premia on longer-term bank debt have increased by substantially more than those on short-term debt, reflecting the heightened levels of uncertainty about the medium term. These spreads have also tended to exhibit the same cycles as for short-term securities, with the spreads to US Treasuries on 5-year bonds issued in the United States by AA-rated banks currently around 370 basis points, compared with 70 basis points prior to the turmoil. Of particular significance for the US housing market, spreads between yields on GSE senior debt and US Treasuries increased substantially from mid 2007 and especially from early April to early September this year (Graph 9). Under the plan announced by the US authorities in September, payments to all debt holders including holders of



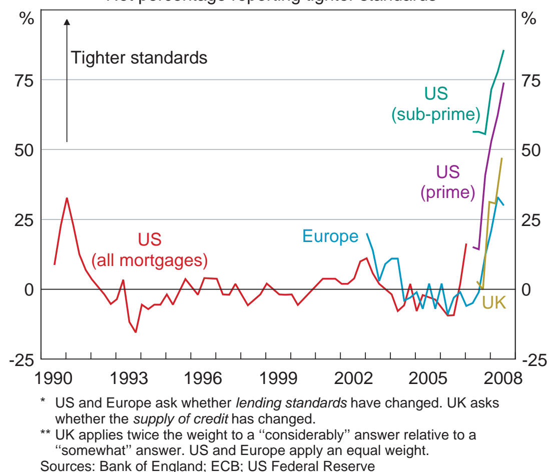
subordinated bonds, will be honoured (although dividend payments to existing shareholders have been suspended) and spreads have consequently fallen sharply.

Conditions in markets for asset-backed commercial paper remain very difficult. In the United States, issuance of asset-backed commercial paper remains low with the amount outstanding relatively unchanged over 2008 at around US$760 billion, well down on the August 2007 peak of around US$1 200 billion. Similarly, CDO issuance has been virtually non-existent, falling by 93 per cent in the United States in the first half of 2008, compared with the equivalent period a year earlier, while issuance in Europe is down by 65 per cent over the same period (Graph 10). Non-agency securitisation funding has also declined significantly with just US$39 billion of non-agency debt having been issued in the year to June, compared with US$470 billion during the same period in 2007. Reflecting investors' current lack of appetite for structured products, issuance of financial intermediaries' conventional bonds has held up better although, as noted above, the spreads on these bonds have risen substantially. Similar trends are evident in other countries, with structured market issuance extremely limited but moderate levels of issuance of conventional bonds; in Europe, issuance of securitisations fell sharply in the first quarter of 2008.

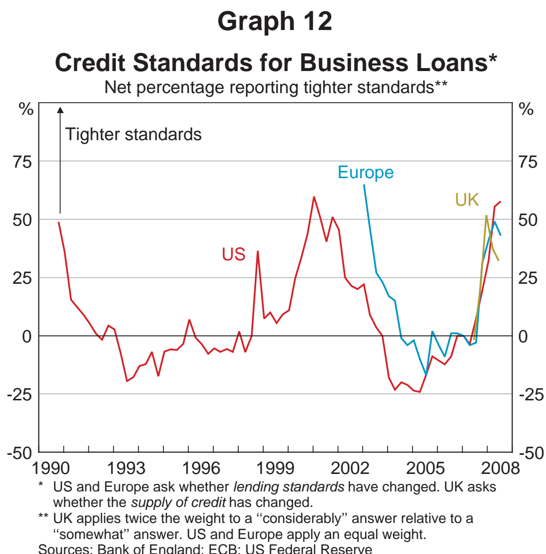


The difficult environment facing many financial institutions has contributed to a marked tightening in the conditions under which credit is provided to many borrowers. Most banks cite the deteriorating economic conditions as the main reason for this tightening, although an increased share of banks in the United States and Europe also cite concerns about their capital positions.

Loan officers' surveys in a range of countries show an unprecedented tightening in lending standards for residential mortgages, after standards were eased over the middle years of this decade (Graph 11). The tightening has been particularly pronounced for riskier loans with, for example, almost 90 per cent of the surveyed US banks engaging in



sub-prime mortgage lending reporting a tightening in lending standards in the three months to July 2008. Nearly two thirds of banks originating riskier loans report that they expect further tightening over the rest of 2008/09.



Lending conditions have also tightened significantly for business borrowers, particularly for those with highly leveraged balance sheets and/or significant exposures to commercial property markets (Graph 12). Risk margins have increased, covenants have been tightened, and the maximum size of credit lines has been reduced.

In terms of the demand for credit, higher interest spreads and the heightened uncertainty have significantly reduced the appetite of many businesses and households for debt. This, combined with the tightening in credit supply, has resulted in a significant moderation in credit growth. Over 2008 to date, annualised housing credit growth in both the United States and the United Kingdom has fallen significantly to low single digit figures (Table 3). The rate of growth of business credit in the United States and United Kingdom has also declined, after growing strongly in preceding years. This is despite business credit being boosted, to varying degrees, by the re-intermediation of off-balance sheet business in response to the financial market turmoil.

Table 3: Credit Growth

	Housing		Business	
	2008 YTD annualised	2005–07 annualised	2008 YTD annualised	2005–07 annualised
Australia	9.2	12.7	8.9	18.3
Europe	7.2	11.7	13.3	11.6
UK	4.4	10.6	7.2	19.2
US	2.7	11.7	3.4	14.3

Sources: Bank of England; ECB; Federal Reserve; RBA

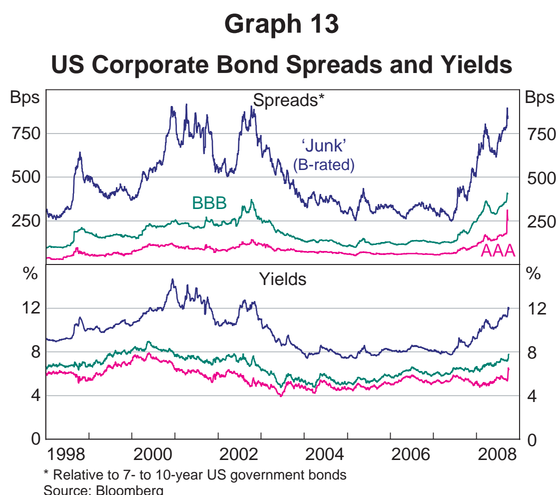
Given the general increase in uncertainty and risk aversion, businesses raising funds in capital markets have also faced more difficult conditions than for some years. Issuance of short-term debt has held up reasonably well but issuance of longer-term debt, especially sub-investment-grade debt, has declined substantially; US investment-grade corporate bond issuance in the year to June was more than 10 per cent lower than in the same period of 2007, while issuance of riskier debt was two thirds lower. At the same time, the spreads demanded by investors have risen sharply, up by 270 basis points for investment-grade debt, and 550 basis points for sub-

investment-grade debt, since mid 2007 (Graph 13). However, for AAA-rated debt, the rise in spreads over the period has been broadly offset by the fall in yields on US Treasuries.

Among specific corporate debt markets, the 'leveraged loan' market (used to finance leveraged buyout transactions) and the 'cov-lite' market (for loans with fewer or less stringent covenants than typical corporate loans) have been particularly affected. These markets flourished in the mid 2000s amid high leveraged buyout (LBO) activity and increased investor appetite for risk, but the value of announced and completed LBO deals fell to less than US$50 billion in the second quarter of 2008. This compares with a peak of over US$400 billion in the June quarter of 2007, but is broadly in line with the average for 2002 to 2005 (Graph 14). Elsewhere, tighter financing conditions in commercial mortgage-backed securities markets (and in the supply of credit from banks) have reinforced pressure on commercial property market prices in some countries, with share prices in this sector typically underperforming broader indices.

Graph 13

US Corporate Bond Spreads and Yields

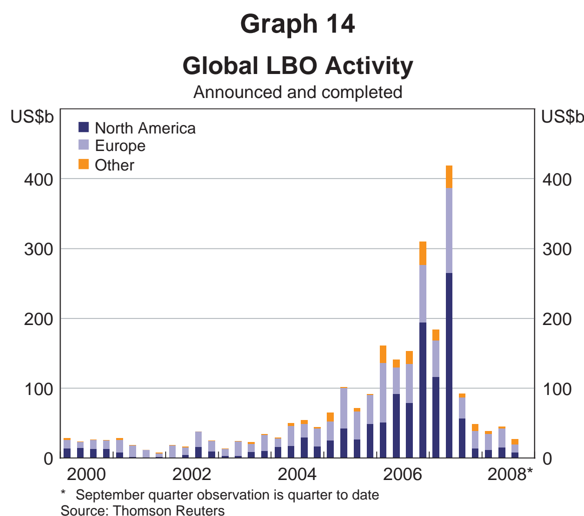


* Relative to 7- to 10-year US government bonds
Source: Bloomberg

Graph 14

Global LBO Activity

Announced and completed

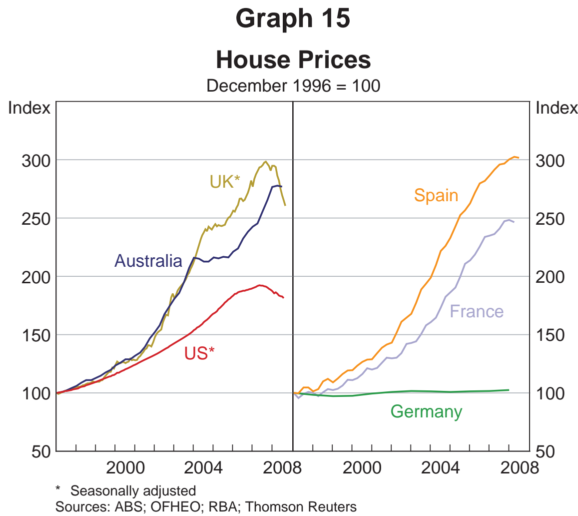


* September quarter observation is quarter to date
Source: Thomson Reuters

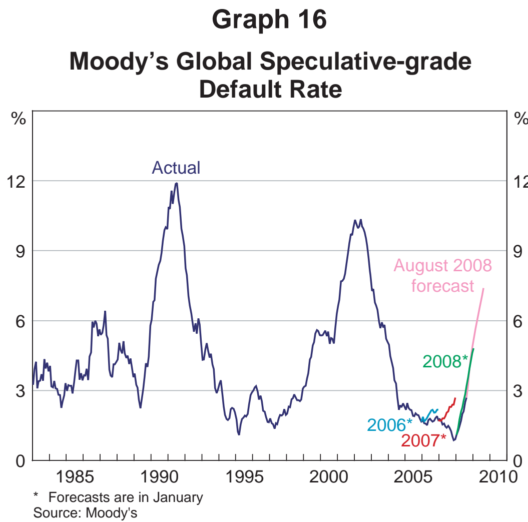
Global Macroeconomic Outlook

As discussed above, the moderation in credit growth, and heightened investor uncertainty, are weighing on many asset values. Clearly, developments in housing markets – particularly in the United States – will continue to be a key factor in macro-financial developments. While the estimated size of the nation-wide fall in US house prices since their peak is sensitive to the measurement methodology used – ranging from 6 per cent according to the Office of Federal Housing Enterprise Oversight to 19 per cent according to the Case-Shiller index – there is no doubt that nationwide house prices have been weak, with the states of California, Nevada and Florida experiencing particularly large falls. This weakness, and the associated rise in foreclosures, has reduced banks' willingness to lend and has dampened private consumption. House price weakness is also a concern in a number of other countries: UK house prices have

fallen by 13 per cent since their peak in August 2007 while prices in Spain and France have recently stopped rising after a number of years of rapid growth (Graph 15).



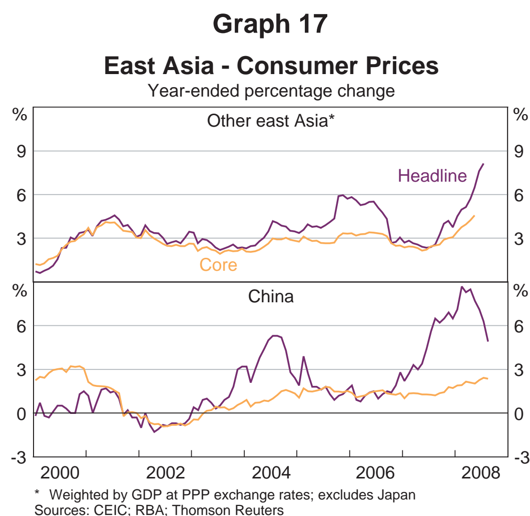
Despite the considerable financial headwinds in the developed countries, global economic activity held up reasonably well in the first half of 2008. In particular, the US economy continued to expand during this period, reflecting strength in business investment, the fiscal stimulus and strong exports due, in part, to the depreciation of the US dollar. Most commentators, though, expect little, if any, growth over the rest of 2008. More generally, expectations for the advanced economies as a whole are for only modest growth during 2008 and a weak recovery during 2009. While these outcomes will weigh on growth in the rest of the world, most forecasters still expect global growth to remain reasonably strong in 2009, although notably lower than that seen in recent years.



To date, business activity globally has held up reasonably well in the face of difficulties in the financial system, although some companies have had increased difficulty servicing debt and, in particular, refinancing maturing debt. Consistent with this, and the associated weakness in general economic activity, rating agencies' expectations of default on speculative-grade debt have increased significantly, although reflecting the generally healthy state of business balance sheets in many countries, the expected default rate is currently lower than that after the dot-com boom or the recession of the early 1990s (Graph 16).

In emerging markets, banking systems have been relatively unaffected by the credit market turmoil but capital markets have come under pressure: equity prices have fallen; spreads have increased; and external corporate debt issuance in the first half of 2008 was less than half of that in the first half of 2007. Another challenge for many emerging market economies is rising

inflation. In particular, some have experienced a significant increase in inflation (albeit less so for core, than headline, inflation) which left unchecked has the potential to undermine growth and external confidence and be a source of financial instability (Graph 17).



Regulatory Responses

The events of the past year have highlighted a number of difficult questions facing policymakers regarding the future regulation of the financial system.

In the United States, a critical issue is the future role of the GSEs. Over the past decade or so, Fannie Mae and Freddie Mac were allowed to reach a size that made it very difficult for the government to do anything other than to effectively guarantee their liabilities when they got into difficulties. Looking forward, ways will need to be found either to reduce the systemic importance of these institutions and/or to bring them under much closer and stronger public-sector oversight. The current reform plan goes some way in this direction, allowing for some modest expansion of the GSEs' balance sheets up to end 2009, but then requiring a contraction of at least 10 per cent per annum over a number of years.

A more general issue facing the authorities in both the United States and elsewhere is how to limit the probability that the current actions to prevent financial instability sow the seeds for even more risk taking in the future. Here, policymakers face a difficult balancing act, with a number of the recent support efforts leading to significant losses to the shareholders of the affected institutions, but with bond holders being less affected (except in the case of Lehman Brothers).

At the international level, much of the ongoing work examining the causes of the recent turmoil and possible policy responses is being coordinated by the Financial Stability Forum (FSF). In April 2008, the FSF released an extensive report, *Enhancing Market and Institutional Resilience*, identifying a number of weaknesses in financial systems that had underpinned the build up of risk over the past decade as well as areas where regulatory action needs to be considered. These areas include:

- the strengthening of prudential oversight of capital and liquidity and, in particular, improving the regulatory arrangements that apply to off-balance sheet exposures, securitisation activities and other contingent liquidity risks;
- increasing the transparency of banks' balance sheets and re-examining how fair value approaches to valuation should be applied when markets are illiquid and/or the only transactions taking place are by distressed sellers;

- re-examining the role and uses of credit ratings by both financial institutions and regulators, as well as addressing the conflicts of interest that can arise within these agencies;
- the strengthening of authorities' responsiveness to risk, including via improved cooperation; and
- improved crisis management arrangements, both for domestic and internationally operating financial institutions.

Initiatives are underway at both the domestic and international level to implement the FSF's specific recommendations (see chapter on *Developments in the Financial System Infrastructure* for a discussion of the Australian authorities' response). For example, the new Basel II capital regime has introduced capital requirements on 364-day renewable liquidity facilities; these facilities, which underpinned many of the structured finance transactions over recent years, previously had no capital requirements. In addition, the Basel Committee on Banking Supervision has published proposals to increase the capital requirements on structured finance products held in trading books and is revising its *Principles for Sound Liquidity Risk Management*. Regulators are also examining ways to reduce risks in the infrastructure supporting trading in over-the-counter (OTC) derivatives. In the United States, for example, the Federal Reserve, together with the private sector, has agreed to an agenda to improve the infrastructure for OTC derivatives, which includes the use of a central counterparty for CDS trades.

On transparency, FSF members have written to internationally active financial institutions in their respective countries to encourage them to comply with best practice disclosures, particularly in relation to asset-backed securities, special purpose entities and leveraged finance. Some institutions have used at least parts of this template in their recent mid-year earnings releases. The US Securities and Exchange Commission (SEC) has also written to selected financial firms asking them to consider disclosing a list of items associated with off-balance-sheet entities. In a similar vein, the American Securitisation Forum (ASF) – a private-sector organisation – has released a proposal to standardise disclosure about RMBS to ensure that a uniform set of information is available to all market participants. The ASF expects to finalise the disclosure package before the end of 2008, for implementation in 2009.

In May, the International Organisation of Securities Commissions (IOSCO) revised its Code of Conduct for credit rating agencies. Among other things, the Code: prohibits the agencies from making recommendations regarding the design of structured finance products; requires the agencies to adopt reasonable measures so that the information they use is of sufficient quality to support a credible rating; and requires the agencies to differentiate ratings of structured finance products from other ratings. While the three major credit rating agencies have noted poor industry feedback on the last of these requirements, two of the agencies have indicated a willingness to move in this direction. The US SEC is reforming its regulation of rating agencies by broadly following the revisions to the IOSCO Code of Conduct, as well as making additional changes, including reducing references to credit ratings in official rules and requirements. The European Commission, together with the Committee of European Securities Regulators and the European Securities Markets Expert Group, is intending to propose a European registration and external oversight environment for credit rating agencies, similar to that in the United States.

On strengthening the authorities' responsiveness to risks, one means is through improving information exchange, including across borders. In order to foster this, the FSF has formed a group of key supervisors to develop the protocols needed to establish supervisory colleges for each of the major global financial institutions. The colleges will be chaired by the home supervisor and comprise a small number of host supervisors of activities that are fundamental to the soundness of these financial institutions.

A more general issue identified by the FSF is the inherent pro-cyclicality of the financial system. This reflects the fact that while the specifics of the current turmoil are unique, its origins lay in the preceding boom in the financial sector of the economy, as have almost all previous episodes of financial turmoil. The FSF is currently examining longer-term policy responses that might help deal with these cycles. Issues under consideration include: the remuneration arrangements in financial institutions; the accounting rules for illiquid assets; the case for monetary policy to lean against financial booms; and the tightening up of various prudential requirements during a boom so that financial institutions build up their capital buffers in good times, and are allowed to run these buffers down in bad times.

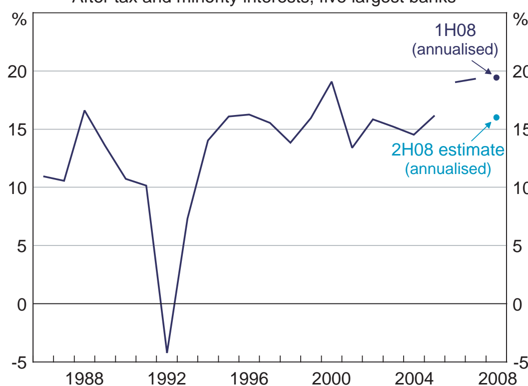
The Australian Financial System

The Australian financial system is well placed to weather the current difficulties in the global financial system. In contrast to many banking sectors around the world, the Australian banking sector continues to be highly profitable. The system is soundly capitalised and the banks have high credit ratings and relatively little exposure to US sub-prime related assets or to market risk from trading activity. Problem loans also remain low by both international and historical standards, although they have increased recently.

Despite this positive performance, bank share prices are down considerably and funding spreads are up noticeably, with this more difficult financial environment making banks more cautious. Reflecting this, the banking sector's holdings of liquid assets have increased significantly, lending standards have been tightened, particularly to higher-risk borrowers, and banks are putting more resources into managing their funding. These developments, together with a reduced demand for credit by borrowers, have seen the pace of expansion of banks' balance sheets slow, after the very strong growth last year.

Profits and Capital of the Banking System

In contrast to many other banking systems around the world, the Australian banking system continues to be highly profitable. For the five largest banks, headline profits after tax and minority interests were around $10 billion for the latest half year (to the end of March for four of these banks and to the end of June for the other) (Table 4). This represents an increase of 12 per cent compared to the same period a year ago and an annualised post-tax return on equity of around 19 per cent which, after adjusting for changes in accounting standards, is around the average of the past decade (Graph 18). The smaller Australian-owned, 'regional', banks have also continued to report solid profits on their banking activities.



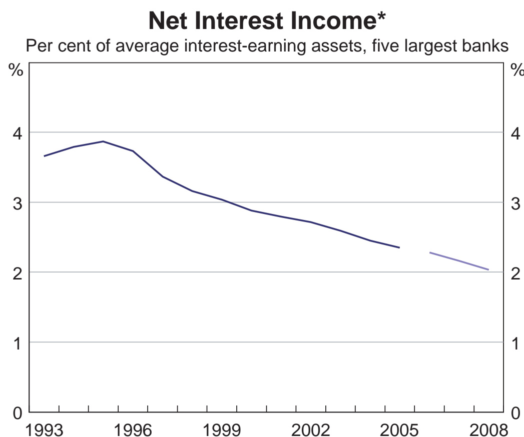
The banking sector's strong performance continues to be underpinned by growth in net interest income. For the five largest banks, net interest income increased by 10 per cent over the past year as a result of the expansion of these banks' balance sheets (see below). The regional banks' net interest income increased by 13 per cent over the same period. As has been the case for much of the past decade, the interest-rate margins that banks earn on lending has continued to contract. The ratio of net interest

Table 4: Banks' Latest Half Year Profit Results(a)
Consolidated, five largest banks

	2007 $b	2008 $b	Per cent of average assets(b)
Income			
Net interest income	16.1	17.7	1.7
Net income from wealth management	3.7	1.3	0.1
Other non-interest income	7.3	9.2	0.9
Expenses			
Operating expenses	12.3	13.7	1.4
Bad and doubtful debts	1.2	3.1	0.3
Profit			
Net profit before tax	13.6	11.5	1.1
Net profit after tax and minority interests	8.7	9.8	1.0

(a) The six months to March for ANZ Banking Group, National Australia Bank, St George Bank and Westpac Banking Corporation; six months to June for Commonwealth Bank of Australia
(b) Annualised half-year results
Sources: Banks' annual and interim reports

income to average interest-earning assets for the five largest banks declined by 13 basis points over the past year, to around 2 per cent, down from almost 4 per cent in the mid 1990s (Graph 19). The most recent decline reflects, in part, the fact that banks did not initially pass on to some borrowers the higher funding costs arising from the turmoil in credit markets.

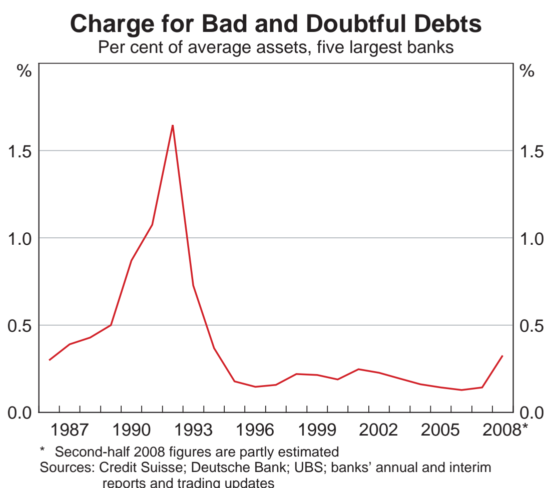


In contrast to the increase in aggregate net interest income over the past year, there was a decline in headline income from wealth management operations, after several years of strong growth. Much of the fall was accounted for by investment losses on assets held in one bank's life insurance operations, with most of these losses ultimately borne by policy holders rather than shareholders of the bank. The other large banks' wealth management operations are, on average, less exposed to equities, and these banks' pre-tax income from wealth management was around 10 per cent lower in the latest half year than in the first half of 2007.

Another factor influencing recent profit results has been a rise in provisioning charges. The five largest banks reported charges for bad and doubtful debts of $3.1 billion over the latest half year, compared with $1.2 billion in the same period a year earlier. This outcome, together with recent trading updates and analysts' expectations for the second half, suggest

that these banks' total charges for bad and doubtful debts for the current year as a whole will be equivalent to around 0.3 per cent of their assets (Graph 20). This is up from the very low charges over recent years – when the ratio of both individual and general provisions to assets fell to unusually low levels – but well below the expense for bad and doubtful debts incurred in the early 1990s.

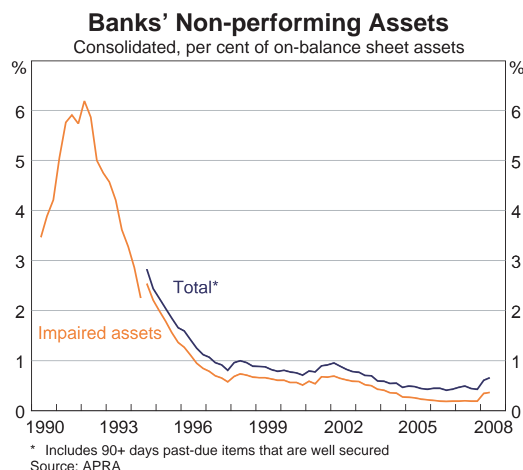
This recent increase in the aggregate bad debts expense reflects a number of factors. One is a rise in banks' collective provisions due to the general deterioration in the credit environment, both in Australia and overseas. Another is a substantial increase in individual provisions, primarily against exposures to highly leveraged companies that have experienced difficulties in the current environment. In addition, one bank has announced higher provisions arising from a liquidity facility that it provided to a conduit holding CDOs.



* Second-half 2008 figures are partly estimated
Sources: Credit Suisse; Deutsche Bank; UBS; banks' annual and interim reports and trading updates

These higher charges are likely to see the banking system's aggregate post-tax profits decline in the near term, with analysts generally anticipating that the aggregate profits of the five largest banks will be around 10 per cent lower in the second half of 2008 than in the same period a year ago. If this were to occur, the annualised post-tax return on equity over this period would be around 16 per cent which, while lower than the average return over the past decade, would be much higher than that being earned in many other banking systems around the world and many other industries in Australia.

While provisioning charges have increased, the Australian banking system continues to experience a low level of problem loans. As at June 2008, non-performing assets accounted for around 0.7 per cent of banks' on-balance sheets assets, which is below the average since the mid 1990s (Graph 21). Only around half of the non-performing assets are classified as 'impaired', in that payments are in arrears by more than 90 days (or are otherwise doubtful) and the outstanding amount is not well covered by the value of collateral.



* Includes 90+ days past-due items that are well secured
Source: APRA

Although the non-performing assets ratio is low, it has nonetheless increased over the past six months, with the rise evident across all the main segments of the domestic loan portfolio (Graph 22). The most notable increase has been in the non-performing business loan ratio, with this increase largely accounted for by a small number of exposures to highly geared companies with complicated financial structures and/or exposures to the commercial property sector. In banks' commercial property loan portfolios, the impaired assets ratio stood at 0.9 per cent as at March 2008 (the latest available data), up from the unusually low levels of recent years (Graph 23). Much of the recent rise has been accounted for by loans for residential development and, particularly, retail property, with no apparent rise in the arrears rate on loans for office property. Developments with respect to commercial property are discussed in more detail in the *Household and Business Balance Sheets* chapter and in Box A.

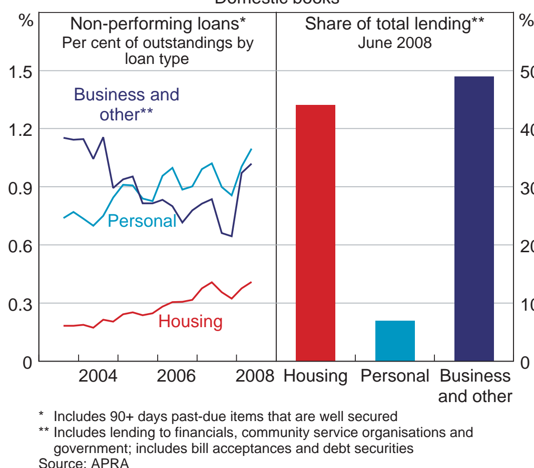
In the mortgage and personal portfolios, non-performing loan ratios have also risen, but remain around, or only slightly above, their levels of a year ago. As at June 2008, non-performing housing loans accounted for 0.4 per cent of Australian banks' outstanding on-balance sheet housing loans. For credit unions and building societies, non-performing housing loan ratios are slightly above their levels in June 2007 but, in aggregate, are below the level in the banking sector.

The modest increase in housing loan arrears rates over recent years was not unexpected given the increase in financing costs for borrowers, and the easing of credit standards that took place over the past decade. Importantly though, this easing of standards was not nearly as marked as that in some other countries, most notably the United States. Reflecting this, the non-conforming housing loan market in Australia (the closest equivalent to the sub-prime market in the United States) has remained very small, with ADIs having virtually no presence in this market. Non-conforming loans account for less than one per cent of outstanding

Graph 22

Banks' Loan Quality

Domestic books

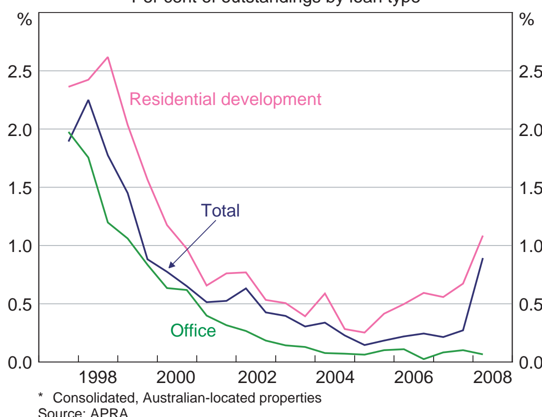


* Includes 90+ days past-due items that are well secured
** Includes lending to financials, community service organisations and government; includes bill acceptances and debt securities
Source: APRA

Graph 23

Banks' Commercial Property Impaired Assets*

Per cent of outstandings by loan type

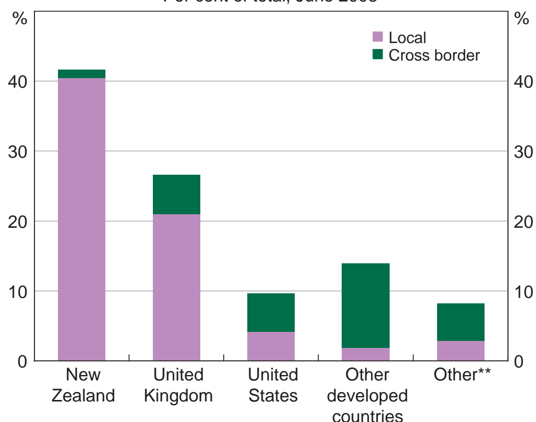


* Consolidated, Australian-located properties
Source: APRA

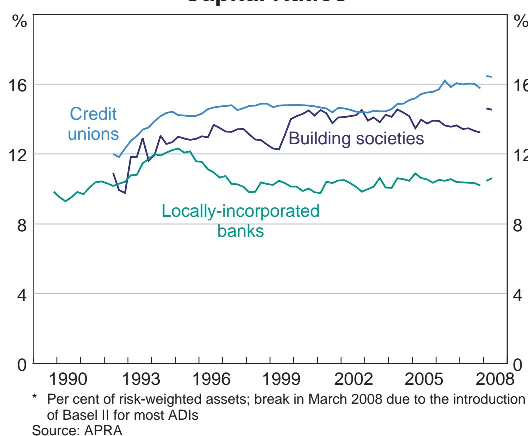
mortgages in Australia – compared with about 12 per cent in the United States – with the vast majority of these loans having been provided by a small number of specialist, non-ADI, lenders. More broadly, even on prime housing loans, arrears rates have historically been considerably lower in Australia than in the United States and the United Kingdom.

As in their Australian operations, there has recently been a modest increase in measures of problem loans in Australian banks' foreign operations, although again from a low base. Entities in New Zealand account for the largest share of Australian-owned banks' foreign exposures, at around 40 per cent, with these exposures largely arising through the four largest banks' New Zealand-based operations (Graph 24). These operations continued to account for around 10–20 per cent of the four largest banks' group-wide profits in the latest half year. US exposures account for less than 10 per cent of Australian-owned banks' total foreign claims, and typically do not arise through lending to the US household sector. While some banks have reported that they have exposures to the US sub-prime market through holdings of financial instruments, these remain small when compared to the size of these banks' balance sheets.

Another factor that has stood the Australian banks in good stead throughout the recent turmoil is that they have traditionally not relied heavily on income from trading activities for profitability. For the five largest banks, trading income accounted for only around 6 per cent of their total income in the latest half year, which is well below the equivalent share for some of the large globally active banks. Consistent with this, Australian banks have traditionally had only small unhedged positions in financial markets, with the value-at-risk – which measures the potential loss, at a given confidence level, over a specified time horizon – for the five largest banks equivalent to 0.03 per cent of shareholders' funds in the latest financial year.



Reflecting the strong profitability of recent years, the Australian banking system remains soundly capitalised, with the aggregate total capital ratio standing at 10.6 per cent as at June 2008, and the Tier 1 ratio at 7.3 per cent (Graph 25). Similarly, the credit union and building society sectors remain well capitalised, with aggregate capital ratios of 16½ and 14½ per cent, respectively. For the banking system, the introduction of Basel II on 1 January this year resulted in a fall in measured risk-weighted assets, the effect of which on the measured capital ratio has been significantly offset by accounting changes associated



* Per cent of risk-weighted assets; break in March 2008 due to the introduction of Basel II for most ADIs
Source: APRA

with the introduction of IFRS and changes to the definition of regulatory capital. Unlike many of their international peers, the Australian banks have not been forced to raise new capital to offset writedowns. Strong profitability has meant that retained earnings remain an important source of banks' Tier 1 capital, with issues of preference shares and the dividend reinvestment plans of the five largest banks adding to Tier 1 capital over the past year.

Balance Sheet Growth

After the strong growth last year, the Australian banking system's aggregate balance sheet has grown more slowly in the most recent six months (Table 5). Nonetheless, growth remains faster than that being experienced in many other countries.

Table 5: Banks' On-balance Sheet Assets[(a)]
Domestic books

	Level	Change	
	Jul 08 $b	Jul 07 – Jan 08 $b	Jan 08 – Jul 08 $b
Liquid assets and marketable securities	413.7	88.6	37.1
Of which:			
Cash and deposits with other banks	78.2	1.3	0.4
Australian ADI securities	252.8	83.9	18.0
Loans and advances	1612.5	172.6	79.0
Of which:			
Business credit[(b)]	635.3	83.4	36.6
Household credit[(c)]	833.5	62.5	53.6
Intra-group	129.6	24.8	-10.4
Other domestic assets	111.4	5.4	-14.5
Total domestic assets	**2137.6**	**266.6**	**101.7**
Offshore assets[(d)]	185.2	10.9	25.3
Total assets	**2322.7**	**277.6**	**127.0**

(a) Not adjusted for series breaks
(b) Includes bill financing and some securities holdings
(c) Does not include loans that have been securitised and removed from the balance sheet
(d) Includes amounts due from overseas operations
Sources: APRA; RBA

The strong growth in the system's assets over the second half of 2007 is partly explained by re-intermediation, as capital market funding tightened up and banks honoured lines of credit, including to vehicles that had previously funded themselves in the commercial paper market. Over the six months to December 2007, bank business credit grew at an annualised rate of around 30 per cent, with loans with a value greater than $2 million accounting for much of the pick up in growth during this period (Graph 26). More recently, growth in lending to businesses has slowed significantly, to an annualised rate of around 7 per cent over the six months to July 2008, with this slowing reflecting both demand and supply factors. As discussed in the *Household and Business Balance Sheets* chapter, many businesses are taking a more cautious approach to gearing in the current environment, and there has been some tightening in the terms and conditions on which credit is available, particularly to riskier borrowers, including those who are already highly leveraged.

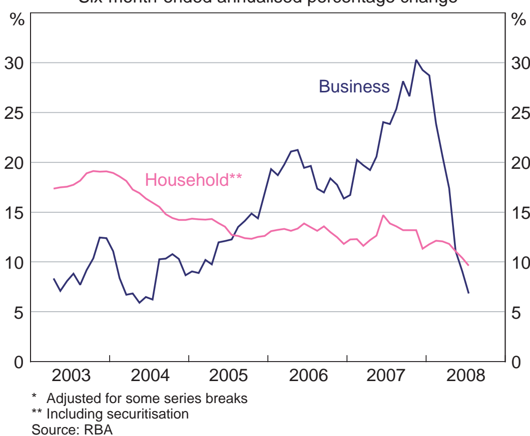
The growth of banks' lending to households has also moderated over the past six months, though the deceleration has not been as pronounced as that for business lending. Household credit (including personal loans, and housing loans no longer held on banks' balance sheets because they have been securitised) extended by banks grew at an annualised rate of around 9½ per cent over the six months to July 2008. This is a faster rate than the overall growth in household borrowing, due to an increased share of housing credit being originated by banks than was the case prior to the credit turmoil (see below).

Another factor that has underpinned the growth in banks' aggregate balance sheet is a marked rise in the banking system's holdings of liquid assets – particularly in the second half of 2007 – reflecting a more cautious approach to liquidity management in the challenging environment (Graph 27). Since mid 2007, the system's total holdings of liquid assets (including cash, deposits and highly rated securities) has increased by around 50 per cent, with their share of total domestic assets increasing from about 13 per cent to

Graph 26

Bank Credit*

Six-month-ended annualised percentage change

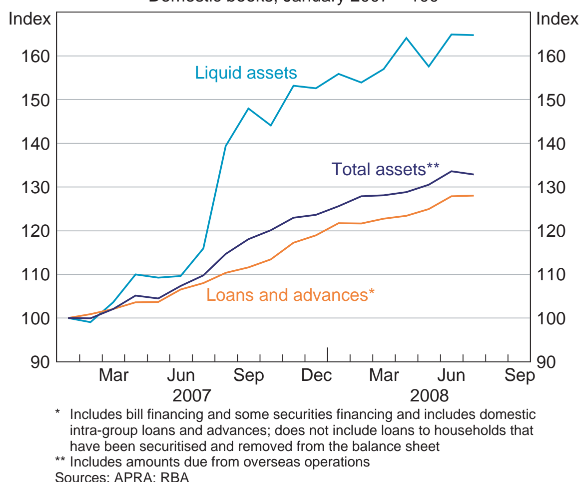


* Adjusted for some series breaks
** Including securitisation
Source: RBA

Graph 27

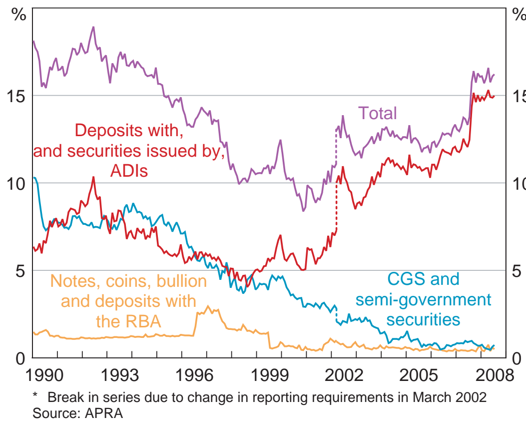
Banks' On-balance Sheet Assets

Domestic books, January 2007 = 100

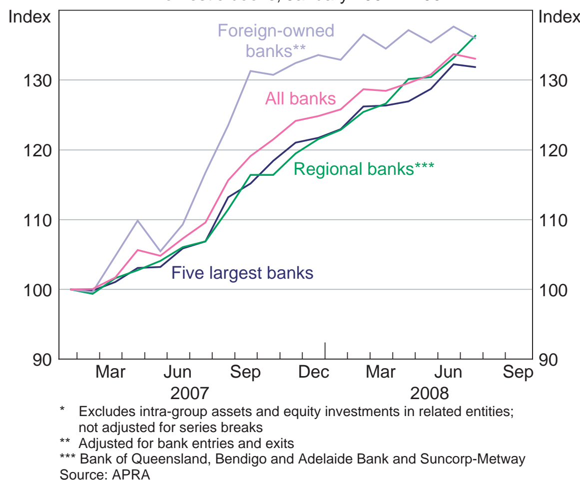


* Includes bill financing and some securities financing and includes domestic intra-group loans and advances; does not include loans to households that have been securitised and removed from the balance sheet
** Includes amounts due from overseas operations
Sources: APRA; RBA

16 per cent, the highest level for over a decade (Graph 28).



The higher holdings of liquid assets have largely taken the form of short-term paper issued by other banks, reflecting the limited supply of alternative liquid assets in Australia. The attractiveness of holding these assets has increased over time, with the RBA accepting bank bills and certificates of deposit as eligible securities for repurchase agreements since March 2004. In September last year, the RBA further widened the list of repo-eligible securities to include highly rated RMBS and ABCP backed by prime, domestic full-doc loans, as well as a broader range of securities issued by ADIs. More recently, the RBA and APRA have also been working with industry participants to strengthen the arrangements for liquidity management in the event of extreme market disruptions. In such circumstances, the RBA would be prepared to conduct repurchase agreements in RMBS backed by mortgages originated by the institution undertaking the repo (so-called 'self securitisations'). To date, 11 institutions have created these self-securitisations, with the total stock of these currently standing at around $58 billion.



While the aggregate assets of the banking system have grown strongly over the past year, there has been some dispersion across broad bank types. Most notably, growth in the combined balance sheets (excluding intra-group transactions) of foreign-owned banks has slowed by more than that for the Australian-owned banks over the past six months or so (Graph 29). This follows a number of years during which foreign-owned banks, as a group, had been expanding at an above-average pace, reflecting strong growth of business lending and, to a lesser extent, attempts to gain a greater share of the retail market. In the early months of the current turmoil, growth in foreign-owned banks' assets picked up further, partly reflecting the acquisition of securities issued by ABCP vehicles as a form of liquidity support to these vehicles. More recently, the slowing of these banks' asset growth mainly reflects developments in the business loan market, with a number

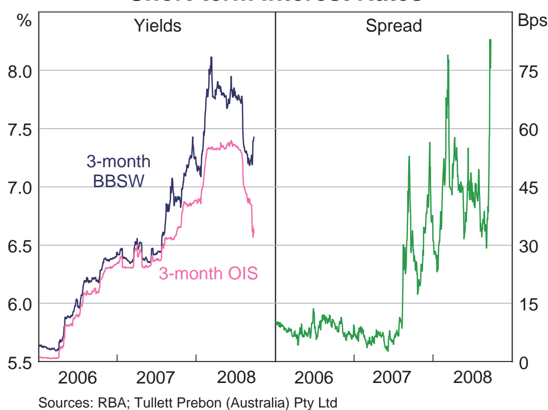
of foreign-owned banks significantly curtailing their activities in Australia over the past six months or so.

Funding Conditions and Competition

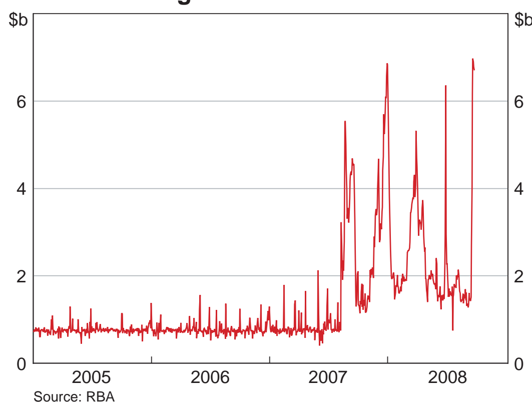
Funding Conditions

The tighter conditions and increased uncertainty in financial markets have led banks to increase their focus on liquidity and funding risks. Whereas in previous years the main consideration in most lending decisions was the ability of the borrower to repay, funding risk has recently become a consideration in many decisions to extend credit. At the same time, the Australian banks have continued to be able to tap both domestic and international wholesale markets, albeit at considerably higher spreads than was the case prior to the turmoil.

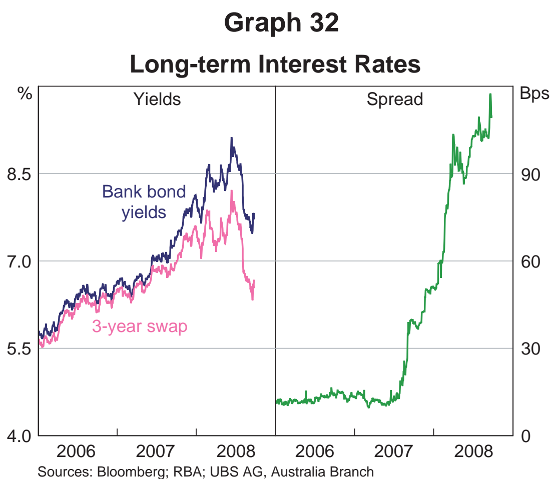
The spread between the yield on three-month bank bills and the overnight index swap rate for the same maturity has averaged around 45 basis points over the past six months, compared with an average spread of less than 10 basis points in the first half of 2007 (Graph 30). While this spread had narrowed a little in recent months, it has risen markedly over the past week or so, to around 80 basis points, reflecting the renewed bout of uncertainty in global markets.



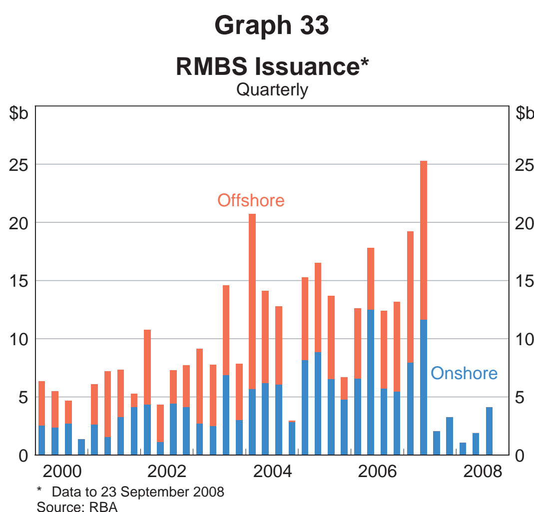
In response to this uncertainty, the RBA significantly increased the supply of Exchange Settlement balances to assist in the smooth functioning of the cash market, with these balances reaching a peak of nearly $7 billion in mid September, compared with average balances of around $1½ billion in recent months (Graph 31). In addition, to further enhance the flexibility of its domestic liquidity operations, the RBA this week announced a term deposit facility under which it will auction term deposits at the RBA on a regular basis. This facility will be available to all institutions holding an Exchange Settlement Account and to ADIs that are members of RITS. The RBA also announced that it and the Federal Reserve had agreed to a US$10 billion swap facility as part of the co-ordinated international effort to address the elevated pressures in the US dollar short-term funding markets in the Asian time zone.



Reflecting the reduced willingness by investors to commit their funds for an extended period, spreads on term debt have increased by more than those on short-term debt. The spread to the benchmark rates (the swap rate for fixed-rate bonds and the bank bill rate for variable-rate bonds) on three- and four-year bonds that have recently been issued by some of the largest banks has been around 100 basis points, compared with around 50 basis points in late 2007, and less than 20 basis points prior to the disturbances in credit markets. Despite the higher spreads, declines in the relevant benchmark rates have meant that bank bond yields are currently around 130 basis points lower than in June 2008 (Graph 32). The spreads on offshore funding also remain much higher than in recent years, with, for example, the effective Australian dollar spread on issuing three- to five-year bonds in the United States around 80 basis points higher than prior to the credit market turmoil.



As noted in the March 2008 *Review*, conditions have been difficult in both the ABCP market and the RMBS market. ABCP markets around the world were among the first to be affected by the repricing of risk, with the offshore ABCP market remaining virtually closed to new issues. As at July 2008, the outstanding value of offshore ABCP issued by Australian entities was just over $7 billion, around 80 per cent lower than its peak in May 2007. Over the second half of 2007, outstandings in the domestic market grew strongly, although issuance has since moderated and outstandings are around 20 per cent below their level at the end of last year. The spread on ABCP over the bank bill rate is also significantly higher than a year ago. Prior to mid 2007 it had been possible to issue ABCP in Australia at a spread of less than 5 basis points over the bank bill rate, compared with current spreads of around 60 basis points.



Conditions in the RMBS market also continue to be difficult. While there have recently been a number of small public issues, activity remains well below previous levels, with quarterly issuance averaging around $2½ billion since mid 2007, compared with $18 billion per quarter over the previous year (Graph 33). All of the recent issues have been in the domestic market. This is in contrast to prior years when there was strong offshore demand for Australian

RMBS, partly reflecting the high quality of Australian mortgages. Recently, many of these offshore investors have been selling these RMBS as they attempt to reduce their leverage, and this has kept spreads on RMBS elevated, with recent issues at spreads to the bank bill swap rate of around 110-130 basis points, compared with less than 20 basis points immediately prior to the market turbulence (Graph 34). At these spreads, funding mortgages by issuing RMBS is unlikely to be profitable for many types of loans at existing mortgage rates. As discussed below, the difficulties in the RMBS market are having a noticeable impact on those lenders whose business models are centred on securitisation.

Despite the strains of the past year, banks, in aggregate, have continued to be able to raise funds in the capital markets on a regular basis. In the initial months of the turmoil, banks issued a large volume of bank bills and certificates of deposit in the domestic market, with the outstanding value of banks' securities with a maturity of less than one year increasing by $132 billion over the second half of 2007 (Table 6). A little over $80 billion of this increase reflected

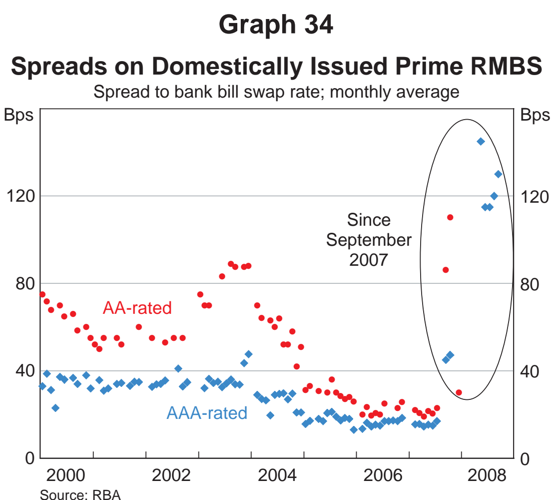


Table 6: Banks' Liabilities[(a)]
Domestic books

	Level	Change	
	Jul 08 $b	Jul 07 – Dec 07 $b	Dec 07 – Jul 08 $b
Deposits	911.4	64.3	96.2
Of which:			
Business	282.9	23.1	12.1
Household	360.2	30.0	27.5
Financials	127.3	-18.1	23.5
Intra-group	104.3	28.5	20.2
Debt securities[(b)]	739.6	133.3	41.2
Of which:			
Domestic short-term	283.2	131.8	-26.5
Domestic long-term	103.8	4.5	25.8
Offshore short-term	113.3	-26.0	25.6
Offshore long-term	239.4	23.0	16.2
Other[(c)]	554.9	78.0	29.2
Total liabilities	**2205.9**	**275.6**	**166.6**

(a) Not adjusted for series breaks
(b) Includes securities issued to other banks
(c) Includes deposits due to non residents, derivative financial instruments and all other non-funding liabilities
Sources: APRA; RBA

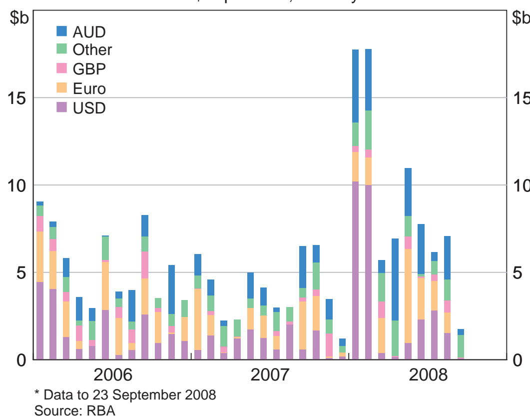
banks issuing short-term securities to one another, as they sought to increase their holdings of repo-eligible securities. But issuance to the non-bank sector was also strong during this period, with banks shifting a higher share of their short-term wholesale funding onshore and a higher share of their domestic funding to the short-term market.

In the most recent six months, the outstanding value of these short-term liabilities has declined. As it became increasingly apparent that the repricing of credit risk was more than just a short-term phenomena, banks increased their issuance of longer-term securities in the domestic market, with the value of outstanding (domestic) securities with an original maturity of over one year increasing by $26 billion, to $104 billion, over the first half of 2008. Banks have also continued to tap offshore markets, although the pace of offshore issuance has slowed from early 2008, when offshore issuance reached record levels (Graph 35). Over the six months to September 2008, the five largest banks have issued, on average, around $7 billion of bonds per month, compared to an average of around $4 billion over the same period in 2007. With banks recently issuing more longer-term debt, the average maturity of their outstanding bonds (both on- and offshore) has fallen only slightly since the onset of the market turbulence.

Graph 35

Five Largest Banks' Bond Issuance*

A$ equivalent; monthly



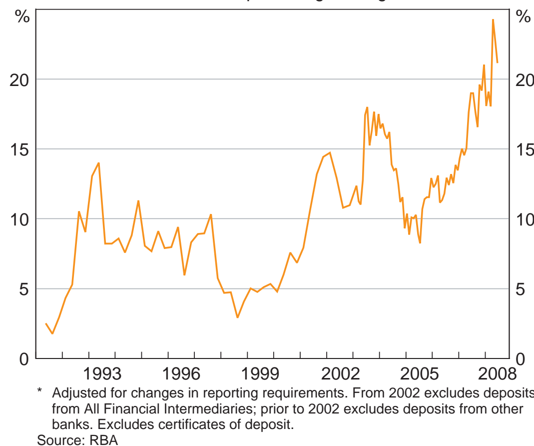
* Data to 23 September 2008
Source: RBA

Over the past year, banks have also benefited from strong growth in deposits, particularly from households, with total deposits increasing by around 20 per cent over the 12 months to July 2008 (Graph 36). Households' term deposits have grown even more rapidly, by around 40 per cent over the year to July 2008. This strong growth reflects both supply and demand factors. As discussed below, banks have been competing more vigorously for deposit funding, and the volatility of alternative investments in the current environment has increased demand; the latest Westpac and Melbourne Institute Survey of Consumer Sentiment showed that nearly 30 per cent of surveyed households viewed bank deposits as the 'wisest place for savings', which is around the highest share in over 15 years.

Graph 36

Banks' Deposits*

Year-ended percentage change

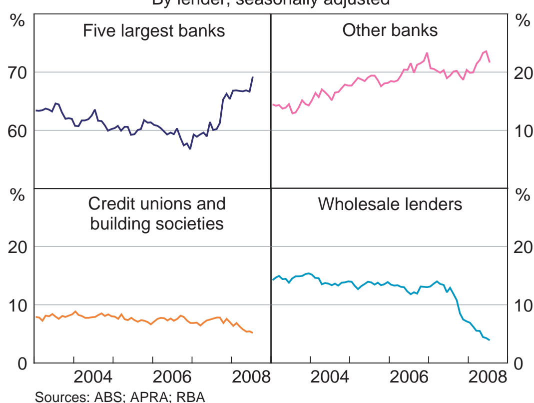


* Adjusted for changes in reporting requirements. From 2002 excludes deposits from All Financial Intermediaries; prior to 2002 excludes deposits from other banks. Excludes certificates of deposit.
Source: RBA

Competition

The recent developments in credit markets have had a noticeable impact on the competitive dynamics of the Australian financial system, particularly affecting lenders that rely heavily on securitisation for funding. These lenders have lost market share to institutions that have more diversified funding bases, and there are signs that credit has become less readily available for higher-risk mortgage borrowers. Financing conditions have also tightened for some business borrowers, particularly those with complicated, and already highly leveraged, balance sheets and those with heavy exposures to commercial property.

In the mortgage market, non-ADI mortgage originators have been the most affected by the strains in the RMBS market, having funded themselves almost entirely through securitisation. As a result, the share of owner-occupier loan approvals accounted for by these lenders fell to around 4 per cent in July 2008, compared with around 12 per cent in mid 2007 (Graph 37). Conversely, the share of new loans accounted for by banks has increased from around 80 per cent to 90 per cent over the past year. This represents a sharp turnaround in the longer-run trend, which had seen mortgage originators increase their share of total *outstanding* housing loans from around 2 per cent in the mid 1990s to a peak of about 10 per cent in mid 2007.



The changes in the financial environment more generally have had a noticeable effect on the pricing of home loans, and on the availability of finance for some borrowers. Since mid last year, the five largest banks have increased their advertised standard variable indicator rates on full-doc loans by an average of 55 basis points more than the increase in the cash rate over the same period. Mortgage originators have, on average, increased their advertised rates by around 80 basis points more than the increase in the cash rate. Interest rates on some non-standard loans have risen by even more, with rates on non-conforming loans, for example, rising by around 210 basis points, or 135 basis points more than the increase in the cash rate, over the same period. In addition, many lenders have re-examined their relationships with mortgage brokers; in recent years around one third of new housing loans have been originated through third parties, with brokers enabling lenders without large branch networks to compete across geographical boundaries. Some of the largest banks, for example, have cut upfront commissions by around 20 basis points, and 'trailing' commissions by 5-10 basis points.

Conditions in business lending markets have also tightened since mid 2007, after a number of years of strong competition. This tightening partly reflects a change in the activities of some of the newer entrants into the market, including foreign-owned banks. As a group, these banks had

expanded their lending to businesses at an above-average rate over recent years, with the most notable gains in market share being in the high-value end of the business loan market. More recently, some of these banks have scaled back their involvement in the Australian market, with foreign-owned banks' business credit growth decelerating by significantly more than that of the Australian-owned banks over the past six months or so. Industry liaison suggests that conditions have tightened by somewhat less for smaller business loans than for large-value corporate loans, with some lenders seeking to increase their share of the small business loan market.

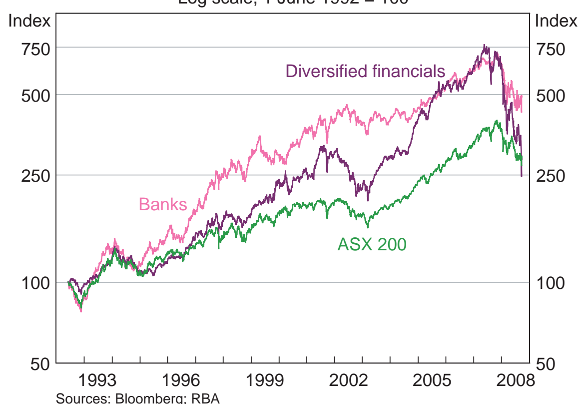
Recent developments have also had an effect on competition in the deposit market, with banks seeking to increase the share of their funding sourced from deposits. Most notably, competition for term deposits has picked up over the past six months, which has seen deposit rates equal, or in some cases higher, than rates in wholesale markets at some maturities.

Financial Markets

Falling prices and heightened volatility have been features of many financial markets since mid 2007, with the overall domestic share market currently around 30 per cent below its peak in November 2007 (Graph 38). The banking sector has declined by a similar amount to be 32 per cent below its peak, also in November last year.

Graph 38

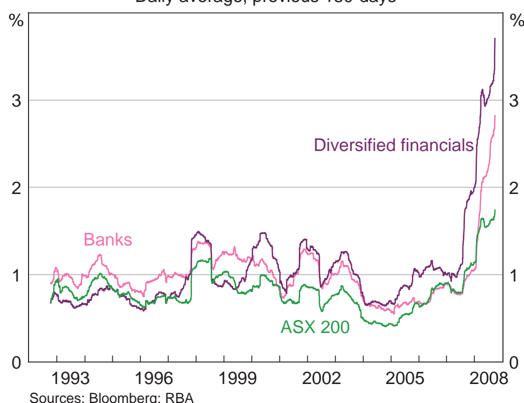
Australian Share Prices



There has also been a very pronounced increase in the volatility of bank share prices since mid 2007 (Graph 39). The daily absolute movement in the banking index has averaged 2.3 per cent over this period, compared with an average of 1 per cent over the previous 10 years. The largest movements occurred in July, when the banking index fell by around 15 per cent over three days, after the market was surprised by a couple of banks announcing higher provisioning charges. The fall in the Australian banking index since its peak has, however, been slightly less than the falls in the European and US banking indexes since their respective peaks, with these markets having declined by about 40 per cent. Over a longer horizon, Australian banks have significantly outperformed many of their

Graph 39

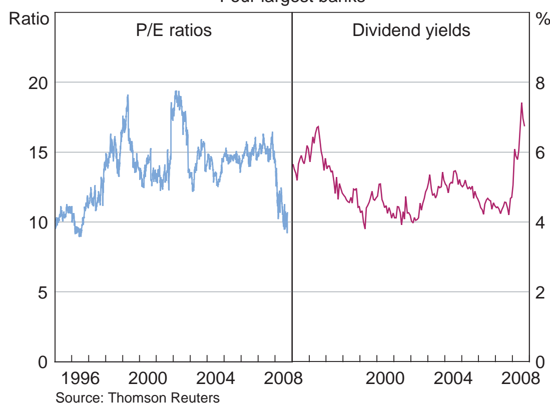
Change in Share Prices

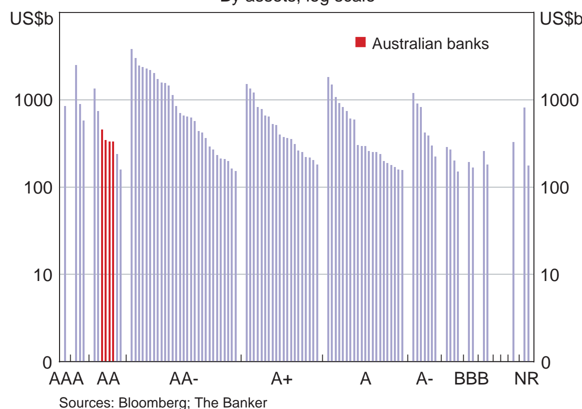


international peers. The share prices of the companies included in the ASX 'diversified financials' index have been more volatile than for Australian commercial banks, with the relevant index declining by around 60 per cent since its peak mid last year.

The movements in banks' share prices have resulted in significant changes in market-based valuation measures, with the banks' price/earnings ratio falling to its lowest level since the mid 1990s and dividend yields rising equivalently (Graph 40).

Consistent with the general deterioration in sentiment, credit default swap (CDS) premia on Australian banks remain elevated relative to historical averages. For the four largest Australian banks, the current annual premia for insuring their senior debt averages around $95 per $10 000 insured, compared with $5–$10 for much of the past few years. While this is a significant increase, CDS premia on Australian banks remain lower than those for the largest US financial institutions, reflecting Australian banks' smaller exposure to structured securities and the US mortgage market. CDS premia for the largest Australian banks also remain within a relatively narrow range, in contrast to a number of other countries where there is wide dispersion in these premia across banks.





Notwithstanding these movements in market prices, Australian banks continue to be viewed favourably by rating agencies. Each of the four largest Australian banks is rated AA by Standard & Poor's, with these ratings having recently been affirmed (Table 7). Of the world's largest 100 banks, only a handful have higher ratings (Graph 41). Moreover, unlike some of the large financial institutions abroad, no Australian-owned bank has had its rating downgraded since the onset of the credit turmoil. A couple of foreign-owned banks operating in Australia have had their ratings downgraded.

Table 7: Long-term Bank Ratings[(a)]

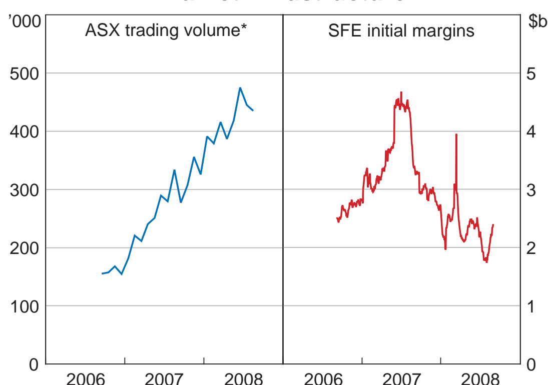
	Outlook	Current	Last change	
			Direction	Date
Adelaide Bank	Stable	BBB+	↑	October 2004
AMP Bank	Stable	A	↑	April 2008
ANZ Banking Group	Stable	AA	↑	February 2007
Arab Bank Australia	Stable	A-	--	January 2007
Bank of Queensland	Stable	BBB+	↑	April 2005
BankWest	Developing	A+	↓	September 2008
Bendigo and Adelaide Bank	Stable	BBB+	↑	February 2005
Citigroup	Negative	AA	↓	January 2008
Commonwealth Bank of Australia	Stable	AA	↑	February 2007
Elders Rural Bank	Negative	BBB	↑	August 2007
HSBC Bank Australia	Stable	AA	↑	July 2006
ING Bank (Australia)	Stable	AA	↑	August 2005
Macquarie Bank	Negative	A	--	November 1994
Members Equity Bank	Negative	BBB	↑	August 2006
National Australia Bank	Negative	AA	↑	February 2007
Rabobank Australia	Stable	AAA	↑	December 1996
St George Bank	Watch Positive	A+	↑	January 2006
Suncorp-Metway	Stable	A+	↑	March 2007
Westpac Banking Corporation	Stable	AA	↑	February 2007

(a) Includes all Australian-owned banks, and foreign-owned banks operating in Australia that have a issuer rating from Standard & Poor's

Source: Standard & Poor's

Australia's financial infrastructure has handled the increased volatility and turnover during the past year effectively. In recent months, trading volumes in Australian equity markets have remained close to their record highs, at around 400000 trades per day (Graph 42). Traders have, however, scaled back their positions on the Sydney Futures Exchange (SFE). Reflecting this, the total value of initial margins held for SFE derivatives has fallen to $2-3 billion, down from a peak of around $4½ billion in June 2007.

Graph 42



* Includes equities, interest rate and warrant trades; daily average number of trades

Source: ASX

One aspect of this infrastructure that has attracted attention is the settlement practices for equities. This follows a delay to equities settlement in late January this year. In response to this delay, the RBA's Payments System Board initiated a review into settlement practices in the Australian equity market and suggested a number of changes to current arrangements (see the *Developments in the Financial System Infrastructure* chapter). The Bank is continuing to discuss these suggestions with the ASX.

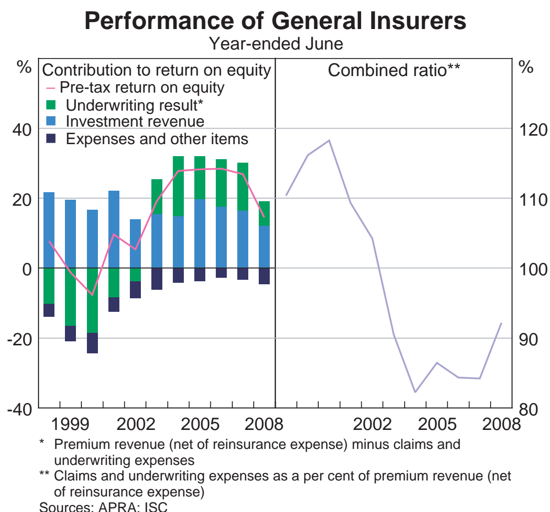
General Insurers

The Australian general insurance industry, in aggregate, continued to report solid profits over the 2007/08 financial year, recording an aggregate pre-tax return on equity of around 15 per cent. While this was lower than during the previous few years, it is in line with the average over the past decade (Graph 43).

Graph 43

Performance of General Insurers

Year-ended June



* Premium revenue (net of reinsurance expense) minus claims and underwriting expenses

** Claims and underwriting expenses as a per cent of premium revenue (net of reinsurance expense)

Sources: APRA; ISC

Income derived from the investment of insurance premiums was around 25 per cent lower than in the previous year, reflecting the more difficult conditions in financial markets. In general, however, Australian insurers have a relatively conservative investment mix, with around 70 per cent of assets invested in fixed-income securities and only a small proportion invested in equities. Consistent with this, Australia's largest general insurers have not reported any direct exposure to US sub-prime risk through their investment portfolios.

Australian general insurers also faced more difficult underwriting conditions over the past year than they have for some time. Aggregate claims (net of reinsurance and other recoveries) increased by 17 per cent, compared with an average annual rise of around 2 per cent over the previous three years. These higher claims partly reflect storms in Australia's eastern states in late 2007 and early 2008. At the same time, however, growth in industry net premium revenue – gross premium revenue less reinsurance expenses – was broadly in line with previous years, at around 3 per cent. Over the year, the effect on total premiums of an ongoing reduction in premium rates for some commercial lines of insurance, including public liability insurance, was only partly offset by higher premium rates for some personal lines. Reflecting these factors, the industry's net underwriting result was weaker than it has been for a number of years. The combined ratio – claims and underwriting expenses relative to net premium revenue – increased by 8 percentage points over the year, to 92 per cent. While this is the highest level since 2002, a combined ratio of less than 100 per cent indicates that insurers, in aggregate, reported an underwriting profit for the year.

The aggregate capital position of the general insurance industry remains sound, with insurers holding capital of around twice the regulatory minimum as at March 2008 (the latest available aggregate data). APRA has also recently strengthened the prudential framework for general insurers by raising the regulatory capital charge for foreign reinsurance recoveries, equities and unlisted investments. These changes became effective on 1 July 2008.

While the insurance sector, in aggregate, remains in a sound position, developments in global housing markets have focused attention on lenders' mortgage insurance (LMI). This type

of insurance provides protection for lenders against borrower default, and is also a form of credit enhancement in the RMBS market. In Australia, the largest non-captive LMIs are PMI and Genworth, which account for around three quarters of industry revenue. Until recently, both were subsidiaries of US insurers, and the US mortgage insurance industry has come under considerable pressure lately as house prices there have fallen and defaults have risen. In contrast, Australian LMIs have continued to report solid profits owing to the relatively good performance of the Australian housing market, though the difficulties experienced by their US parents have had an impact on their ratings. In particular, following downgrades to their parent companies, rating agencies lowered PMI Australia's rating from AA to AA-, with Moody's downgrading Genworth equivalently. In August, PMI announced the sale of its Australian operations to QBE, a move that further divorces the Australian LMI industry from the difficulties in the United States. Rating agencies have recently affirmed PMI Australia's rating following the announcement of the sale.

The downgrades of the two US mortgage insurers and the follow-on effects on the Australian subsidiaries resulted in around 190 Australian subordinated RMBS tranches being downgraded to AA- from AA. However, the ratings of all senior tranches (AAA) were affirmed as they were deemed to have sufficient protection from subordination to withstand a one notch downgrade of the LMI provider. Since subordinated tranches only make up a small share of the total value of an RMBS, the overall effect of these downgrades on the RMBS market has been small, with less than 5 per cent of the value of outstanding RMBS affected.

More generally, rating agencies continue to hold a favourable view of the Australian general insurance industry. The four largest insurers are all rated A+ or higher by Standard & Poor's, though Insurance Australia Group was downgraded by one notch to AA- in May (Table 8). The rating agencies' outlooks on these four insurers are stable. Despite this, share prices of the largest listed Australian general insurers have fallen by around 25 per cent over the past year and have underperformed the broader market over this period (Graph 44). This underperformance mainly reflects the storm-related profit warnings late last year and in the early part of 2008. More recently, insurers' share prices have moved broadly in line with the overall market. Negative sentiment arising from the difficulties at the US insurer AIG has not had a significant impact on the local market, with AIG having only small operations in Australia.

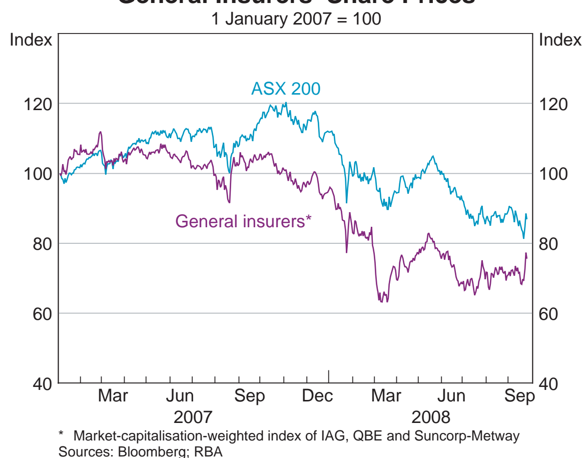
Australian general insurers cede around one quarter of gross premium revenue to reinsurers, with the majority of this placed with large global reinsurers. The global reinsurance industry entered the current period of market turmoil in generally good shape after a number of years of strong profitability. While claims have risen over the first half of 2008 and some insurers have reported valuation losses on investments, the large global reinsurers have typically continued to report solid profits. While the recent difficulties experienced by the US insurer

Table 8: Financial Strength Ratings of Selected Large Insurers

	Current	Outlook
Allianz Insurance Australia	AA-	Stable
Insurance Australia Group	AA-	Stable
QBE Insurance Australia	A+	Stable
Suncorp-Metway Insurance	A+	Stable

Source: Standard & Poor's

AIG have attracted considerable attention, its reinsurance operations have remained profitable, and the support package announced by the US authorities means that any reinsurance cover provided by the company will continue to be effective. More generally, rating agencies continue to maintain a sound industry rating profile for the reinsurance industry, with the majority of companies rated A or higher by Standard & Poor's, and the largest rated AA or higher.



Managed Funds

The turbulence in financial markets over the past year or so has had a marked impact on the performance of the funds management industry. Managed fund institutions' consolidated assets under management fell by around 3 per cent over the year to June 2008, to stand at $1.3 trillion, reflecting investment losses over the second half of the year (Table 9).

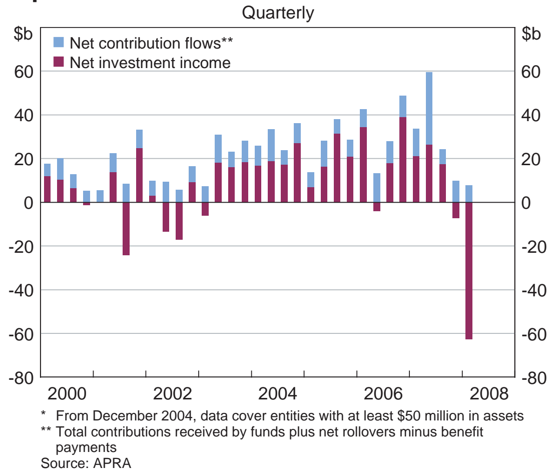
Table 9: Funds under Management
Consolidated, June 2008

	Level	Share of total	Six-month-ended annualised percentage change	
			Dec 2007	Jun 2008
	$b	Per cent	Per cent	Per cent
Superannuation funds	799.0	60.6	6.8	-7.2
Life insurers[a]	182.7	13.8	-0.9	-20.8
Public unit trusts	275.2	20.9	2.0	-15.0
Other managed funds[b]	62.7	4.7	-2.7	3.6
Total	**1319.5**	**100.0**	**4.2**	**-10.5**
Of which:				
All superannuation assets [c]	947.9	71.8	4.9	-12.1

(a) Includes superannuation funds held in the statutory funds of life insurers
(b) Cash management trusts, common funds and friendly societies
(c) Superannuation funds plus an estimate of the superannuation assets held in the statutory funds of life insurers
Sources: ABS; RBA

Superannuation Funds

According to ABS data, superannuation funds' (consolidated) assets under management fell by 0.4 per cent over the year to June 2008, compared with a decade-average annual growth rate of around 15 per cent. This fall primarily reflects lower valuations on investment assets in



the first half of 2008, with APRA data showing that superannuation funds recorded an aggregate loss of $63 billion on their investment portfolios in the March quarter (Graph 45). While aggregate APRA data on returns for the June quarter are not yet available, the continued downturn in global and Australian equity markets has meant superannuation funds have reported further losses since March. Inflows of new funds have also been lower than in recent years, as investors have shied away from market-linked assets in the current environment. In the March quarter, net inflows into superannuation funds were $7.7 billion, compared with a quarterly average of $9.4 billion since 2004 (after excluding the very strong flows in June 2007 associated with changes to taxation arrangements).

Superannuation funds' investment returns have been particularly affected by the downturn in global and Australian equity markets, as around half of superannuation funds' assets are held in equities and units in trusts (Table 10). Notwithstanding this, Australian superannuation funds have limited exposures to US sub-prime related debt, though several funds have modest holdings of CDOs backed by US sub-prime debt. Aggregate data shows that only 4 per cent of superannuation funds' financial assets are invested in offshore bonds (including CDOs).

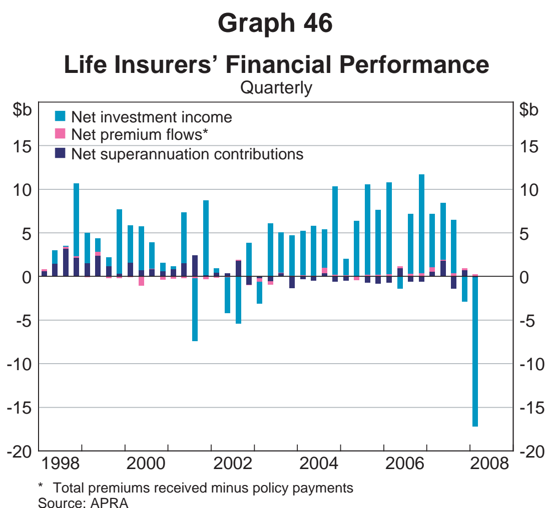
Table 10: Superannuation Funds' Assets
Unconsolidated[(a)], June 2008

			Six-month-ended annualised percentage change	
	Level	Share of total	Dec 2007	Jun 2008
	$b	Per cent	Per cent	Per cent
Cash and deposits	142.8	14.8	-0.5	15.1
Loans and placements	7.7	0.8	6.1	4.0
Short-term securities	49.8	5.1	17.0	5.9
Long-term securities	51.5	5.3	15.1	-13.0
Equities	297.0	30.7	9.7	-18.5
Units in trusts	149.9	15.5	19.2	-19.2
Other assets in Australia[(b)]	86.0	8.9	-8.2	35.1
Assets overseas	183.4	19.0	13.4	-17.6
Total	**968.0**	**100.0**	**9.6**	**-9.2**

(a) Not adjusted for cross-investments with other managed fund sectors
(b) Includes non-financial assets
Source: ABS

Life Insurers

Life insurers account for around 14 per cent of the funds management industry. Life insurers' assets declined by 11 per cent over the year to June 2008, after having increased at an average annual rate of around 4 per cent over the previous decade. Superannuation assets continue to account for around 90 per cent of life insurers' total assets, and returns on these investments have typically accounted for a significant share of life insurers' asset growth. Over recent years, this has reflected strong growth in the equity market, with around half of life insurers' statutory fund assets held in the form of Australian equities and units in trusts. With the Australian share market having fallen considerably, investment losses were $17 billion in the March quarter 2008 (Graph 46). As only around 10 per cent of life insurers' income is derived from ordinary 'risk' business, the performance of the industry will remain closely tied to developments in the superannuation sector.



Public Unit Trusts and Other Managed Funds

Outside of superannuation funds and life offices, the majority of funds under management are invested in public unit trusts. Assets of public unit trusts declined by around 8 per cent over the year to June 2008 (on an unconsolidated basis) (Table 11). With most asset classes having come under pressure since the onset of the market turmoil, the declines in asset values have been broadly based across the various types of public unit trusts. As discussed in Box A, developments in the listed property trust sector have attracted particular attention lately, given the high levels of gearing in that sector.

Table 11: Public Unit Trusts' Assets
Unconsolidated(a), June 2008

	Level	Share of total	Six-month-ended annualised percentage change	
			Dec 2007	Jun 2008
	$b	Per cent	Per cent	Per cent
Listed property trusts	125.1	40.8	0.7	-1.4
Listed equity trusts	50.1	16.3	12.5	-6.9
Unlisted equity trusts	100.7	32.8	-3.8	-32.2
Other trusts	30.9	10.1	5.7	-16.8
Total	**306.7**	**100.0**	**1.2**	**-15.7**

(a) Not adjusted for cross-investments with other managed fund sectors
Source: ABS

Household and Business Balance Sheets

After several years of strong growth in spending and increases in debt, the household sector has entered a period of consolidation. The recent slowing in consumption and reduced demand for credit has occurred against a background of softer growth in real incomes and some decline in household wealth. There has been some rise in arrears rates on household loans, particularly in certain parts of the country, but the overall arrears rate remains low by historical and international standards. In the business sector, the various indicators continue to suggest that most balance sheets are in fairly good shape, although there are a relatively small number of companies – those that are highly leveraged and that are more exposed to declining asset valuations – that have found the current financial environment particularly challenging.

Household sector

Average nominal income per household continued to grow at a robust pace, of a little under 7 per cent, over the past year. This is around the same as the average growth rate over the previous three years, during which the aggregate rate of household saving increased. But higher inflation has meant that growth in real income per household has slowed. Reflecting tighter monetary policy and earlier increases in debt, growth in real income after interest payments has slowed even more, to 1.2 per cent over the year to the June quarter 2008 (Table 12). These developments have contributed to the recent weakening in consumption.

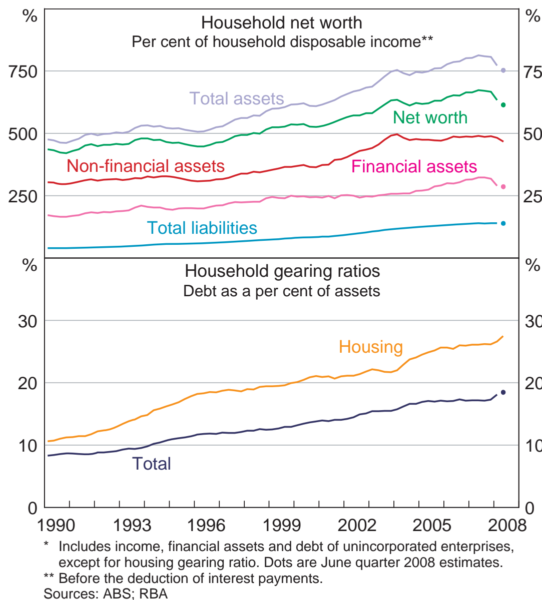
Table 12: Income per Household[(a)]
Percentage change

	Annual average, three years to the June quarter 2007	Year to the June quarter 2008
Nominal disposable income		
before interest	6.9	6.8
after interest	5.9	4.6
Real disposable income		
before interest	4.4	3.3
after interest	3.5	1.2

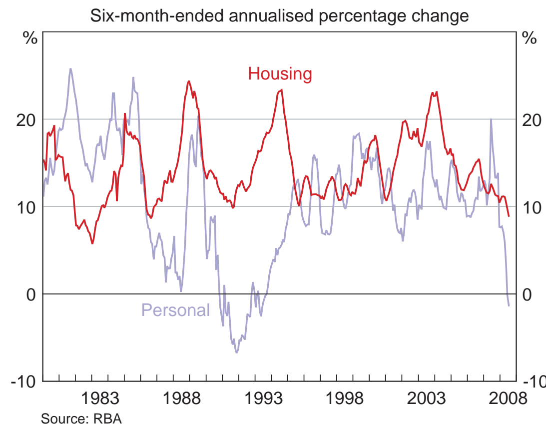
(a) Excludes unincorporated enterprises
Sources: ABS; RBA

Many households have also recently experienced falls in their wealth, after a long period over which wealth rose steadily. The value of housing assets – which represent nearly 60 per cent of the value of the household sector's total assets – declined slightly in the first half of 2008, with established house prices flat or falling across most capital cities. Household wealth has also been negatively affected by substantial declines in share prices; according to investment research firm Intech, the median superannuation fund return for the 2007/08 financial year was -8½ per cent, the weakest outcome for at least two decades.

As a result of these developments, aggregate household net worth is estimated to have fallen since the beginning of 2008, representing a notable departure from households' experience over the past decade, during which net worth grew by an average of around 10 per cent per annum. As a ratio to household disposable income, the net worth of the household sector is estimated



* Includes income, financial assets and debt of unincorporated enterprises, except for housing gearing ratio. Dots are June quarter 2008 estimates.
** Before the deduction of interest payments.
Sources: ABS; RBA



Source: RBA

to have fallen from 670 per cent at end December 2007 to 615 per cent at end June 2008 – around its level in early 2005 (Graph 47). Household gearing ratios, in turn, increased a little in the first half of 2008, after being broadly steady for a couple of years.

Reflecting the tighter financial conditions, the appetite for further borrowing by the household sector has diminished and consumption has been weak. Housing credit – which accounts for the bulk of household borrowing – grew at an annualised pace of 9 per cent over the six months to July, down from around 12 per cent over the year to July 2007. This is around its slowest pace since the mid 1980s (Graph 48). Growth in personal credit has seen an even more marked slowdown. In response to share market price declines and volatility, households have reduced margin loan debt by 19 per cent over the year to July, in contrast to average growth of around 40 per cent over the three years to December 2007. Households have also slowed their use of credit card debt, with growth over the year to July of around 8 per cent, compared with average growth of 12 to 13 per cent over the previous two years.

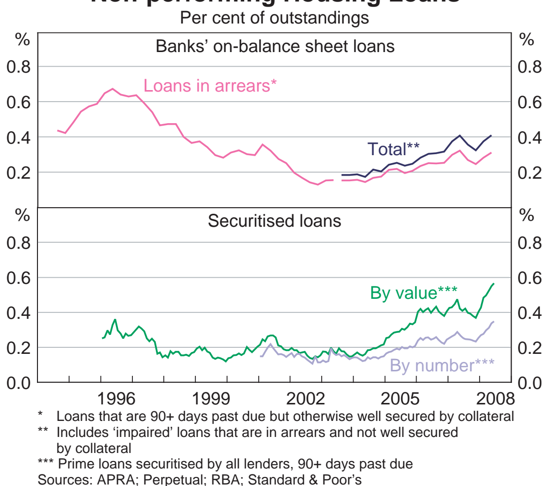
Notwithstanding the change in the financial environment, there has been only a modest increase in arrears rates on household loans, which remain low both by historical and international standards. For housing loans on banks' domestic books (which account for around three quarters of all outstanding housing loans), the proportion of loans that are in arrears by 90 days or more was 0.41 per cent at June 2008, up a little from the end of 2007 but unchanged from a year ago (Graph 49). In contrast, the arrears rate on prime securitised housing loans is higher than a year ago, at 0.57 per cent as at June 2008. This likely reflects the lower average credit quality of these loans with, for example, the share of low-doc loans in the

pool of securitised loans higher than that for loans on banks' balance sheets. In addition, there is some evidence that the arrears rate on prime, fully documented loans made by some non-ADI lenders (that relied heavily on securitisation) is higher than that for many bank lenders (see below).[1]

Graph 49

Non-performing Housing Loans

Per cent of outstandings



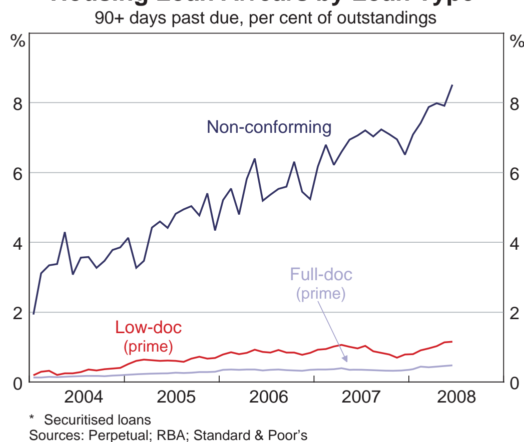
* Loans that are 90+ days past due but otherwise well secured by collateral
** Includes 'impaired' loans that are in arrears and not well secured by collateral
*** Prime loans securitised by all lenders, 90+ days past due
Sources: APRA; Perpetual; RBA; Standard & Poor's

As would be expected, arrears rates across loan types reflect the underlying risk characteristics of these loans. For securitised prime *full-doc* loans, the arrears rate has increased by around 15 basis points over the past year, to 0.5 per cent in June 2008 (Graph 50). The arrears rate on securitised prime *low-doc* loans (where borrowers can provide less evidence of debt-servicing ability) is higher than for full-doc loans, and has increased by around 20 basis points over the past year, to around 1.2 per cent in June. In contrast, for non-conforming loans – which are typically made to borrowers with poor credit histories – the arrears rate is both much higher than for other loans, and has risen by more, increasing from 7.1 per cent to 8.5 per cent over the year to June 2008. It is, however, important to note that these loans account for less than one per cent of the total value of outstanding housing loans in Australia.

Graph 50

Housing Loan Arrears by Loan Type*

90+ days past due, per cent of outstandings



* Securitised loans
Sources: Perpetual; RBA; Standard & Poor's

Across all housing loan types, it is estimated that around 17 000 borrowers are 90 or more days behind on their mortgage repayments. This compares with an estimate of around 15 000 borrowers that were 90 or more days in arrears earlier in the year.

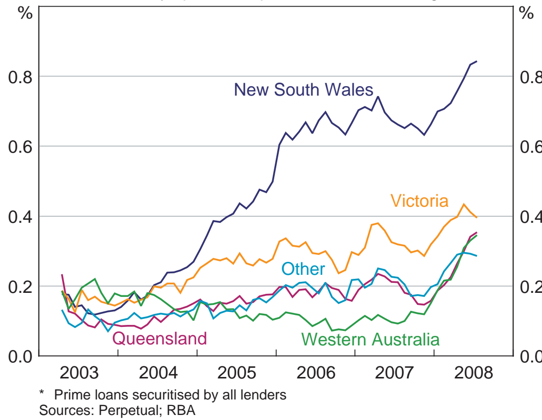
In analysing how arrears rates vary across the country, the main source of information is data from securitised loans. As noted above, interpretation of these data has recently been made more complicated by the lack of securitisations over the past year. Notwithstanding this, it is clear that

1 *Part of the explanation is also technical. The arrears rate on securitised loans in earlier years may have been held down by the strong growth of such loans, as only mortgages not in arrears are securitised. With securitisation having slowed recently, this effect has weakened.*

Graph 51

Housing Loan Arrears by State*

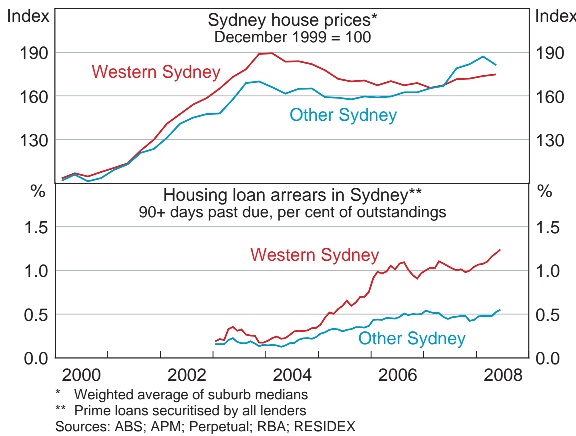
90+ days past due, per cent of outstandings



* Prime loans securitised by all lenders
Sources: Perpetual; RBA

Graph 52

Sydney House Prices and Arrears

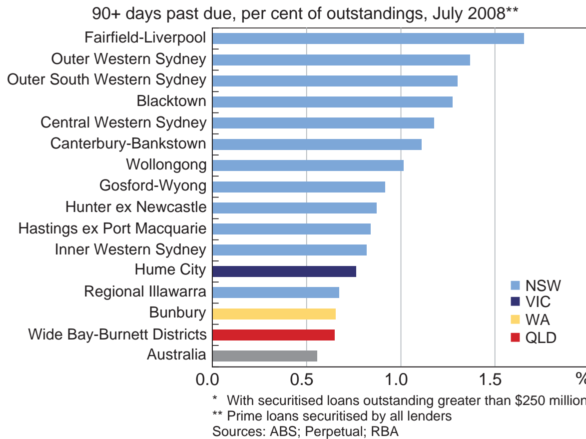


* Weighted average of suburb medians
** Prime loans securitised by all lenders
Sources: ABS; APM; Perpetual; RBA; RESIDEX

Graph 53

Housing Loan Arrears by Region*

90+ days past due, per cent of outstandings, July 2008**



* With securitised loans outstanding greater than $250 million
** Prime loans securitised by all lenders
Sources: ABS; Perpetual; RBA

arrears rates on prime loans remain considerably higher in NSW than in the other states, largely reflecting the relatively weak economic conditions and housing markets that have prevailed in some areas of that state (Graph 51). The arrears rate is notably higher in western Sydney, where there is a relatively large share of indebted households with high mortgage-servicing ratios and where house prices remain below the peak reached in early 2004 (Graph 52). Nationwide, the six areas with the highest arrears rates (on prime loans) are all in western Sydney, while a number of other regions in NSW are also showing relatively high arrears rates (Graph 53).

The available evidence suggests that newer lenders seeking to increase their market share, in part through looser lending standards, were particularly active in many of the regions with poor loan performance. In western Sydney, for example, mortgage originators appear to have comprised a greater share of lending than for Australia as a whole. For securitised prime full-doc loans made by these lenders in this area, the arrears rate is currently around 1.65 per cent, which is considerably higher than the average arrears rate for other lenders (Graph 54). In particular, the aggregate arrears rate on securitised prime full-doc loans made by Australian-owned banks in western Sydney is currently around 0.85 per cent. A comparison of arrears rates for all loans – that is, including low-doc and non-conforming – shows an even greater

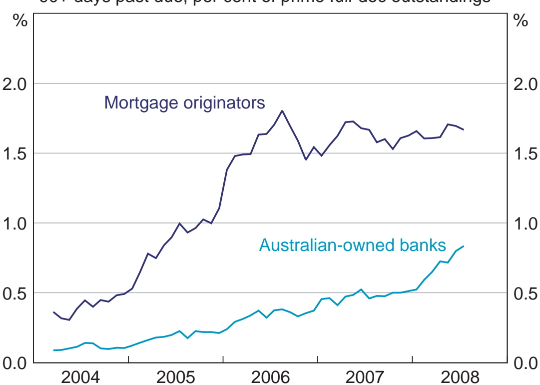
divergence in arrears rates across lender types.

The impact of declining lending standards, particularly in parts of NSW, is also evident in the experiences of different loan cohorts over recent years. For loans taken out at the start of this decade there has been little variation in arrears rates over time (Graph 55). But as property prices in Sydney began increasing rapidly, many borrowers turned to lenders that allowed higher maximum loan-to-valuation ratios or higher permissible debt-servicing ratios in order for them to borrow larger amounts. This period also saw the expansion of low-doc lending: as a share of new loans nationwide, low-doc loans are estimated to have grown from 4 per cent in 2002 to 8 per cent in 2006. For many, the increased risk involved in such loans was perhaps perceived to be mitigated by the prospect of further house price growth. Much of this non-traditional lending was enabled by the expansion of mortgage broking, and concerns remain about brokers' remuneration structures (high upfront and low trailing commissions). In a small number of instances some lenders engaged in predatory lending practices.

Graph 54

Western Sydney Housing Loan Arrears*

90+ days past due, per cent of prime full-doc outstandings**



* Includes Blacktown, Canterbury-Bankstown, Fairfield-Liverpool and Central Western, Inner Western, Outer South Western and Outer Western Sydney

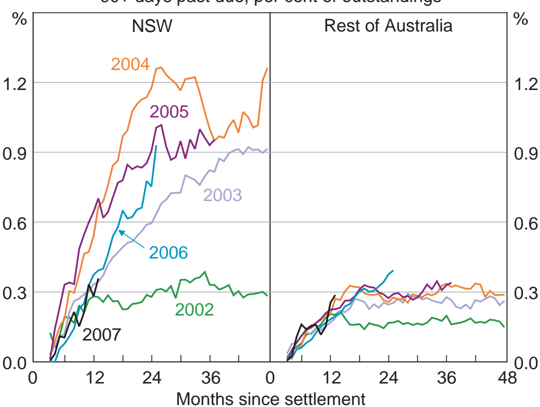
** Prime full-doc securitised loans

Sources: ABS; Perpetual; RBA

Graph 55

Housing Loan Arrears by Cohort*

90+ days past due, per cent of outstandings



* Prime loans securitised by all lenders

Sources: Perpetual; RBA

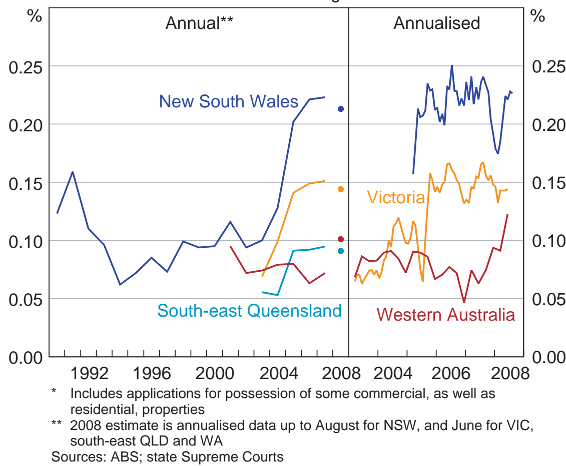
In the event, Sydney house prices reached a peak in late 2003 (and early 2004 in western Sydney), and loans originated in NSW in 2004 subsequently experienced the worst arrears rate of any loan cohort. While arrears rates on loans originated in the years since then have been somewhat lower, they are still well above those of loans originated early in the decade. With the exception of parts of Melbourne, most regions outside of NSW have not seen this pattern; for the rest of Australia as a whole, loans extended since 2002 have only slightly higher arrears rates than do loans extended in 2002.

The increase in arrears rates between 2004 and 2006 in NSW and, to a lesser extent, in Victoria, led to a sharp rise in applications for property repossession between 2004 and 2006 in those states.

Graph 56

Applications for Property Possession*

Per cent of dwelling stock



* Includes applications for possession of some commercial, as well as residential, properties

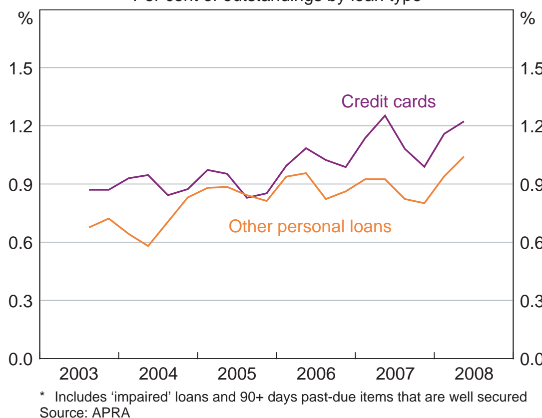
** 2008 estimate is annualised data up to August for NSW, and June for VIC, south-east QLD and WA

Sources: ABS; state Supreme Courts

Graph 57

Banks' Non-performing Personal Loans*

Per cent of outstandings by loan type

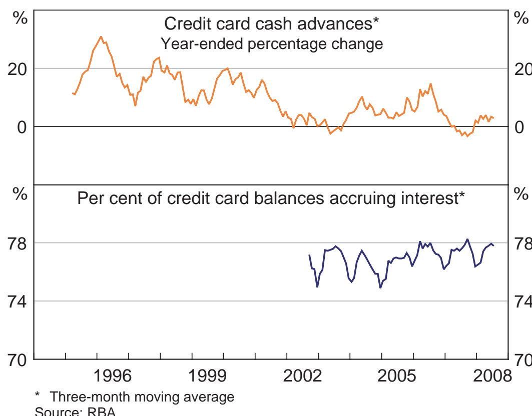


* Includes 'impaired' loans and 90+ days past-due items that are well secured

Source: APRA

Graph 58

Indicators of Personal Credit Card Use



* Three-month moving average

Source: RBA

There has also been an increase in repossession applications in south-east Queensland. More recently, however, the rate of repossession applications has shown little change (Graph 56). The one exception is Western Australia, where there has been a sharp rise in repossession applications over recent months, consistent with increasing arrears over the past year. This follows the recent decline in house prices in Western Australia after several years of rapid growth.

Other indicators of the state of household finances also suggest that, while household finances are not as favourable as they were a few years ago, there has not been a significant deterioration in the ability of households, as a whole, to meet their financial obligations over the past year. While arrears rates on credit cards and other personal loans have shown a slight upward trend since the middle of the decade, they are currently around, or not much above, the same level as a year ago (Graph 57). Similarly, the growth in credit card cash advances over the past year remains low, and the proportion of credit card balances accruing interest has remained steady over the past few years between 76 and 78 per cent (Graph 58). And as noted above, the growth in credit card debt outstanding has slowed over the past year. Together, these developments suggest little increase in households' reliance on credit cards for short-term cash flow management. Other evidence also suggests there has not been a significant increase in the extent of more severe financial stress among households in 2008: the number of

personal administrations (including bankruptcies) has risen only moderately (mainly due to increases in NSW); and the number of applications for the early release of superannuation benefits is broadly unchanged.

Overall, household finances in Australia continue to be in much better shape than those in a number of other countries, where arrears rates and rates of property repossession are, in some cases, many times higher than in Australia.

Business sector

At the aggregate level, most indicators continue to suggest that business finances remain in good shape, though firms with complicated and/or highly geared balanced sheets, and those exposed to declining asset valuations, have come under pressure.

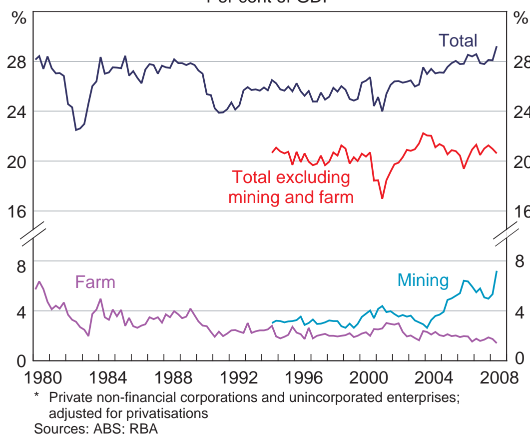
Over the year to the June quarter 2008, aggregate profits were up 14½ per cent, with profits as a share of GDP at its highest since the 1970s (Graph 59). This outcome has been boosted over recent years by the strength in mining profits, which grew at an annual average rate of 27 per cent between 2003 and 2008. Profits in the rest of the corporate sector have also fared quite well, with average annual growth of 7½ per cent over the same period.

The strength of profits over recent years has increased the scope of businesses to fund investment expenditure from internal resources, with retained earnings having averaged 9 per cent of GDP since 2003, up a little from the previous decade and nearly double the average over the 1980s (Graph 60). This has meant that, although spending on investment is at historical highs as a share of GDP, the amount of external funding needed has been much less than during other periods of strong investment, such as the mid to late 1980s. The bulk of the required external funding has been in the form of net debt raisings, with only limited

Graph 59

Business Profits*

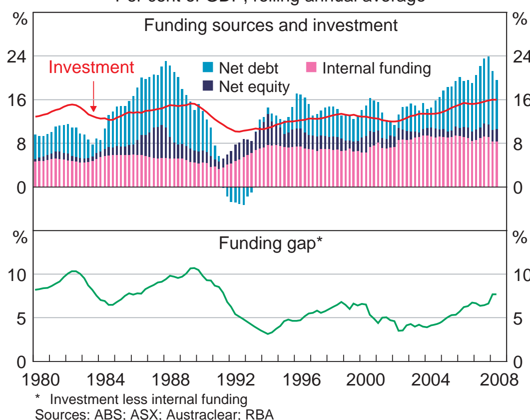
Per cent of GDP



Graph 60

Business Funding and Investment

Per cent of GDP, rolling annual average

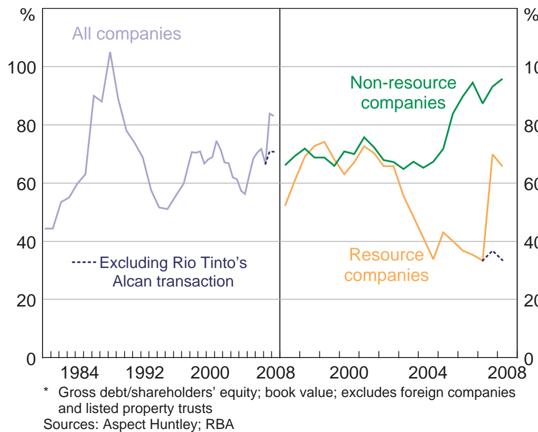


net equity issuance – in contrast to the experience of the 1980s, where equity raisings played a larger role in meeting businesses' funding requirements. Notably, in recent years, new borrowings had reached levels well in excess of the additional funding necessary for aggregate investment expenditures, with some businesses building up significant holdings of liquid financial assets.

Among listed non-financial companies, the pace of debt raisings outstripped the accumulation of retained earnings and new equity raisings between 2005 and end 2007, resulting in an increase in aggregate gearing. Since the end of 2007, however, gearing levels have been stable, with the aggregate ratio of debt to the book value of equity (excluding the effect of a large debt raising by Rio Tinto) currently around 70 per cent. Although this is higher than a few years ago, it is only a little above its average of the past 15 years (Graph 61). As discussed below, much of the increase in the gearing of non-resource companies over the past few years has been driven by the activities of utilities and other infrastructure firms. Some non-listed companies have also increased their gearing, in part reflecting the marked increase in leveraged buyout activity in 2006. And, as discussed in Box A, gearing of listed property trusts (LPTs) rose over the past few years.

Graph 61

Listed Non-financial Companies' Gearing Ratios*



* Gross debt/shareholders' equity; book value; excludes foreign companies and listed property trusts

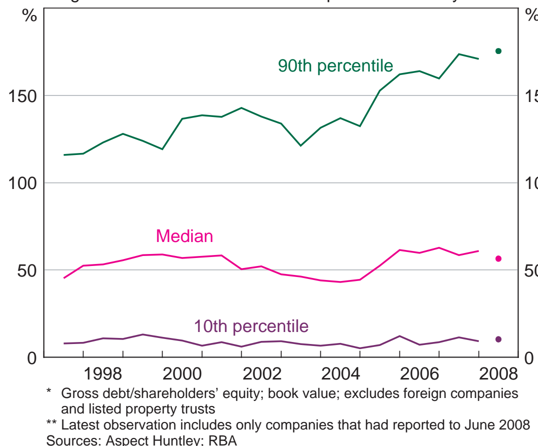
Sources: Aspect Huntley; RBA

While, at the aggregate level, gearing for listed non-financial companies has increased only moderately in recent years, a relatively small number of listed companies have borrowed more heavily, which has been reflected in a widening in the distribution of gearing across firms. As an illustration, among the largest listed non-financial companies, the gearing ratio of the company at the 90th percentile increased from around 120-140 per cent earlier in the decade to around 175 per cent at present (Graph 62).

Graph 62

Distribution of Company Gearing Ratios*

Largest 250 listed non-financial companies ranked by assets**



* Gross debt/shareholders' equity; book value; excludes foreign companies and listed property trusts

** Latest observation includes only companies that had reported to June 2008

Sources: Aspect Huntley; RBA

Some highly geared companies have proved vulnerable to the tightening of financial conditions. The balance sheets of some entities holding utility and other infrastructure assets have been of particular concern to investors, with share prices of many of these companies falling markedly over the past year (Graph 63). The

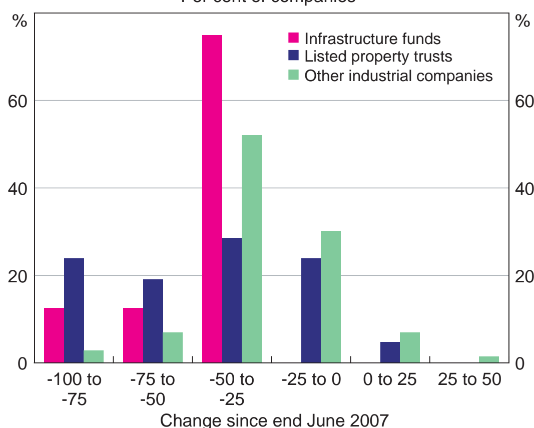
requirement to refinance a substantial amount of debt in the next couple of years, at what may be significantly higher spreads, has raised concerns about the ability of these entities to maintain distributions to investors; there have also been concerns over asset valuations, as well as the complexity of some related entities' corporate structures.

Share prices for many other non-financial companies have also declined over the past year, reflecting global events and concerns over the outlook for profits during a period of slower economic growth. Non-resource companies' share prices have declined by 24 per cent since June 2007. These price declines come after a period of strong earnings, which has seen the price/earnings (P/E) ratios of these companies decline to levels well below their longer-run averages (Graph 64). In contrast, investors remain more optimistic about the profit outlook for resource companies, with share prices of these companies broadly unchanged since June 2007, leaving this sector's P/E ratio only a little below its average for the past decade and a half.

Graph 63

Change in ASX 200 Company Share Prices

Per cent of companies*

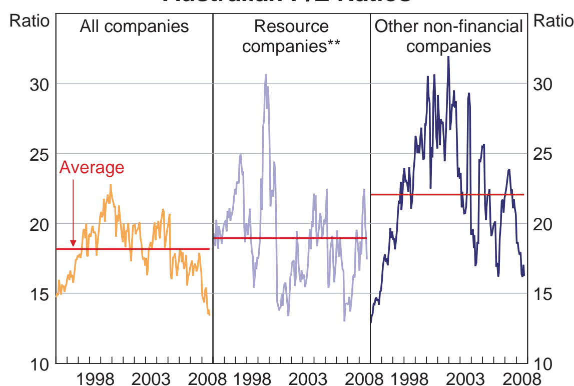


* Includes recently delisted and suspended companies; excludes financial and resource companies

Sources: Bloomberg; RBA

Graph 64

Australian P/E Ratios*



* September 2008 estimates assumes earnings unchanged

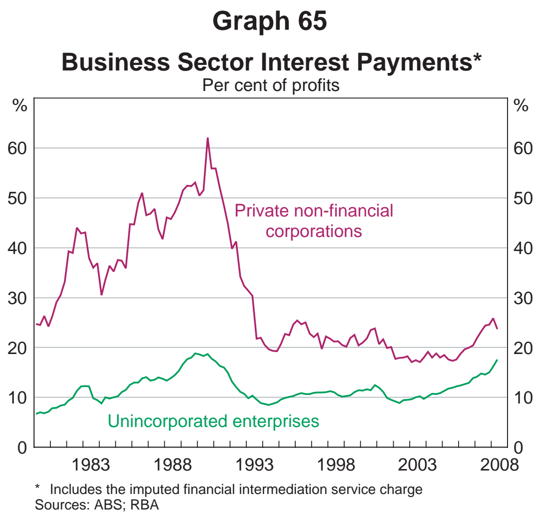
** Energy and materials sector

Sources: MSCI; RBA; Thomson Reuters

As with infrastructure companies, many LPTs have experienced large share price declines over the past year, with this sector as a whole down 38 per cent since June 2007. As discussed in Box A, these share price falls have been driven by a range of concerns, including: the sustainability of higher levels of gearing; the impact of higher debt-servicing requirements on distributions to investors; and the prospect of downward asset revaluations. These factors have also curtailed banks' willingness to lend for commercial property purposes, with many property-related firms reporting difficulties in obtaining funds, including much stricter terms on loans for development. The recent slowdown in commercial property lending comes after several years of very rapid growth in banks' lending to this sector. Over the year to March 2008 (the most recent data

available), banks' lending for commercial property rose by 28 per cent, with lending for office property growing by 38 per cent.

Although concerns about the availability of debt financing and tighter financial conditions have been felt most acutely in property-related sectors, the broader business sector has also registered some of these concerns over the past year. Since end July 2007, interest rates on large and small business variable-rate loans have increased by around 140 basis points. Although the aggregate interest-servicing ratio for larger businesses has increased to its highest level since the early 1990s, it remains well below the peak around that time; interest payments were equivalent to 24 per cent of profits in the June quarter 2008, compared with a peak of 62 per cent in 1990 (Graph 65). In contrast, the interest-servicing ratio for unincorporated enterprises is high by historical standards, and is currently only a little below its peak around 1990. Survey data, as well as liaison with businesses, indicate there has been an increase in the share of firms that view the level of interest rates and, to a lesser extent, the ability to raise funds from financial institutions, to be a constraint on investment. To date, however, aggregate investment spending has remained strong.



As well as some firms finding it more difficult than a year or so ago to raise funds from intermediaries, companies that usually access capital markets have found non-intermediated debt raisings to be more challenging than in the past. Only a small number of bond issues have occurred in the domestic market in 2008. While some large, well established companies have been able to raise significant amounts of funds in offshore wholesale markets, activity over the past year has been sporadic and issuance has not been sufficient to offset maturing debt securities; total non-intermediated debt funding declined by 2 per cent over the year to July 2008. Large businesses continue to have access to institutional funds through syndicated loans, with aggregate syndicated loan approvals over recent months only a little below average monthly amounts over the past few years. Whereas over the past couple of years corporate acquisitions accounted for a significant share (around a half) of new syndicated loans, recent approvals have largely been for capital expenditure or for general corporate and refinancing purposes.

Partly driving larger businesses' concern about the availability of finance has been the decline in foreign banks' activity in the Australian market. In the June quarter, net new lending to businesses by foreign banks contracted slightly, after a number of years in which lending growth by these banks had been particularly strong, associated with the strength in acquisitions

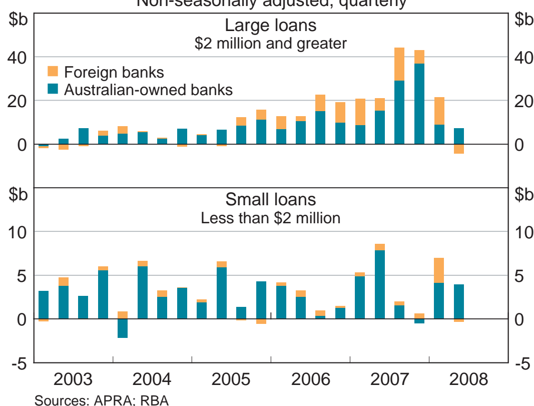
and investment activity by businesses (Graph 66). Lending to large businesses by Australian-owned banks surged in the second half of 2007, reflecting acquisition and investment activity, and also re-intermediation. Although net new lending has recently slowed significantly, it remains around the levels seen earlier in the decade. Lending to smaller businesses – which is almost all undertaken by Australian-owned banks – has slowed a little, but remains broadly in line with levels seen in recent years.

An important factor underpinning lenders' willingness to extend credit to businesses is the continued good financial health of this sector. Business failure rates remain around the levels of recent years, having picked up only a little in the first half of 2008, and are below the levels of the early and mid 1990s (Graph 67). And, for the most part, the quality of business loans on banks' balance sheets remains very strong by historical standards. Although recently there has been an increase in the arrears rate for loans to incorporated businesses, up from 0.7 per cent in December 2007 to 1.2 per cent in June 2008, this largely reflects the problems in property-related businesses (Graph 68). The arrears rate on loans to unincorporated businesses has not risen over the past year, notwithstanding some movements from quarter to quarter. For both types of businesses, the current arrears rates are similar to those in 2003 and 2004.

Graph 66

Change in Bank Lending to Business

Non-seasonally adjusted, quarterly

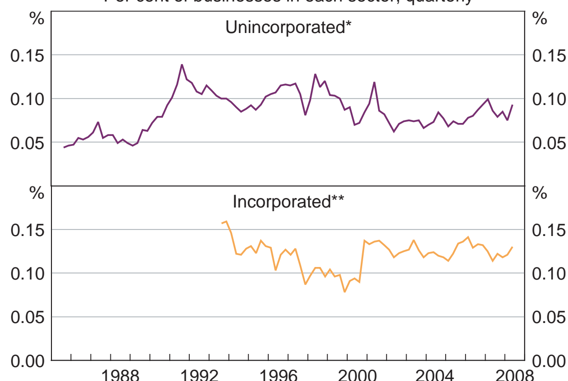


Sources: APRA; RBA

Graph 67

Business Failures

Per cent of businesses in each sector, quarterly

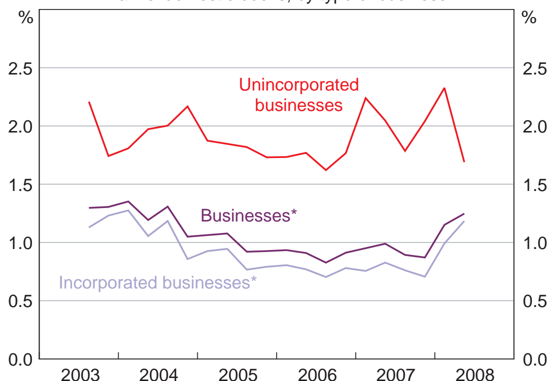


* Business bankruptcies
** Corporate receiverships and liquidations
Sources: ABS; ASIC; ITSA; RBA

Graph 68

Non-performing Business Assets

Banks' domestic books, by type of business

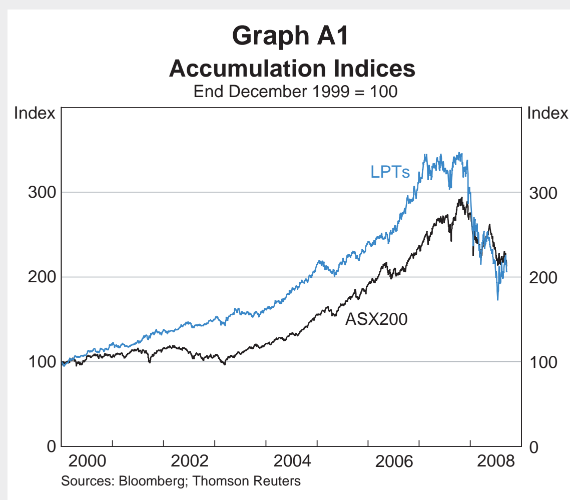


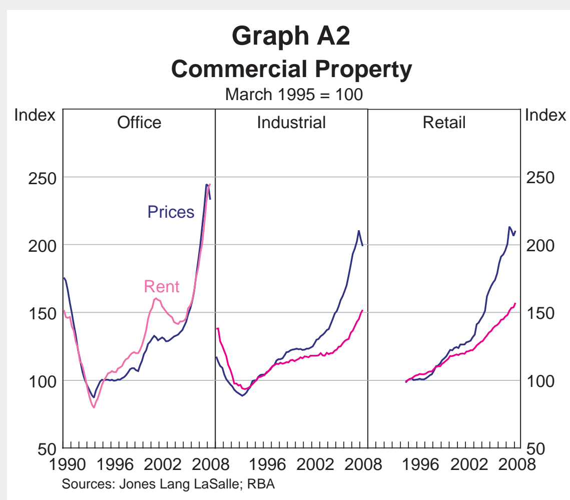
* Includes bill acceptances and debt securities
Source: APRA

Box A: Australian Listed Property Trusts

As an actively traded investment class, listed property trusts (LPTs) provide an indication of conditions in the commercial property market. Available evidence suggests Australian LPTs own around one third of domestic commercial property, with ownership of the remainder divided reasonably evenly between unlisted property trusts and institutional investors. Australian LPTs also invest in commercial property overseas, with around one quarter of their assets located in the United States and a further 10 per cent in other countries, mainly in Europe.

LPTs have traditionally been considered a relatively defensive investment that provide stable dividend income. Over the period from 2000 to 2007, the average annual return on LPTs was 14 per cent, which was similar to, although less volatile than, the average return for the broader equity market (Graph A1). This strong performance was underpinned by robust growth in domestic commercial property prices, with office, retail and industrial property prices increasing at average annual rates of around 7 to 10 per cent over this period (Graph A2).

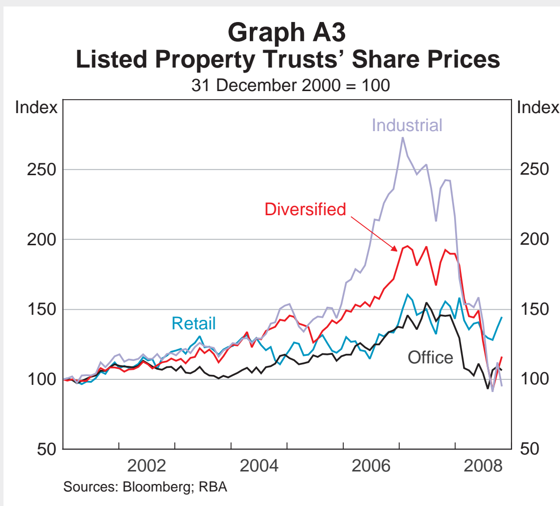


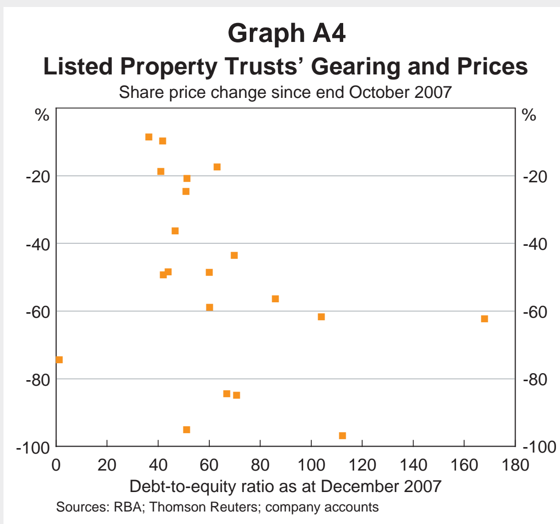


One factor supporting prices over recent years has been the strong growth in economic activity. This is particularly evident in demand for office space, with the national vacancy rate having fallen sharply in recent years to just over 4 per cent, around its historical low, and office rents increasing at an average annual rate of 8 per cent since 2000. Another factor has been the favourable financial environment, and in particular the global search for yield which saw a fall in risk

premia demanded by investors and low interest rates around the world. Moreover, credit was readily available to the commercial property sector.

As with many investors around the globe, domestic LPT managers responded to the favourable macroeconomic and financial conditions over recent years by increasing leverage. Reflecting this, the average debt-to-equity ratio on LPTs has increased, rising from around 50 per cent in 2000 to around 70 per cent currently. Available data suggest that around half of LPT debt is sourced from capital markets, with the remainder from Australian and foreign banks.





The recent turmoil in global markets has seen significant declines in the share prices of many highly leveraged entities, including LPTs. Moreover, some LPTs that relied on short-term funding have experienced difficulties rolling over debt, and access to commercial paper markets, particularly in the United States, has also been limited. In response, some LPTs have cut dividends and have sought to lower gearing through asset sales and by increasing equity, either by introducing a dividend reinvestment plan or seeking additional capital. Since November 2007, LPTs have underperformed the broader equity market, with the LPT index falling by 36 per cent, compared with a 25 per cent decline in the ASX 200. The decline has been largest for LPTs investing in the industrial and diversified sectors and for the most heavily geared LPTs (Graph A3). For example, the share prices of the 5 most heavily geared LPTs have fallen by an average of around 70 per cent since end October 2007 (Graph A4).

The falls in LPTs' share prices have also reflected downward revisions to expected earnings, with

rental income growth forecast to slow and rental yields expected to rise as risk is repriced. Concerns about exposure to markets with deteriorating economic outlooks, such as the United States and United Kingdom, have also weighed on some LPTs. ✠

Developments in the Financial System Infrastructure

Crisis Management Arrangements

Events in the global financial system over the past year have focused attention on the arrangements for dealing with difficulties in markets and in individual financial institutions. As discussed in earlier chapters, Australia's financial markets and institutions have performed well through the recent turmoil and its regulatory system is highly regarded. Notwithstanding this, the Australian authorities – primarily under the auspices of the Council of Financial Regulators – have continued to examine crisis management arrangements in Australia. In particular, the Council – whose members comprise APRA, ASIC, the Treasury and the RBA – has considered the various recommendations of the Financial Stability Forum (FSF) as well as potential lessons from the problems experienced by institutions such as Northern Rock in the United Kingdom, and Bear Stearns in the United States.

Financial Claims Scheme

For some time the Council has seen a need for the introduction of a scheme that would provide depositors with timely access to at least some of their deposits in a failed Authorised Deposit-taking Institution (ADI). The events surrounding Northern Rock reinforced this view. The introduction of such a scheme was also supported by the IMF as part of its assessment of the Australian financial system in 2006 and is consistent with the recent recommendations of the FSF. In response, in June this year the Government announced its intention to establish a *Financial Claims Scheme* under which depositors in a failed ADI and policyholders in a failed APRA-regulated general insurer would be provided with timely access to funds owed to them. In relation to ADIs, the up-front payments under the Scheme to individual depositors would be capped at $20 000 per depositor.

This approach strengthens the existing provisions of the *Banking Act* which give depositors first claim over the assets of a failed ADI. If activated, the Scheme would be administered by APRA, with the necessary payments initially being funded by the Government. APRA, on behalf of the Commonwealth, would also be able to borrow from the Reserve Bank for the purpose of the Scheme. APRA would then have first claim over the assets of the failed entity. Only in the highly unlikely situation that APRA was unable to recover the full cost of the Scheme through the sale of the failed ADI's assets, would an industry levy be required.

Memorandum of Understanding Between the Members of the Council of Financial Regulators

Throughout the recent turmoil in financial markets the various regulators in Australia have been in close contact with one another. The Council of Financial Regulators has discussed developments in the Australian and international financial systems on a regular basis and there

has been a steady exchange of information between the Reserve Bank and APRA on a range of policy and operational issues. These arrangements have worked very well and reflect the strong relationships among the various members of Council. In an effort to further strengthen these relationships and to improve public understanding of the responsibilities of each of the agencies, the Council members have recently agreed on a joint Memorandum of Understanding (MOU) dealing specifically with crisis management arrangements. This MOU is being publicly released on 25 September 2008 and can be found on the websites of all four agencies and is reproduced at the end of this Chapter.

The MOU reflects the strong commitment of Australia's regulatory agencies to the open exchange of information and to a co-ordinated response to potential threats to the stability of Australia's financial system. The release of this document should help public understanding of the responsibilities of each of the agencies in the areas of financial stability and the objectives and principles that would guide their response to potential threats to financial stability.

Other Activities of the Council of Financial Regulators

The Council has also been considering other aspects of crisis management, including options for dealing with a severely troubled institution whose immediate closure might be expected to have significant effects on the stability of the financial system. Following this work, the Government has accepted the Council's recommendations for a number of changes to current legislation including: providing enhanced arrangements for transfer of business in banking, general insurance and life insurance, with appropriate oversight by the courts or APRA; and facilitating the recapitalisation of failing entities by removing some potential legal barriers. Legislation to give effect to these changes, as well as the *Financial Claims Scheme,* is currently being drafted with the expectation that it will be introduced later this year.

Another aspect of crisis management arrangements identified by the FSF is the need for cross-border information sharing and cooperation in a crisis. This is particularly an issue for Australia and New Zealand, given that Australian banks have significant operations in New Zealand, with these operations accounting for around 90 per cent of New Zealand banking system assets. Reflecting this, the members of the Council of Financial Regulators and the Trans-Tasman Council on Banking Supervision are working together to strengthen current arrangements for dealing with potential stresses in a bank with operations on both sides of the Tasman Sea, as well as arrangements for the exchange of information more generally.

Over the past year, the Council has also considered the results of a pandemic stress test of the insurance industry conducted by APRA, and the policy responses to the failure of a number of property companies offering unlisted and unrated debentures to the public (see below).

Other Actions Being Undertaken to Address FSF Recommendations

As discussed in *The Global Financial Environment* chapter, in April 2008 the FSF made a number of recommendations to improve the resilience of markets and institutions. In June 2008, the Treasurer announced Australia's comprehensive response to these recommendations. In addition to those measures concerning crisis management outlined above, this response detailed the actions being taken by individual Council members, some of which are outlined below.

In response to the FSF recommendation to examine the role and regulation of **credit rating agencies**, particularly in relation to structured and securitised products, the Treasury and ASIC are consulting with the ratings agencies and the industry on how to improve the quality of the rating process. This includes examination of: how to manage the conflicts of interest in rating structured products; the extent to which investors rely on the ratings agencies; and whether the level of diligence and discussion undertaken by agencies warrants this reliance. The review will also examine financial product research houses, in particular, the role they played in providing advice to investors in several recent major corporate collapses. The Treasury and ASIC expect to report to the Government towards the end of 2008.

The FSF also highlighted the need for more attention to be paid to the management and supervision of **liquidity**. As detailed in the March 2008 *Review*, APRA had begun an extensive review of its approach to liquidity risk management prior to the onset of the recent turmoil. It plans to strengthen the current liquidity regime by: enhancing supervisory information on ADIs' liquidity positions; strengthening ADIs' approaches to liquidity stress testing, including potentially determining new "minimum survival" scenarios involving a protracted period of market disruption; and enhancing ADIs' contingency planning in respect of retail run management strategies. In doing so, APRA will take into account the output of a working committee of industry participants, which has recently been established to translate the draft *Principles for Sound Liquidity Risk Management and Supervision* developed by the Basel Committee on Banking Supervision (BCBS) into new liquidity rules.

The BCBS principles are based on the premise that a bank's liquidity risk framework should ensure it maintains sufficient liquidity to withstand a range of stress events, including those that affect secured and unsecured funding. They underscore the importance of establishing a robust liquidity risk management framework that is well integrated into the bank-wide risk management process. The principles also strengthen expectations about the role of supervisors, including the need to intervene in a timely manner to address deficiencies in liquidity management and the importance of communication with other supervisors and public authorities, both within and across national borders.

Another of the FSF recommendations is for financial institutions to strengthen their **risk disclosure** in relation to exposures to certain instruments that the market now recognises as involving more risk than previously appreciated. To assist this, a template was developed incorporating leading-practice disclosures in areas such as collateralised debt obligations, residential and commercial mortgage-backed securities and leveraged finance. To give effect to this recommendation, the Reserve Bank Governor wrote to internationally active banks in Australia encouraging them, where relevant, to draw on the template in considering what additional information they could provide in their next reporting cycle.

The FSF has also called for flexibility in **central banks' operational frameworks**. The Reserve Bank's long-standing arrangements meant that it was well placed to respond to the turmoil in interbank markets that began around the middle of last year. These arrangements are very flexible, with the RBA dealing in the market every day and able to deal with a wide range of counterparties, in a wide range of securities and across a wide range of maturities. The Bank's initial response, in August 2007, was to significantly boost the pool of exchange settlement

funds that commercial banks hold at the RBA, in order to maintain the cash rate at the target set by the Reserve Bank Board. Also, as outlined in *The Australian Financial System* chapter, in September last year the Bank broadened the pool of securities it would accept under 'repo' to include some commercial bank paper not previously accepted and certain residential mortgage-backed securities and asset-backed commercial paper. The Bank has also lengthened the maturity of its operations significantly, indicating at various times that its preferred term for repos was around one year.

Prohibition on Short Selling of Equities

In response to the extremely unsettled market conditions over recent weeks and international actions, ASIC has introduced a ban on the short selling of all listed stocks, with the ban effective from 22 September 2008. The ban is subject to a small number of exceptions, including to permit limited hedging activity, particularly by market-makers. In announcing the ban, ASIC noted that while short selling can play a valuable role, recent market conditions and extensive short selling of stocks created the risk of unwarranted price fluctuations which, if left unchecked, could threaten the operation of fair and orderly stock markets.

The current ban will be re-assessed in October, at which time an announcement will be made on whether to re-allow covered short sales for non-financial stocks. A 'covered' short sale is a sale of a product that the seller, at the time of sale, does not currently own, but does have a presently exercisable and unconditional right to vest in someone else – typically through a binding securities lending agreement. The ban will otherwise apply until the Government's short selling legislation becomes effective.

ASIC has also exercised its powers under the Corporations Act to require the disclosure of covered short sales. This will also continue until the implementation of the foreshadowed legislation in this area. Previously, disclosure was only required for those securities involving so-called naked short selling. In practice, at least until late October, the new disclosure requirement will apply only to the covered short sales exempt from the prohibition.

Developments in Payment and Settlement Systems Infrastructure

As outlined in the March 2008 *Review*, wider competition in the provision of market services for equities is currently under consideration, with three companies, AXE ECN, Chi-X Australia and Liquidnet Australia having applied for market licences to operate trading platforms for ASX-listed equities. The platforms would compete directly with the ASX market. In March 2008, ASIC provided advice to the Minister for Superannuation and Corporate Law on these applications and the regulatory framework that might apply to these new trading platforms; the Minister is currently considering that advice.

The prospect of new trading platforms has required ASX to consider in detail how it might open access to its clearing and settlement facilities. As part of this process ASX has conducted a series of public consultations, the most recent of which, released in July 2008, outlined the proposed processes and information flows between the aspirant trade-execution-only platforms and the Clearing House Electronic Sub-register System (CHESS). Further input from settlement and clearing participants and other stakeholders is being sought in order to refine the operational and systems solutions.

The Reserve Bank has oversight responsibility for financial stability and risk issues arising from clearing and settlement arrangements in the Australian equity market. Reflecting this responsibility, the Bank has established Financial Stability Standards for licensed clearing and settlement facilities and reports publicly on its assessment each year. While the Bank is satisfied that the facilities are meeting these standards, in late January 2008, the inability of a participant to meet its payment obligations resulted in settlements in the Australian equity market being delayed on two occasions. There was never any doubt that the central counterparty for equity transactions, the Australian Clearing House, would be able to meet its obligations, but the settlement delays prompted the Bank to examine whether some changes to the settlement procedures in the Australian equity market could make the settlement process more robust.[2]

Settlement of most equities transactions in Australia occurs in a single daily batch process run by CHESS, which is owned and operated by ASX. This batch process reduces all scheduled securities transfers, including both novated and non-novated transactions, to a single net transfer per line of stock for each participant. Settlement occurs on a delivery-versus-payment basis, with associated interbank payment flows settled across Exchange Settlement accounts at the Reserve Bank, also on a net basis. Netting reduces the amount of equities and funds that need to change hands, providing benefits to participants, but introduces additional interdependencies.

As part of the *Review of Settlement Practices*, the Reserve Bank considered possible fundamental changes to current settlement arrangements, concluding that a move to a system in which settlement occurs on a trade-by-trade basis would reduce the dependence of market-wide settlements on a single participant. However, neither ASX nor market participants are persuaded of the need to move to a new settlement model, citing, in particular, the considerable cost of transition. While the Bank continues to view such a change as worthy of consideration over the medium term, it does not see the matter as being so pressing as to require a change through regulation. In the meantime, the Bank sees a strong case for modifications to existing batch settlement arrangements to increase their robustness. One modification considered in the *Review* is the introduction of an explicit window for completion of settlement. Other possible refinements include: the clarification of lines of communication and deadlines for decisions, including by settlement banks; and amendment to the cut-off time for new settlement instructions, so as to allow more time prior to batch settlement for participants to ensure that securities and funds are in place. These, among other options, are currently under consideration by ASX, in consultation with the Reserve Bank. In the *Review*, the Bank also examined potential changes to arrangements for dealing with settlement fails. ASX has since increased the fees applying to failed trades and has announced prospective new arrangements for the forced close-out of trades remaining unsettled beyond the fifth day after trade date.

The Reserve Bank has also been discussing with industry participants ways of improving the disclosure of securities lending activity. Improved disclosure in this area would help enhance participants' understanding of settlement risk and would be complementary to improved disclosure of short selling. One option that the Bank is considering is an amendment to the *Financial Stability Standard for Securities Settlement Facilities* to effectively require ASX to collect and publish data on securities lending activity. The Bank is currently discussing this possibility with industry participants.

2 *See Reserve Bank of Australia (2008),* Review of Settlement Practices for Australian Equities, *May.*

Account Switching

In February 2008, the Treasurer and the industry announced a reform package aimed at making it easier for retail customers to move their business between financial institutions. Elements of the initiative include a single consumer complaints hotline, comprehensive consumer education resources and an ASIC-led industry review of entry and exit fees. Another key element of the package is the introduction of a 'listing and switching' service in relation to transaction accounts, to simplify the process of identifying existing direct debit and credit transactions (for example, payroll and bill payments) and redirecting these to the customer's new account. Currently, identifying and redirecting these payments can be a difficult and time consuming process and can limit competition by discouraging customers from moving between financial institutions.

The Australian Bankers' Association and Abacus-Australian Mutuals (the industry association for building societies, credit unions and friendly societies) have committed to the introduction of this service, which is being co-ordinated through a group convened by the Australian Payments Clearing Association (APCA). The key elements of the service include:

- upon request, a customer's old financial institution will provide a list of direct debit and credit arrangements over the previous 13 months to the customer. The list will be provided as soon as practicable and no later than five business days after the customer's request;
- the new financial institution will provide the customer with information and support to help the customer make the switch. Institutions will provide customised 'switching packs', taking into account guidelines provided by APCA; and
- if requested by the customer, the customer's new financial institution will assist in notifying billing and crediting organisations of new direct debit and direct credit arrangements.

The industry has committed to having the listing and switching service operational by 1 November 2008. APCA has provided regular progress reports to the Reserve Bank and these have been made available on the Bank's website.[3]

Regulation of Credit and Financial Services

In June 2008, the Government released a paper on *Financial Services and Credit Reform* discussing options to improve, simplify and standardise regulation of financial services and credit. The paper included options for reform across six broad areas involving: the development of a comprehensive approach to the regulation of mortgages and mortgage broking advice and non-bank lenders; the regulation of margin lending; the creation of a national market for trustee corporations; reforms to improve the existing regulation of debentures; issues relating to property investment advice; and consideration of the most appropriate regulation of credit products, such as credit cards and personal loans.

Following consultations across the different levels of government and with the business and consumer sectors, the Council of Australian Governments (COAG) agreed that the Commonwealth should assume responsibility for the regulation of all consumer credit (that is, personal loans, credit cards, pay day lending and micro loans), as well as for regulating mortgages, mortgage brokers, non-bank lenders, trustee companies and margin loans. This is a welcome

3 *These reports are available at:* www.rba.gov.au/PaymentsSystem/Reforms/ASI/index.html

development, given that consideration of some of these issues, for example, the introduction of consistent national regulation of mortgage brokers, had been under consideration for many years. A plan for implementation of this agreement, drawing on the comments received on the consultation paper, is to be presented to COAG before the end of 2008.

Efforts to Improve Disclosure

As reported in the March 2008 *Review*, ASIC has taken a number of steps over the past year to improve disclosure requirements applying to unlisted and unrated debentures. These include: the establishment of disclosure benchmarks in areas such as equity capital, liquidity, related-party transactions and credit ratings; and the requirement that if issuers do not meet these benchmarks, they are required to explain why this is so (known as the 'if not, why not' approach). ASIC has examined the implementation of the new regulatory measures and while it found significant improvements in the quality of disclosure to retail investors, it also considered that some refinements to the practical implementation aspects of the requirements were warranted. Accordingly, in August 2008, an updated regulatory guide was released that clarified some of the implementation aspects of the disclosure benchmarks, as well as the obligations for issuers who on-lend funds indirectly through a related party and the auditors' report on the benchmarks. This guide also confirmed that the arrangements do not apply to debentures that are to be quoted on a financial market, or ones that are convertible into listed securities at the discretion of the investors.

In line with the efforts to improve disclosure of unlisted debentures, regulatory guides aimed at improving disclosure to retail investors in other unlisted schemes have been released by ASIC. Drawing on the model adopted last year for debentures, and following consultation with interested parties, companion investor guides for unlisted mortgage and property schemes have been produced to assist investors in understanding the enhanced disclosure and making better informed investment decisions.[4]

For unlisted mortgage schemes, a benchmark-based disclosure model has also been developed. These benchmarks differ from the ones introduced for debentures reflecting the different risk profile of unlisted mortgage schemes and the different legal structures and rights associated with this type of investment. As with debentures, however, the issuers are required to disclose against the benchmarks on an 'if not, why not' basis. ASIC requires responsible entities for existing mortgage schemes to report against the benchmarks to existing investors by 30 November 2008. From this date, new fundraising documents for mortgage schemes will need to address the benchmarks and ASIC will conduct a review of disclosure practices against the new requirements.

Regarding unlisted property schemes, ASIC has developed disclosure principles designed to give issuers guidance on key areas that need to be prominently disclosed to existing and potential retail investors in order to allow investors to compare the relative risk and return of unlisted property scheme investments. The new principles have to be applied by 30 November 2008 for open schemes, while closed schemes have been allowed a longer time period for transition, with

4 *Investors in a mortgage scheme receive income based on loans for property development, whereas investors in a property scheme receive income based on rents and capital appreciation upon disposal of assets.*

these schemes having until 31 March 2009. After this ASIC will review the unlisted property schemes sector to see whether the guidance has improved investor disclosures, as well as the impact on the sector of any changes in market conditions.

More generally, the issue of financial disclosure documentation is being examined by the Australian Government's newly established Financial Services Working Group. This Group was initially asked to examine financial disclosure documentation for the First Home Saver accounts, before turning to the broad task of examining product disclosure documentation across the financial services arena. The Working Group is also examining the issue of the availability of advice on choices within an existing superannuation account (intra-fund advice), with a view to identifying steps that could be taken to help more consumers get access to low-cost advice.

Cross Border Recognition of Financial Regulation

The Australian Government is examining the framework for Australian investors to access other well regulated capital markets, advisers and products, subject to ensuring the integrity of financial markets and protection of investors. A joint consultation paper on this issue was released in June 2008 and included proposals to develop a mutual recognition framework to be applied in agreements between Australia and overseas jurisdictions as well as to refine ASIC's existing framework of unilateral recognition of securities regulation.

The general approach of the Australian Government to recognising foreign regulation of financial markets and financial services providers has been based on unilateral recognition of the foreign jurisdiction. This means that a foreign entity operating both in Australia and the foreign jurisdiction will need to comply with only the foreign regulatory regime; not all the Australian regulatory requirements need to be complied with and the foreign jurisdiction need not recognise Australian regulation. This policy allows Australian investors to benefit from access to markets and financial services without the foreign-service provider being subject to duplication of regulation.

In order to better enhance the effectiveness of the Australian arrangements, the consultation paper proposes both refinements to the unilateral approach and a framework for mutual recognition of securities regulation. Mutual recognition would enable an Australian entity to operate in a foreign jurisdiction on the basis of compliance with the Australian regulatory framework and vice-versa. One of the pre-conditions of mutual recognition is that the regulatory framework of each jurisdiction must be substantially equivalent, thus ensuring investor protection and market integrity irrespective of the location of the investor.

Separate from this process of consultation, there have also been developments on mutual recognition with individual countries. In June 2008, Australia undertook its first mutual recognition agreement with New Zealand on securities offerings. Issuers of securities can now use one prospectus to offer shares, debentures or managed or collective investment schemes to investors on both sides of the Tasman Sea, subject to certain requirements. Following this, Australia and Hong Kong extended mutual recognition to authorised collective investment schemes that will facilitate the sale of retail funds in each other's market. Furthermore, in August 2008 Australian authorities signed a third mutual recognition arrangement, this time with the United States Securities and Exchange Commission. ✠

MEMORANDUM OF UNDERSTANDING ON FINANCIAL DISTRESS MANAGEMENT

BETWEEN THE MEMBERS OF THE COUNCIL OF FINANCIAL REGULATORS

This Memorandum of Understanding (MOU) between the members of the Council of Financial Regulators (Council) sets out the objectives, principles and processes for dealing with stresses in the Australian financial system.

The MOU identifies the responsibilities of each Council member and is intended to facilitate a coordinated response to stresses in the financial system.

1. Introduction

The Council's membership comprises representatives of the Reserve Bank of Australia (RBA), the Australian Prudential Regulation Authority (APRA), the Australian Securities and Investments Commission (ASIC) and the Treasury. The Council is chaired by the Governor of the RBA.

The Council provides a forum for facilitating coordination among the members in order to ensure prompt and effective identification of, and responses to, developments that pose a threat to the stability of the financial system.

The circumstances to which this MOU relates include, but are not limited to, the following:

- financial distress in an authorised deposit-taking institution (ADI), general insurer, life insurer or superannuation fund;
- disruption to financial markets; or
- interruptions to the smooth functioning of financial system infrastructure (including payment and settlement systems).

2. Responsibilities of the Council and member agencies

The Council's objectives are to contribute to the efficiency and effectiveness of regulation and to promote stability of the Australian financial system.

Each member is fully responsible for discharging its own responsibilities within its statutory mandate.

The responsibilities of each member for dealing with stress in the financial system are as follows:

- The RBA has primary responsibility for the maintenance of overall financial system stability, including stability of the payments system, and for providing liquidity support to the financial system or to individual financial institutions where appropriate.

- APRA is responsible for the prudential supervision of banks, building societies, credit unions, life and general insurance companies, friendly societies and certain superannuation funds. In performing its functions to protect the interest of depositors, policyholders and fund members, APRA is required to balance the objectives of financial safety and efficiency, competition, contestability and competitive neutrality and, in balancing these objectives, is to promote financial system stability in Australia. APRA has failure management and enforcement powers to deal with a distressed institution and will be responsible for administering the Financial Claims Scheme (FCS).
- ASIC is responsible for monitoring, regulating and enforcing corporations and financial services laws, and for promoting market integrity and consumer protection across the financial services sector and the payments system.
- The Treasury provides advice to the Government on policy and possible reforms that promote a sound financial system, including on financial distress management arrangements. The Treasury has responsibility for advising the Government on matters relating to the exercise of the Treasurer's powers, and on the broader economic and fiscal implications of developments that pose a threat to the stability of the financial system.

Each agency has responsibility for liaising and coordinating responses with its equivalent agencies in other countries in situations where financial stress has cross-border implications.

3. Objectives of financial distress management

In exercising their respective financial distress management responsibilities Council members will seek to balance the following objectives:

- Protecting depositors, policyholders or superannuation fund members, with a view to avoiding or minimising losses where possible.
- Maintaining the stability of, and confidence in, the financial system.
- Resolving the distress situation effectively and as quickly as practicable.
- Ensuring that the owners, directors and management of a distressed or failed institution bear appropriate responsibility.
- Minimising the economic and fiscal impacts of any financial distress resolution arrangements, and maintaining appropriate market disciplines.

4. Principles that guide decisions and actions

Private sector or market-based solutions are generally the preferred means of responding to financial system distress. However, there may be circumstances where a public sector response is required in order to satisfactorily resolve a financial distress situation. In these circumstances, and where Council members need to exercise any of the statutory powers available to them, the following principles will be considered:

- The response will be guided by the relevant statutory objectives of each member and the objectives referred to in this MOU.

- In considering the most appropriate means for resolving financial distress, the impacts on the broader economy will be taken into account.
- Any resolution option will also take into account short- and long-term benefits, costs and risks.
- Communication will be timely, coordinated and focused on the information needs of stakeholders.
- The response to financial distress will take into account cross-border implications where relevant, with a view to achieving a satisfactory outcome for all affected jurisdictions, subject to ensuring that the outcome meets the needs of the Australian financial system and depositors, policyholders and fund members in Australia. Trans-Tasman issues are particularly important in this context, given the integration between Australia and New Zealand in the financial area and relevant legislative mandates.

5. Financial distress: detection and responses

The process for monitoring and responding to emerging financial distress includes the following elements.

5.1 Detection of emerging distress

The Council members have the following responsibilities for detecting emerging distress in the financial system:

- The RBA has lead responsibility for monitoring financial markets, and payment and settlement systems, and for advising the Treasurer or other relevant Minister on emerging distress in these markets and systems.
- APRA has lead responsibility for monitoring and prudentially supervising financial institutions. It also has statutory responsibilities to advise the Treasurer or other relevant Ministers in the event that a supervised institution is unable, or about to become unable, to meet its financial obligations.
- ASIC has lead responsibility for monitoring financial service providers and for advising on emerging vulnerabilities in this area.
- The Treasury, through its liaison activities with industry and other agencies, will inform the other Council members of any concerns regarding the financial system or a particular institution and seek their advice on these matters for the purpose of keeping the Government apprised of the situation.

Notwithstanding these responsibilities, once a Council member becomes aware of an emerging vulnerability or distress situation that is relevant to the responsibilities of the other members, it will advise the other members as a matter of urgency. In particular, Council members will advise each other as early as possible of information that gives rise to concerns on the condition of a financial institution or market, and in respect of potential threats to financial stability.

Timely advice will be provided to the Treasurer and the Treasury on developments and proposed steps to be taken, both in regard to a distressed institution and potential threats to financial stability and the economy.

5.2 Assessment of financial stress and implementation of response options

If significant potential or actual financial distress has been identified, the Council serves as a coordination forum for assessing the situation and considering possible response options. If a decision and its implementation fall directly within the responsibility of a Council member, that agency is responsible for that decision.

Members of the Council have the following responsibilities:

- The RBA has lead responsibility for assessing and advising on the nature and scale of the systemic impact of significant financial stress, including implications for financial markets and the payments system. The RBA is also responsible for evaluating and implementing response options that involve liquidity support or the use of payments system powers.
- APRA has lead responsibility for assessing and advising on the nature and extent of financial distress in a supervised institution, including liquidity and solvency, and for evaluating and implementing supervisory response options relating to any affected institutions. In particular, APRA is responsible for decisions relating to the investigation of a supervised institution, giving directions to such an institution, appointing a statutory manager to an ADI, giving directions to a statutory manager, and recommending to the court that a judicial manager be appointed to a general insurer or life insurer. If the FCS has been invoked in respect of an ADI or general insurer, APRA has responsibility for administering the FCS in respect of that institution.
- ASIC has lead responsibility for assessing and advising on the regulatory implications of the situation for financial markets and investors, the disclosure implications of any resolution option, and for liaising with market operators. ASIC is responsible for decisions relating to public disclosure statements by institutions that are subject to the Corporations Act.
- The Treasury has lead responsibility for providing policy advice to the Government, through the Treasurer, on any responses that involve Government action.

Where a Council member's action could impact on the performance of responsibilities by another member or where the action may have implications for the overall response to the distress situation, the first member will ensure sufficient notice of the proposed action is provided.

5.3 Coordination of response

The implementation of a response to resolve a distressed institution or broader financial system stress will be coordinated between the members of the Council, where more than one member has responsibility for responding to the situation.

Where the Treasurer or the Government makes a decision on a response, the Treasury will inform the other Council members of that decision as early as possible. The members of the Council will work together to implement the Government's decision.

The Council members will keep the Treasurer and the Treasury informed on the progress of the implementation of a response to financial stress.

5.4 *Coordination of communication*

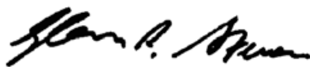
Each member will develop and implement communications with stakeholders, including public communications, in its respective areas of responsibility. Where the response involves actions by more than one Council member, communications are to be coordinated across members of the Council, and with the Government.

Subject to their statutory obligations, Council members have the following particular responsibilities:

- The RBA has responsibilities for public communications on liquidity support and the payments system.
- APRA has responsibilities for public communications on supervisory actions taken with respect to supervised institutions and implementation of the FCS. APRA is responsible for communications regarding individual supervised institutions prior to any coordinated response.
- ASIC has responsibility for public communications relating to the Corporations Act and regulatory actions taken in relation to financial markets.
- The Treasurer/Government has lead responsibility for communicating to the public any resolution options that involve a Government decision, including the decision to apply the FCS to an ADI or general insurer.

5.5 *Cross-border cooperation*

Members will endeavour to assist each other in meeting cross-border cooperation obligations.



Glenn Stevens
Governor
Reserve Bank of Australia

John Laker
Chairman
Australian Prudential Regulation Authority

Tony D'Aloisio
Chairman
Australian Securities and
Investments Commission

Ken Henry
Secretary
The Treasury

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