

FINANCIAL STABILITY REVIEW

March 2007

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Reserve Bank

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Overview

Over recent years, financial systems around the world have benefited from generally favourable economic and financial conditions. The world economy has grown at an above-average pace over the past four years and, for most of this period, volatility in financial markets has been unusually subdued. In addition, credit spreads generally remain low, many asset prices are at historically high levels, and financial institutions in Australia and elsewhere are recording strong profit growth, with problem loans at quite low levels. Against this favourable background, the past month has seen an increase in volatility in some markets, and notably, a sharp pick-up in loan arrears in sub-prime residential mortgages in the United States.

The generally favourable conditions of recent years have persisted despite a number of potential setbacks. A few years ago there were concerns that when the major central banks started increasing short-term interest rates there might be sharp adjustments in financial markets. In the event, these concerns were not realised, although the process of returning interest rates to more normal levels still has a way to run in Japan. More recently, financial markets have reacted calmly to events that, in the past, might have been the catalyst for disruptive adjustments (for example, the Thai coup and the imposition of capital controls, the disputed Mexican election, and the failure of Amaranth, a large hedge fund).

There are a number of (not mutually exclusive) possible explanations for this recent strong performance of the global financial system.

One is that it represents an appropriate response to the greater macroeconomic stability and low inflation of the past decade or so. If this greater stability is here to stay, then term and credit risk premia should be lower than previously, leverage can be higher without implying more risk, and higher asset prices are justifiable. Complementing these developments, the robustness of the financial system has been reinforced by the wider dispersion of credit risk among investors, a trend facilitated by innovative developments in credit risk transfer markets. The main debate here is over the extent to which the macro and financial stability of the past decade is likely to continue.

A second explanation is that financial pricing has been heavily influenced by developments in Asia and, in particular, the high savings rates relative to investment in that part of the world. In the first instance, this saving, finding its way into global capital markets, has put downward pressure on government bond yields and the cost of capital to businesses and households. Given the macroeconomic stability of recent years, investors have been prepared to buy a range of alternative assets, pushing up their prices – the so-called ‘search for yield’. They have also been prepared to increase leverage, and have been encouraged to do so by the low level of interest rates, particularly in Japan. The main debate here is over the sustainability of this flow of savings from Asia and other capital exporting countries to the rest of the world.

There are also a variety of views as to the implications of these favourable outcomes for the future stability of the global financial system.

Many investors appear to be behaving as though the benign macroeconomic environment will continue for the foreseeable future and/or that the flow of saving from Asia will not come to an end in a disruptive fashion. Underlying this behaviour may be an assessment that policy-makers, armed with more robust and credible policy frameworks, can continue to oversee muted business cycles and low inflation.

A more cautious interpretation is that while the global economy is indeed more stable than in the 1970s and 1980s, and recent trends may well be sustainable for a time, there inevitably remains some probability of a significant recession at some point. In the event that such a recession did occur, the need to restructure more leveraged balance sheets, and for asset prices to adjust, could significantly amplify the downturn.

A decidedly more pessimistic view is that the current favourable environment is inexorably sowing the seeds of its own demise, with investors seriously underestimating risk and taking on too much leverage. According to this view, the longer the underestimation of risk continues, the greater the imbalances in the system are likely to become, and hence the greater the potential for disruption when the correction takes place.

It is difficult to dismiss the view that the world economy is more stable than in previous decades, and that there is a reasonable probability that global capital markets will adjust without significant disruption to a change in the saving-investment dynamics in Asia or other shocks. At the same time, since valuations in a number of markets appear to be based on quite optimistic assumptions about future conditions, central banks and regulators charged with safeguarding financial stability need to pay attention to the downside risks attached to the otherwise favourable environment.

Turning to the domestic economy, the downside risk that has attracted most attention over recent years is the possibility that adjustments in household balance sheets following the housing boom could amplify an economic downturn. There are, however, very few signs of this risk materialising, although households are taking a more cautious approach to their finances than they were a few years ago. Surveys suggest that, in aggregate, households are generally positive about the outlook for their personal finances, and while mortgage arrears have increased following the general lowering of credit standards over the past decade, they remain relatively low both by historical and international standards. There are some pockets where household finances are under strain, particularly in western Sydney, and among households that took out loans with high loan-to-valuation ratios in 2003 and 2004, but the overall picture remains, at present, quite reassuring.

Recently, a second area of interest has been developments in the business sector. Over the past decade, the Australian business sector has had a relatively low level of gearing after the problems in the early 1990s. There are, however, some signs that this period of conservative leverage may be starting to draw to a close, with growth in business credit up significantly on rates a few years ago. Perhaps the clearest manifestation of this change has been the recent spate of leveraged buyout activity by private equity funds, which has led to pockets of significantly increased leverage within the corporate sector. Overall though, while this trend may well have some way to run, business balance sheets currently remain in good shape.

In the financial sector, both the banking and insurance sectors continue to record high rates of return on equity, benefiting from continued balance sheet expansion, low levels of non-performing loans and the strong performance of equity markets. While there has been robust competition in lending to households for a number of years, recently there has also been a noticeable pick-up in competition for business lending, with margins under downward pressure and an easing of lending conditions. As has been the case for some time, the challenge for financial institutions is how best to measure, and price for, risk in an economy that is now in its 16th year of expansion. ❧

The Macroeconomic and Financial Environment

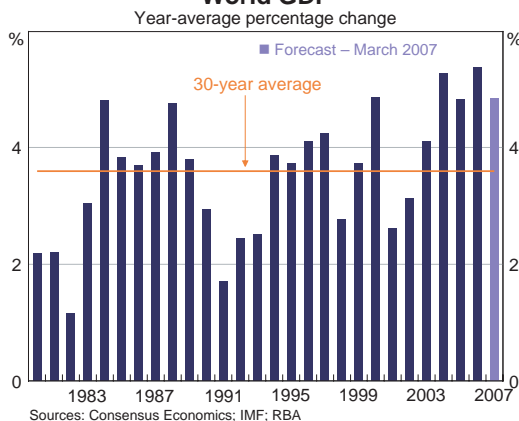
The International Environment

Over the past four years, the global macroeconomic environment has provided a very supportive backdrop to many financial systems around the world. Over this period, the world economy has grown at well above its long-run trend rate and both short- and long-term interest rates have been below average, and at multi-decade lows for a time, in some countries (Graph 1). Corporate profitability has been strong, default rates have been low by historical standards, and volatility in financial markets has generally been subdued. Not surprisingly, in this environment many asset prices have risen significantly and investors have been prepared to seek out alternative assets and increase leverage in an effort to lift their returns.

Against the background of these very favourable operating conditions, there have been occasional periods of heightened concern about a return to a less benign environment. In 2003, for example, some observers were concerned that the commencement of the process of returning interest rates to more normal levels in the United States could be a catalyst for greater volatility in financial markets. More recently, the same concerns were heard about the beginning of the monetary policy tightening process in Japan. In both cases, however, the adjustment to higher interest rates has proceeded relatively smoothly, although there remains some way to go before interest rates in Japan are back to more normal levels (Graph 2). Indeed, rather than serving as a catalyst for disruptive adjustments, the tightening process has been a positive development

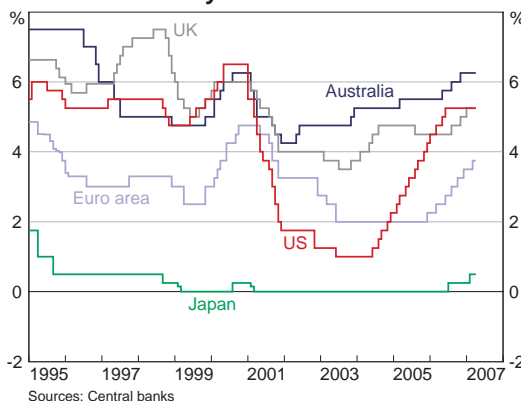
Graph 1

World GDP



Graph 2

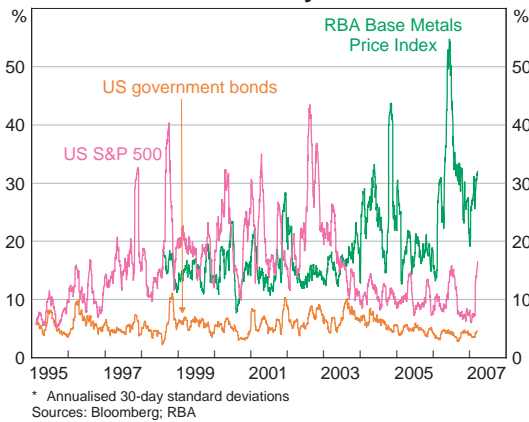
Policy Interest Rates



from a financial stability perspective, increasing the cost of debt finance from the extraordinarily low levels seen a few years ago.

Last year there was also a brief period of increased market volatility in May and June, largely reflecting concerns about higher inflation, particularly in the United States. These concerns led to declines in a number of stock markets, a small rise in some credit spreads and greater volatility in commodity prices. This episode though turned out to be relatively short-lived, with equity markets resuming their upward movement, credit spreads reversing their rise, and volatility declining again.

Graph 3
Volatility*



In the past month, financial markets have again experienced an increase in volatility, reflecting a sharp fall in the Chinese share market, problems in the US sub-prime mortgage market and some disappointing economic data in the United States (Graph 3 and Box A). Many of the major share markets experienced falls in the order of 5–10 per cent over a five-day period, with larger declines being experienced in some emerging market economies. In addition, bond yields in the major economies

declined as investors sought assets which were perceived to be less risky. Credit spreads on lower-rated debt widened and in currency markets, the Japanese yen appreciated against high-yielding currencies, including against the Australian dollar, as investors reassessed the riskiness of borrowing in yen and investing in these currencies (the so-called carry trade).

Whether this turbulence in global financial markets turns out to be temporary, or the start of a broad reversal of the very favourable environment seen over recent years, remains to be seen. It has, however, highlighted the strong inter-linkages between financial markets around the world, and the potential for developments in one part of the global financial system to have significant effects elsewhere. It has also provided a timely reminder to investors that the recent period of strong returns and low volatility is unlikely to continue indefinitely, and has prompted, at least to some extent, greater discrimination between different levels of risk.

While equity markets fell in late February, most are still up considerably on levels a year ago. In a number of the developed economies, share prices are above the peaks reached in 2000 following four years of strong gains. Share markets have also generally been strong in the emerging market countries, with the MSCI Emerging Markets Index up 18 per cent over the past year and 190 per cent since early 2003 (Graph 4).

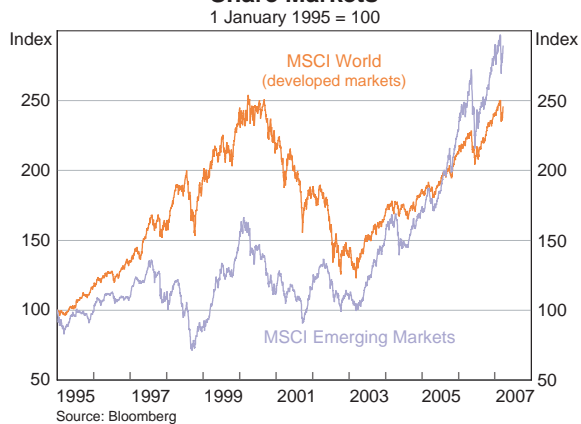
Recent developments have also seen a small rise in credit spreads on emerging market debt and lower-rated corporate debt. Despite this, these spreads remain at levels that are historically low (Graph 5). For lower-rated corporate bonds in the United States, spreads have fallen by

about two thirds since late 2002, with the default rate on high-yield bonds reaching a 25-year low of 1.57 per cent in 2006. Since 2002, spreads on emerging market sovereign bonds have also fallen noticeably. A measure of the strength of sovereign debt markets is the way in which political uncertainties in some emerging markets – for example Brazil, Hungary, Mexico and Thailand – have had little impact on pricing over recent years, in contrast to some earlier experiences.

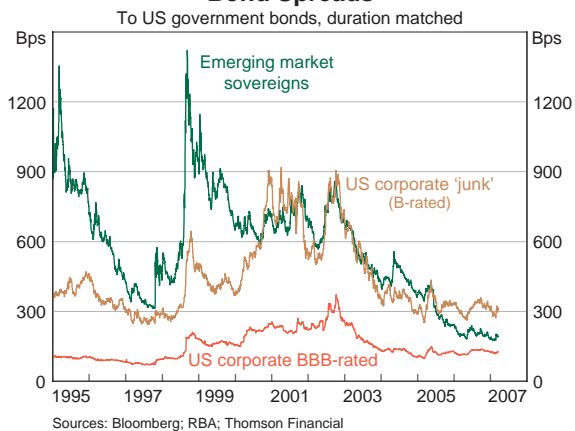
The levels of government bond yields in the major economies also remain quite low (Graph 6). The fairly muted response of long-term bond yields to increases in official interest rates has meant that yield curves have flattened, and even become inverted in some countries. This is particularly evident in the United States, where the federal funds rate has been increased by 4¼ percentage points since mid 2004, but over the same period, 10-year bond yields have been broadly unchanged. Recently the increases in most major economies' government bond yields seen earlier in 2007 have been unwound, partly in response to investors seeking less risky assets following the stock market movements and problems in the US sub-prime mortgage market.

The generally strong macroeconomic and financial environment over recent years has made for a very favourable operating environment for financial institutions. Many banking systems are enjoying historically high rates

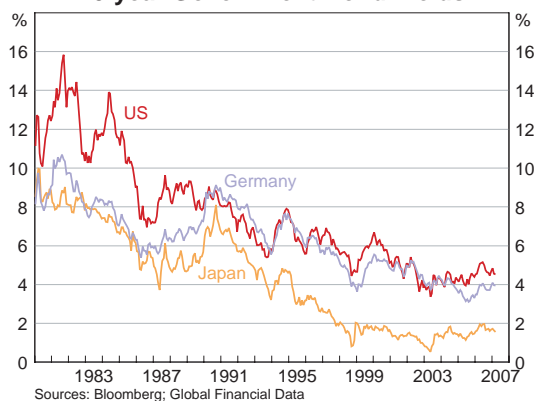
Graph 4
Share Markets



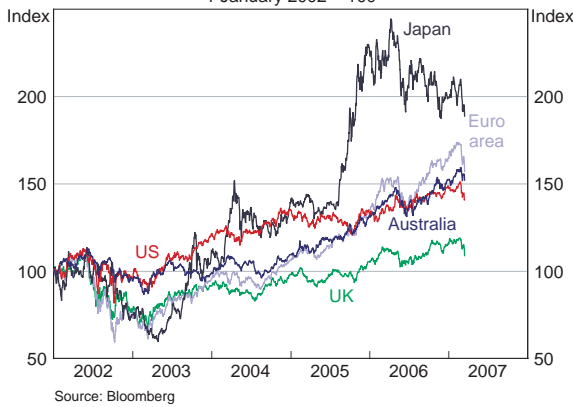
Graph 5
Bond Spreads



Graph 6
10-year Government Bond Yields



Graph 7
Share Price Indices – Banks
1 January 2002 = 100

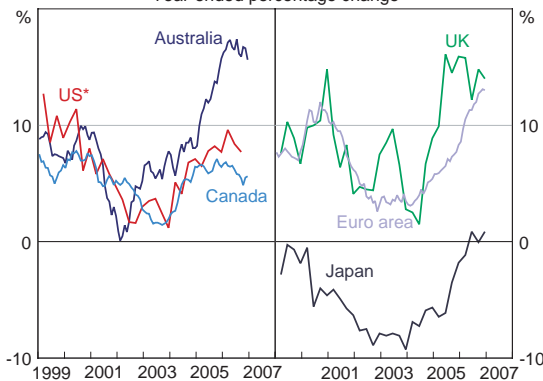


reduction in global insured losses compared with the previous couple of years. Reflecting this, broad insurer share price indices in all major economies, except Japan, have risen over the past six months, and spreads on insurers' credit default swaps have remained very low.

Graph 8

Business Credit

Year-ended percentage change



* Growth in total business debt, including non-intermediated debt
Sources: Central banks; Statistics Canada

to shareholders in the form of repurchases and dividends, up almost 20 per cent on the previous year. Some of these cash distributions are simply a response to strong profits, but others appear to form part of a defensive strategy by companies looking to reduce their cash holdings to make themselves less attractive to private equity firms.

The clearest manifestation of this trend towards higher leverage in the corporate sector is the surge in leveraged buyout (LBO) activity. In 2006, around US\$810 billion of LBOs took place globally compared to around US\$365 billion in 2005 (Graph 9). This surge in LBO activity has been underpinned by large inflows into private equity firms. In the first half of 2006, for example, the amount of capital flowing into private equity funds in the United Kingdom

of return on equity – in excess of 20 per cent – and share prices of banks in a number of countries have shown significant gains over recent years (Graph 7). Conditions have been particularly favourable for investment banks, with their profits typically up by more than 30 per cent in the past year on the back of higher trading income. The global insurance industry has also been very profitable of late, benefiting from high investment returns and favourable underwriting results, the latter boosted in 2006 by a sharp

The strong performance of banks has been underpinned recently by a pick-up in business credit growth and strong corporate balance sheets (Graph 8). Following more than a decade in which the demand for debt finance by businesses was relatively subdued, business credit is now growing as fast as, or faster than, household credit in a range of countries. Leverage has also been increased by the growing tendency of firms to return cash to shareholders through dividend payouts and share buybacks; in 2006, US S&P 500 companies returned US\$656 billion

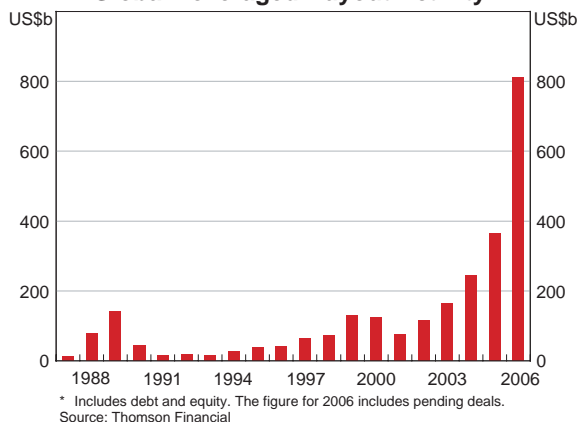
exceeded the amount of capital raised in initial public offerings on the London Stock Exchange. Private equity funds have been able to use this capital, together with debt raised on favourable terms, to purchase companies that they perceive to have potential for restructuring and, hence, for resale at a profit. The debt is typically underwritten by banks, but it is increasingly being distributed to participants in the institutional debt market, including hedge funds, pension funds and insurance companies.

While this surge in activity has attracted much attention, and has led to the purchased companies having much more leveraged balance sheets, in aggregate, business sector balance sheets in most countries remain in good shape. Just as the run-up in household leverage took place over the better part of a decade, it is possible that the increase in corporate borrowing that we are currently seeing will run for some years yet. Further details on private equity are provided in the article in this *Review*.

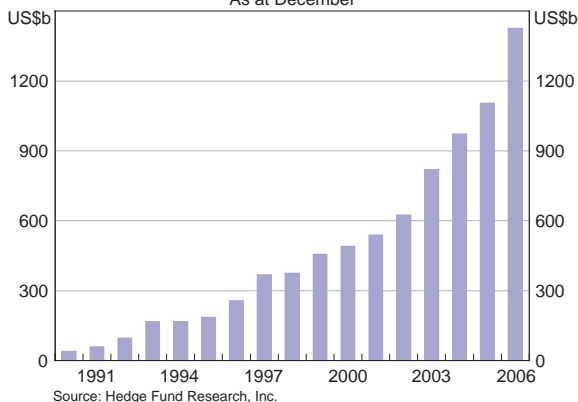
On the regulatory front, central banks and supervisors in a number of countries are attempting to understand the implications of the LBO-private equity phenomenon. On the one hand, private equity clearly has the potential to improve the performance of underperforming firms, and thus contribute to the efficient allocation of global capital. On the other hand, there are concerns that the current boom might turn out to have a number of less welcome consequences. These include: the amplification of a future economic downturn due to a sharp rise in leverage in a period when capital markets have provided debt on very generous terms; a reduction in the flow of information to investors if the size and depth of public equity markets are reduced; and the increased potential for market abuse reflecting the sizeable flows of price-sensitive information in the period leading up to the transaction, and the conflicts of interest that can often exist for management and financial institutions over these deals.

A second issue continuing to attract considerable attention in the international arena is the growth of the hedge fund industry (Graph 10). In common with private equity firms,

Graph 9
Global Leveraged Buyout Activity*



Graph 10
Hedge Fund Assets under Management
As at December

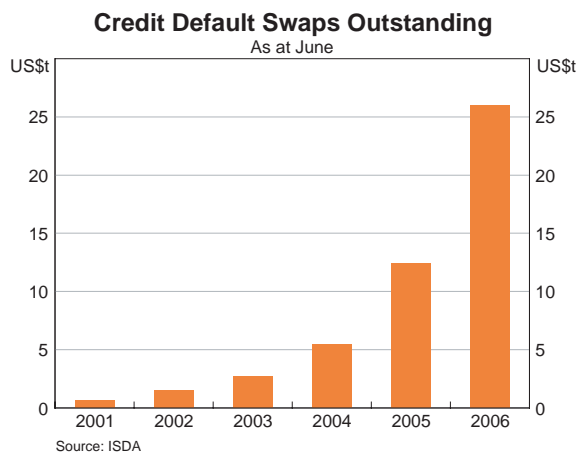


most hedge funds have had no difficulties in recent years in attracting funds from investors hoping to earn higher returns than those offered on more traditional investments. According to Hedge Fund Research, the average US dollar return earned by hedge funds was almost 13 per cent last year, which was more than double the average return available from investing in government bonds, but below the returns from investing in buoyant global equity markets. Globally, hedge fund assets under management are estimated to have increased by nearly 30 per cent in 2006, to US\$1.4 trillion, above the average annual growth rate of 18 per cent over the previous five years.

Hedge funds use a wide range of investment strategies, including short-selling securities and using derivatives to create leverage. While these strategies can add to market depth and help reduce anomalies in market pricing, the rapid growth of hedge funds is prompting concerns among some regulators, particularly in Asia and continental Europe. These concerns largely relate to issues of transparency, specifically the lack of disclosure around hedge fund activities, which is making it difficult for regulators to determine where risk in the global financial system resides. This is in contrast to the situation during the 1997 Asian crisis, when large hedge funds were heavily criticised on the grounds that they were using their size to manipulate markets in a destabilising fashion.

Given the concerns about transparency, financial regulators have been focusing their attention on the institutions that provide prime brokerage services to hedge funds, encouraging them to develop a full understanding of the risk profile of the hedge funds that they deal with and to conservatively manage their exposures to them. There is, however, concern among some regulators that this approach is not sufficient and that further action is required. This reflects a view that relying solely on counterparties to manage the risk associated with hedge funds does not take account of the systemic consequences of the increasingly complex inter-relationships between participants in the hedge fund industry. While there is little appetite for regulating hedge funds as closely as banks, there is interest in finding ways to improve the information available to regulators on their activities. Accordingly, the G-7 Finance Ministers and Central Bank Governors have asked the Financial Stability Forum for a report on hedge funds by May.

Graph 11



Rapid growth in the use of credit derivatives is also posing financial regulators with a number of issues relating to transparency (Graph 11). In some cases, the balance sheet data received from financial institutions are becoming less meaningful, as credit exposures are taken on or divested through derivatives. The growth of credit derivatives markets has also meant that it is less clear where the credit risk actually resides, and how those holding this risk will react in a less benign environment. While there are clearly benefits in

having credit risk widely held, rather than concentrated on the balance sheets of systemically important banks, these markets also pose new risks. In particular, their rapid growth has, to some extent, outpaced the capacity of banks and other participants to manage the operational aspects of these instruments leading, at times, to a backlog of unconfirmed trades. Regulators in the major financial centres have been monitoring this issue closely and encouraging sounder market practices around derivatives trading.

This intersection of private equity, hedge funds and credit derivatives is rapidly transforming credit markets. This transformation is mostly for the better, improving the allocation of global capital, and leading to risk being more broadly held than in the past. Despite this, there remains considerable uncertainty as to how the system would react to a very large shock. It is possible that the very developments that have contributed to the increased robustness of the financial system to most events, through the wider dispersion of risk, could actually amplify the disruption following a serious shock. In particular, there is uncertainty about just how credit risk transfer markets, on which so many institutions now rely, might perform. Dealing with this potential paradox – a decline in the likelihood of a significant disruption but an increase in the potential costs of such a disruption – is likely to remain a key issue over the years ahead for central banks and financial regulators charged with maintaining financial stability.

The Domestic Environment

Household Sector

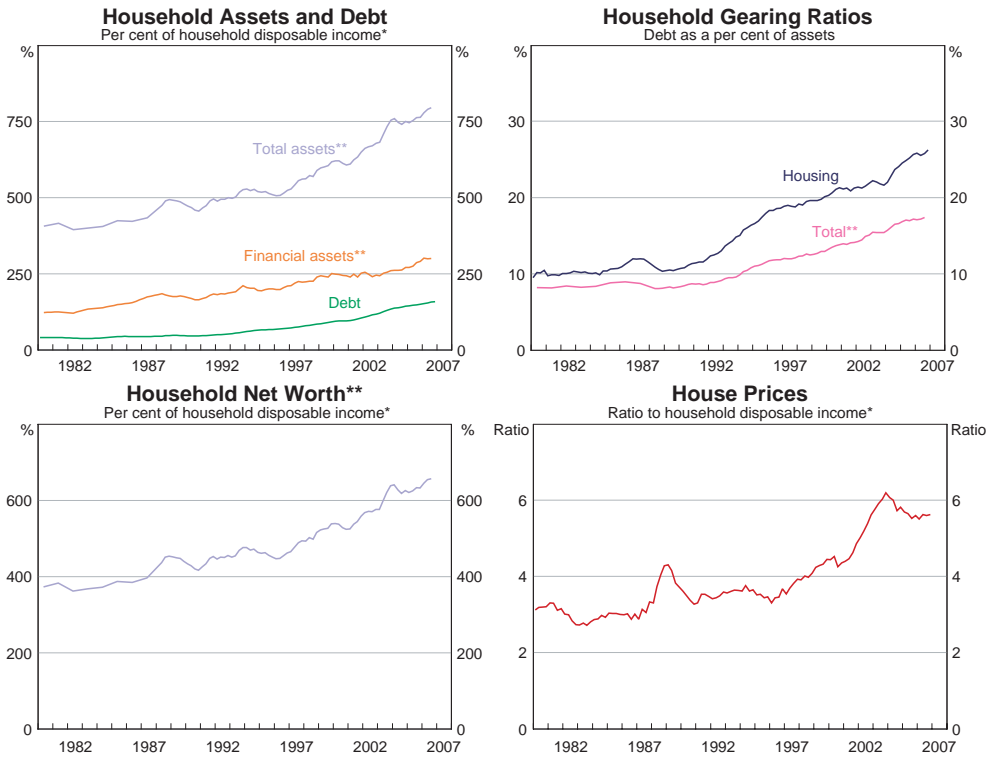
As has been discussed in previous *Reviews*, the past decade has seen a significant transformation of household balance sheets in Australia, with large increases in the value of both assets and liabilities (Graph 12). On the assets side, the strong rise in house prices between 1996 and 2003 has been followed over the past few years by a significant increase in the value of the household sector's holdings of financial assets as a result of the buoyant stock market. On the liabilities side, debt has increased significantly, to about 160 per cent of annual income at the end of 2006, more than double the level a decade ago.

Taken together, these developments have resulted in a substantial increase in the wealth of the household sector. As at September 2006, net worth was equivalent to 6½ times annual household disposable income, up from 4½ times annual income in the mid 1990s. At the same time, the overall leverage of the household sector has increased, with the ratio of debt to assets standing at 17½ per cent as at September 2006, up from around 11 per cent in the mid 1990s.

Over the most recent year for which data are available (ending September 2006), the value of the household sector's financial assets grew by 12 per cent, mainly due to a rise in the value of superannuation assets. Holdings of cash and deposits have also grown fairly solidly, as they have for much of the past five years, partly reflecting the higher interest rates that financial institutions have been offering on some savings accounts.

Growth in the household sector's holdings of non-financial assets (largely housing) has been a little slower in recent years than that in holdings of financial assets. Reflecting this, the contribution to the growth in household wealth from financial assets exceeded that from non-financial assets in 2004 and 2005 (Graph 13). However, growth in the value of non-financial

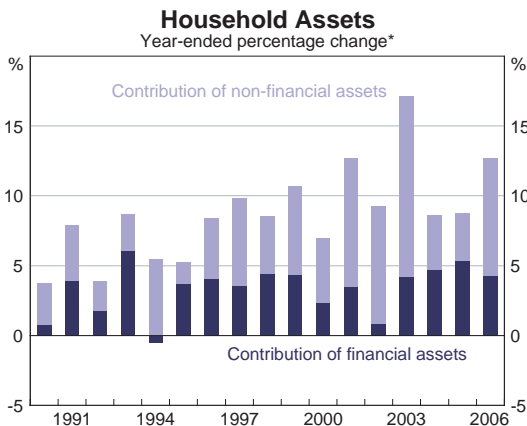
Graph 12



* Income is after tax and before the deduction of interest payments; includes income of unincorporated enterprises in all ratios except for household debt to income and house prices to income.
** Includes financial assets of unincorporated enterprises.
Sources: ABS; RBA; REIA

assets has recently picked up, to 11½ per cent in the year to September 2006, reflecting the firmer tone in house prices.

Graph 13



* 2006 is annualised growth for the three quarters to September
Sources: ABS; RBA

On a national basis, the median house price rose by about 7 per cent in 2006, compared with average annual growth of around 1½ per cent over the two previous years. As has been the case for some time, there were significant differences across Australia, with prices broadly flat in Sydney and up sharply in Perth and Darwin. While the ratio of house prices to average household disposable income is below the peak reached at the end of 2003 – following a couple of years in which

growth in incomes has outpaced that in house prices – it remains high by both historical and international standards (Graph 12).

On the liabilities side of the balance sheet, household credit continues to grow solidly, although well down on the pace of growth seen earlier in the decade. Over the year to January, household credit increased by 14 per cent, compared with average growth of 18 per cent in 2002 and 2003.

Within household credit, housing credit is the largest component, accounting for 86 per cent of the total. Over the year to January, owner-occupier housing credit grew by 16 per cent, up slightly on the rate of growth experienced over the previous year (Graph 14). Over the same period, investor housing credit grew by 12 per cent, not far above the lowest rate seen in the past two decades. To a large extent, the sharp slowing in the rate of investor housing credit growth over the past few years reflects the changed dynamics of the housing market. With investors no longer experiencing large capital gains, they have had to rely more on rental income for their returns, and, as discussed in the recent *Statement on Monetary Policy*, rental yields have been at historically low levels.

Growth in personal credit has also picked up over the past year, and is currently running at around 12½ per cent in year-ended terms, compared with 10 per cent a year earlier. The pick-up has been most noticeable in fixed-term loans, although growth in outstanding credit card balances has also been a bit firmer (Table 1). Recent data on the purpose of personal loan approvals point to an increase in borrowing for travel and holidays, housing alterations and additions, and debt consolidation.

One component of personal credit that has been growing very rapidly is margin lending for the purchase of shares and managed funds, associated with the strength in the share market. Outstanding margin debt (excluding loans over \$10 million) rose by 35 per cent over 2006, contributing about two fifths of the increase in total personal credit. This growth reflects both a rise in the average loan size, which reached \$147 000 in December, and an increase in the number of loans. On average, the leverage that margin loan investors are currently employing, at around 40 per cent, is about 10 percentage points below the levels seen in late 2002. Reflecting this, and the generally subdued volatility in share markets, the frequency of margin calls was very low in 2006, at about a tenth of what it was in the second half of 2002.

The strong growth in household debt since 2002, together with higher interest rates, has resulted in a significant increase in the ratio of household interest payments to disposable income

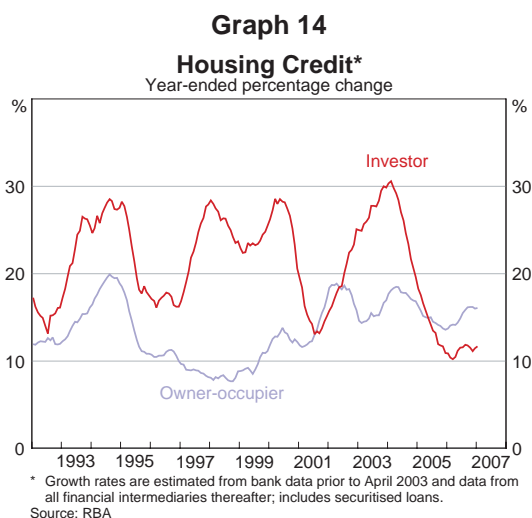
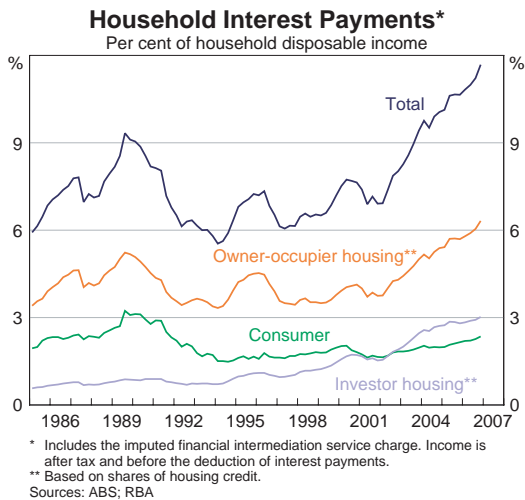


Table 1: Personal Credit
Per cent

Component	Share of total Jan-07	Year-ended growth	
		Jan-07	Jan-06
Fixed	52.3	14.5	9.5
Credit card	27.0	13.1	11.8
Non-credit card revolving	20.7	7.1	8.1
of which: secured by housing	13.9	4.7	6.7
Total	100.0	12.5	9.7
<i>Memo: Margin loans^(a)</i>	17.7	34.6	26.2

(a) Margin loan data are for December 2006, and exclude loans over \$10 million but include some margin loans to business. Margin loans feature in both revolving and fixed credit owing to differences in reporting across lenders.
Source: RBA

Graph 15



(Graph 15). In the December quarter 2006, this ratio stood at 11.7 per cent, up from 6.9 per cent at the start of 2002. As discussed in the previous *Review*, part of the trend increase in this ratio over the past decade or so can be explained by a rise in the share of owner-occupier households with a mortgage, with many households now prepared to carry debt later in life. Another important influence has been the strong growth in investor housing loans, with interest payments on these loans currently equivalent to 3 per cent of household disposable

income, up from 1½ per cent in early 2002. Notwithstanding the increase in the aggregate ratio of household interest payments to income, the repayments on an average new owner-occupier loan, as a share of average disposable income, are still below the previous peak. Box B provides further details of trends in owner-occupier debt and assets at a disaggregated level.

While the aggregate interest-servicing ratio has risen significantly, there are few signs that the household sector is struggling to meet the higher debt-servicing costs. Households are continuing to benefit from strong employment growth, with the unemployment rate falling by around ½ of a percentage point over the past year to 4.6 per cent, the lowest level in around 30 years. Consistent with this, nominal household disposable income has been growing strongly, up by 7½ per cent over the past year. While income growth continues to be underpinned by solid growth in wages and salaries, it has also been boosted in the past few years by stronger growth in investment income, including dividends and interest receipts.

Reflecting these generally favourable developments, a relatively high share of households report that their personal finances are more favourable than was the case a year ago (Graph 16);

the picture is similar for households with a mortgage, those who own their home outright, and those who rent.

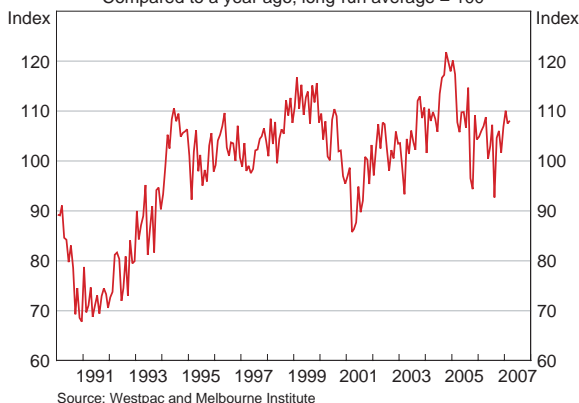
While there are no aggregate data available on the extent of mortgage prepayments, our liaison with banks indicates that many borrowers have substantial prepayment buffers. Rough indications are that around one quarter of owner-occupier borrowers are more than a year ahead of their scheduled mortgage repayments, with around one half ahead by more than a month. The equivalent figures for investor loans are somewhat lower, reflecting the lesser incentive to pay off these loans quickly. Recently there has been a sharp increase in the share of households that view paying off debt as the wisest place for their savings, suggesting that some borrowers may be seeking to accelerate debt repayments, partly in response to higher interest rates (Graph 17).

The various measures of loan arrears also suggest that the household sector is coping reasonably well with the higher levels of debt and interest servicing.

As at end December 2006, the ratio of non-performing to total housing loans on the banks' Australian books stood at 0.31 per cent (Graph 18). This ratio had increased steadily from early 2004 to early 2006, but has shown relatively little change over the past six months. Of these non-performing loans, banks report that around three quarters are fully covered by collateral. Overall, the ratio of non-

Graph 16

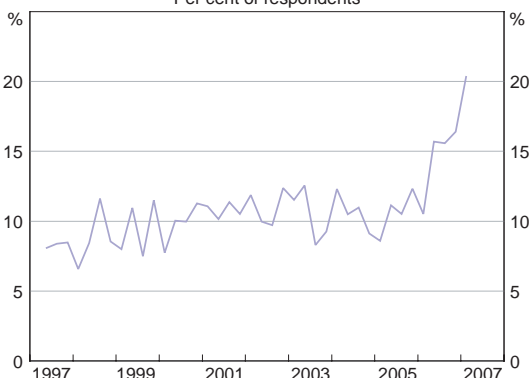
Sentiment about Personal Finances
Compared to a year ago, long-run average = 100



Source: Westpac and Melbourne Institute

Graph 17

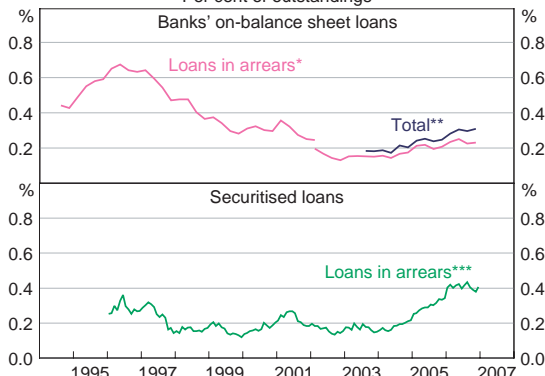
Wisest Place for Savings: Paying Down Debt
Per cent of respondents



Source: Westpac and Melbourne Institute

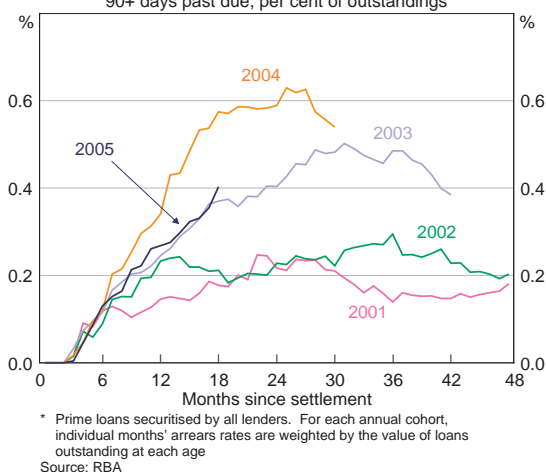
Graph 18

Non-performing Housing Loans
Per cent of outstandings

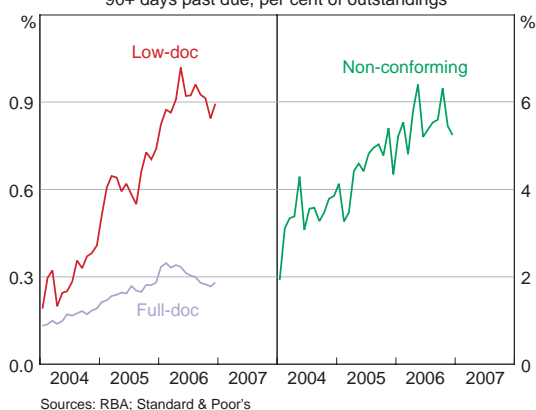


* Loans that are 90+ days past due but otherwise well secured by collateral
** Includes loans that are in arrears and not well secured by collateral
*** Prime loans securitised by all lenders, 90+ days past due
Sources: APRA; Standard & Poor's

Graph 19
Housing Loan Arrears by Cohort*
 90+ days past due, per cent of outstandings



Graph 20
Housing Loan Arrears
 90+ days past due, per cent of outstandings



performing loans remains lower than at any time in the 1990s and low by international standards.

The share of loans that have been securitised that are more than 90 days in arrears has also increased since 2003, but like the figures for loans on banks' balance sheets, has shown little change recently. At end December 2006, the 90-day arrears rate for securitised loans stood at 0.4 per cent, somewhat higher than the rate for loans on banks' balance sheets, primarily reflecting the larger share of low-doc loans in the pool of securitised loans. The securitisation data also suggest that the repayment record for housing loans made in 2005 has been a little better than for those made in 2004, reversing some of the deterioration seen over the previous two years (Graph 19).

This general pattern of rising arrears in 2004 and 2005 and little change in 2006 is evident in the data for full-doc loans, low-doc loans and non-conforming loans (Graph 20). According to securitisation data, the 90-day arrears rate on full-doc loans currently stands at 0.28 per cent, compared to 0.89 per cent for low-

doc loans, and 5¼ per cent for non-conforming loans, which are made to borrowers with poor credit histories. Unlike in the United States, there has not been a recent sharp deterioration in the performance of non-conforming loans in Australia (see Box A).

Similar to housing loans, the share of credit cards and other personal loans that are non-performing has also levelled out recently, after picking up slightly over the previous year or two (Graph 21). For both types of loans, this share is currently just below 1 per cent.

While the overall picture suggests that, in aggregate, the household sector is coping well with the higher levels of debt and interest servicing, there are some limited pockets where financial stress is evident. Areas of western Sydney, in particular, look to have been adversely affected by the fall in residential property prices, with a disproportionate number of households in this area taking out loans with high loan-to-valuation and debt-servicing ratios near the peak of the

house price boom. Partly reflecting this, the arrears rate and the number of personal administrations has increased by more in New South Wales than in the other states (Graph 22). However, like the pattern for the aggregate data, the arrears rate for New South Wales did not increase over the course of 2006, after increasing in 2004 and 2005.

Consistent with the increase in housing loan arrears over recent years, there has been a pick-up in the number of court applications for property possession (which include applications for both residential and commercial property). In New South Wales and Victoria, the number of such applications increased by around 50 per cent in 2005 compared with the previous year, but only by about 10 per cent in 2006. Banks too have reported a modest rise in mortgagee sales, though these remain low.

The increase in loan arrears in 2004 and 2005 was not unexpected given the general lowering of credit standards that has occurred since the mid 1990s. The resulting expansion in the availability of credit has meant that for any given level of unemployment and interest rates, a higher share of loans could be expected to be in arrears. Overall, the household sector remains in good financial shape, which is not surprising given the ongoing strength in the economy. While at a disaggregated level there are some areas of financial stress, these remain fairly contained.

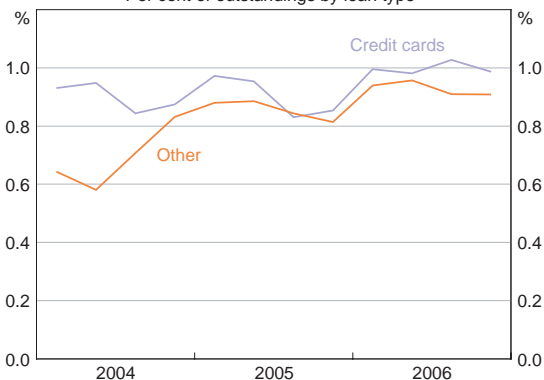
Business Sector

The long-running expansion of the Australian economy also continues to underpin strong conditions in the business sector. Profitability and investment have been at high levels over recent years and, in aggregate, business balance sheets remain in good shape. For the past decade or so the business sector has had relatively low levels of gearing, following the problems in the

Graph 21

Non-performing Personal Loans

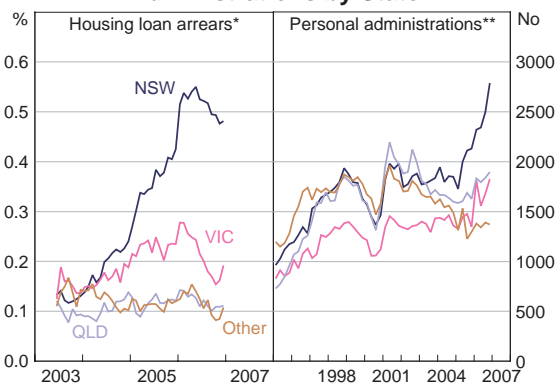
Per cent of outstandings by loan type*



* Includes past-due items
Source: APRA

Graph 22

Housing Loan Arrears and Personal Administrations by State

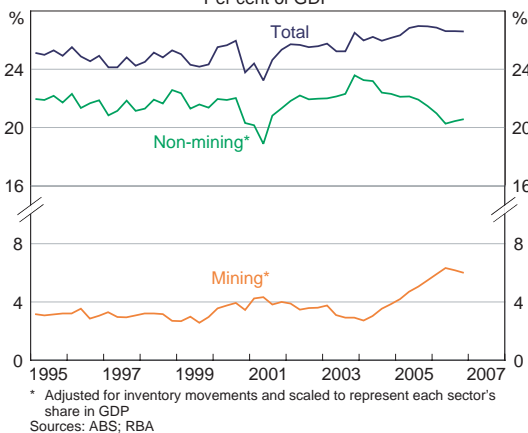


* Prime full-doc loans securitised by all lenders, 90+ days past due, per cent of outstandings.

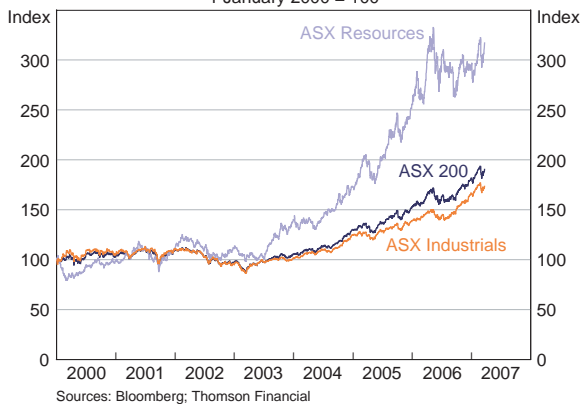
** Includes bankruptcies, personal insolvency agreements and debt agreements. Provisional figures, seasonally adjusted by the RBA.
Sources: ITSA; RBA

early 1990s; unlike the household sector, it did not take advantage of the lower nominal interest rates of the past decade to substantially increase its level of borrowing. There are, however, some signs that this period of conservative balance-sheet management may be drawing to a close, with stronger growth in business credit and a sharp increase in leveraged buyout activity.

Graph 23
Business Profits
Per cent of GDP



Graph 24
Share Price Indices
1 January 2000 = 100



an average annual increase of 20 per cent, with the market up by 19 per cent over the past year (Graph 24). The ASX Resources sub-index has been particularly strong, although it has underperformed the broader market recently. The price/earnings (P/E) ratio for the market as a whole currently stands at around 14, which is lower than the level of recent years and also below the average level of the past two decades. The P/E ratio for the resources sector has declined over the past year, reflecting the strong growth in earnings, while there has been little change in the P/E ratio for the rest of the market.

The generally strong growth in profitability since early in this decade has meant that businesses' internal funding as a per cent of GDP has been high by historical standards (Graph 25). This has

Aggregate business sector profits – as measured by the gross operating surplus of private non-financial corporations and gross mixed income of unincorporated enterprises – increased by 6 per cent over the year to the December quarter 2006 and, as a share of GDP, remain well above the average of the past 15 years (Graph 23). After profits increased more quickly than nominal GDP for much of the first part of the current decade, the past few years have seen profit growth broadly in line with GDP. For much of this period, exceptionally strong growth in mining sector profits has offset somewhat weaker profit growth in the non-mining sectors, though this divergence has narrowed recently. Looking forward, equity analysts continue to forecast growth in aggregate profits, albeit at a slightly slower pace than over the past few years.

The strong performance of the business sector has been reflected in the equity market, notwithstanding the recent volatility. Over the past four years, the ASX 200 has recorded

allowed financing of the investment boom largely through internal funding. Recently, however, recourse to external funding has increased noticeably, with net raisings rising from the equivalent of around 5 per cent of GDP in 2003 to over 10 per cent in 2006. This pick-up in external funding has mostly been in the form of intermediated business credit, which increased by 16 per cent over the year to January, around the fastest pace since the late 1980s (Graph 26).

Data from APRA suggest that the stock of outstanding loans greater than \$2 million in size grew by 28 per cent over the year to December 2006, while there was a slight decline for loans of less than \$500 000, which are more likely to be used by smaller businesses (Table 2).

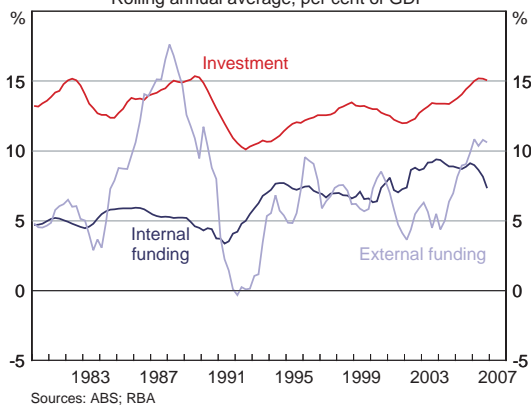
The overall strength in intermediated borrowing has been associated with strong competition among lenders, which has been evident in the continued lowering of interest rate spreads on business loans. This has been more evident

in larger loans, with the spread to the cash rate for loans greater than \$2 million currently around half its level in 2002, while spreads on smaller loans have contracted by about one fifth. Competitive pressures have also been evident in the lowering of fees on business loans as well as the relaxation of non-pricing conditions, including covenants.

Graph 25

Business Funding and Investment

Rolling annual average, per cent of GDP



Graph 26

Business Credit*

Year-ended percentage change

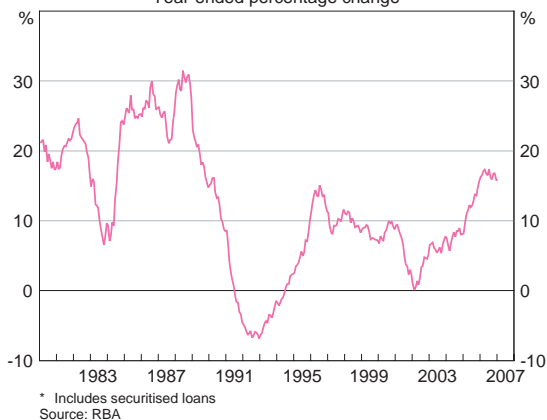


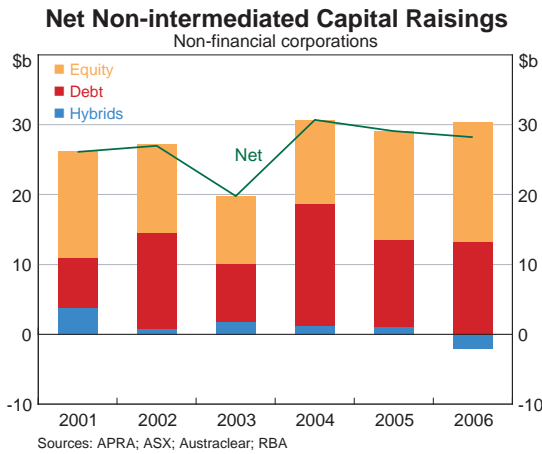
Table 2: Banks' Business Lending

December 2006, by loan size

Loan size	Level	Share of total	Year-ended growth
	\$b	Per cent	Per cent
Less than \$500 000	89.9	18.6	-2.1
\$500 000 to \$2 million	83.3	17.2	16.5
Greater than \$2 million	310.4	64.2	27.6

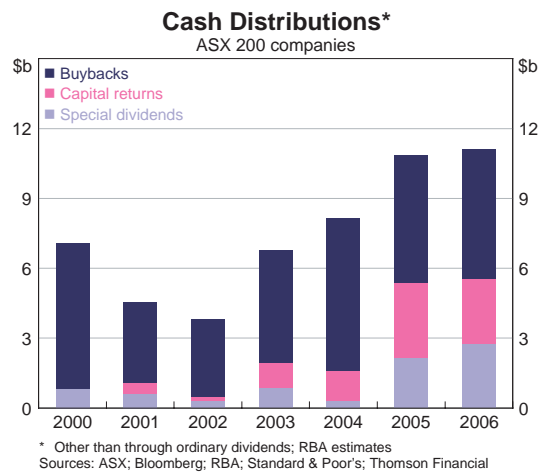
Source: APRA

Graph 27



Unlike intermediated borrowing, net non-intermediated capital raisings of non-financial corporations have been fairly steady over the past three years, at around \$30 billion per year (Graph 27). Within this, annual net equity raisings rose from \$12 billion in 2004 to \$17 billion in 2006, with stronger non-IPO equity raisings only partly offset by an increase in share buybacks; 2005 was a record year for IPO raisings, but they moderated a little in 2006. In contrast, annual net bond issuance has declined by about \$5 billion since 2004, mainly reflecting reduced issuance of long-term debt.

Graph 28



One of the clearest signs of the business sector's increased appetite for debt has been the acceleration in LBO activity over the past year, with 28 announced deals in Australia in 2006. The total value of transactions either undertaken or endorsed in the year was around \$26 billion, up from an average of \$1½ billion over the previous five years. It has not been uncommon for these deals to involve, or propose, an increase in the debt-to-equity ratios of the bought-

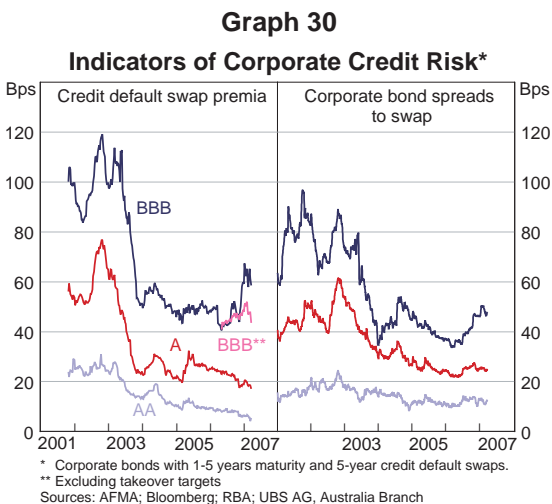
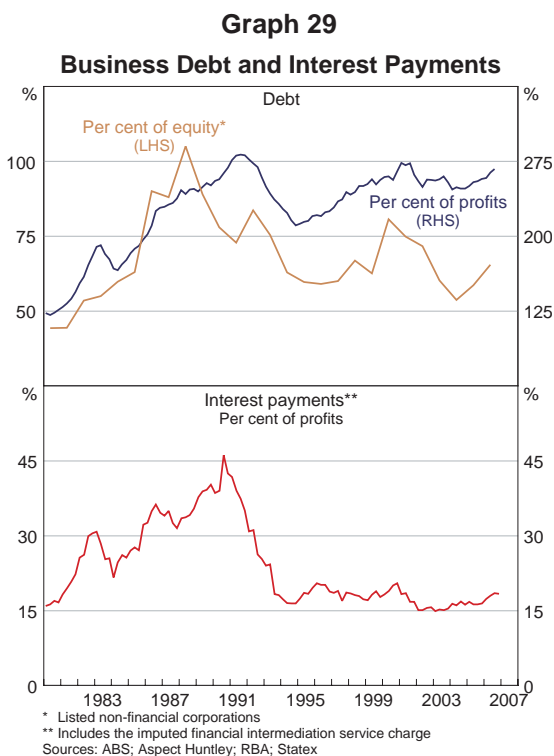
out companies from around 50 per cent to 250 per cent. The buyout activity also appears to be having an impact on other publicly listed companies, with some boards deciding to return cash to shareholders through dividend payments and share buybacks, partly as a defensive strategy (Graph 28). The growth of private equity in Australia and its implications are discussed in an article in this *Review*.

While the willingness of businesses to borrow has clearly increased, the debt-to-equity ratio for listed non-financial corporations, at around 65 per cent, is still well below the peak in the late 1980s and only around the average of the past decade (Graph 29). This is in sharp contrast to the experience of the household sector where leverage has steadily increased since the early 1990s. As a ratio to profits, business debt also remains below previous peaks, whereas for the household sector the ratio of debt to income is more than three times its level in the early 1990s. Reflecting the strength in profits and contractions in lending margins, the interest-servicing ratio of the business sector remains at a low level, even after the increases in interest rates over the

past few years. Consistent with these indicators of overall health, financial institutions continue to report very low levels of business loan arrears, as discussed in the *Financial Intermediaries* chapter. There have also been very few (rated) corporate bond defaults in Australia in recent years, the latest being in mid 2004.

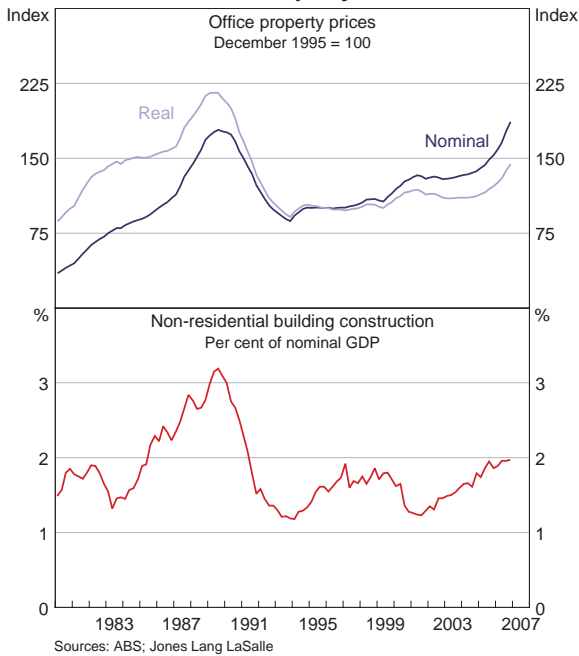
The positive business environment is also reflected in business surveys, financial market prices and credit ratings. A range of business surveys, including the NAB survey, indicate generally high business confidence, with sentiment regarding business conditions in the non-farm sector above long-run average levels in the second half of 2006, but somewhat below the high levels seen in 2003 and 2004. The relatively low levels of corporate bond spreads and credit default swap (CDS) premia indicate that financial market participants continue to have a positive assessment of the credit worthiness of the corporate sector, although there has recently been a rise in the spreads and CDS premia for lower-rated companies, mainly reflecting the spate of LBO transactions (Graph 30). The positive assessment of financial market participants has also been reflected in the strength in the share market, notwithstanding the recent volatility. Credit rating agencies have also been more optimistic about the business outlook with Standard & Poor's making more rating upgrades than downgrades for Australian companies in 2006, continuing the trend of the past couple of years.

Given that past excesses in the commercial property market have been associated with stresses in the banking sector, developments in this market warrant close attention. Bank lending for commercial property has been buoyant recently, increasing by 18 per cent over the year



to September 2006, following a similar increase over the preceding 12 months. Prime office property prices in Australia rose by 22 per cent over the year to December 2006, the strongest annual growth since December 1988, while industrial property prices rose by about 12 per cent over the same period. For office property prices, growth has been particularly strong in Perth and, to a lesser extent, Brisbane.

Graph 31
Commercial Property Indicators



overall increase in gearing has been limited to date, these trends will bear close watching in the period ahead.

While the fast growth in property prices and borrowing suggests some potential for an increase in risks in the commercial property market, at an aggregate level developments are much sounder than those seen prior to the collapse in the market in the early 1990s. Office property prices, in real terms, remain well below their late 1980s peak, while construction activity is also below the level that led to over-development in the 1980s (Graph 31).

Overall, businesses are in good financial shape, with high levels of profitability and strong balance sheets. Recently, however, there have been significant increases in the leverage of some companies and signs of releveraging in the business sector more generally. While the

Box A: Developments in the US Sub-prime Mortgage Market

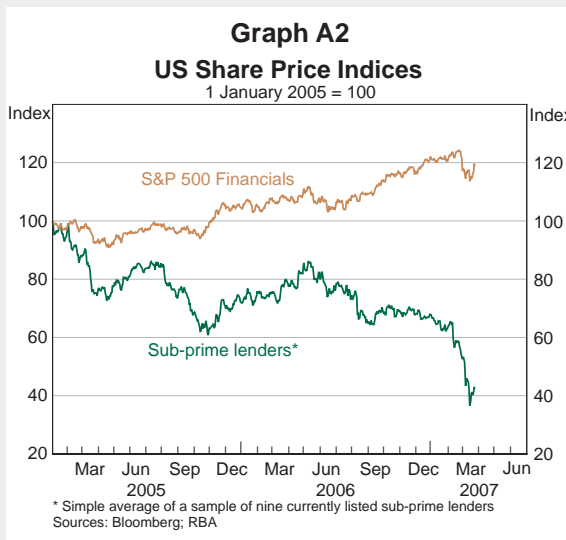
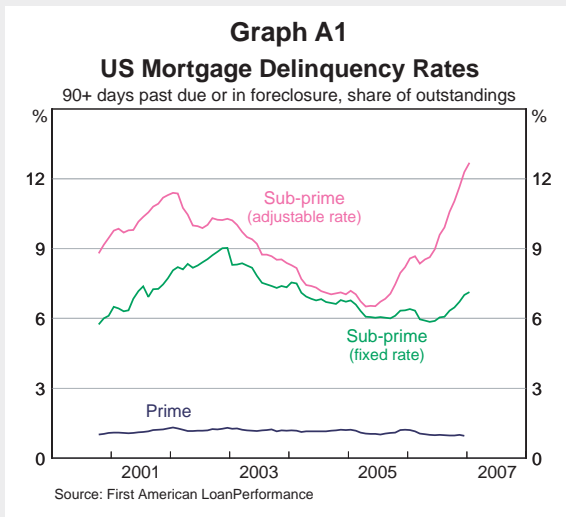
Recently, there has been a marked increase in problem loans in the sub-prime segment of the mortgage market in the United States. While there is no precise definition of sub-prime loans, in the United States they are typically loans made to borrowers with impaired credit histories, which might include one or more payment defaults, a previous loan foreclosure, or bankruptcy. Because of their higher risk of default, sub-prime borrowers are charged higher interest rates than prime borrowers.

There has been rapid growth in US sub-prime lending since 2003, with these loans accounting for around one fifth of mortgage originations in 2006 and an estimated 15 per cent of all outstanding mortgages. In addition, between one half and two thirds of sub-prime loans are adjustable-rate mortgages (ARMs), compared to less than one quarter of prime loans. Most sub-prime ARMs have an initial two-year period in which the interest rate is fixed at a relatively low level before being adjusted at fixed intervals thereafter in line with changes in floating market rates.

As well as the expansion in sub-prime lending, there has also been strong growth in the so-called Alt-A segment of the US mortgage market over recent years, with these loans currently estimated to account for up to an additional 15 per cent of all outstanding mortgages. Compared with sub-prime borrowers, Alt-A borrowers have stronger credit histories but their loans incorporate other non-standard features, such as low documentation or high loan-to-valuation ratios, which make them riskier than prime loans. While the problems that are currently affecting the sub-prime market are not as pronounced in the Alt-A market, this segment could be vulnerable to a more widespread deterioration in conditions, given the elevated risk characteristics of Alt-A borrowers.

The rapid growth in sub-prime and Alt-A lending over recent years partly reflects a loosening of credit standards in response to strong competition among financial institutions. Lenders have been able to finance much of this lending through the securitisation market. Around three quarters of sub-prime loans made since 2003 were repackaged into residential mortgage-backed securities (RMBS) and sold to investors attracted by the higher returns on offer.

Recently, a combination of slower growth in house prices, rising mortgage rates, lax underwriting standards, and the expiration of introductory discount rates on loans originated in the past few years has resulted in a sharp increase in delinquencies among sub-prime ARMs in the United States. According to First American LoanPerformance, the proportion of these loans that are 90 or more days in arrears or in foreclosure has increased from around 6½ per cent in mid 2005 to nearly 13 per cent in January (Graph A1). By comparison, the delinquency rate for fixed-rate sub-prime loans has increased relatively little over the same period, whereas that for prime loans has not increased at all. The current level of delinquencies on sub-prime ARMs



is above its previous peak in early 2002, and many commentators expect that it will continue to rise as the introductory discount rates on loans made in 2005 and 2006 expire, resulting in significant ‘payment shock’ for some borrowers as their repayments are increased. It has not been uncommon recently for the repayments of some sub-prime borrowers to rise by 50 per cent or more following the expiration of the introductory interest rate period.

The increase in delinquencies on sub-prime loans is causing significant difficulties for many sub-prime lenders. A number have been forced to repurchase bad loans that they had earlier sold because of conditions attached to early default. Some are also facing funding pressures and are having difficulties renewing their credit lines. Reflecting this, more than 20 sub-prime lenders have shut down and, on average, the share prices of the largest sub-prime lenders in the United States have fallen by nearly 40 per cent since the start of the year (Graph A2). The problems in the sub-prime market have also weighed on other financial stocks, most notably investment banks that

have an exposure to this market either through the lines of credit they have extended to sub-prime lenders, their own sub-prime lending operations or through their role as aggregators, in which they acquire sub-prime loans from originators for eventual resale as RMBS.

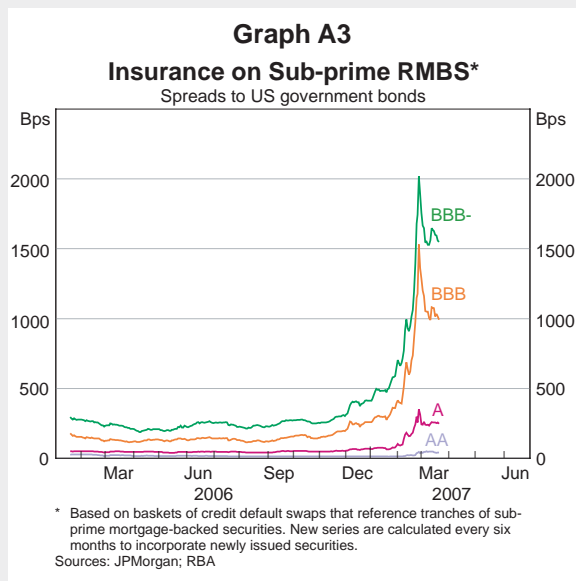
Investors in the securities backed by sub-prime mortgages are also facing valuation losses as a result of the increase in sub-prime delinquencies. Credit spreads on some lower-rated RMBS tranches backed by sub-prime loans have widened sharply and rating agencies have downgraded some of these securities. There has also been a rise in the cost of insuring against the default risk on sub-prime RMBS using credit default swaps. For baskets of the riskiest tranches of sub-

prime RMBS (rated BBB and BBB–), the cost of this insurance has more than tripled since the beginning of the year (Graph A3).

Aside from these immediate impacts on sub-prime lenders and RMBS investors, there are concerns that the problems in the sub-prime market could be the catalyst for a generalised tightening of mortgage credit standards, with adverse implications for housing activity. Although there is some evidence that lenders are beginning to tighten their credit standards beyond sub-prime loans, it is too early to tell how far this will go. Moreover, as noted

above, credit quality in the prime mortgage market remains very strong, with the delinquency rate on these loans showing no increase over the past few years.

The closest equivalent to sub-prime loans in Australia are non-conforming housing loans, which are provided by a few specialist non-deposit taking lenders and account for an estimated 1 per cent of all outstanding mortgages, well below the 15 per cent sub-prime share in the United States.¹ While the 90-day arrears rate on securitised non-conforming housing loans in Australia has increased over the past few years and is higher than for other housing loans, at 5¼ per cent, it is about half the equivalent arrears rate on sub-prime loans in the United States. One relevant factor here is that non-conforming loans in Australia usually do not feature low introductory interest rate periods or high-risk repayment options such as negative amortisation periods. ❧

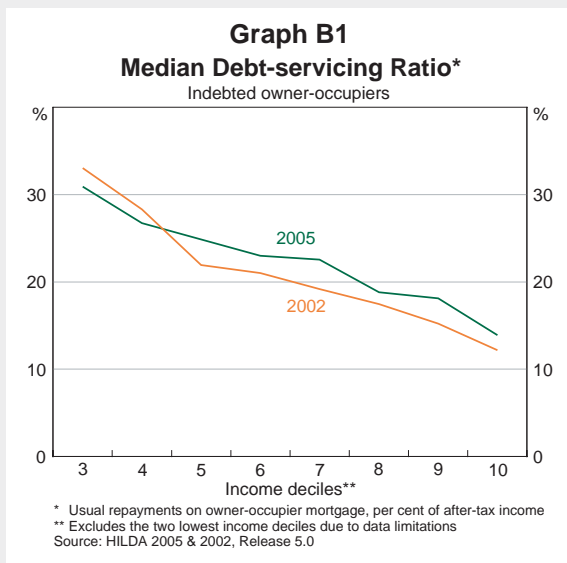


1 See Reserve Bank of Australia (2005), 'Box C: Non-conforming Housing Loans', Financial Stability Review, March.

Box B: Disaggregated Analysis of Owner-occupier Housing Debt and Assets

In assessing the vulnerability of households to changes in economic and financial conditions, the distribution of debt across households, as well as its aggregate level, is important. The main source of disaggregated data on household debt and assets is the Household, Income and Labour Dynamics in Australia (HILDA) Survey. This box examines data from the recently released 2005 survey, comparing the results with those from the 2002 survey.¹

The 2005 survey continues to show that household debt is concentrated among higher-income households. Of the one third of Australian households that had owner-occupier debt in 2005, those in the top 30 per cent of the income distribution held close to 60 per cent of debt by value, while those in the bottom 40 per cent owed less than 10 per cent. Compared to 2002, there has been a slight increase in the share of debt owed by higher-income households.



According to the survey, in 2005 the median owner-occupier debt-to-income ratio of those households with debt was 190 per cent, up from 160 per cent three years earlier. For these households, the median debt-servicing ratio (interest and principal repayments on owner-occupier debt as a share of after-tax income) was 21 per cent, up by around 2½ percentage points since 2002, reflecting both higher debt levels and an increase in interest rates. Across the income distribution, the increase in debt-servicing ratios was evident for middle and upper-income households (Graph B1).

The survey also shows that the share of households with very high debt-servicing ratios – above 50 per cent – remained fairly low at around 5½ per cent, with lower-income households disproportionately represented within this group.

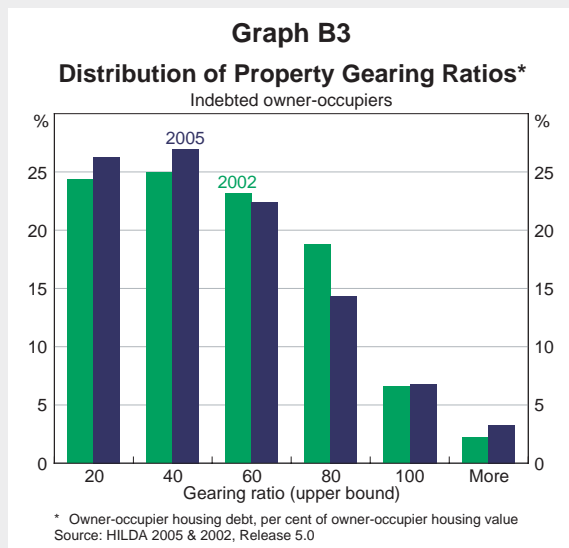
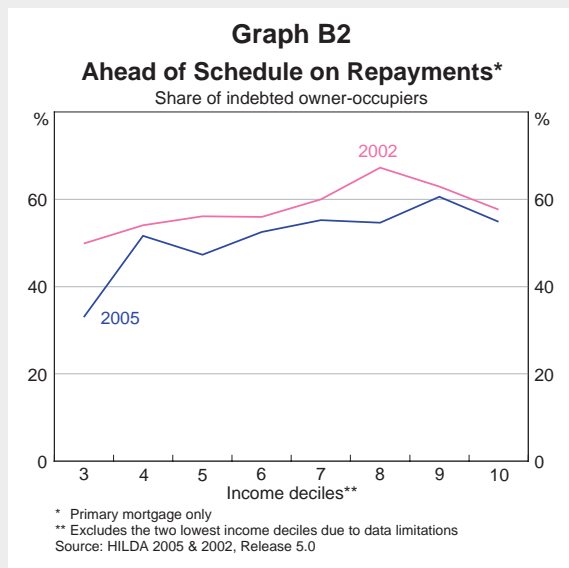
One buffer that households can have against a change in their financial circumstances is mortgage prepayments – the amount by which they are ahead of schedule in their mortgage repayments. The latest data show that just over one half of indebted owner-occupier households

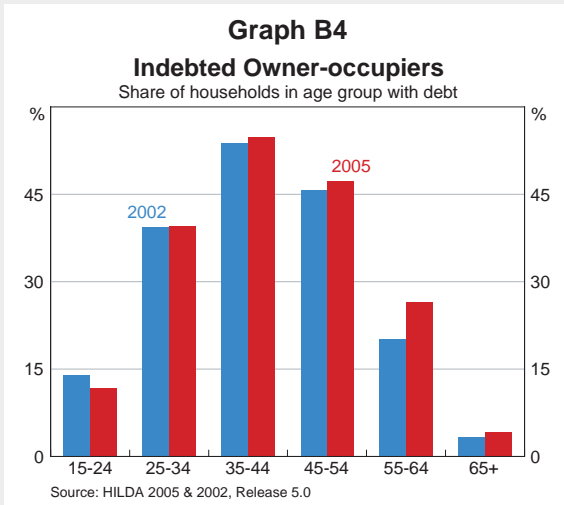
¹ This box updates results from Box A in the March 2005 Financial Stability Review, which were based on data from the 2002 HILDA survey. Note that the 2002 HILDA survey data have been revised since 2005.

are ahead in their mortgage repayments. This figure is consistent with our recent discussions with banks, which suggest that one quarter of owner-occupier borrowers are ahead of schedule by more than a year. Compared with 2002, the share of households reporting that they are ahead of schedule on their mortgage repayments declined a little, which is consistent with newer borrowers being less able to build up prepayment buffers given higher interest rates (Graph B2). Higher-income households were still more likely than lower-income households to be ahead of schedule on their mortgage repayments in 2005.

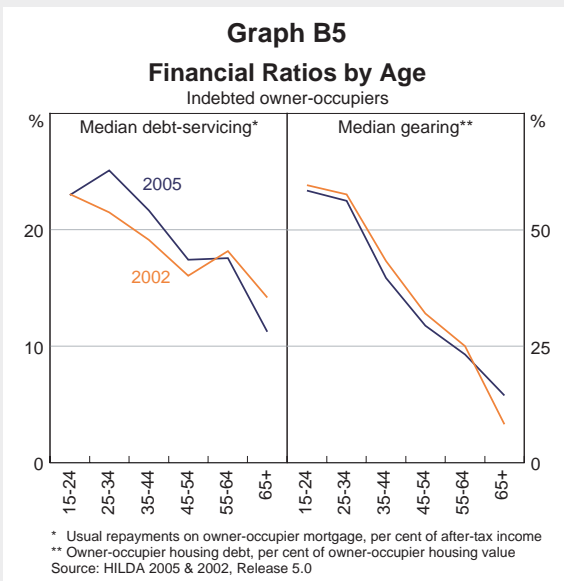
The disaggregated data also show that most home-owners have considerable equity in their homes, so that even if house prices were to fall significantly, they would be unlikely to find themselves in a negative equity position. Three quarters of indebted owner-occupier households had a property gearing ratio – the ratio of owner-occupier housing debt to housing value – of 60 per cent or less in 2005 (Graph B3). This was slightly higher than in 2002, indicating that average gearing declined over the period. This reduction was more pronounced among lower-income households, with the median gearing ratio of households in the third and fourth income deciles falling by around 10 percentage points. Given that the median amount of outstanding owner-occupier debt increased between 2002 and 2005, the fall in gearing is due to the growth in house prices that occurred in this period, particularly in 2002 and 2003.

One of the reasons behind the increase in household debt at an aggregate level over the past decade or so has been an increase in the share of households with an owner-occupier mortgage. The disaggregated data show that between 2002 and 2005, the increase has been particularly





noticeable for households in the 55-64 year old age group (Graph B4). The households in this age group, however, tend to have lower debt-servicing and gearing ratios than younger households (Graph B5). Moreover, the median debt-servicing ratio for indebted owner-occupier households aged 55-64 years fell slightly between 2002 and 2005, while for younger households it increased. ✎



Financial Intermediaries

The ongoing expansion of the Australian economy continues to be reflected in the strong performance of financial intermediaries. Banks and general insurers have, in aggregate, been highly profitable in recent years and the wealth management industry has benefited from strong growth in assets under management. In the banking sector, a notable feature of the current environment is the robust competition that is evident for both household and business lending opportunities, as well as for deposits. The arrears rate on housing loans has also increased from the very low levels of a few years ago, reflecting the general lowering of credit standards that has taken place since the mid 1990s. Notwithstanding this, the level of banks' overall non-performing loans remains very low.

Deposit-taking Institutions

Profitability

The Australian banking system continues to be highly profitable, with the aggregate pre-tax profits of the five largest banks increasing by 14 per cent in the 2006 financial year, to around \$24½ billion (Table 3). This represents an aggregate pre-tax return on equity of 27 per cent, which, abstracting from changes associated with the move to the new International Financial Reporting

Table 3: Banks' Annual Profit Results^(a)
2006, five largest banks, consolidated

	Level \$b	Growth ^(b) Per cent	Per cent of average assets
Income	50.1	4.6	3.3
Net interest income	29.8	–	2.0
Net income from wealth management	6.3	–	0.4
Other non-interest income	14.0	–	0.9
Expenses			
Operating expenses	23.8	-3.3	1.6
Bad and doubtful debts	1.9	0.1	0.1
Profit^(c)			
Net profit before tax	24.4	14.1	1.6
Net profit after tax	17.0	12.4	1.1

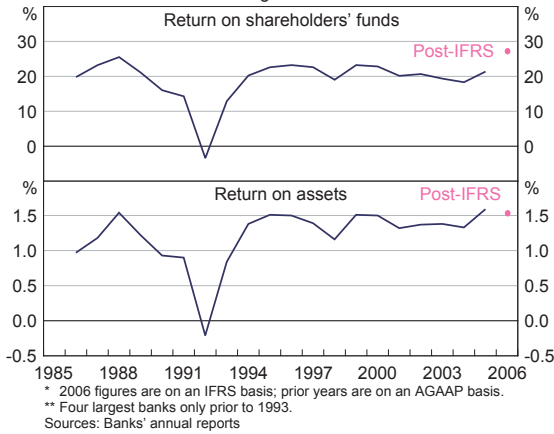
(a) Year to September for ANZ Banking Group, National Australia Bank, St George Bank and Westpac Banking Corporation; year to June for Commonwealth Bank of Australia

(b) Some items are not directly comparable due to the introduction of IFRS

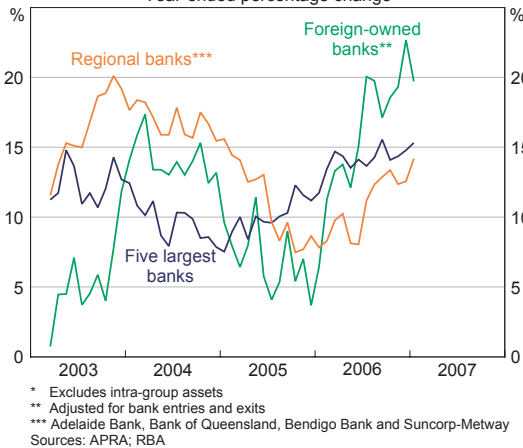
(c) Before outside equity interests

Sources: Banks' annual reports

Graph 32
Profits before Tax*
 Five largest banks**



Graph 33
Banks' Assets*
 Year-ended percentage change



Standards (IFRS), is broadly similar to the average of recent years (Graph 32).¹ The pre-tax return on assets has been less affected by the accounting changes and is largely unchanged from the previous year, to stand at slightly above the average of the past decade.

Strong profitability continues to be associated with a robust expansion of balance sheets, with total assets (excluding intra-group activities) on banks' domestic books increasing by 17 per cent over the year to January 2007. While this figure is slightly boosted by accounting changes, it largely reflects ongoing strong growth in domestic lending – which accounts for around 65 per cent of total assets – as well as increased holdings of trading and investment securities. Lately, foreign-owned banks' assets have grown particularly strongly, increasing by 20 per cent over the year to January (Graph 33).

Banks' interest margins continue to decline, with the ratio of net interest income to average interest-earning assets falling to 2.3 per cent in the latest financial year (compared

to 3.7 per cent a decade ago) (Graph 34). This ongoing narrowing of margins reflects competitive pressures in both lending and deposit markets – in Australia and abroad – and the fact that the banking sector is sourcing a higher share of funding from wholesale markets than in the past.

At the same time, the banking sector is earning a higher share of its income from wealth management activities. While accounting changes contributed to banks reporting relatively modest growth in income from wealth management operations over the past year, this form of income now accounts for about 13 per cent of total income for the five largest banks, compared to 9 per cent five years ago. Moreover, funds under management at these banks increased by 16 per cent in the latest financial year.

¹ For further details see Reserve Bank of Australia (2006), 'Box A: International Financial Reporting Standards', Financial Stability Review, September.

A key driver of banks' strong performance over the past decade or so has been the moderate growth of operating expenses, relative to that of income. In the latest year, aggregate expenses for the five largest banks fell slightly, due mainly to lower restructuring costs at one bank. As a result, the aggregate cost-to-income ratio for these banks fell to 48 per cent in 2006, around 13 percentage points lower than it was in the mid 1990s (Graph 35).

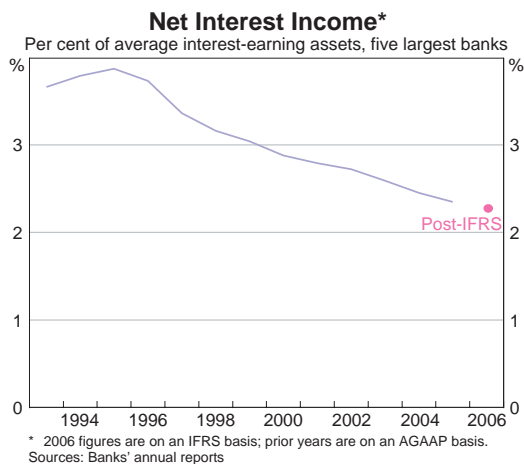
Lending and Competition

As noted in previous *Reviews*, strong competition in lending markets is a prominent feature of the current banking environment. Over recent years, this competition has been particularly pronounced in the housing loan market and has been associated with a contraction in margins and significant changes in lending practices. More recently, competition has also intensified around lending to businesses as banks have refocused their attention on this segment to help offset the moderation in the demand for housing credit.

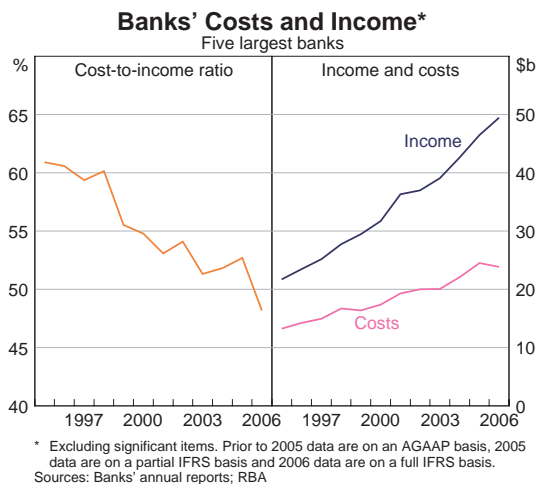
Bank business credit grew by 17 per cent over the year to January, up slightly from 16 per cent over the preceding year, and faster than the 11 per cent growth in banks' on-balance sheet housing credit. Growth has been particularly strong in large loans, including syndicated facilities where a number of lenders each finance a portion of the total amount. Nearly \$100 billion of such facilities were approved last year, 38 per cent higher than in 2005, with around one quarter of these used to finance mergers and acquisitions, compared to an average of 15 per cent over the period since the early 1990s (Graph 36).

As discussed in *The Macroeconomic and Financial Environment* chapter, the strong growth in leveraged buyouts in the past year is an issue that has attracted considerable attention. While some of the largest Australian banks are active participants in this market, arranging and underwriting debt issued in these transactions, they typically retain only a portion of the credit

Graph 34

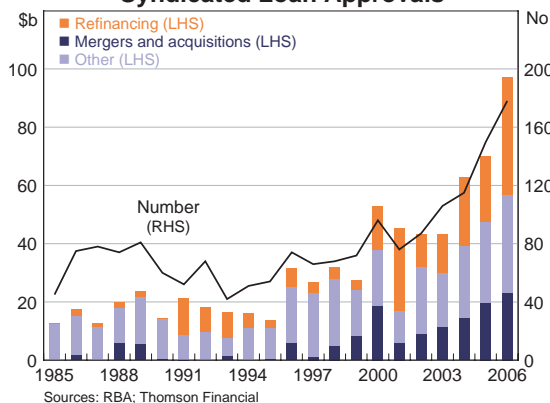


Graph 35



Graph 36

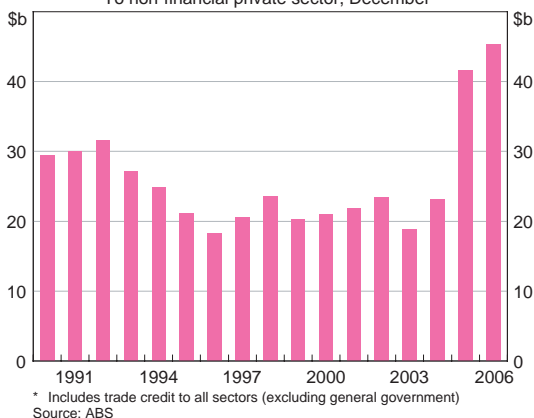
Syndicated Loan Approvals



Graph 37

Cross-border Loans Outstanding

To non-financial private sector, December*



preceding decade (Graph 37). Much of this increase has been associated with the activities of banks located in the United States and the United Kingdom.

Another factor prompting greater competition has been the rising prominence of brokers in the business banking market, particularly in asset-backed finance (including commercial property) and loans to small- to medium-sized enterprises (SMEs) backed by residential property. It appears that broker-originated business lending has grown strongly (albeit from a low base) in recent times and, although precise data are unavailable, it has been estimated that as much as one third of small- to medium-sized borrowers currently access finance through brokers.

Competitive pressures have manifested themselves in an ongoing contraction in business loan margins, with the spread between the weighted-average variable interest rate on business loans and the cash rate falling by around 35 basis points over the past year, with recent margin compression most evident in large loans (Graph 38). Business surveys also indicate continued pressure on lending margins, with the JPMorgan and East & Partners Survey of Business

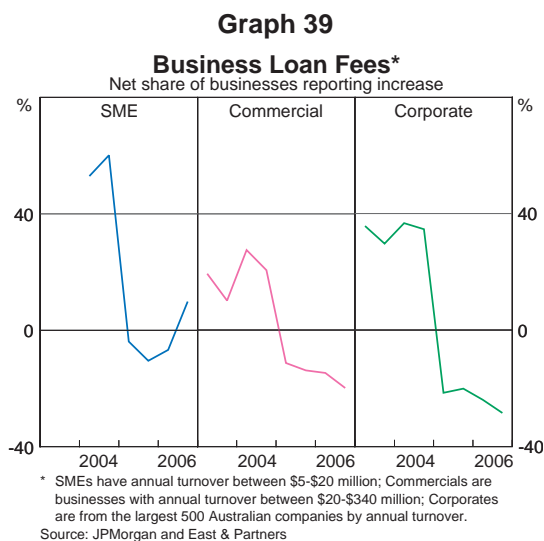
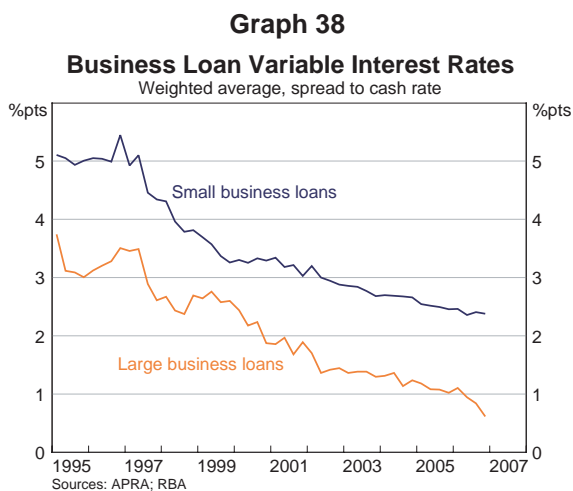
risk in their own lending portfolios, while distributing the majority to other institutional investors. A recent survey by APRA showed that, at end December 2006, the gross private equity exposures (including short-term underwriting commitments) of the larger Australian-owned banks totalled approximately \$15 billion, although amounts actually funded are considerably smaller.

A number of factors have prompted the strengthening of competition in business lending, including the activities of newer entrants into the market. Foreign-owned banks operating in Australia have expanded their business lending at a rapid rate recently, and have been particularly active in the market for large loans (see Box C). In addition, domestic banks face competition from banks located overseas, with the value of cross-border loans outstanding to Australian businesses increasing strongly in the past two years, to stand at around \$45 billion at end 2006, compared to an average of around \$20 billion over the

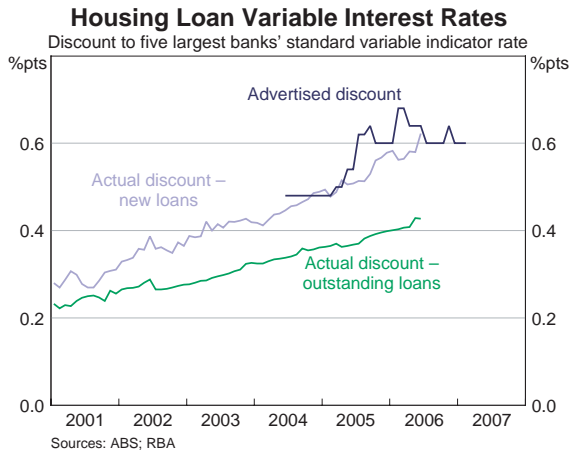
Borrowers showing that the number of businesses that have experienced a reduction in their borrowing spread over the past year significantly exceeds the number that have experienced an increase. Moreover, lenders appear more willing to compete on the non-interest features of business loans, with the same survey showing that the number of businesses that have had a reduction in their lending fees has exceeded the number that have experienced an increase over recent years (Graph 39). Reflecting this competitive environment, banks have sought to bolster the number of business banking staff, as well as to streamline the processing of business loans. Part of this process has been to make greater use of automated approval systems for certain types of loans.

Competition also remains intense in the housing loan market, which, over recent years, has been associated with some notable changes in lending practices. As discussed at some length in previous *Reviews*, these include: an increase in permissible debt-servicing and loan-to-valuation ratios; the use of alternative property valuation techniques; an increased reliance on brokers to originate loans; and the wider availability of 'low doc' loans. More recently, it appears that many lenders have attempted to maintain strong growth in their mortgage portfolios at the same time as the demand for housing finance has moderated from its peaks in 2003.

This competition is evident in the contraction of margins on variable-rate housing loans, with the vast majority of new borrowers now paying an interest rate less than the major banks' standard variable home loan indicator rate. The average interest rate paid by new borrowers was around 60 basis points below the standard variable rate as of mid 2006, compared to an average discount of around 45 basis points two years earlier, and around 20 basis points in the mid 1990s (Graph 40). Consistent with a large proportion of housing loans having been taken out in recent years, the average discount on outstanding loans has increased to around 40 basis points. With refinancing accounting for over one quarter of new housing loan approvals over



Graph 40



the past two years, it seems likely that average housing loan margins will continue to contract, even if the size of the discount on new loans stabilises.

It appears that competition has also picked up around fixed-rate housing lending, as some lenders have responded to increased demand for these products. In late 2006, fixed-rate loans accounted for around 20 per cent of owner-occupier loan approvals, well above the average of around 10 per cent since 2000. At the same time, the margin on fixed-

rate loans has narrowed slightly, with the 3-year fixed indicator rate increasing by less than the 3-year swap rate over the past year.

The narrowing of housing loan margins has been particularly pronounced in the low-doc segment of the mortgage market. These loans involve a large element of self-verification in the application process and are designed mainly for the self-employed or those with irregular incomes who do not have the documentation required to obtain a conventional mortgage. The interest rate paid on new low-doc loans was, on average, around 20 basis points below the major banks' standard variable indicator rate in mid 2006, compared to 50 basis points *higher* than the standard variable rate two years earlier. This is equivalent to 45 basis points above the actual rate paid on new full-doc loans. In general, however, banks entered the low-doc market later than some more specialised non-bank lenders.

Heightened competition has also seen the increased availability of housing loans that require little or no deposit. While such products have been available from certain lenders for some time, no-deposit loans are now available from a wider range of lenders and tend to feature more prominently in product advertising. Margins on no-deposit loans have narrowed recently, with many lenders advertising these products at rates below the major banks' standard variable indicator rate, whereas a premium was typically charged a few years ago – the average advertised interest rate on no-deposit loans is currently around 45 basis points below the standard variable rate. While the high loan-to-valuation ratios on these loans may result in a borrower being more susceptible to a change in their financial circumstances, lenders' mortgage insurance is typically required on these loans.

The ability of banks and non-bank lenders to access funding through the residential mortgage-backed securities (RMBS) market at attractive spreads has been one of the factors that has sustained the competition in the housing loan market. Investors currently require spreads of around 22 and 16 basis points over the bank bill swap rate to hold AA-rated and AAA-rated RMBS, respectively (Graph 41). This compares to spreads of around 70 and 35 basis points a few years ago.

Strong competition is also evident in the personal lending market, especially in credit cards. Most issuers, including the five largest banks, now offer low-rate cards with interest rates in the range of 9 to 14 per cent, compared with 17½ per cent on traditional cards. Like other segments of the loan market, competition has been spurred by smaller players and newer entrants – foreign-owned banks, for example, have increased their share of total bank credit card balances outstanding from 8 per cent in early 2002, to 12 per cent as at January 2007. As discussed in *The Macroeconomic and Financial Environment* chapter, margin lending is another component of personal credit that has recently grown quickly.

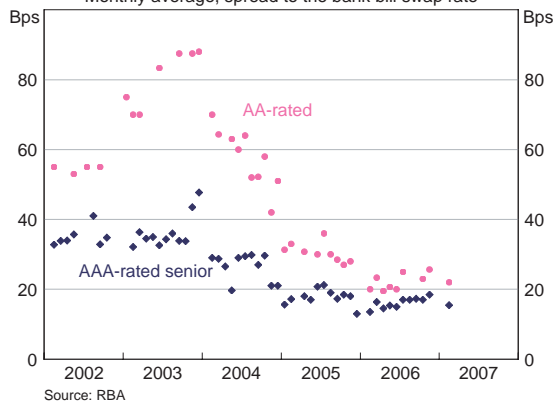
Credit Risk and Capital Adequacy

Credit Risk

The ratio of banks' non-performing assets to on-balance sheet assets remains at a very low level, both by historical and international standards. As at December 2006, this ratio stood at 0.4 per cent and has been largely unchanged over the past year or so, after falling for a number of years (Graph 42). Of these non-performing assets, just under half are classified as 'impaired' – that is, payments are in arrears (or otherwise doubtful) and the amount owed is not well covered by collateral. The remainder are considered to be well covered by collateral, though payments are in arrears by 90 days or more.

Within these aggregate figures, the arrears rate on domestic business loans has fallen consistently over the past few years and, while it ticked up in the December quarter to 0.9 per cent, it remains low (Graph 43). In contrast, both the domestic personal and housing loan arrears rates increased between 2003 and early 2006, but have shown little change since.

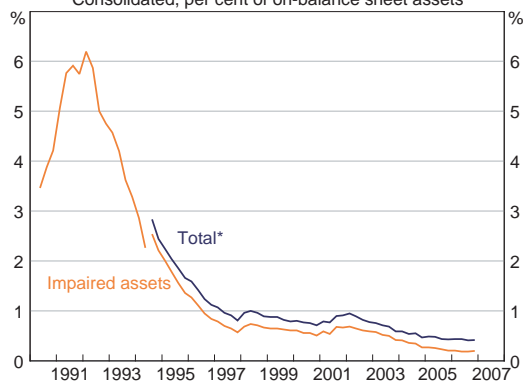
Graph 41
Spreads on Domestically Issued Prime RMBS
Monthly average, spread to the bank bill swap rate



Source: RBA

Graph 42

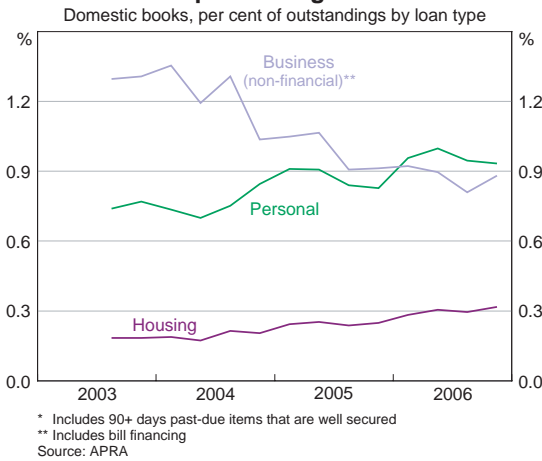
Banks' Non-performing Assets
Consolidated, per cent of on-balance sheet assets



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

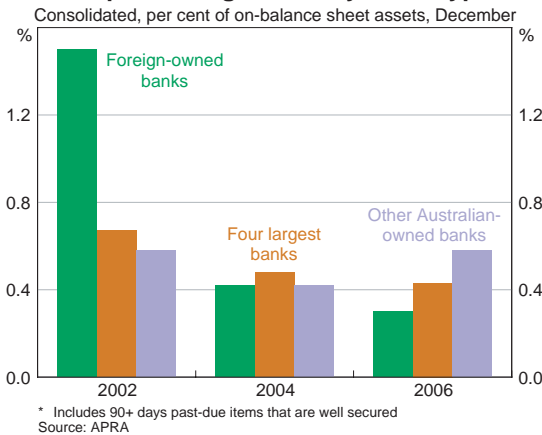
Graph 43

Non-performing Loans*



Graph 44

Non-performing Assets by Bank Type*



Notwithstanding the overall low levels of problem assets, there have been slightly divergent trends in non-performing assets ratios across different types of banks, with the ratio for the foreign-owned and four largest Australian-owned banks continuing to fall over the past two years, while it has risen slightly for other Australian-owned banks (Graph 44). For foreign-owned banks, part of this fall reflects the recent strong growth in their assets noted above, although the level of problem assets has also declined over recent years. This divergence across bank types is consistent with developments in banks' mortgage portfolios, where the mild increase in housing loan arrears from the lows of two years ago has been less pronounced at the four largest banks compared to other Australian-owned banks. This is likely to partly reflect a higher aggregate share of low-doc loans on regional banks' balance sheets, with such loans accounting for as much as one quarter of some regional banks' outstanding mortgages. More generally, as discussed in *The*

Macroeconomic and Financial Environment chapter, it is unsurprising that housing loan arrears are higher than they were a few years ago given the changes in the housing finance market that have seen credit become more widely available, and on more accommodating terms, than in the past.

Although housing and personal loan arrears are higher than they were a few years ago, so far, this has not translated into increased write-offs, with total write-offs for the four largest banks equivalent to 0.20 per cent of domestic loans outstanding in 2006 (down from 0.26 per cent in 2004). Personal loans, which are often unsecured, tend to have higher loss rates than other forms of lending and accounted for around 70 per cent of these write-offs. Notwithstanding this, the personal write-off rate, at around 1.5 per cent, is lower than it was four years ago (Graph 45).

Australian banks are also exposed to credit risk through their overseas operations. Over the past six months, Australian-owned banks' foreign exposures increased by around 7 per

cent, to stand at around 29 per cent of total assets as at December 2006 (Table 4). These exposures remain concentrated in New Zealand and the United Kingdom and are largely due to the activities of branches and subsidiaries located in these countries. Although Australian-owned banks have built a stronger presence in the Asia-Pacific region in recent years, claims on these countries remain a small share (6 per cent) of banks' total foreign exposures.

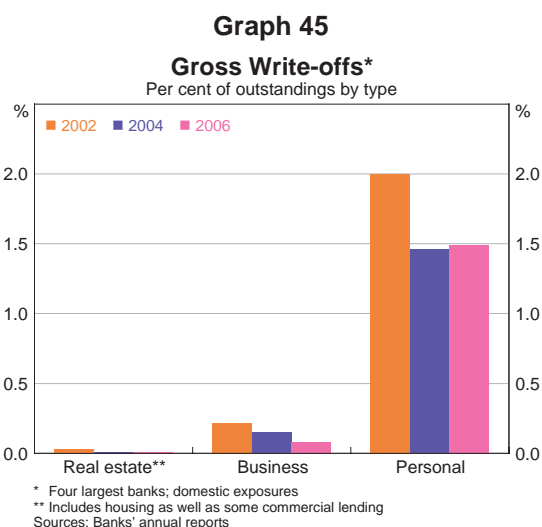


Table 4: Australian-owned Banks' Foreign Exposures
December 2006, ultimate risk basis

	Total		of which:	
	Level \$b	Share Per cent	Cross-border \$b	Local \$b
New Zealand	201.5	46.0	5.8	195.7
United Kingdom	107.0	24.4	22.7	84.3
United States	43.6	10.0	28.2	15.4
Other developed countries	54.9	12.5	49.7	5.2
Developing countries	18.1	4.1	11.3	6.8
Offshore centres ^(a)	12.5	2.8	7.4	5.0
Other	0.4	0.1	0.4	0.1
Total	437.9	100.0	125.4	312.5
<i>Memo: Per cent of total assets</i>	<i>28.5</i>		<i>8.2</i>	<i>20.3</i>

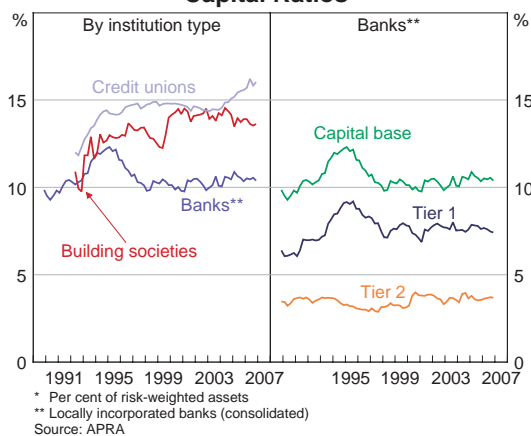
(a) Includes Hong Kong and Singapore
Source: APRA

Capital Adequacy

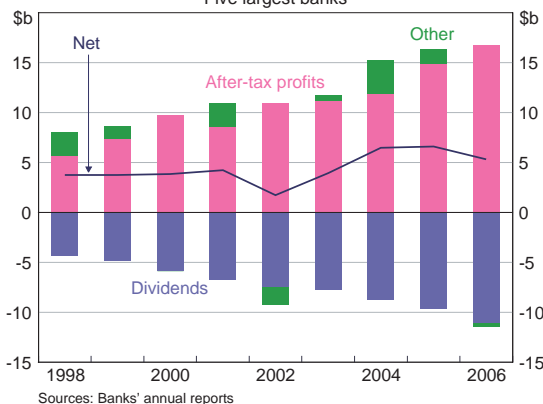
Australian banks remain well capitalised, with an aggregate regulatory capital ratio of 10.4 per cent as at December 2006, around the same as a year ago and the average of the past decade (Graph 46). The aggregate capital ratio of the credit union sector has steadily increased to 16 per cent over recent years, while the aggregate ratio for the building society sector has fallen a little, to around 14 per cent.

For banks, the Tier 1 capital (primarily paid-up equity and retained earnings) ratio has fallen slightly over the past year but, at 7.4 per cent, it remains well above international minimum requirements. Strong profitability has allowed banks to increase retained earnings at around the same rate as risk-weighted assets over recent years while, at the same time, paying out around two thirds of their after-tax profits to shareholders in the form of dividends (Graph 47).

Graph 46
Capital Ratios*



Graph 47
Tier 1 Capital Changes
Five largest banks



market risk, Australian banks do not rely heavily on trading income for profitability, with this form of income accounting for around 5 per cent of total operating income of the four largest

The Tier 2 capital (primarily term subordinated debt) ratio increased slightly over the past year as issuance of term subordinated debt has outpaced growth in risk-weighted assets. Over the past decade or so, there has been a considerable change in the composition of Tier 2 capital. Banks have increased their use of lower Tier 2 capital – mainly term subordinated debt – while their use of perpetual subordinated debt has declined. Lower Tier 2 capital has increased to around 75 per cent of total Tier 2 capital, up from around 60 per cent in the mid 1990s.

Market Risk

Australian banks have traditionally had only small unhedged positions in financial markets. This is illustrated by the fact that, in 2006, the value-at-risk – which measures the potential loss, at a given confidence level, over a specified time horizon – for the four largest banks was equivalent to 0.04 per cent of shareholders' funds, which was unchanged from the previous two years (Table 5). Consistent with this low exposure to

Table 5: Traded Market Risk
Four largest banks, annual average value-at-risk, per cent of shareholders' funds^(a)

	2004	2005	2006 ^(b)
Interest rate	0.02	0.02	0.02
Foreign exchange	0.01	0.01	0.00
Other ^(c)	0.02	0.01	0.02
Diversification benefit	-0.01	-0.01	-0.01
Total	0.04	0.04	0.04

(a) Value-at-risk is calculated using a 99 per cent confidence interval and one-day holding period.

(b) Shareholders' funds in 2006 are reported under IFRS.

(c) Other market risks include commodity, equity, prepayment, volatility and credit-spread risk.

Sources: Banks' annual reports

Australian banks in the latest year, compared to as much as one third for some of the large globally active banks.

The use of derivatives is an important element of banks' trading activities, with the banking sector as a whole increasing its trading in such instruments in recent years, mainly reflecting the activities of foreign-owned banks in interest-rate and foreign-exchange markets. Nearly one quarter of the banking sector's total trading income was earned through derivative trading activities in 2006, up from around 10 per cent three years ago.

Funding and Liquidity

As discussed at some length in previous *Reviews*, the way in which the banking sector funds its balance sheet growth has changed considerably over the past decade or so. This is mainly due to the fact that bank credit growth, particularly that extended to the household sector, has consistently outpaced the growth in retail deposits over much of this period. Reflecting this, retail deposits accounted for 21 per cent of banks' total liabilities as at January 2007, down from 37 per cent a decade ago (Graph 48).

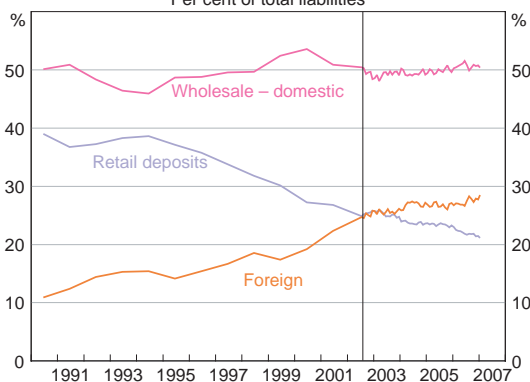
At the same time, vigorous competition in the deposit market over recent years has led many deposit-takers to offer high-yield online savings accounts. The average rate on these accounts is 5.7 per cent, only slightly lower than the cash rate of 6.25 per cent, and well above the rates available on transaction accounts. While this competition has meant that banks have to pay more for traditionally low-cost retail

funding, and has hence added to the pressure on margins, it has also increased the attractiveness of bank deposits as a financial asset for the household sector. The higher returns available on these accounts has contributed to a strengthening in bank deposit growth over the past five or so years, and it may also be one reason why the Westpac and Melbourne Institute Survey of Consumer Sentiment shows that the share of households that view bank deposits as the 'wisest place for savings' has increased to around 20 per cent, up from 15 per cent at the end of the 1990s (Graph 49).

Notwithstanding the recent stronger growth in deposits, banks continue to rely more heavily than in the past on wholesale markets, including those offshore, to fund their balance sheet growth. Over the year to January 2007, banks' foreign liabilities increased by over 25 per cent and accounted for about 28 per cent of total liabilities, compared to around 15 per cent in the mid 1990s. Around two thirds of this offshore borrowing has been through the issuance of debt securities, primarily by the four largest banks and denominated in US dollars. The foreign-currency risk is, however, almost fully hedged using derivative instruments.

Graph 48

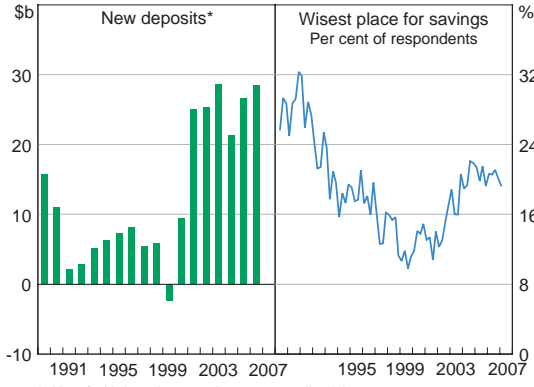
Banks' Liabilities*
Per cent of total liabilities



* All banks (domestic operations, on-balance sheet). Annual data up to June 2002 and monthly data from July 2002.
Sources: ABS; APRA

Graph 49

Households' Bank Deposits



* Net of withdrawals; 2006 data are annualised three quarters to September

Sources: ABS; Westpac and Melbourne Institute

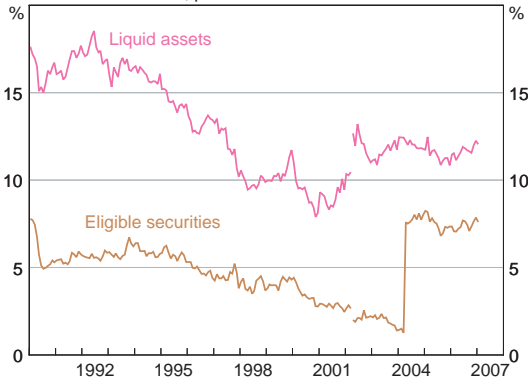
growth and lending growth. For these banks, the value of assets that have been securitised is equivalent to 28 per cent of the value of assets retained on their balance sheets, compared to less than 2 per cent for the four largest banks.

On the other side of the balance sheet, liquidity risks in the banking sector are managed, in part, through holding assets that can be readily sold in adverse market conditions. Such 'liquid' assets include government securities and securities issued by other authorised deposit-taking institutions, as well as cash and deposits. On a domestic books basis, liquid assets accounted for around 11 per cent of total assets in 2006, a share that has remained relatively stable in recent years after falling for much of the 1990s (Graph 50). The proportion of these assets that can be used in repurchase agreements with the Reserve Bank has also been broadly steady since the eligibility criteria were expanded in March 2004.

Graph 50

Banks' Liquid Assets and Eligible Securities*

Domestic books, per cent of on-balance sheet assets



* Series break in March 2002 due to change in reporting requirements
Source: APRA

arrange an issue, potentially at short notice. Reflecting changes in liquidity management practices, APRA also allows banks that have sufficiently sophisticated liquidity management systems to

Of these offshore debt securities, around 80 per cent had been issued into the US and UK markets, though Australian banks have expanded the number of markets in which they issue securities over recent years. In 2006, the weighted-average term to maturity of offshore bonds issued by the four largest banks was around five years.

While the four largest banks continue to tap offshore debt markets, other Australian-owned banks rely relatively more on securitisation to bridge the gap between retail deposit

While Australian banks tend to hold a lower share of their assets in traditionally liquid form than they did a decade ago, financial innovation has increased the liquidity of other parts of the portfolio. In particular, the growth of securitisation markets means that banks' loan portfolios, particularly residential mortgages, may be more readily used to meet the redemption of liabilities than in the past. The ability of banks to tap securitisation markets as a source of liquidity depends, in part, on having the appropriate systems in place to

use a scenario-based approach to show that they would be able to meet their payments for five days under adverse conditions.

Financial Markets' Assessment

Financial markets and rating agencies continue to take a positive view of Australian banks and the financial sector more generally. In February, Standard & Poor's (S&P) upgraded the four largest Australian banks' long-term credit ratings to AA from AA-, the first upgrade for any of these banks since 1996 (Table 6). Of the world's 100 largest banks (ranked by Tier 1 capital), only three have higher S&P credit ratings. Suncorp-Metway was also upgraded, to A+, in March.

Table 6: Long-term Ratings of Australian Banks^(a)

As at 22 March 2007

	Current	Last change	
		Direction	Date
Adelaide Bank	BBB+	↑	October 2004
AMP Bank	A-	↑	August 2004
ANZ Banking Group	AA	↑	February 2007
Arab Bank Australia	A-	—	January 2007
Bank of Queensland	BBB+	↑	April 2005
BankWest	AA-	↑	August 2006
Bendigo Bank	BBB+	↑	February 2005
Commonwealth Bank of Australia	AA	↑	February 2007
HSBC Bank Australia	AA	↑	July 2006
ING Bank (Australia)	AA	↑	August 2005
Macquarie Bank	A	—	November 1994
National Australia Bank	AA	↑	February 2007
St George Bank	A+	↑	January 2006
Suncorp-Metway	A+	↑	March 2007
Westpac Banking Corporation	AA	↑	February 2007

(a) Local currency

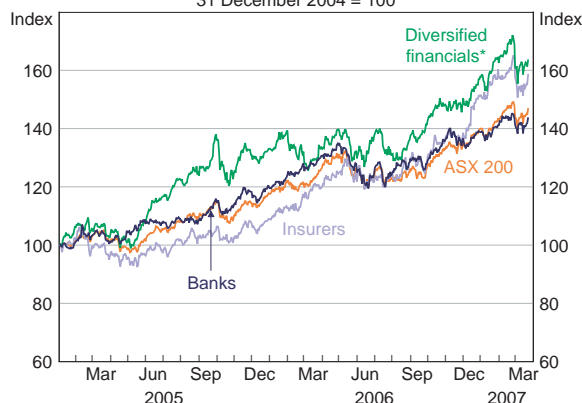
Source: Standard & Poor's

Banks' share prices have increased by around 14 per cent over the past six months, slightly underperforming the broader market (Graph 51). Market-based measures of credit risk also remain benign, with bank bond spreads remaining low by the standards of recent years, and the premia on credit default swaps – both senior and subordinated – falling further over the past six months (Graph 52).

Graph 51

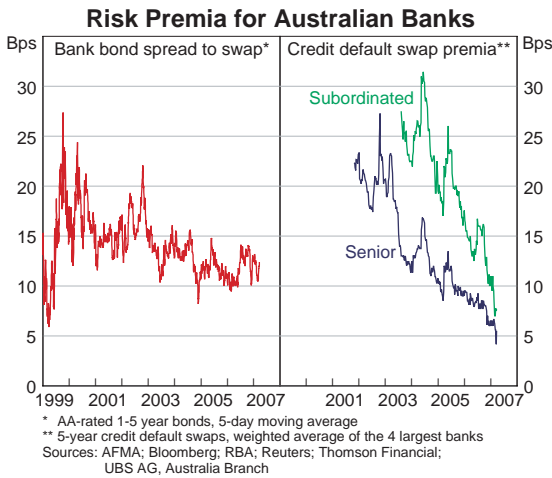
Financial Sector Share Prices

31 December 2004 = 100



* Includes Macquarie Bank and Suncorp-Metway
Source: Bloomberg

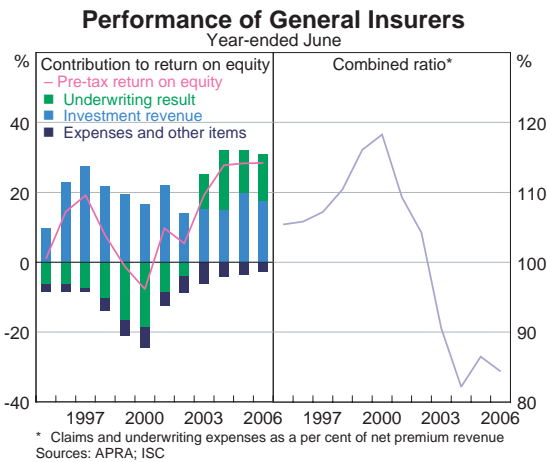
Graph 52



General Insurance

The Australian general insurance sector, in aggregate, continued its recent run of strong results in the latest financial year. In 2006, pre-tax return on equity was 28 per cent, with aggregate pre-tax profits increasing by 6.5 per cent from the previous year (Graph 53). Return on equity was around the same as in the past two years, but around 9 percentage points above the average return of just under 20 per cent recorded over the previous five years.

Graph 53



Within this aggregate result, investment revenue accounted for around 60 per cent of total profits, though the level of investment revenue was down slightly from the previous year. The insurance sector also continued to benefit from a favourable claims environment, with the ‘combined ratio’ – claims and underwriting expenses relative to net premium revenue – remaining low by recent standards, at around 85 per cent. Losses from Cyclone Larry, which hit northern Queensland in March 2006, are currently estimated at between \$350 million and \$500 million, which is within the provisions insurers hold against such events.

Consistent with developments elsewhere in the financial system, heightened competition is placing pressure on premiums in the general insurance industry. This pressure has been most pronounced in commercial business lines – including public and product liability, and professional indemnity insurance – in which gross premium revenue has generally contracted over the past year or so. At the same time, however, the claims experience in many of these lines has been relatively subdued, influenced in part by previous tort law reforms, which have limited insurers’ cost of claims.

In personal insurance lines – which account for half of insurers’ premium revenue – growth in net premium revenue was slower than the growth in net claims over the year to June 2006.

In aggregate, general insurers continue to hold capital well in excess of minimum regulatory requirements. As at June 2006, their aggregate capital holdings amounted to twice the regulatory

minimum, although this coverage ratio has fallen from 2.3 times the minimum requirement a year earlier.

Financial market participants and rating agencies continue to hold a positive view of the general insurance sector. All of the five largest general insurance companies are rated A+ or higher by Standard & Poor's (Table 7). General insurers' share prices outperformed the broader market over the past six months, partly reflecting the favourable reaction to merger and acquisition activity, both in Australia and overseas. The merger of Suncorp-Metway and Promina continues the trend of consolidation in the insurance sector that has been evident for a number of years, with the number of general insurers in Australia having declined by around 20 per cent over the past decade or so. As a result of this trend, the five largest direct insurance groups accounted for just under three quarters of gross premium revenue in the year to June 2006, up from around 60 per cent in 2000. This ratio will increase further following the integration of Suncorp-Metway's and Promina's businesses.

Global reinsurers – including their Australian branches – appear to be well placed to absorb some of the risk from domestic insurers. Following two years of historically high natural catastrophe claims – around half of which were covered by the reinsurance industry – total insured catastrophe losses declined to one of the lowest levels seen in the past 20 years in 2006 (Graph 54).

Table 7: Financial Strength Ratings of Selected Large Insurers

As at 22 March 2007

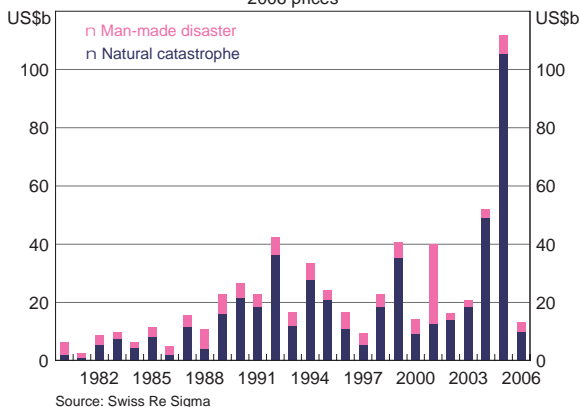
Allianz Australia Insurance	A+
Insurance Australia	AA
QBE Insurance Australia	A+
Suncorp-Metway Insurance	A+
Vero Insurance (Promina)	A+

Source: Standard & Poor's

Graph 54

Global Insured Catastrophe Losses

2006 prices



Wealth Management

The wealth management industry continues to expand rapidly in Australia, with total (consolidated) assets under management increasing by around 15 per cent over the year to December 2006, to stand at nearly \$1.1 trillion (Table 8). Superannuation funds recorded the strongest growth in assets over the period, continuing the trend of much of the past decade, and account for nearly 55 per cent of total assets under management.

As noted above, banks in Australia are among the financial institutions that have sought to benefit from the strong growth in the wealth management industry, with Australian-owned

Table 8: Assets under Management

December 2006, consolidated

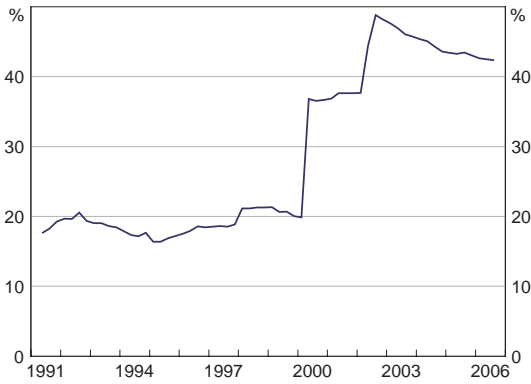
	Level \$b	Share of total Per cent	Year-ended growth Per cent
Superannuation funds	596.5	54.4	20.1
Life insurers ^(a)	209.5	19.1	6.1
Other managed funds	289.9	26.5	11.6
Total	1095.9	100.0	14.9

(a) Includes superannuation funds held in the statutory funds of life insurance offices
Source: ABS

Graph 55

Banks' Retail Funds under Management*

Per cent of total



* Australian-owned banks
Source: Plan for Life

banking groups' share of total retail funds under management currently standing at around 40 per cent (Graph 55). While banks' market share remains well above its level of around 20 per cent in the 1990s, it has fallen somewhat since the large-scale acquisitions around the turn of the decade. This decline, in part, reflects competition in the wealth management sector, including the entry of a significant number of new fund managers over recent years.

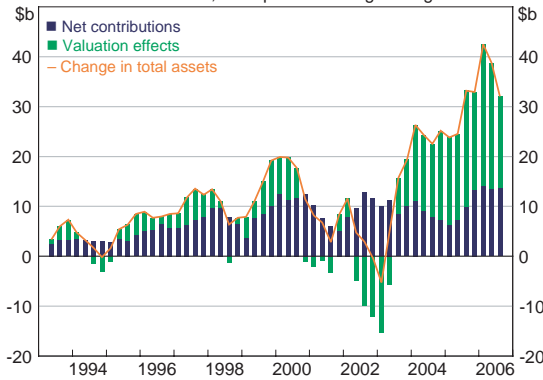
Superannuation

Superannuation funds' assets increased by \$100 billion, or around 20 per cent, over the year to December 2006, to stand at nearly \$600 billion. This rate of increase was around the same

Graph 56

Change in Assets of Superannuation Funds

Consolidated, four-quarter moving average



Source: ABS

as that over the preceding year, notwithstanding a slight moderation in the buoyant investment returns recorded over recent years. At the same time, households invested around \$53 billion directly with superannuation funds over the year to September 2006, which is around the record levels for new contributions seen over the past few years (Graph 56).

One of the factors contributing to the strong growth of assets in superannuation funds has been

the changes to retirement savings arrangements in Australia over the past 20 or so years, particularly the introduction of compulsory employer contributions in 1992. Looking ahead, the recently announced changes to the taxation treatment of superannuation are likely to increase the incentives for households to invest in superannuation, relative to other assets, and hence may provide a further fillip to the industry. Most notably, tax on payouts from pre-taxed funds has been abolished, and reasonable-benefit limits that capped the amount of superannuation that could be taken on a tax-advantaged basis have been removed. Other changes include the introduction of a \$50 000 limit on tax-advantaged contributions that is irrespective of age, as well as a limit on post-tax contributions of \$450 000 over three years; as a transitional measure, one-off post-tax contributions of up to \$1 million are permitted prior to 1 July 2007.

Life Insurers

Assets of life insurers increased by 6 per cent in 2006, to stand at \$210 billion (Graph 57). While premiums and new contributions marginally exceeded policy payments in 2006, the vast majority of life insurers' asset growth in recent years has been due to investment returns. As noted in previous *Reviews*, this dependency on investment returns rather than policy premiums reflects the long-running challenge faced by the life insurance industry associated with households shifting a greater share of their retirement savings into superannuation funds, rather than life offices. Indeed, it seems likely that the performance of life insurers will remain closely linked to equity markets, with these institutions increasing the share of their assets invested in domestic and overseas equities to around 62 per cent of financial assets, up from around 45 per cent a decade ago.

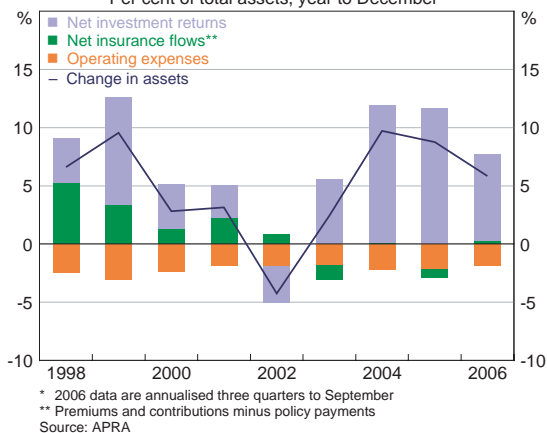
Other Managed Funds

The combined (consolidated) assets of public unit trusts, cash management trusts, friendly societies and common funds increased by around 12 per cent over the year to December 2006 and accounted for just over one quarter of funds under management (Graph 58). Unit

Graph 57

Performance of Life Insurers

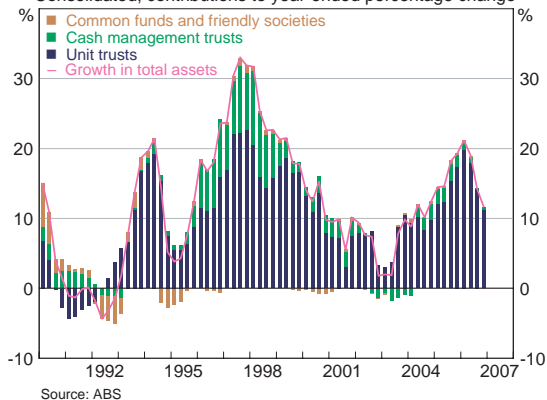
Per cent of total assets, year to December*



Graph 58

Assets of Other Managed Funds

Consolidated, contributions to year-ended percentage change



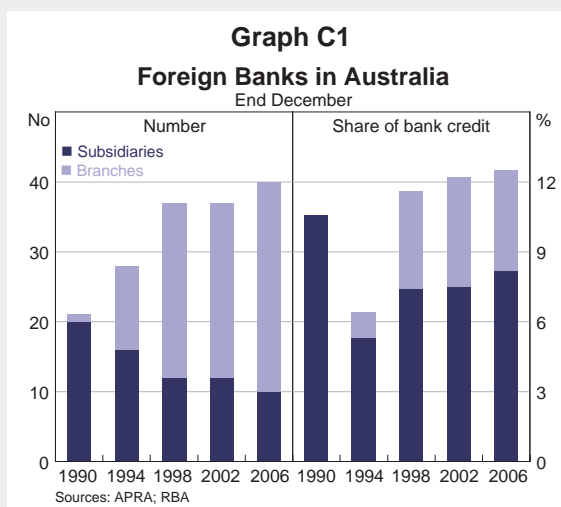
trusts, which account for over 80 per cent of these assets, recorded growth of 14 per cent over the period, compared to 22 per cent over the preceding year. In contrast, rising commercial property prices continue to underpin strong growth in property trusts, with assets of these funds increasing by 18 per cent over the past year.

Box C: Foreign-owned Banks in Australia

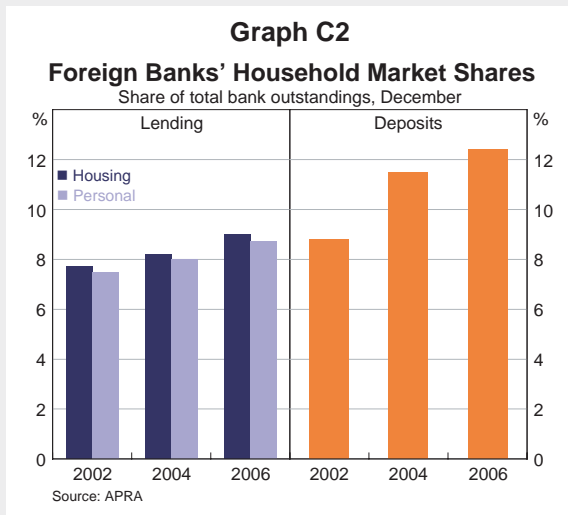
Prior to 1985, foreign-owned banks had only a limited involvement in the Australian banking system, with just two foreign institutions operating continuously as authorised banks in the post-war period.¹ This situation reflected a moratorium on foreign-bank entry that had effectively been in place during this period. Despite this restriction, foreign banks did participate in the Australian financial system, mainly through wholly owned or part-owned merchant banks, with the merchant banking sector accounting for around 5 per cent of the total assets of financial intermediaries in Australia in the 1970s. The relaxation of foreign-bank entry restrictions announced in 1984 led to the granting of bank licenses to 15 overseas banks over the next year and a half – some to existing merchant banks and some to genuinely new bank entrants. One feature of the entry requirements was that foreign banks assumed subsidiary status rather than a branch structure, thus requiring capital to be held locally.

The early entrants generally struggled, however, to make meaningful inroads into the market shares of the incumbent banks, particularly in retail banking. When conditions on foreign bank entry were further liberalised in 1992, foreign banks were permitted to operate as a branch or as a subsidiary. If the bank operates as a branch, capital is not held locally and the bank is not permitted to accept retail deposits from Australian residents of less than \$250 000. Since the mid 1990s, the branch structure has become more prominent among foreign banks. Currently, 40 of the 54 Australian banking licences are held by foreign banks, with 30 of these operating as branches; some foreign banks have both a branch and a subsidiary in Australia (Graph C1). In contrast to the previous period, the foreign-owned banks' share of total domestic lending has increased noticeably over the past decade or so – from around 7 per cent of bank credit in 1994, to around 13 per cent at the end of 2006. This reflects a combination of acquisitions, new entrants and organic growth.

This increase in market share partly reflects a renewed focus on retail banking by foreign-owned banks over the past five or so years, which has been facilitated by the more widespread distribution of banking services via the internet. It is estimated that the number of



¹ *The Bank of New Zealand and Banque Nationale de Paris. The Bank of China also operated as a branch up to 1972, re-opening in 1985. For more details, see Edey, M. and B. Gray (1996), 'The Evolving Structure of the Australian Financial System', Reserve Bank Research Discussion Paper 9605.*



people banking online in Australia has increased at an average annual rate of 18 per cent in recent years, which has helped foreign-owned banks overcome the disadvantage of having small branch networks.² Most notably, foreign-owned banks were among the first institutions to offer high-yield online savings accounts, beginning in the late 1990s. Reflecting this, these banks currently hold around 12½ per cent of households' total bank deposits, compared to just under 9 per cent in 2002 (Graph C2). The rate of increase has, however, slowed over

the past couple of years as an increasing number of other deposit-takers have responded by offering similar products.

Foreign-owned banks have also increased their lending to the household sector at an above-average rate recently, though the gains in market share have been less pronounced than in the deposit market. These banks currently account for around 9 per cent of both total bank housing and personal loans outstanding.

In the housing loan market, at least two related factors appear to have contributed to this increase. The first is that the small existing portfolios of most foreign-owned banks has meant that they are able to advertise lower interest rates without adversely affecting the profitability of a large stock of loans to existing customers. The second is the wider acceptance on the part of customers of applying for loans over the internet, which has increased the ability of these banks to reach new borrowers. In personal lending, foreign-owned banks are most active in the credit card market, accounting for around 12 per cent of banks' domestic credit card balances outstanding. This share has increased from around 8 per cent five years ago, with a number of these banks focusing in particular on the low-rate/no-frills segment of the credit card market.

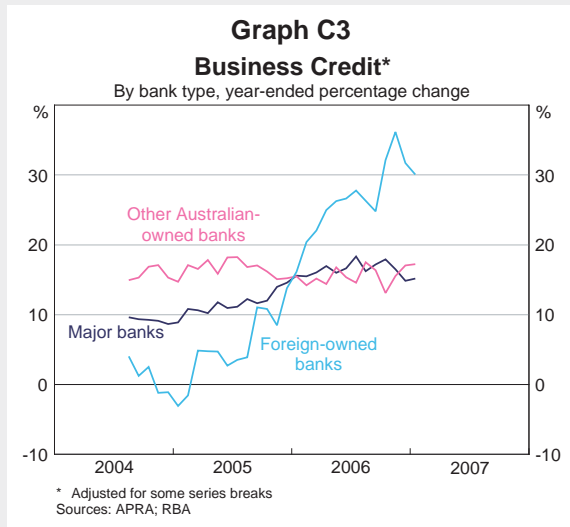
Despite the recent advances in retail banking, foreign-owned banks still have a larger presence in the business banking market, reflecting the focus of foreign bank branches on wholesale operations. At end 2006, foreign-owned banks accounted for around 18 per cent of total bank business credit outstanding. Business credit extended by these banks has grown very rapidly over the past 18 months, reaching an annual growth rate of over 35 per cent in late 2006, compared to around 16 per cent for Australian-owned banks (Graph C3). This recent strong performance has brought foreign-owned banks' market share back to around its 2002 level, after

² See Department of Communications, Information Technology and the Arts (2005), *Trust and Growth in the Online Environment*, page 13.

their business lending had grown at a below-average rate in the intervening period.

Much of the pick-up in foreign-owned banks' business lending growth has been in 'large' loans (defined as loans over \$2 million), with these banks accounting for around one quarter of outstanding bank loans of this size. The activity of foreign-owned banks appears to have been one of the catalysts for stronger competition in this market, which in turn has been associated with a contraction in lending margins. Foreign-owned banks

operating in Australia (as well as foreign banks located offshore) are also prominent in the market for syndicated loans, accounting for around one third of syndicated loan approvals in Australia in recent years, with part of this activity associated with the surge in leveraged buyouts over the past year. ↗



Developments in the Financial System Infrastructure

A stable and efficient financial system requires a robust payments and settlement system and sound financial infrastructure – the regulatory, accounting and legal framework that supports the day-to-day operations of financial intermediaries and markets. While Australia’s financial infrastructure is regarded highly – a view confirmed by the recent International Monetary Fund (IMF) review of the Australian financial system under the Financial Sector Assessment Program (FSAP) – the various financial regulators continue to examine areas where current arrangements can be refined. Recent issues considered include crisis management arrangements, trans-Tasman banking, the existence of overlapping or redundant regulations, compensation arrangements for retail clients of financial services licensees, and preparations for dealing with an avian flu outbreak.

Crisis Management Arrangements

As outlined in some detail in the September 2006 *Review*, the Council of Financial Regulators has endorsed the introduction of a scheme in Australia to provide depositors in a failed authorised deposit-taking institution (ADI) and policyholders in a failed insurer with timely access to at least some of their funds. The issue of crisis management arrangements was also considered in depth by the IMF as part of the recent FSAP review. As part of the Australian Government’s consideration of the Council’s proposal, the Treasury, together with regulatory agencies, has recently held a further round of discussions with the main industry bodies on specific design features of the scheme and on the potential costs of implementation.

Trans-Tasman Banking

As discussed in the March 2005 *Review*, the Trans-Tasman Council on Banking Supervision (TTC) was established in 2005 comprising officials from the Australian and New Zealand Treasuries, the Australian Prudential Regulation Authority (APRA), the Reserve Bank of New Zealand (RBNZ) and the Reserve Bank of Australia. The mandate of the TTC is to enhance co-operation on the supervision of trans-Tasman banks, to promote and regularly review crisis management arrangements, and to guide the development of policy advice to both governments.

One of the first tasks of the TTC was to report to Ministers on legislative changes required to ensure that the respective bank regulators (APRA and the RBNZ) can support each other in the performance of their current regulatory responsibilities at least regulatory cost. The TTC submitted its proposals to Ministers in August 2005 and based on their recommendations, the Australian Treasurer and the New Zealand Finance Minister proposed changes to the relevant legislation in both countries. These changes came into force in Australia on 6 December 2006 and in New Zealand on 15 December 2006.

As a result of these changes:

- each bank regulator is required to support the statutory responsibilities of the other regulator relating to prudential regulation and financial system stability, and to the extent reasonably practicable, avoid any action that is likely to have a detrimental effect on financial system stability in the other country;
- where reasonably practicable, regulators must consult each other before exercising a power that is likely to have a detrimental effect on financial system stability in the other country; and
- an administrator or statutory manager appointed to a bank must advise the regulator if a proposed action by them is likely to have a detrimental effect on financial system stability in the other country.

Streamlining Prudential Regulation

Over the past year, APRA and the Australian Securities and Investments Commission (ASIC) have been working together to identify ways of reducing regulatory burden. As part of this exercise they have jointly examined legislative sources of regulatory overlap, inconsistency or duplication and have contributed to a discussion paper on legislative reform, prepared by the Australian Treasury, entitled *Streamlining Prudential Regulation: Response to 'Rethinking Regulation'*. The paper recommends:

- the various prudential acts administered by APRA – the *Banking Act 1959*, *Insurance Act 1973*, *Life Insurance Act 1995*, *Superannuation Industry (Supervision) Act 1993* and related legislation – be refined and updated to provide for greater consistency across legislation;
- harmonising the reporting of breaches under the prudential acts and the *Corporations Act 2001*, and minimising multiple breach reporting to APRA and ASIC; and
- that a more consistent and transparent approach be adopted for decision-making, helping to ensure proper accountability. Merits review, for example, would be available for administrative decisions made by APRA, such as licensing decisions and decisions aimed at ensuring that an entity or individual meets minimum standards. It would not be available, however, for decisions relating to an entity where APRA reasonably believed that its failure to act immediately would materially prejudice the beneficiaries of the institution or the stability of the financial system.

APRA and ASIC have also identified some areas where the administrative burden on entities regulated by the two agencies might be reduced. There is, for example, some duplication of data reporting and audit requirements for Australian financial services licensees that are also APRA regulated. APRA and ASIC will also produce an industry guide to explain their licensing objectives, requirements and processes for jointly regulated superannuation trustees. While there is little overlap between the agencies' licensing obligations, the guide will point to existing provisions and practices that reduce regulatory burden.

Compensation Arrangements for Financial Services Licensees

The Australian Treasury is currently reviewing compensation arrangements for retail clients who make successful claims against Australian financial services licensees under Chapter 7 of the *Corporations Act 2001*. The main types of breach giving rise to compensation claims relate to poor services (for example, inappropriate advice), disclosure and misleading or deceptive conduct. The review is designed to address concerns that some licensees may be unable to meet all claims against them and that the complexity of financial products increases the probability that less sophisticated consumers may not understand the nature of the product or service being offered.

The draft regulations proposed by the Treasury are designed to:

- ensure adequate professional indemnity insurance by licensees (in the absence of ASIC approving alternative compensation arrangements);
- require financial services licensees to note their indemnity insurance in their Financial Services Guide;
- prescribe factors that ASIC must take into account before approving alternative arrangements; and
- exempt certain licensees (prudentially supervised institutions and certain related entities) from the requirements.

Submissions on the draft regulations closed at the end of November 2006 and are now publicly available on the Treasury's website.

Pandemic Contingency Planning

Over the past few years, there has been increasing concern about the possibility of an influenza pandemic. As part of its preparation, the Australian Government has released the *National Action Plan for Human Influenza Pandemic* outlining how Commonwealth, state, territory and local governments would work together in the event of a pandemic. Supporting this are detailed plans by individual agencies covering how they would respond to an influenza pandemic.

Within the financial sector, APRA released a Prudential Practice Guide ('PPG 233 – Pandemic Planning and Risk Management') and an Information Paper in October 2006 to assist financial institutions in their preparations for a potential pandemic. The Guide emphasises the importance of each institution developing a plan to help them identify their critical business functions, such as the clearing and settlement of financial obligations, and how these can be maintained in the event of high levels of staff absenteeism over an extended period. APRA is also conducting a stress test of insurance companies to assess the potential financial impacts of a pandemic on life and general insurance businesses.

APRA, ASIC and the Reserve Bank are similarly developing their own capabilities to ensure that they will be able to co-ordinate closely in any financial crisis involving a pandemic. The Reserve Bank's responsibilities in such a crisis would include ensuring the continued operation of the high-value payments system, maintaining an adequate nation-wide supply of cash and helping to ensure the provision of banking services to the Australian Government.

APRA Draft Prudential Standard on Securitisation

Authorised deposit-taking institutions (ADIs) make extensive use of securitisation markets, either as a means of funding their lending activities or reducing the amount of risk-weighted assets against which they need to hold capital. APRA's existing requirements for securitisation are designed to ensure that a reduction in capital requirements will only occur where an ADI can demonstrate that it has no responsibility for how the assets that have been securitised subsequently perform. The new Basel II capital framework includes internationally agreed guidance on the capital treatment of securitisation. In November 2006, APRA released a draft revised prudential standard ('APS 120 – Securitisation') to reflect this guidance and to take account of market developments since it was originally issued.

Because some of the more complex securitisation transactions are structured with the assistance of credit derivative instruments, at the same time that it released the draft standard on securitisation, APRA also outlined some proposals for the treatment of credit derivatives under the Basel II framework. These provide guidance on the treatment for capital adequacy purposes of single-name credit default and total-rate-of-return swaps, credit-linked notes and first- and second-to-default basket products.

Financial Soundness Indicators for Australia

As foreshadowed in the March 2005 *Review*, the IMF has conducted an exercise to compile an internationally harmonised set of 'financial soundness indicators' (FSIs), with around 60 countries, including Australia, participating.

The 39 indicators are divided into two sets: a 'core' set of 12 that relate to the health and performance of the deposit-taking sector; and an 'encouraged' set of 27 covering deposit-taking institutions, other financial corporations, the household and corporate sectors, and financial and real estate markets. As part of the exercise, each participating country was asked to compile these indicators, on a best-efforts basis, for calendar 2005 (for flow variables), or as at end December 2005 (for stock variables). The data were then published on the IMF's website in January 2007, along with detailed information on the compilation methods used by the participating countries, with Australia ranking very highly in terms of both the coverage and quality of the data supplied. The various FSIs for Australia are reproduced in Tables 9 and 10.

Later this year, the Executive Board of the IMF will decide on how best to follow-up on the exercise, including the possibility of establishing a framework for regular reporting of these FSIs. ↗

Table 9: Financial Soundness Indicators for AustraliaPer cent^(a), 2005^(b)

Indicator		Australian-owned banks ^(c)	All banks ^(c)	
CORE SET				
Banks				
<i>Capital adequacy</i>	1	Regulatory capital to risk-weighted assets	10.2	11.3
	2	Regulatory Tier 1 capital to risk-weighted assets	7.5	7.6
	3	Non-performing loans net of provisions to capital	4.6	4.4
<i>Asset quality</i>	4	Non-performing loans to total gross loans	0.6	0.6
	5	Sectoral distribution of loans	–	(d)
<i>Earnings and profitability</i>	6	Return on assets ^(e)	1.8	1.4
	7	Return on equity ^(e)	25.3	21.6
	8	Interest margin to gross income	41.9	50.5
	9	Non-interest expenses to gross income	58.4	52.9
<i>Liquidity</i>	10	Liquid assets to total assets ^(f)	9.8	13.1
	11	Liquid assets to short-term liabilities ^(f)	22.5	25.1
<i>Sensitivity to market risk</i>	12	Net open position in foreign exchange to capital ^(g)	–	0.8
ENCOURAGED SET				
Banks				
	13	Capital to assets	6.9	7.2
	14	Large exposures ^(h)	69	189
	15	Geographical distribution of loans	(d)	–
	16	Gross asset position in financial derivatives to capital	42.1	36.1
	17	Gross liability position in financial derivatives to capital	40.2	35.1
	18	Trading income to total income	4.8	5.9
	19	Personnel expenses to non-interest expenses	39.7	49.6
	20	Spread between reference lending and deposit rates (in basis points)	293.6	267.2
	21	Spread between highest and lowest interbank rate (in basis points)	0.0	–
	22	Customer deposits to total (non-interbank) loans	–	51.9
	23	Foreign currency denominated loans to total loans	–	4.5
	24	Foreign currency denominated liabilities to total liabilities	–	20.2
	25	Net open position in equities to capital	–	–

Table 9: Financial Soundness Indicators for Australia *(continued)*
Per cent^(a), 2005^(b)

		Indicator	Australian- owned banks ^(c)	Non- bank FSIs
Other financial corporations	26	Assets to total financial system assets	–	26.2
	27	Assets to GDP	–	168.8
Non-financial corporations	28	Total debt to equity ⁽ⁱ⁾	–	74.6
	29	Return on equity	–	14.2
	30	Earnings to interest and principal expenses	–	369.6
	31	Net foreign exchange exposure to equity ^(g)	–	11.9
	32	Number of applications for protection from creditors	–	646
Households	33	Household debt to GDP	–	102.8
	34	Household debt service and principal payments to income ⁽ⁱ⁾	–	12.0
Market liquidity	35	Average bid-ask spread in the securities market (percentage of mid-point price)	–	4.5
	36	Average daily turnover in the securities market (per cent) ^(k)	–	2.5
Real estate markets	37	Real estate prices (annual percentage change)		
		(i) Residential real estate prices	–	2.2
		(ii) Commercial real estate prices ^(l)	–	11.8
	38	Residential real estate loans to total loans	56.5	–
	39	Commercial real estate loans to total loans	10.4	–

(a) Unless otherwise indicated.

(b) Unless otherwise indicated, for stock data, reference date is 31 December 2005; flows data cover the year ending 31 December 2005.

(c) The data for Australian-owned banks are globally consolidated, i.e. the domestic operations and overseas branches and subsidiaries are included. The data for all banks include all banks with operations in Australia, with the data reported on either a licensed ADI or domestic books basis. Licensed ADI data include overseas branches; domestic books data essentially cover the banks' assets and liabilities in Australia. For more information, see Australia's FSI metadata on the IMF's website <http://dsbb.imf.org/Applications/web/fsi/fsicountrycategorylist?strcode=AUS>.

(d) Data for this indicator are presented in Table 10.

(e) Before tax and extraordinary items.

(f) Using the 'broad measure' of liquid assets as defined in the IMF's *Compilation Guide on Financial Soundness Indicators*.

(g) Data are as at March 2005.

(h) The number of large exposures to a counterparty which are equal to or greater than 10 per cent of a bank's capital base.

(i) Market value measure for all private non-financial corporations.

(j) Debt-service payments only. Includes unincorporated enterprises.

(k) Based on turnover for year to June 2005. Indicator represents the average daily turnover of outstanding stock of Commonwealth Government Securities.

(l) Capital city CBD office property.

Sources: ABS; AFMA; APRA; ASIC; Jones Lang LaSalle; RBA

Table 10: Distribution of Loans

Per cent, December 2005

FSI 5: Sectoral Distribution		FSI 15: Geographical Distribution	
Sector	All banks ^(a)	Country/Region	Australian-owned banks ^{(a)(b)}
Residents	95.9	Australia	68.9
Deposit-takers	0.7	Advanced economies	29.8
Central bank	0.0	Other countries	1.3
Other financial corporations	2.2	Central and eastern Europe	0.2
General government	0.3	Developing Asia (incl. China)	0.8
Non-financial corporations	27.7	Middle East	0.1
Other domestic sectors	65.0	Western hemisphere	0.1
Non-residents	4.1	Other	0.0
Total	100.0	Total	100.0

(a) FSI 5 is on a domestic books basis; FSI 15 is on an Australian-owned banks basis. See footnote (c) to Table 9 for definitions.

(b) Data for Australia represent loans; data for other countries capture all claims on those countries.

Source: APRA

Private Equity in Australia

Introduction

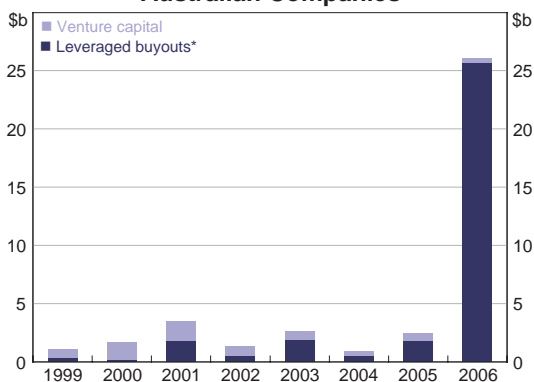
Over the past year there has been a significant increase in investments by private equity funds in Australia. This increase has focused public attention on a number of aspects of private equity, including the implications for investors and the broader economy, the efficiency of public capital markets, the potential for conflicts of interest and the current regulatory arrangements for such investments. Given the broad and overlapping nature of these issues, the Council of Financial Regulators – which draws together the heads of the Australian Prudential Regulation Authority (APRA), the Australian Securities and Investments Commission (ASIC), the Australian Treasury and the Reserve Bank of Australia (RBA) – has recently examined various aspects of private equity in Australia. This report presents the main facts and discusses a number of related issues.

The Size of the Market

There is no precise definition of private equity, with the term generally used to describe two types of investment. The first is often known as ‘venture capital’, with investors providing equity funding to small and relatively high-risk companies with strong growth potential. The second is the acquisition of a public company by a group of investors who take the company ‘private’, delisting it from the stock exchange. Typically, a significant percentage of the financing for such buyouts is in the form of debt, so that private equity is often associated with leveraged buyouts (LBOs).

Until 2005, the value of private equity transactions in Australia was broadly evenly split between venture capital investments and LBOs (with the former being particularly popular during the tech boom). This changed markedly in 2006, with the value of private equity transactions announced and endorsed by the target company’s board surging to \$26 billion, up from an average of around \$2 billion over the previous five years, with all of the increase accounted for by LBOs (Graph 1). In total, in 2006, the value of announced LBOs was equivalent to 2 per cent of the total assets of the Australian non-financial corporate sector, much the same as the comparable number for the United States. Over the year, LBOs accounted for around a

Graph 1
Private Equity Investments in Australian Companies



* LBOs by domestic and offshore private equity funds. Includes debt and equity funding of deals completed and pending; excludes existing debt of bought-out company.

Sources: Australian Venture Capital Journal; Thomson Financial

quarter (by value) of all mergers and acquisitions of Australian companies, compared with less than 5 per cent in previous years. The transactions included the actual or planned purchase of a number of high-profile Australian companies, including Qantas, PBL Media, DCA Group and the Seven Media Group.

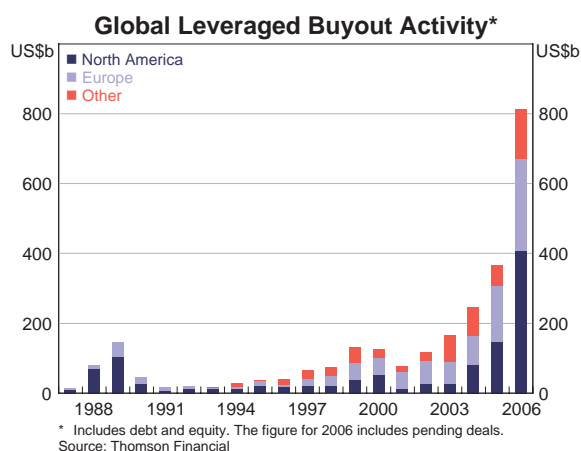
The increase in the value of LBO activity is accounted for by a sharp rise in the average size of deals, rather than a rise in the number of deals (Table 1). In total, there were 28 completed or pending deals in 2006, with an average value of \$0.9 billion. The largest transaction, with a value of \$11 billion, was the planned buyout of Qantas.

Table 1: Leveraged Buyouts of Australian Companies*

	Number	Average deal value \$m	Total value of all deals \$m
1999-2004 average	21	42	880
2005	29	62	1 792
2006	28	917	25 670

* Includes debt and equity funding of deals completed and pending; excludes existing debt of bought-out company.
Sources: Australian Venture Capital Journal; Thomson Financial

Graph 2



The strong growth in private equity in Australia follows a boom in private equity transactions globally (Graph 2). Unlike the situation in Australia where the value of LBO activity increased markedly only in 2006, the boom elsewhere has been underway for a number of years, although it has clearly accelerated recently. In 2006, global LBOs amounted to a little over US\$800 billion, more than double the level in the previous year and more than six times higher than in 2000. Unlike the previous boom in private equity

in the late 1980s, the current boom has seen strong activity in Europe and Asia, not just in the United States.

The Funding of LBOs

LBOs are financed through a combination of equity and debt. In recent years, buyouts in Australia have typically resulted in debt-to-equity ratios (known as gearing ratios) of around 250 per cent, compared with pre-buyout ratios of around 50 per cent and a gearing ratio for the non-financial corporate sector as a whole of 65 per cent (Graph 3). This degree of leverage, while very high, is lower than during the late 1980s LBO boom in the United States, where it was not uncommon for debt-to-equity ratios to exceed 500 per cent. Notwithstanding this,

in the most recent Australian LBOs the purchased company's gearing has increased to such an extent that the company's credit rating has become sub-investment grade.

Equity Funding

The equity component for an LBO is typically provided by a private equity fund which raises money from a range of investors. The investment is generally made through a limited partnership, with the general partner (often the manager of the fund) making decisions about management of the fund's assets. Investors in private equity funds are typically required to lock their money away for periods ranging from seven to 10 years, or until divestment has occurred.

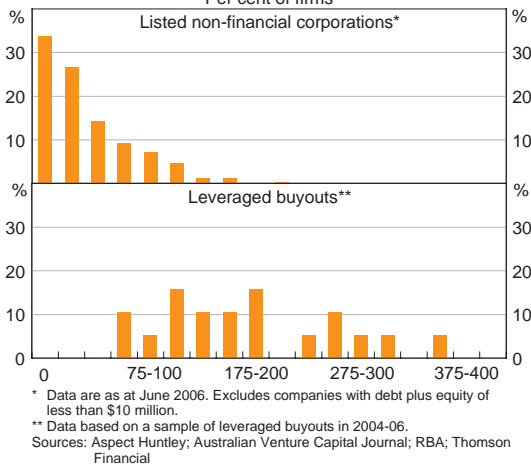
The increase in global LBO activity has been underpinned by very large inflows into private equity funds over recent years. In 2006, LBO funds raised more than US\$250 billion, with the largest private equity managers raising more than US\$15 billion each (Graph 4). This aggregate inflow is more than double the inflow experienced in the

previous peak in 2000. The increased size of individual funds, and their increasing tendency to combine resources for specific deals, has facilitated buyouts of some very large companies. This can be seen in the fact that nine of the 10 largest LBOs have occurred in the past two years (the exception is the purchase of RJR Nabisco in the late 1980s).

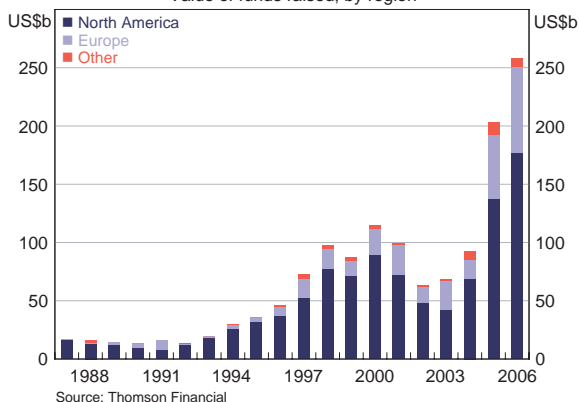
The bulk of the funds raised globally have come from the United States (69 per cent), with a further 29 per cent from Europe. Institutional investors, including insurance companies, endowment funds and pension funds, currently account for around 80 per cent of the investor funds under management.

In Australia, there has also been a significant flow of money into private equity funds (Graph 5). Over the past three years, annual raisings have averaged around \$3 billion, with private equity funds now accounting for about 1½ per cent of Australian funds under management. Institutional investors account for four fifths of the funds managed by Australian

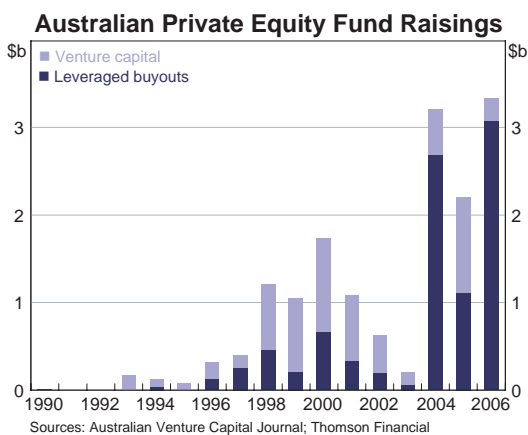
Graph 3
Distribution of Gearing Ratios – Australia
Per cent of firms



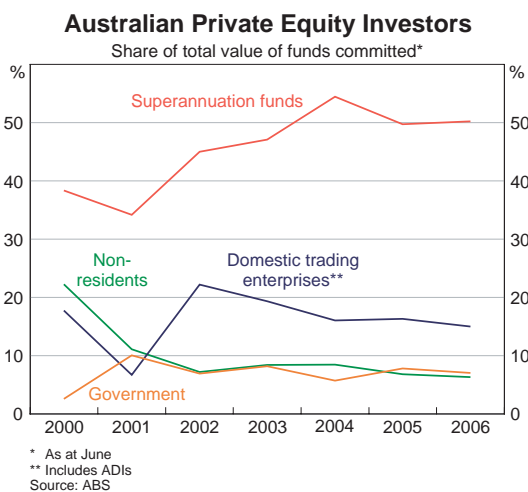
Graph 4
Global Leveraged Buyout Fund Raising
Value of funds raised, by region



Graph 5



Graph 6



private equity funds. Superannuation funds represent the major investor class, accounting for around half the total funds committed to private equity as at the end of June 2006 (Graph 6). The available evidence suggests that more than half of the largest superannuation funds have a portfolio allocation to private equity, with an average allocation of around 5 per cent. Over the past decade, 35 per cent of investor inflows in Australia have been through ‘fund of funds’ – pooled vehicles in which a private equity fund invests in a range of domestic and offshore private equity funds – whereas in the United States this figure is closer to 10 per cent.

The prevalence of institutional investors reflects, in part, the fact that private equity funds require a relatively high minimum subscription. Most private equity firms have multiple funds, with a number of the larger vehicles having funds under management in excess of \$1 billion. Retail investors in Australia have some access to private equity funds,

either through the funds management industry, with minimum subscriptions as low as \$1 000, or through a limited number of private equity investment companies listed on the Australian stock exchange. The latter cover a wide range of investments including private equity fund of funds and investments in both listed and unlisted companies. A third of the 20 or so private equity investment companies listed in Australia have been established in the past two years, with each being heavily oversubscribed.

Notwithstanding the significant inflows into Australian private equity funds over recent years, the largest transactions in Australia have often involved overseas funds, either acting alone or through a ‘club’ arrangement with Australian or other foreign funds.

Debt Funding

In recent LBO transactions, debt has typically accounted for around 70 per cent of the funding used for the purchase, with the debt generally having sub-investment grade status. In large deals it is usual for the debt to be split into senior and subordinated components.

In recent deals in Australia, senior debt has typically accounted for about two thirds of the debt raised. The bulk of this debt is provided initially by large Australian and overseas banks, usually through a syndicated loan, with the participating banks then seeking to on-sell part of the loan to investors (including other banks, insurance companies and superannuation funds) or hedge the credit risk using derivatives. To date, there has been little senior debt issued in the form of bonds.

The subordinated debt is typically provided by institutional investors (mainly offshore) such as insurance companies, pension funds and hedge funds, although Australian retail investors have some involvement, most notably through the purchase of hybrid securities. Smaller LBOs often do not have a tiered debt structure, with the debt financing provided entirely by banks, with loans usually only syndicated if they are greater than \$100 million.

Given the credit rating of the debt, the acquired companies typically pay around 200 basis points above the comparable swap rate on their senior debt, and 400 to 450 basis points above the swap rate for subordinated debt.

The use of non-amortising debt, where no capital repayments are made for a pre-agreed period of time, is becoming increasingly common in large transactions. Such a structure minimises the effect of the higher gearing on the company's short-term cashflow and therefore allows the company to bear a significantly higher amount of debt financing than it might otherwise have been able to afford, although it has a negative effect on cashflows once the repayment of principal falls due.

Reflecting competition amongst lenders, the conditions attached to some of the debt are gradually being eroded. Loan covenants in which lenders' rights are triggered solely by a missed interest payment, rather than by a deterioration in the financial condition or performance of the target company, for example, are increasingly common.

Bank Exposures

APRA recently surveyed banks operating in Australia about their exposure to the private equity market. This survey suggested that these exposures are generally spread across the largest Australian and foreign banks and are subject to appropriate credit controls. Overall, private equity exposures amount to less than 3 per cent of total loans in the Australian banking system.

At end December 2006, the sum of the individual exposures to private equity transactions reported by the largest Australian banks was nearly \$15 billion. This, however, is an upper bound on the aggregate exposure, as the figure includes joint underwriting commitments held by multiple banks. At least \$2 billion of the exposures are to overseas transactions (primarily New Zealand and UK companies). More than 80 per cent of the exposures relate to senior debt, with Australian banks tending to avoid subordinated debt (including mezzanine debt) owing to its substantially higher risk; some banks do, however, permit limited subordinated lending if the bank is also involved in the distribution of senior debt. For both senior and subordinated debt, maturities generally range from five to seven years, though in recent times this debt has tended to be repaid within two to three years.

The Australian banks most active in private equity funding tend to have a fairly well diversified portfolio of exposures, while the smaller institutions have exposures to only a handful of transactions, or none at all. The banks involved in underwriting the new debt generally hold a portion of the debt to maturity – though their short-term underwriting commitments may be much larger – while other banks may acquire a participation in the loan syndication. Some large banks cite overall portfolio risk limits on private equity debt and leveraged lending generally in the range of \$1-3 billion, which is less than 5-10 per cent of total bank capital in most cases.

Several banks also manage private equity funds, which are open to both retail and institutional investors. These activities do not represent direct exposures of the bank itself. Life insurance companies owned by banking groups also invest in private equity funds, though the reported amounts are not large.

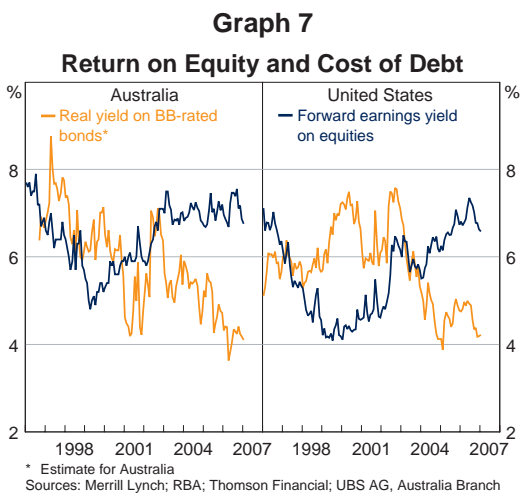
In aggregate, the Australian branches of foreign banks (or their non-bank capital markets subsidiaries) reported a total exposure to private equity of \$20 billion, with more than half of this consisting of short-term underwriting exposures. In the case of 20 recent private equity deals, around two thirds of participating banks were foreign banks. The most active foreign banks tend to underwrite larger amounts than the Australian banks – as much as \$2 billion each in some recent Australian private equity deals – owing to their larger global distribution networks and balance sheets.

Why has Private Equity Increased?

To a significant extent the Australian experience is simply part of a global trend, which has been largely driven by the very favourable macroeconomic conditions and low global interest rates of recent years.

The world economy has experienced four consecutive years of above-average growth, interest rates have been below average, and volatility in financial markets has been unusually subdued. Not surprisingly, profit growth has been strong, with returns on equity having been high and relatively stable. Reflecting these developments, the forward earnings yields on equities have been above their decade-long averages for several years, while at the same time, the cost of debt

has been unusually low, influenced by historically low government bond yields and credit risk premiums (Graph 7). The corporate sectors in a number of countries, including Australia, have also been relatively conservatively geared for more than a decade, following the debt problems in the early 1990s. In this environment of stable economic growth and relatively low interest rates, investors have been prepared to move further out the investment risk spectrum, seeking alternative



investments such as private equity funds and hedge funds. They have also been prepared to invest in more leveraged investments, particularly given the low cost of debt.

Another commonly cited driver of the increase in private equity investments is the potential for private ownership to allow better management of a particular company. A number of reasons have been advanced as to why this might be so. These include the ability of a private firm to take decisions in the long-term interests of the firm even if they adversely affect its short-term performance, the reduced governance burdens on management under private ownership, and the potential to better align the incentives of managers and owners.

The claim that under private ownership a firm can more easily take decisions that maximise long-term value reflects the fact that investors in private equity funds are usually obliged to remain committed for periods of up to 10 years. In some cases, being away from the public gaze and the need to meet short-term performance targets may allow a company to improve its operations in a way that might be seen as more difficult under public ownership.

Overseas, analysts have also pointed to the perceived benefits of avoiding new governance requirements imposed on public companies by the 2002 US Sarbanes-Oxley legislation and ongoing scrutiny of markets and public investors. The emerging conventional wisdom is that a private company faces far fewer distractions on management time and energy than do public companies, notwithstanding the fact that private equity fund managers may be as, or more, demanding than shareholders or market analysts with respect to regular reporting and profit-generation. While the Australian ‘principles based’ approach to corporate governance contrasts with the more prescriptive approach in the United States, any publicly listed Australian company wishing to list debt or equity in the United States must meet those requirements.

Analysts also point to the possibility of a better alignment of incentives between the owners and executives of the firm. Private equity firms normally retain existing management and provide them with a significant equity stake to contain the principal-agent conflicts inherent in large companies. It has also been speculated that high leverage provides better incentives for management to improve operational efficiency in the face of high regular debt repayments. In addition, private equity sponsors are often able to work closely with the target company’s management in directing and restructuring the company’s operations. As part of this, the private equity firm may be able to provide relevant managerial expertise and experience (some of the larger funds, for example, employ industry experts).

The evidence as to whether private ownership delivers higher returns than public ownership is, however, mixed. Academic research, based mainly on the US market, points to both under- and over-performance relative to returns (after fees) on listed equity markets. There is more agreement, however, on the significant dispersion of private equity fund returns. In the United States, for example, data from Thomson Financial suggest that the spread between the annual returns of a 25th percentile and a 75th percentile LBO fund has averaged around 35 percentage points over the past decade (the comparable spread for surviving companies in the US S&P 500 index is around 10 percentage points). Similarly, there is reasonable support in the academic literature for persistence in fund performance, with funds that outperform in one period likely to also outperform in the next.

Policy and Regulatory Issues

Private equity can play an important role in promoting the efficient allocation of capital. The threat of a takeover by a private equity firm, or another entity, provides a critical discipline on existing management to manage their company's assets as well as possible. In addition, takeovers, including by a private equity fund, are an important way in which investors are able to take control of firms that they view as underperforming. As such, private equity can help to promote an efficient, dynamic and innovative business sector in Australia.

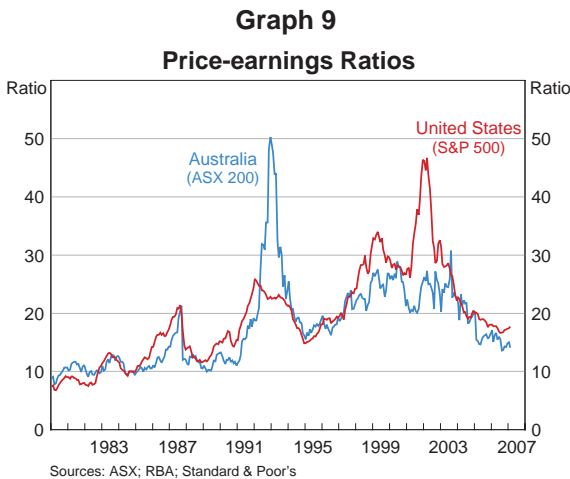
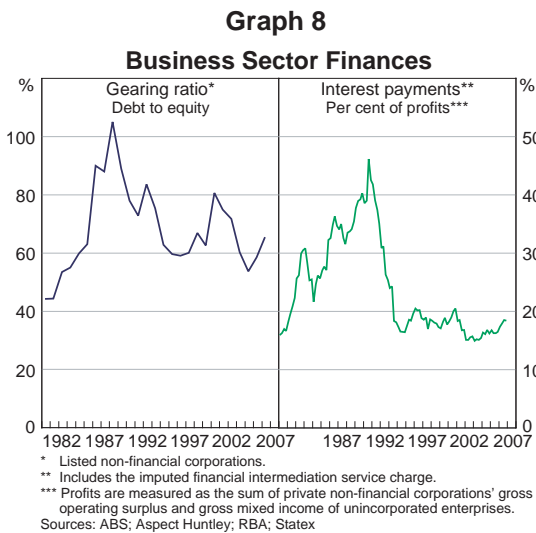
Notwithstanding these positive aspects of private equity, recent developments do raise a number of public policy issues. These are discussed below.

Corporate Gearing

Private equity transactions typically result in a significant increase in the leverage of the acquired company. In addition, the increase in LBO activity may encourage other companies to take on

additional debt either as a defensive strategy, or in an effort to increase their own returns by replicating aspects of the private equity model. This increase in leverage, if it became widespread, could cause problems for the economy as a whole at some point in the future.

While the increased leverage inherent in LBOs clearly increases the riskiness of the specific companies involved, at an aggregate level, corporate gearing in Australia is currently relatively low (Graph 8). Australian companies have tended to be conservatively geared since the mid 1990s, following the spate of corporate collapses in the late 1980s. They have also benefited from the decline in interest rates that occurred following the fall in inflation in the early 1990s, with interest payments currently equivalent to 18 per cent of profits, less than half that at the end of the 1980s. From this perspective, the current level of corporate gearing does not appear to represent a significant risk to the health of the Australian economy. Furthermore,



there is little evidence that the private equity boom has led to the stock market becoming overvalued, with the price-earnings ratio for the market as a whole currently standing at 14, below its average level of the past two decades (Graph 9).

While this aggregate picture is broadly reassuring, the increase in LBO activity is leading to some pockets of much higher leverage within the corporate sector. The experience of the late 1980s suggests that very large losses by a few highly leveraged firms have the potential to affect the wider economy. From this perspective, it is important that developments are monitored closely, both at the aggregate and disaggregated levels. This is particularly so, given that the current structure of balance sheets and the economic outlook means that it would not be surprising if there were a further increase in gearing over the coming years.

Depth and Quality of Public Capital Markets

A second issue is the implications of the growth of private equity for the quality and depth of public capital markets. The issue has received increased attention recently, given that the value of stock market capitalisation, after abstracting from changes in prices, is estimated to have fallen in 2006 in continental Europe, the United Kingdom and the United States. Furthermore, in the United Kingdom, the inflow into private equity funds in the first half of 2006 exceeded new capital raised through initial public offerings (IPOs) on the London Stock Exchange. In contrast, in Australia \$8 billion of new capital was raised through IPOs on the Australian Stock Exchange in 2006, compared with inflows into private equity funds of \$3 billion.

One concern is that private equity transactions involving the acquisition of listed companies result in a lessening of the public reporting obligations of the newly private companies. In particular:

- the continuous disclosure provisions no longer apply;
- half-yearly financial reporting is not required (though annual reporting obligations remain); and
- some disclosure requirements in annual reports no longer apply (for example, director and executive remuneration provisions).

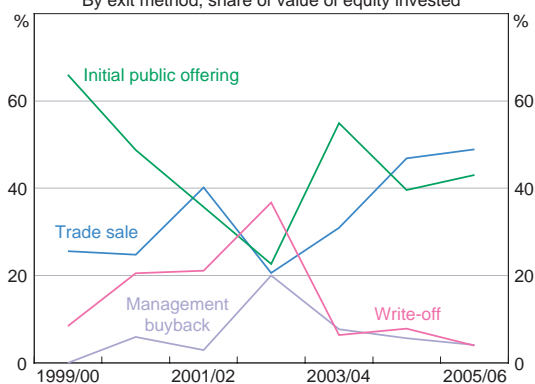
Notwithstanding the reduction in public reporting obligations, firms under private equity ownership are still required to report regular and detailed financial information to their owners and lenders in the same way as do the vast bulk of Australian companies that are not listed on a stock exchange. To the extent that there is less information available to the wider investing public, investors may have more difficulty in comparing the performance of companies within and across sectors, and this may have implications for the efficiency of the allocation of capital. More generally, a large-scale reduction in the size of public markets would result in a smaller non-intermediated investible universe for ordinary investors.

One factor mitigating concerns about a possible decline in public capital markets is that private ownership is typically seen as a temporary state of affairs. Many funds seek to sell their investments after a number of years, hoping to capitalise on the high return on equity that they have been able to generate. It has not been uncommon overseas for such sales to occur through an IPO or a trade sale to a listed firm. In Australia, while to date there have been relatively few large divestments by private equity funds, data from the Australian Bureau of Statistics (ABS)

Graph 10

Exits of Private Equity Investments

By exit method, share of value of equity invested



Source: ABS

suggest that around half the value of LBO and venture capital investments exited in 2005/06 were through a trade sale, with a further 40 per cent through an IPO (Graph 10).

A key question in the debate about the future role of public capital markets is whether companies under private ownership are able to generate superior returns, and if so, why. As discussed above, the evidence is unclear, although commentators cite a variety of reasons as to why private ownership may offer some advantages,

including: the ability of private owners to take a longer-term view; the less onerous governance requirements that apply under private ownership; and the potential to better align management and shareholder interests.

The strength of these various arguments, and any implications for regulation, are difficult to assess at this point in time. The issue of ‘short termism’ in markets is a long-standing one, and the growth of private equity can be seen partly as a response, if it allows decisions to be made that deliver long-term shareholder value that might be more difficult under public ownership. Whether or not this is the case, and why it might be so, are topics worthy of ongoing investigation.

Corporate Conduct

In Australia, transactions by private equity funds are subject to the same regulation through the *Corporations Act* as other transactions; directors and officers of the target corporation and of the bidding vehicle (if incorporated in Australia) are subject to comprehensive conduct and disclosure rules, as is the mergers and acquisitions process (involving either a takeover or scheme of arrangement). The conduct of intermediaries and advisers involved in the transaction is also fully regulated through the *Corporations Act* licensing regime. Reflecting this, private equity transactions do not of themselves raise wholly new regulatory issues.

Nonetheless, some private equity transactions may create pressures that alone or in combination, can lead to poor behaviour or misconduct that threatens the integrity of the markets in which transactions take place. While the same issues arise in many other capital market transactions, private equity transactions may create incentives for misconduct in areas not always present in more traditional mergers and acquisitions activity.

In LBOs in which senior executives are offered the opportunity to participate in the bidding consortium there can be a tension between their personal interests and their duty to act in the interests of the existing shareholders. Conflicts can arise, for example, if these executives:

- participate in decisions that are directly or indirectly relevant to the consortium's proposed acquisition;
- have access to confidential information that is relevant to the consortium's valuation of the company; or
- are unable to devote sufficient attention to the duties to the company as a result of their involvement in the bidding process.

Managing these conflicts is not always straightforward, particularly if limiting the participation of conflicted executives in key management decisions is not in the best interests of the current shareholders. In some situations, it may not be possible to adequately manage a conflict. In that case, the appropriate course of action is to ensure that the conflict is avoided.

Conflicts of interest can also arise for advisers. This is particularly evident in a situation in which a person who is engaged as an adviser to a company wishes to participate in, or provide advice to, a consortium bidding for the company. The potential for conflict can also arise if an adviser:

- has multiple private equity clients who are interested in pursuing the same company;
- places more importance on establishing or maintaining a close relationship with a private equity firm, which can generate lucrative fees on an ongoing basis, than on maintaining existing relationships with target companies;
- has the opportunity to participate in the consortium as a debt or equity provider, thereby increasing its potential earnings from a particular transaction; or
- has established a relationship with senior executives in an advisory role, and uses that relationship to work with those senior executives on a buy-out proposal.

In Australia, advisers to private equity transactions, including investment banks or corporate advisory firms, need to hold an Australian financial services licence. Licensees have a duty to manage, or if necessary avoid, conflicts of interest. APRA's recent survey of large banks confirmed that the major Australian and foreign banking institutions have formal conflict of interest policies in place that would apply to their private equity activities. These policies require separation of duties and consultation with legal counsel and prevent information sharing between staff working on different aspects of a given transaction, for example, senior versus subordinated debt tranches. More generally, it is important that conflict of interest policies extend across the range of potential roles that an institution may have in a private equity transaction, including debt and equity participation, as well as other activities, such as funds management.

Private equity transactions can also increase the risk that price sensitive information will be improperly disclosed or misused. Unlike much traditional takeover activity, a private equity takeover can involve a consortium of bidders, each with its own advisers, and each conducting its own due diligence. Further, as discussed above, private equity takeovers depend on a high level of debt funding, potentially involving a number of lenders. Accordingly, there are often a large number of people who are aware of a proposed transaction. The risk of individuals trading on this information may be heightened where potential bidders or lenders drop out of the process, ceasing to have an interest in the success of the proposed bid.

Under the ASX listing rules and the *Corporations Act*, a listed company has an obligation to inform the market about price sensitive information. However, a company does not need to disclose information that a reasonable person would not expect to be disclosed, that is confidential and that concerns an incomplete proposal or negotiation. Companies have taken a variety of approaches as to when details of a potential private equity transaction should be disclosed. Where adequate disclosure has not taken place, there is greater potential for insider trading. On the other hand, premature disclosure may run the risk of creating an uninformed market based on speculation.

The regulatory issues discussed above are currently addressed by the *Corporations Act* for both private equity transactions and other transactions. Many of the potential problem areas noted above can be dealt with by ensuring that advisers and participants in private equity transactions have robust and effective information barriers such as those described above. It is the responsibility of private equity funds, directors, advisers and others involved in private equity transactions to ensure that their conduct is appropriate and complies with all legal requirements. ASIC will continue to monitor developments in the private equity market.

The Exposure of the Banking System

A fourth issue is the exposure of the Australian banks to private equity, and, more generally, to a more highly leveraged corporate sector.

As noted above, to date the Australian banks' exposures to private equity are relatively small and mainly restricted to senior debt, albeit of a low credit rating. Given this, and the generally healthy state of business balance sheets in Australia, it is difficult to see current business sector exposures causing serious difficulties for the Australian banking system, although clearly the profits of some banks would be affected by a deterioration in the quality of individual borrowers. Looking forward, however, this situation could obviously change if corporate leverage were to increase significantly.

While from a banking stability perspective the current situation seems relatively benign, recent developments have raised a number of issues for regulators and for financial institutions.

One of these is whether the pricing of current deals adequately compensates lenders for the risks that they are assuming. As noted above, risk spreads around the world have been compressed over recent years and growth in the Australian and world economies has been strong. In this environment, there is some possibility that risk is being underpriced, and that in less benign conditions, credit losses could turn out to be significantly higher than expected. Such an outcome is made more likely by the recent trend towards a loosening of terms and conditions to make loans more consistent with US and European standards. The trend toward 'covenant lite' leveraged lending in the United States, in particular, may be driving down creditor protections across a range of deals.

A second issue is the management of the underwriting risks. In many cases, underwriting exposures are typically much higher than limits on final positions (regulatory requirements for banks to set aside capital are less onerous for underwriting exposures than for debt). To date, Australian banks have been able to successfully sell down these positions within the target timeframes. However, in the event of market disruption, credit ratings downgrades or negative

rumours about the purchased company, the underwriting bank could be left with a large and illiquid position. While in some cases banks are able to effectively hedge this risk with credit derivatives, this is not always possible.

APRA's approach to banks' activities in this area focuses on ensuring that sound credit risk management processes are in place and that appropriate capital is held against potential losses. Currently, the banks that are most active in private equity have well developed approaches to credit risk management, and with the introduction of the so-called advanced approaches of the Basel II capital framework in 2008, regulatory capital required to be held against debt associated with private equity transactions will be more sensitive to the banks' assessment of their risk of loss. APRA would be concerned if smaller, less sophisticated banks were making forays into private equity without adequate lending policies and credit risk monitoring processes in place.

The Exposure of Retail Investors to Private Equity

A fifth issue relates to the exposure of retail investors to the private equity market. While direct access to private equity funds by retail investors is currently somewhat limited, increasingly investors are able to access these funds through the funds management industry, or through the purchase of shares in listed private equity funds (though as noted previously, the latter can also include investments in listed companies). The responsibility for disclosure to investors about the risks rests with the fund manager through the Product Disclosure Statement and on financial advisers when recommending a fund.

Retail investors also have considerable indirect exposures to private equity through superannuation funds. While these funds are managed by trustees, fund members do have some capacity to vary their holdings in particular classes of investments, including investments in private equity and hedge funds. Decisions as to which private equity funds the superannuation fund invests in, and how the risks associated with the investment are managed, rest with the trustees. In March 2006, after extensive consultation with the industry and the Government, APRA issued a circular that sets out its expectations with respect to investment management decisions by superannuation funds. In particular, trustees need to consider, and be able to document and justify, how all investments made under an investment strategy are consistent with that strategy and must achieve a level of diversification which is reasonable having regard to the circumstances of the fund. With respect to private equity, APRA noted that:

“Non-traditional assets, such as infrastructure, private equity and public-private partnerships, are acceptable in a diversified portfolio, provided the trustee has considered their expected return and diversification effect on the portfolio and can demonstrate appropriate expertise and process to manage such asset classes within a superannuation fund portfolio.”

In APRA's on-site reviews of superannuation funds, a key objective is determining the trustees' understanding of their investment strategy, particularly in the case of alternative asset classes.

Like other alternative investments, understanding the risks involved in private equity is often complicated and pricing is less transparent than for many other investments, in many cases being based on models maintained by managers. The complexity of many private equity deals can also make it difficult to obtain comparative information when assessing fund manager strategies and performance. For superannuation funds and other institutional investors, private equity funds often involve ongoing commitments, requiring the investor to have access to liquid

assets to meet these commitments. It remains important that all investors understand the nature of these risks and that they have the capacity to effectively manage the risks.

Taxation

A final issue is the role of tax in determining the structure of private equity deals and the impact of these deals on the Government's fiscal position.

Given the potential for the tax regime to influence the structure of transactions, the Australian Taxation Office (ATO) has been working with some of the businesses where private equity takeovers have been completed or announced in 2006. The aim of this exercise is to understand the tax outcomes of private equity deals at the earliest possible point, particularly given the complexity of some arrangements. The ATO has also sought, as part of its 2006/07 Compliance Program, to ensure that:

- tax deductions related to financing arrangements are appropriate;
- payment of international related-party fees are appropriately characterised for tax purposes and the level of these payments accords with the OECD's arm's length principle;
- following the takeover, Australian entities with offshore operations or foreign-controlled Australian entities do not allocate an excessive amount of debt to their Australian operations (and so meet the legislative limits in the thin capitalisation rules);
- security distributions are taxed appropriately, and withholding tax payments are made;
- the tax values of assets, post-restructure, are appropriately assigned, especially where divestments are made during the period of private equity ownership; and
- there is appropriate disclosure of capital gains on any disposals by the investors and the target entities.

The implications for Government revenue are hard to ascertain as there are currently insufficient data to fully model the effects of private equity on tax revenue. While higher levels of debt, all else constant, are likely to result in reduced tax payments by the purchased companies, there may be offsetting effects. In particular, to the extent that lenders are based in Australia, their taxable income is likely to increase and add to tax revenue. Furthermore, where lending arrangements are with foreign-domiciled financiers, withholding tax collections may also increase, but this depends on the withholding tax arrangements in bilateral tax treaties with Australia. The purchased company may also achieve operational efficiencies and improved profitability over time, again adding to tax revenue.

Conclusions

Private equity can play an important role in ensuring an efficient and dynamic business sector. The threat of a takeover by a private equity fund or another group of investors is an important element in helping to ensure that the existing managers of firms have a strong incentive to manage the assets under their control as efficiently as possible. Private equity funds also provide one among several vehicles for investors to purchase and restructure firms that they view as underperforming, and may potentially help overcome some of the problems arising from the 'short termism' that is sometimes evident in financial markets. Evidence is mixed, however, on

the extent to which a private equity structure improves risk-adjusted returns to the ultimate investors in businesses.

While the recent increase in LBO activity in Australia has led to some pockets of increased leverage within the corporate sector, it does not appear to represent a significant near-term risk to either the stability of the financial system, or the economy more broadly. The exposure of the Australian banking sector to private equity is well contained, and both the leverage and the debt-servicing ratios for the corporate sector as a whole remain relatively low. Looking forward, however, it is likely that the increase in business leverage that is currently underway has some way to run. Given this, together with the potential implications of LBO activity for the depth and integrity of public capital markets, as well as the importance of investors understanding the risks they are taking on, the agencies that make up the Council of Financial Regulators will continue to monitor developments closely. ✎