Financial Stability Review

MARCH 2011

Contents

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Overview

Over the past three years or so, concerns about financial instability have been focused primarily on vulnerabilities generated within the banking sector, particularly in the major economies. Recent natural disasters in Australia, New Zealand and Japan, as well as the unrest in North Africa and the Middle East, have redirected some attention to the resilience of the financial system to shocks from outside it. Information available to date suggests that the costs to Australian insurers of the recent disasters are within the sector's capacity to absorb them. For global insurers, the financial effects of the Japanese earthquake and tsunami are likely to be more severe, but will take some time to evaluate.

Confidence in the banking systems of major countries has generally improved since the previous *Financial Stability Review*. Bank share prices in the major markets tended to increase over much of this period, along with broader market moves, though they have moderated in recent weeks reflecting the natural disasters and tensions in North Africa and the Middle East. The major international banks have continued to report profits and strengthen their balance sheets. Some banking systems are still under considerable strain, however, notably in parts of Europe, where recovery is being undermined by market concerns about sovereign debt sustainability.

In the major economies, banks' profits have recently been supported by generally improving economic conditions. This has allowed them to reduce loan loss provisions, offsetting some moderation in trading and investment income. However, the underlying revenue growth of many banks remains subdued, as credit growth is still quite weak. The return to profitability since the crisis has helped banks to strengthen their capital positions, and some have also been able to repay the public capital that was injected into them during the crisis. While this places banks in a better position to withstand future shocks, some of them will probably need to repair their balance sheets further.

Banks globally face a number of challenges in the period ahead. Despite the recent reductions in loan loss provisions, non-performing asset ratios remain high in many banking systems, particularly those that are dealing with a large amount of troubled property-related exposures. The continued dislocations in property markets, and the likelihood of slow and uneven economic recovery in some major economies, will weigh on banks' asset quality and profitability. There are also concerns about how some countries' banking systems will cope with the withdrawal of macroeconomic policy stimulus. Bank wholesale funding markets have generally been stable over the past six months, despite the focus on sovereign risk in Europe. However, funding will remain a challenge for many banks over the next few years, as they need to improve their funding structures at the same time as refinancing government-guaranteed debt issued during the crisis. Hence they remain susceptible to any sudden turns in market sentiment.

Some of the fast-growing emerging market economies are facing a different set of financial stability challenges. They face a combination

of strong economic growth, still-expansionary macroeconomic policy, and in some cases managed exchange rates, which is contributing to rapid credit and asset price growth. Some have already taken policy actions in response, though further action may be needed to prevent a build-up of financial and economic imbalances in these countries.

The Australian banking system has continued to perform better than those in many other countries, consistent with the relative strength of the domestic economy over recent years. Non-performing asset levels remain higher than a few years ago, though they are low in comparison with those in the major economies. Their largest component – non-performing business loans – was beginning to show slight signs of improvement towards the end of last year, and the flow of loan loss provisions has already fallen significantly. For the largest banks, profitability has now recovered to near pre-crisis levels. Profitability has also picked up for the smaller Australian-owned banks, though the increase has been less pronounced, reflecting their somewhat weaker asset quality. The flooding and other recent natural disasters are unlikely to have a major effect on banks' asset quality. However, they will result in a significant increase in claims on general insurers, which will reduce their profits in the current financial year.

Australian banks have maintained ready access to wholesale funding markets in the past six months, but they have also had less need to raise wholesale funds over this period as growth in deposits continues to outpace growth in credit. This shift towards deposit funding has enabled banks to further reduce their reliance on short-term wholesale debt. As a result, their liquidity positions have improved further. Banks' capital positions have also been substantially bolstered in recent years.

The economic expansion is supporting the financial position of the household and business sectors in Australia. They nonetheless continue to exhibit a more cautious approach to their borrowing than prior to the crisis, with businesses deleveraging significantly and households reducing the growth in their debt outstanding to a rate more in line with income growth. Household indebtedness remains historically high, however, and recent increases in interest rates have lifted the aggregate debt-servicing requirement. While indicators of financial stress are relatively subdued, a continuation of this recent borrowing restraint would help build additional resilience into households' balance sheets.

As the global economy moves beyond the initial recovery phase, the challenge for financial institutions and regulators in Australia will be to manage an expansion under post-crisis conditions. The very rapid growth in the financial system over the years that preceded the crisis seems unlikely to be repeated, since to a significant degree it represented a one-time adjustment to financial deregulation and the shift to low inflation. If that view is correct, then banks' domestic growth opportunities will be more limited in the years ahead. There is no reason why the financial system cannot adapt smoothly to a slower rate of expansion, but if industry participants were to attempt to return to their earlier rates of growth, they could be induced to take risks that may subsequently be difficult to manage. Maintaining a more moderate pace of balance sheet expansion, particularly one that is more easily able to be funded by deposits, will also assist in further strengthening bank funding profiles.

Another issue for both the Australian and global financial sectors over the coming years will be dealing with significant changes in the regulatory environment. International agreement was reached late last year on the main elements of the global bank capital and liquidity reforms known as Basel III, which are to be phased in over the next decade or so. In recent months, the focus has been on finalising the details of the agreed reforms for banks and how they can best be implemented across countries. Australian banks are well placed to meet the new capital standards, particularly given the significant bolstering of their capital positions in recent years. Since the previous *Review*, international

agreement has also been reached on alternative arrangements for countries such as Australia where there are insufficient government securities for banks to hold to comply with the new liquidity standards. The Reserve Bank of Australia (RBA) and Australian Prudential Regulation Authority have announced the approach that will be adopted here, which involves allowing banks to establish contractual committed liquidity facilities with the RBA. This will ensure Australian banks meet the standards while giving them the same incentives as banks in other jurisdictions to manage their liquidity positions prudently.

Other areas of importance in recent months have been the continuing work at the international level on identifying financial institutions that are systemic in a global context and ways to strengthen their capacity to absorb losses, and the move towards central clearing of over-the-counter derivatives. There is also work ongoing at the global level to strengthen the intensity and effectiveness of supervision, which is a necessary complement to the new regulations. Australia continues to be an active participant in the international discussions that are shaping these reforms.

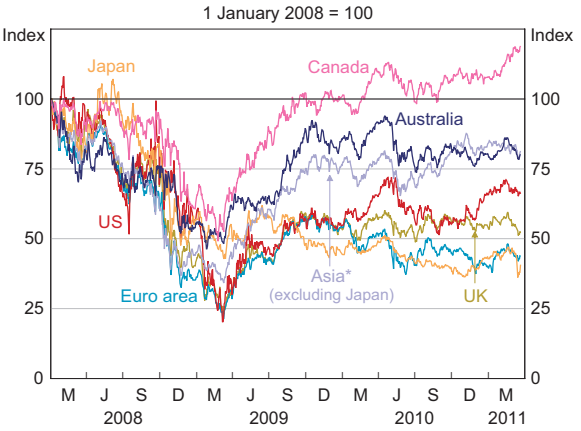
1. The Global Financial Environment

Confidence in major banking systems has recovered further over the past six months. Assisted by generally improving economic conditions, large banks have continued to report profits and repair their balance sheets. In particular, many banks have further strengthened their capital positions; this, together with previous gains, has left many banks better placed to withstand future adverse shocks and meet tougher upcoming regulatory capital requirements. Partly in response to this, bank share prices generally increased over the past six months, along with broader share market indices, though they have fallen in recent weeks reflecting the unrest in North Africa and the Middle East, and the natural disaster in Japan (Graph 1.1). There remains considerable variation across and within some countries: some banking systems are still under considerable strain, most notably in parts of Europe, where recovery has been undermined by market concerns about sovereign debt sustainability.

Banks in the major advanced countries still face significant challenges. Even though loan loss provisions have been falling recently, non-performing asset ratios remain around historical highs and property markets are still weak in many countries. Banks are also seeking to improve their funding structures. Many need to refinance their government-guaranteed debt in the next few years, but funding conditions are still fairly fragile and sovereign debt issuance is competing with theirs.

While overall global financial stability has improved over the past six months, there has been a setback to market sentiment in recent weeks associated with the unrest in North Africa and the Middle East, and the recent natural disasters. These events have focused attention on the resilience of financial systems to external shocks. This comes after a few years in which concerns about financial instability had primarily focused on vulnerabilities generated within financial systems. While it is still too early to assess the full impact of these events, they highlight that financial systems remain susceptible to sudden shifts in market sentiment.

Graph 1.1
Banks' Share Prices
1 January 2008 = 100



* MSCI financials index
Source: Bloomberg

Profitability and Capital

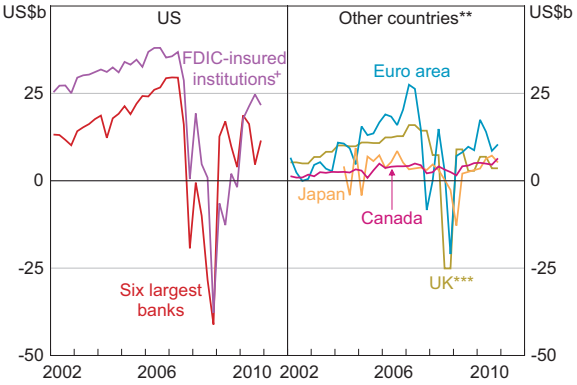
Large banks in the major advanced countries have continued to report profits, although profit levels and returns on equity are subdued compared with the pre-crisis period. While banking sector profits were generally much higher in 2010 than in the previous

year, they tended to ease in the second half of the year (Graph 1.2). In the United States, aggregate profits of the six largest banking groups (representing around one half of US domestic banking system assets) have been volatile in recent reporting periods, in large part due to significant goodwill impairment charges at one of these banks. Profits of the remaining five large banks have been steadier, and were up about 40 per cent in 2010 compared with 2009. Profits of all US Federal Deposit Insurance Corporation (FDIC) insured institutions increased considerably in 2010. In the euro area, recent profit results for large banking groups have been mixed: some were affected by difficulties in funding and trading markets that followed the sovereign debt downgrades in some euro area countries. Even so, aggregate profits of the ten largest euro area banks (including two Swiss banks) were up around 50 per cent in 2010. The large UK banks' results remain dispersed; some banks recorded significant profit rises for 2010 as a whole, while others recorded further losses.

Banks in non-Japan Asia and Canada largely avoided the damaging securities write-downs seen in some other banking systems during the crisis, and their loan losses have also been more modest. They generally continued to post firm profit results in 2010, consistent with their more favourable domestic economic conditions. Accordingly, bank share prices in these regions have outperformed those in the United States, euro area, United Kingdom and Japan over the past few years. Profitability of the New Zealand banking system increased during 2010, after higher provisions had weighed on profits in 2009. However, a number of NZ finance companies failed during the past year due to losses on property development loans and/or funding difficulties; consolidation in the NZ non-bank financial sector is ongoing.

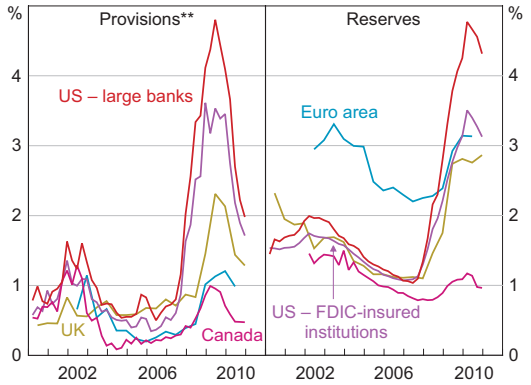
The main driver of bank profits in recent reporting periods has been further declines in the flow of provisions for bad loans, as economic conditions have gradually improved. The decline in loan loss provisions has been particularly noticeable in the United States, where the largest banks' (annualised) provision charges in late 2010 were equivalent to around 2 per cent of their loans, compared with a peak of 4.8 per cent in mid 2009 (Graph 1.3). Some larger banks have also begun to reduce their loan loss reserves. Despite this, provisions and loan loss reserves are still above historical averages for the

Graph 1.2
Banks' Profits*
After tax and minority interests



* Adjusted for significant mergers and acquisitions
** Ten largest listed euro area banks (including Switzerland), five largest UK banks, four largest Japanese banks and six largest Canadian banks
*** Implied from semi-annual data
\+ Includes the six largest banks, but the timing and magnitude of some goodwill impairment charges in 2009 and 2010 differ
Sources: Bloomberg; FDIC; banks' annual and interim reports

Graph 1.3
Banks' Loan Loss Provisioning and Reserves*
Per cent of loans outstanding



* Six largest US banks, ten largest listed euro area banks (including Switzerland), five largest UK banks and six largest Canadian banks for which data are available; adjusted for significant mergers and acquisitions
** Annualised values of quarterly (US, FDIC, Canada and euro area) or semi-annual (UK) provisions
Sources: Bloomberg; FDIC; banks' annual and interim reports

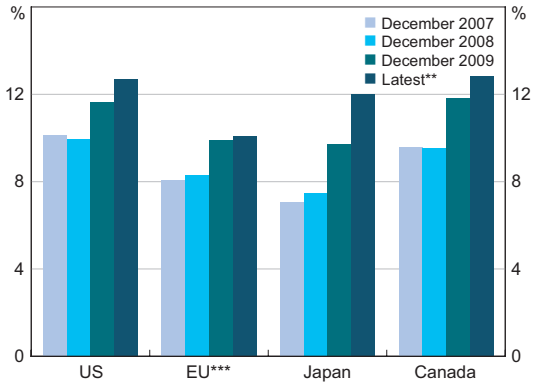
major banking systems, reflecting the high level of non-performing loans and weakness in property markets (discussed further in the section on 'Asset Quality and Credit Conditions').

For larger banks, the boost to profits from lower loan loss provisions has been partly offset by falls in non-interest income from the elevated levels seen in 2009; trading and investment banking income was boosted in that period by market volatility and increased capital market raising activity. While net interest margins continue to benefit from steep upward-sloping yield curves, credit growth remains relatively weak across the major banking systems, and so growth in banks' net interest income is still quite subdued.

The return to profitability in recent years has helped many banks increase both the level and quality of their capital. Tier 1 capital ratios, for example, have increased markedly since the start of the crisis, although less so in those banking systems in Europe that remain under the most stress (Graph 1.4). Much of the increase has been in the form of common equity – mainly ordinary shares and retained earnings – which absorbs losses most readily. The improvements to banks' capital positions mean they should be better placed to meet the more demanding Basel III capital standards that will be phased in over the next decade.

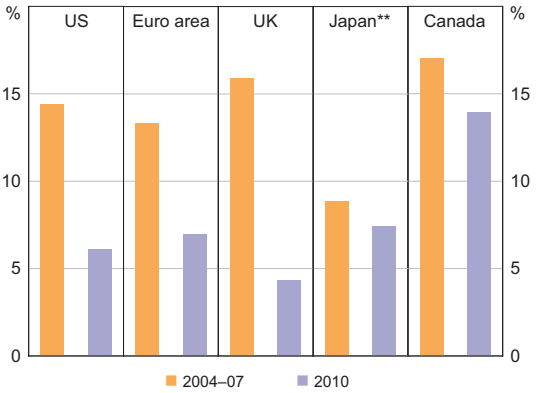
Higher capitalisation has also improved banks' ability to withstand adverse shocks, but, for a given level of profits, it reduces their returns on equity. Across the major regions, large banks' returns on equity in 2010 averaged between 4 and 7½ per cent, below the average rates recorded over the 2004–07 period (Graph 1.5). As banks reorient their business models in light of the crisis and forthcoming regulatory changes, they may find it more difficult to achieve the rates of return seen before the crisis. But there will inevitably be pressure on banks to boost returns as economic conditions strengthen, which could encourage banks to take on additional risks.

Graph 1.4
Banking System Tier 1 Capital*
Per cent of risk-weighted assets



* Caution should be used in comparing Tier 1 capital ratios across banking systems given definitional differences; Japan includes three largest banks
** June 2010 for Europe, December 2010 for US, Japan and Canada
*** December 2007 is the average of IFRS and non-IFRS reporting countries
Sources: Bloomberg; ECB; FDIC; OSFI; RBA

Graph 1.5
Large Banks' Return on Equity*
After tax and minority interests



* Annual average return on equity of the six largest US banks, ten largest listed euro area banks (including Switzerland), five largest UK banks, four largest Japanese banks, six largest Canadian banks; where banks have not reported their final result, profit is annualised and total equity is assumed constant from last reporting date
** 2004–07 results are to fiscal year ended 31 March
Sources: Bloomberg; RBA; banks' annual and interim reports

As profits have recovered, recent additions to banks' capital have been increasingly sourced from retained earnings rather than capital raisings. There was little capital raised by large banks in 2010, unlike in 2009 when banks' capital was boosted by common equity raisings and, in some cases, public capital injections. Restrictions on dividend payments have helped to boost some banks' retained earnings, but there is now increasing market pressure for banks to increase these payments.

Banks have also used retained earnings to repay the public capital that was injected into them during the crisis. In the United States, 86 per cent of the US$245 billion in capital support extended to banks under the Troubled Asset Relief Program (TARP) has been repaid. All of the largest banks have now fully repaid public capital following the US Treasury's sale of its remaining stake in Citigroup in December 2010, but many smaller institutions still have public capital support in place; 569 of the 707 institutions that received capital assistance in the United States are yet to fully repay. (As discussed below, the US Government also retains significant exposure to the balance sheets of the troubled insurer, AIG, and the government-sponsored mortgage agencies, Fannie Mae and Freddie Mac.) Progress in repaying public capital has been mixed across Europe: large banks in some countries have fully repaid this capital (including Switzerland and France), while those in other countries are still dependent on it (including Ireland, the United Kingdom and Germany).

Despite the general improvement in global bank profitability recently, banking systems in some countries remain weak, reflecting their economic and financial conditions. This is particularly the case in some European countries, such as Ireland, Greece, Portugal and Spain, where the interaction of weak economic growth, fiscal strains and bank exposures to troubled property sectors is undermining bank performance. The problems have been particularly acute in Ireland, where the large banks recorded further substantial losses on their property exposures in the second half of 2010. The Irish banks had expanded their balance sheets rapidly over the decade leading up to the crisis, with a significant portion of new lending directed towards property construction and development. A large oversupply of property developed, and the ensuing downturn in the property market has been severe. A government-sponsored 'bad bank' has been acquiring the large banks' troubled property exposures at significant haircuts. The ongoing loan losses have resulted in a number of large Irish banks requiring additional capital injections from the Irish government.

In some countries, bank difficulties are more acute among the smaller, regionally focused lenders, which account for a sizeable share of the banking sector in some cases. In Spain, for example, the savings banks (cajas), which hold around one half of banking sector loans, have been performing worse than the larger and more diversified commercial banks. The savings banks' difficulties mainly stem from large exposures to the troubled property development sector and excess capacity, though this has been compounded by weak governance and other structural problems. The Spanish authorities have introduced legislative changes to address some of the structural difficulties in the sector, and public funds have been used to facilitate restructuring and consolidation. More recently, in response to ongoing market concerns about the sector, the authorities have introduced tighter capital requirements – to be met by public funds if necessary – and measures to enhance transparency for all banks.

In the United States, the smaller deposit-taking institutions in aggregate returned to profitability in 2010, but their average return on equity remains below that of the larger banks. In 2010, 157 mainly small institutions failed in the United States, a little higher than the number in 2009 (Graph 1.6). However, these failed institutions only accounted for about 2 per cent of all FDIC-insured institutions. The ongoing high number of failures partly reflects the large exposure of some smaller institutions to the troubled commercial property and property development sectors. More than 10 per cent of US institutions are still considered vulnerable by the FDIC, which is higher than the 1990 peak. These institutions account for around 3 per cent of FDIC-insured institutions' assets.

Some small savings banks in South Korea have also encountered difficulties recently, though they account for a very low share of banking system assets. In February 2011, authorities suspended the operations of seven small savings banks following significant deposit withdrawals, and activated the Korean deposit insurance scheme. Depositor concerns had built up after some of these banks

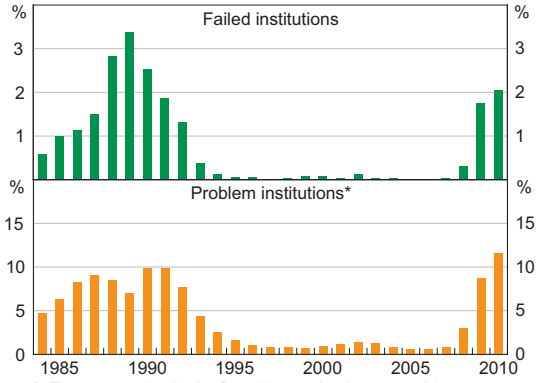
were found to be insufficiently capitalised as a result of losses on property development loans.

Authorities in the major jurisdictions are responding to the still-challenged outlook for banks by conducting a further round of stress tests in the first half of 2011. The European Banking Authority is co-ordinating a stress test of European banks' capital resilience under adverse economic conditions and shocks to interest rates and asset prices. This test will be based on banks' 'core' Tier 1 capital, which is stricter than the Tier 1 capital definition used in the previous stress test conducted in mid 2010. The final results of this stress test will be released in June. A separate study of banks' funding and liquidity risks is also being undertaken, though the results will not be made public. In the United States, regulators have undertaken another stress test of the 19 large banks; the results were not made public, but regulators have approved some banks' plans to increase dividends, buy back private capital or repay public capital.

Conditions remain difficult for the large non-bank financial institutions in the United States that still have significant public capital in place. The government-sponsored mortgage agencies, Fannie Mae and Freddie Mac, recorded further losses in the second half of 2010. Authorities have recently announced options to reduce the role of these agencies in the mortgage market and ultimately wind them down; remaining government involvement in the mortgage market would target only a limited range of borrowers, although there are alternative proposals to expand the government's role during times of housing stress, such as by offering reinsurance for certain mortgage-backed securities. The troubled US insurer, AIG, returned to profitability in the second half of 2010 as it sold some assets. Along with TARP funds, the proceeds from asset sales were used to repay loans from the Federal Reserve Bank of New York. The US Treasury has converted some of its preference share holdings into common shares, leaving it with a 92 per cent stake in AIG, which it plans to sell down gradually.

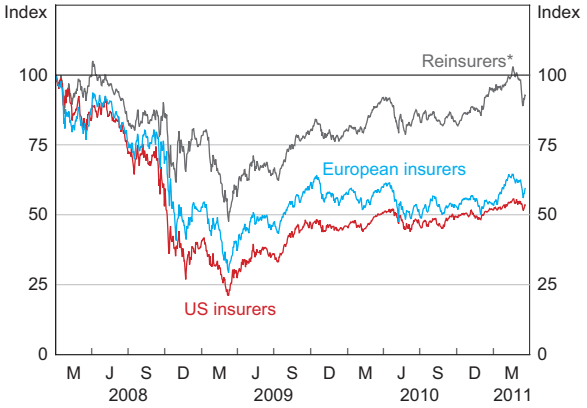
More broadly, general insurers in the United States and Europe mostly maintained their profitability in the second half of 2010. Market sentiment towards insurers had generally been improving over the past six months, but share prices have fallen recently in response to the natural disaster in Japan (Graph 1.7). Reinsurers' profits have recently been under downward pressure from sizeable natural catastrophe losses, and this is expected to continue in 2011. For a number of large global reinsurers, natural catastrophe losses so far this year, including from the Christchurch earthquake, have been quite high. The earthquake and associated tsunami in Japan will further add to losses in the reinsurance

Graph 1.6
FDIC-insured Institutions in Difficulty
Per cent of all institutions, by number



* Those assessed as having financial, operational or managerial weaknesses that threaten their continued financial viability
Source: FDIC

Graph 1.7
Insurers' Share Prices
1 January 2008 = 100



* Market-capitalisation-weighted index of seven large reinsurers
Sources: Bloomberg; RBA

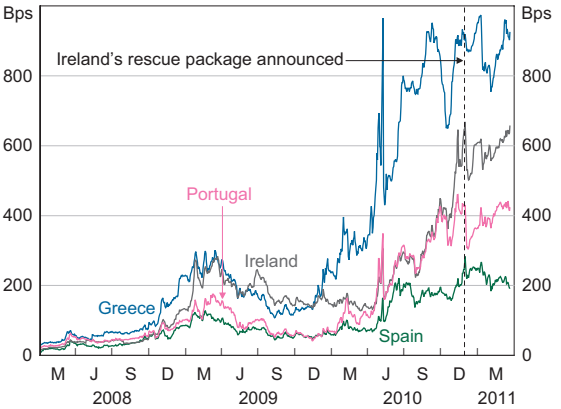
industry, although it is too early to evaluate their extent. Global reinsurers' share prices have fallen since this catastrophe, but remain a little higher than at end September 2010. For life insurers, the low interest-rate environment continues to weigh on profits. This has prompted concerns that some insurers will seek to boost investment returns by taking on additional risks, for example by investing in unfamiliar assets such as emerging market bonds.

Market and Funding Conditions

Bank wholesale funding markets have generally been stable over the past six months, though there continue to be market concerns over sovereign debt sustainability, particularly in Europe. Pressures eased somewhat around the middle of 2010, after measures were put in place to support Greece and the European stress test results were released. However, concerns over European sovereign risks intensified in the final months of 2010 and have carried through to 2011. The focus in late 2010 was initially on Ireland, where the weak economy and the need to recapitalise the large Irish banks generated considerable strain on its public finances and in financial markets. These pressures led to a joint European Union (EU) and International Monetary Fund (IMF) rescue package announced in November. Sovereign spreads for other euro area countries with fiscal strains and/or weak banks have also been elevated in recent months, creating funding challenges for their banking systems and raising the spectre of further bank and sovereign bail-outs (Graph 1.8). Reduced access to private markets means some of these banking systems are still heavily dependent on central bank funding support, and bank credit default swap premia in these countries have increased significantly.

While only a few countries' sovereigns and banking systems are currently distressed, there is potential for strains to propagate to other European countries via cross-border connections. Some of the larger European banking systems have large exposures to the banks and sovereigns of the affected countries. Many large European banks are also exposed

Graph 1.8
European Government Bond Spreads
To 10-year German Bunds



Source: Bloomberg

through their lending to households and businesses in these countries; the performance of these loans would be expected to deteriorate if sovereign or banking strains worsened the downturn in local economic conditions.

Concerns about possible contagion effects have prompted the European authorities to bolster euro area support mechanisms. In late 2010 the European Council endorsed the creation of a permanent scheme to support euro area financial stability, the European Stability Mechanism (ESM), which will replace the European Financial Stability Facility (EFSF) after it expires in 2013. It was subsequently agreed that the ESM will have a lending capacity of €500 billion, around double that of the EFSF. There have also been discussions about expanding the lending capacity and flexibility of the EFSF in the interim, including providing it with the option to buy sovereign bonds issued under certain conditions.

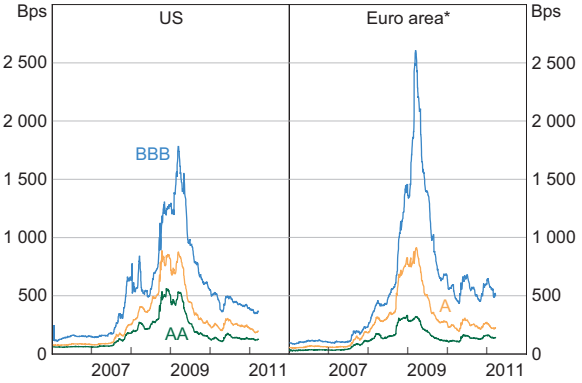
Pricing of bank debt has generally been resilient to the renewed focus on sovereign risk in Europe. Spreads have been broadly stable in most of the major short-term inter-bank funding markets since September 2010, though they have been more volatile in the euro area. Spreads on long-term bank debt have narrowed a little over the past six months in the United States and been broadly unchanged in other major markets (Graph 1.9).

Following the expiry of a number of European schemes at the end of last year, most wholesale funding guarantee schemes are now closed to new borrowing. Banks have generally maintained access to funding markets despite the closure of these schemes, with senior debt issuance picking up in the past few months in most major markets (Graph 1.10). Institutions in Europe have increased their issuance of covered bonds, and some banks in a number of other countries, such as New Zealand and South Korea, have also begun to issue covered bonds for the first time. Banks are being attracted to covered bond markets in the current funding environment because the higher credit ratings attached to these instruments allow them to diversify their funding by tapping into a different investor base (see 'Box A: Covered Bonds'). Despite these recent developments, overall wholesale debt issuance by banks is still fairly subdued by historical standards, largely reflecting weak credit growth in the major banking systems. Moreover, issuance of structured finance instruments remains very low relative to pre-crisis levels (Graph 1.11). Most of the recent issuance of residential mortgage-backed securities (RMBS) in the United States has been by the government-sponsored mortgage agencies, with private label markets still effectively closed.

In response to market and regulatory pressures, many banks are seeking to make their funding structures more robust, including by lengthening and diversifying their funding. They have further increased the share of long-term debt securities and retail deposits in their total funding, while reducing their reliance on short-term wholesale funding. Banks are therefore competing more aggressively for deposits, particularly term deposits. Deposit growth in the major regions remains subdued, however, partly because growth in incomes is below average (Graph 1.12). Some banks have also recently altered the pattern of their shorter-term wholesale funding, for example by using longer-dated repos, typically of two to seven years.[1]

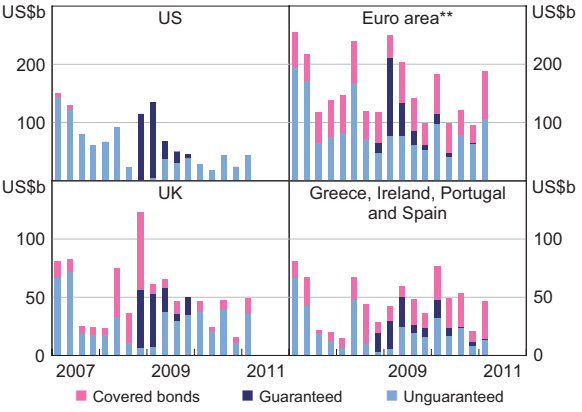
1 Bank of England (2010), 'Box 3: Recent developments in bank funding markets', *Financial Stability Report*, December, pp 38–39.

Graph 1.9
Banks' Bond Spreads
Spread to equivalent maturity government bonds



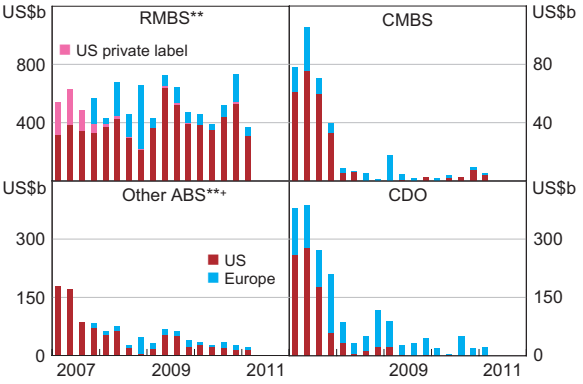
* Euro-denominated bonds issued by financials
Source: Bloomberg

Graph 1.10
Banks' Bond Issuance*



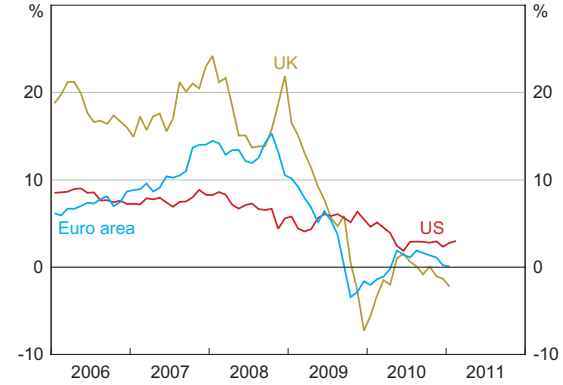
* March 2011 is quarter-to-date
** Excludes Greece, Ireland, Portugal and Spain
Sources: Dealogic; RBA; Thomson Reuters

Graph 1.11
Structured Finance Issuance*



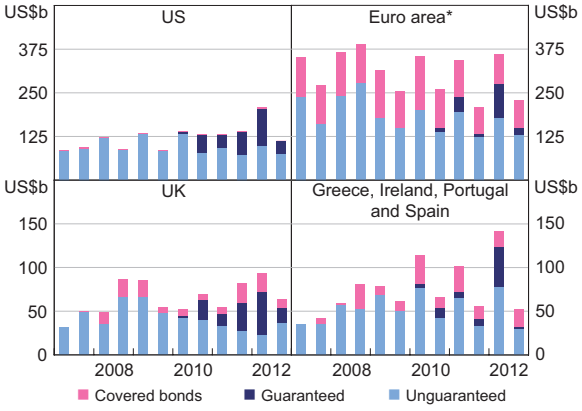
* Includes 'structure-to-repo' issuance; March 2011 is quarter-to-date
** Includes some agency CMBS for US; data prior to fourth quarter 2007 are unavailable for Europe
\+ Includes credit cards, home equity, auto and other loans
Sources: CRE Finance Council; JPMorgan; SIFMA

Graph 1.12
Deposit Growth
Year-ended*



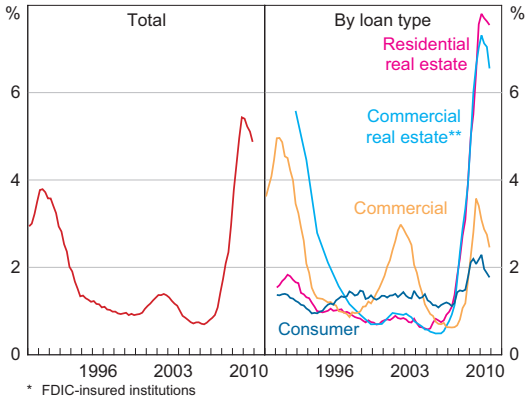
* Adjusted for some series breaks
Sources: Bank of England; Board of Governors of the Federal Reserve System; ECB

Graph 1.13
Bank Bonds Maturing



* Excludes Greece, Ireland, Portugal and Spain
Sources: Dealogic; RBA; Thomson Reuters

Graph 1.14
US Non-performing Loans*
Per cent of loans



* FDIC-insured institutions
** Includes construction and development loans
Source: FDIC

Banks in some countries, particularly in Europe, face a significant wholesale debt refinancing challenge in the next few years, and will therefore remain susceptible to any stress in funding markets. Estimates suggest that around 40 per cent of bank wholesale debt will mature in 2011 and 2012. Around one quarter of bond maturities in this period will be government-guaranteed bonds that were issued in the past few years (Graph 1.13). Some of the investors in these guaranteed bonds may be unwilling or unable to assume the higher credit risk of unsecured bank debt, particularly as banks will be competing with a large amount of sovereign issuance. In Europe, there has recently been increasing investor concern about potential future private-sector burden-sharing in bank resolution, which could adversely affect the demand for unsecured bank debt.

Asset Quality and Credit Conditions

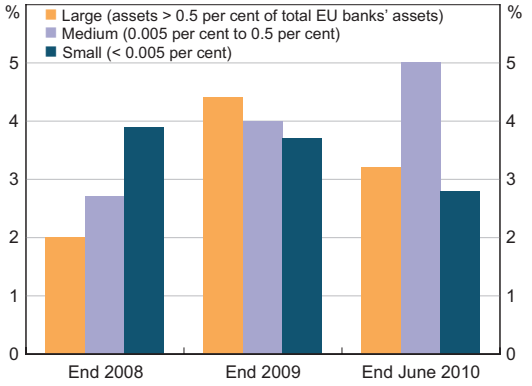
Asset quality remains a key vulnerability in many banking systems, even though loan loss provisions and stocks of non-performing assets have fallen. In the United States, the share of total non-performing loans across all FDIC-insured institutions has declined from the peak of about 5½ per cent, but remained high, at 4.9 per cent as at December 2010 (Graph 1.14). The available data for Europe suggest that non-performing loan ratios have declined across the large banks that accounted for much of the earlier deterioration, though they also remain elevated (Graph 1.15). In contrast, these ratios continued to increase for some of the smaller banks. Outcomes at the individual country level still vary significantly: non-performing loan ratios have declined in some of the larger banking systems (such as Germany), but are continuing to rise in other countries where economic and financial conditions are relatively weak (such as Greece and Spain).

Property-related exposures remain an area of focus because of their prominent role in banks' loan losses during the crisis. In the United States, non-performing loan ratios for both residential and

commercial real estate have declined since early 2010, but remain around their respective historical highs at 7½ per cent and 6½ per cent. As noted earlier, some smaller US banks have particularly large exposures to commercial property and property developers. A few large banks in the United States are also facing the prospect of having to buy back some poorly performing residential mortgages from investors given flaws in the origination process, though resolution of this process is likely to be slow. In Europe, property also continues to feature prominently in banks' non-performing loans. Non-performing housing loan ratios have shown modest improvement in some European countries recently, however, such as Spain and the United Kingdom (Graph 1.16). Comparable data are generally not available for commercial property, but data from a number of large banks with significant commercial property exposures suggest that losses in this business segment have been more severe than for housing.

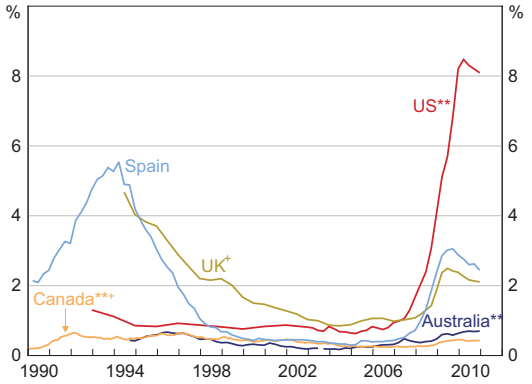
How property-related exposures play out for bank profitability in the future will depend to a large extent on developments in the economy and asset prices. Many commercial and residential property exposures are likely to be in negative equity, as prices remain well below their peaks in many countries. Commercial property prices in the United States and United Kingdom, for example, are currently around 40 per cent and 35 per cent below their respective peaks (despite some mild gains in the United Kingdom) (Graph 1.17). Prices are still falling in Ireland and Spain – countries that have experienced particularly large booms and busts in property development. Residential property prices in the United States are still falling, though at a slower rate than in recent years, and they are now around 30 per cent below their peak (Graph 1.18). The inventory of properties that are in foreclosure or have already been repossessed remains large, and this is weighing on prospects for the US housing market. Residential property prices in some European countries are also at much lower levels

Graph 1.15
EU Banks' Non-performing Loans
Per cent of loans, by bank size



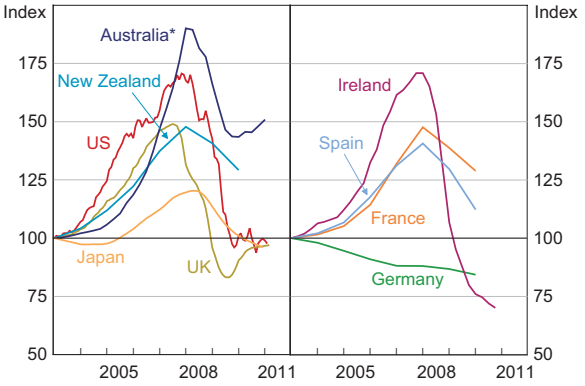
Source: ECB

Graph 1.16
Non-performing Housing Loans
Per cent of loans*



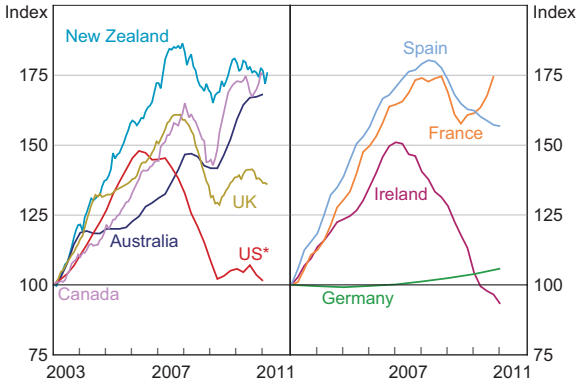
* Per cent of loans by value; includes 'impaired' loans unless otherwise stated; for Australia, only includes loans 90+ days in arrears prior to September 2003
** Banks only
\+ Per cent of loans by number that are 90+ days in arrears
Sources: APRA; Bank of Spain; Canadian Bankers' Association; Council of Mortgage Lenders; FDIC; RBA

Graph 1.17
Commercial Property Prices
December 2002 = 100



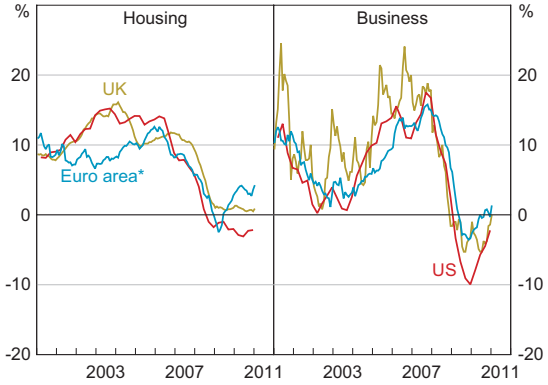
* Prime office space only
Sources: Bloomberg; Jones Lang LaSalle; Property Council of Australia; RBA

Graph 1.18
Dwelling Prices
December 2002 = 100



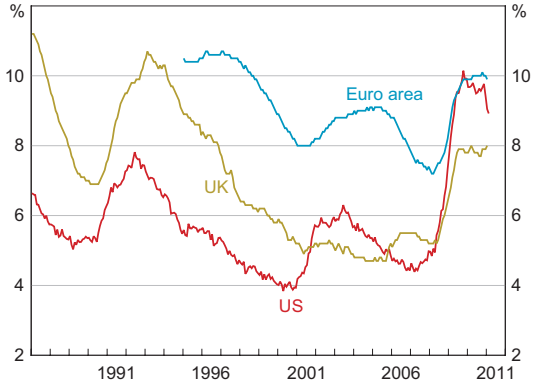
* Prices of detached houses only
Sources: APM; Bloomberg; Canadian Real Estate Association; RBA; Real Estate Institute of New Zealand; Thomson Reuters

Graph 1.19
Credit Growth
Six-month-ended annualised, seasonally adjusted



* Euro area data are not adjusted for securitisations
Sources: Bank of England; ECB; RBA; Thomson Reuters

Graph 1.20
Unemployment Rates



Source: Thomson Reuters

than a few years ago, though they are picking up in some countries, such as France.

The low level of interest rates may have helped some property borrowers continue to service their loans, enabling banks to forbear on some problem loans (such as by extending loan maturities or converting loans to interest-only terms), and thus limiting forced property sales into already depressed markets. Banks' property-related exposures could therefore be negatively affected by the withdrawal of macroeconomic policy stimulus in some countries, especially where there is a large share of these loans in negative equity.

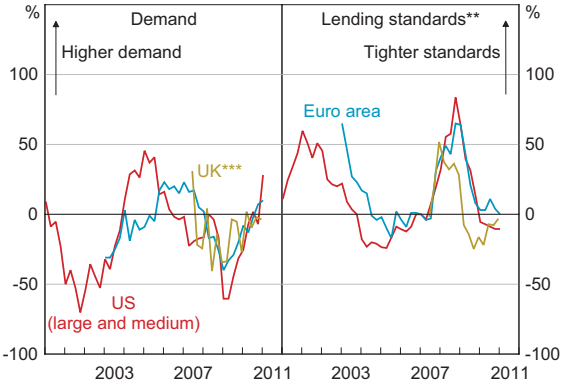
Private financing activity is still fairly weak in many countries, despite accommodative monetary policy, and this is weighing on the recovery of property markets and the economic situation more broadly. Growth in housing credit has picked up a little in the euro area over the past year, but it remains weak in the United Kingdom, and the level of credit is still falling in the United States (Graph 1.19). Households' confidence and capacity to take on new debt continues to be constrained by subdued growth in incomes and high unemployment. Annual growth in household disposable income across the major regions remains below average rates of growth seen over the past decade. Despite having declined since late 2009, the unemployment rate in the United States remains around double the level seen before the onset of the crisis, while rates in the euro area and the United Kingdom are close to their respective peaks of 10 per cent and 8 per cent (Graph 1.20).

Bank lending to businesses has been even weaker than for housing, falling in most major markets over the second half of 2010, though the rate of contraction has eased compared with 2009. This weakness in credit growth reflects both demand and supply factors. Loan officer surveys indicate that demand for credit and banks' willingness to lend have both improved since the extremes of the crisis, but are still generally soft overall (Graph 1.21). Some authorities have been particularly concerned about the weakness in lending to small businesses given how reliant these firms are on banks for their funding.

In contrast to intermediated financing, capital market funding flows in the major economies generally held up during the crisis, as some larger businesses switched away from bank debt and others raised equity to deleverage. Non-financial corporate bond issuance has recently been strong; this is particularly the case for sub-investment grade debt in the United States, as the credit quality of lower-rated issuers has improved and investors have sought higher yields (Graph 1.22).

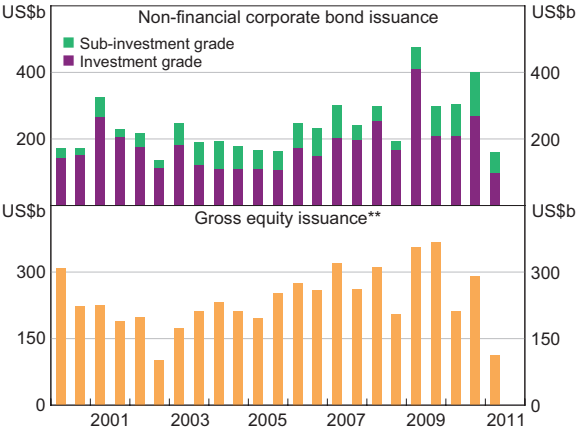
The financial stability challenges confronting policy-makers in many emerging market economies are quite different from those of the major advanced economies. In contrast to advanced economies, non-performing loan ratios are around, or a little below, their pre-crisis levels across a range of emerging Asian economies. But stronger economic growth rates compared with the advanced economies, combined with still-low real interest rates, have contributed to robust credit growth and significant rises in asset prices in some of these countries. Share prices in emerging Asia and Latin America have significantly outperformed those in the advanced

Graph 1.21
Business Loans
Net percentage reporting*



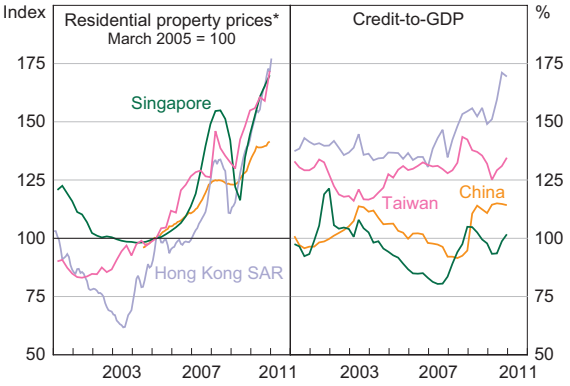
* UK survey applies twice the weight to a 'considerably' answer relative to a 'somewhat' answer; US and Europe apply an equal weight
** US and Europe ask whether lending standards have changed in the quarter; UK asks whether the supply of credit has changed
*** Demand from large businesses; lending standards for all businesses
Sources: Bank of England; Board of Governors of the Federal Reserve System; ECB

Graph 1.22
Bond and Equity Issuance*



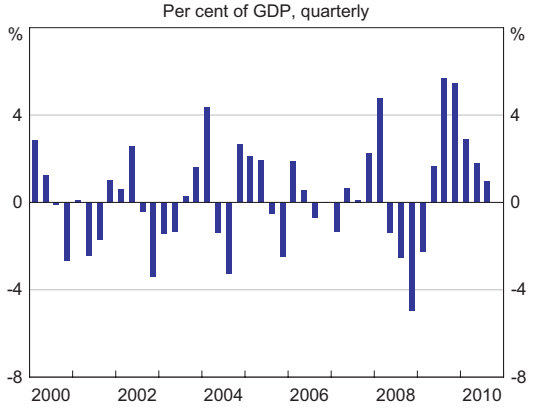
* Euro area, Japan, UK and US; first half 2011 is half year-to-date
** Includes financials; also includes Denmark, Iceland, Norway, Sweden and Switzerland
Sources: Dealogic; RBA; Thomson Reuters

Graph 1.23
Asset Prices and Credit



* For China, data are an average of new and existing residential property prices
Sources: CEIC; Central Bank of Taiwan; Hong Kong Monetary Authority; Monetary Authority of Singapore; RBA

Graph 1.24
Net Private Capital Flows to Asian Economies*
Per cent of GDP, quarterly



* Financial account transactions less reserves; includes Hong Kong SAR, India, Philippines, Singapore, South Korea, Taiwan and Thailand
Sources: CEIC; IMF

world since the end of 2008, with broad market indices recording rises of around 60 per cent to 80 per cent compared with around 35 per cent in advanced countries. In Asia, residential property prices in China, Hong Kong SAR, Singapore and Taiwan have grown strongly over the past couple of years, more than reversing earlier falls (Graph 1.23).

Large capital inflows, attracted by growth prospects and in some cases interest-rate differentials, have generated pressures for Asian currencies to appreciate (Graph 1.24). But for countries with managed exchange rate regimes, the result has instead been domestic monetary expansion that has exacerbated the strength in credit and asset prices. Authorities in some of these countries have been responding with targeted measures to cool speculative pressures in residential property markets, including increasing mortgage down-payment requirements, raising stamp duties, and imposing restrictions on bank lending. Measures have also been introduced to control capital inflows in a number of countries. For example, South Korea and Thailand have imposed taxes on foreign investors' earnings on government bonds, while Indonesia has increased the reserve requirement ratio on commercial banks' foreign-currency holdings. Net private capital flows to some of the Asian economies have moderated from the strong levels seen in the second half of 2009; in some cases there have recently been net outflows. Some countries have also tightened monetary policy a number of times over the past year, and in a few cases, their exchange rates have appreciated. However, given that real interest rates remain low in many of these strongly growing economies, further policy action could be required over the coming period to guard against the build-up of macroeconomic and financial imbalances.

Box A
Covered Bonds

Covered bonds are bonds secured by a pool of high-quality assets on the issuing financial institution's balance sheet. The main feature of covered bonds is that if the issuer can no longer service the periodic bond payments, investors have a preferential claim on this pool of assets and the associated cash flows. If the cover assets are not sufficient to meet the bond payments in full, covered bondholders also have an unsecured claim on the issuer to recover any shortfall. In that case they would stand on an equal footing with the issuer's other unsecured creditors. This is known as dual recourse.

The covered bond market is large, with a total global amount outstanding of about €2.2 trillion in 2010. Around 300 institutions in over 30 countries have issued covered bonds. The bulk of covered bonds, around 90 per cent, have been issued by countries in the euro area, though firms have recently started to do so in some other countries, including Canada, New Zealand, South Korea, United Kingdom and the United States. In the euro area, the covered bond market is roughly 40 per cent of the size of the sovereign bond market.

Covered bonds can be regulated by a specific legal framework or on a contractual basis using general law, though the majority are issued under special legal frameworks. Either way, all covered bonds are designed to provide maximum investor protection. The legal frameworks vary considerably across countries, but they typically determine:

- which institutions are allowed to issue covered bonds;
- what type of assets can be used to secure the covered bonds;
- how the assets are protected and made available exclusively to investors if the issuer becomes insolvent;
- how the issuer must manage the pool of assets by over-collateralising and by replacing impaired or matured assets; and
- which regulatory authority enforces compliance with the covered bond law.

Because of strict regulations and the two-fold protection of investors' interests, covered bonds are considered to be the safest form of bank debt. As a result, they typically carry a higher credit rating than that of their issuer, and allow the issuer to access cheaper and more stable long-term funding from the wholesale debt markets.

The funding advantages of covered bonds are currently attracting attention in Australia. In December 2010, the Australian Government announced that it will establish a legal framework that will permit all authorised deposit-taking institutions (ADIs) to issue covered bonds. Currently, Australian ADIs are not permitted to issue covered bonds because covered bondholders would have preferential access to an ADI's assets, thereby subordinating other unsecured creditors, like ordinary depositors. This would conflict with the *Banking Act 1959*, which enshrines the principle of depositor preference under which, if an ADI is wound up, all of its assets in Australia are made available to meet the ADI's deposit liabilities in Australia in priority to other liabilities of the ADI.

Countries that have adopted covered bond regulations have managed depositor subordination differently. Up until about a decade ago, issuance of covered bonds across Europe was restricted mostly to specialised credit institutions that did not take deposits. More recently, however, some countries have begun to permit deposit-taking institutions to issue covered bonds, for example, Germany in 2005.

Countries that have only recently begun to permit covered bonds have tended to manage the subordination of depositors and other creditors by setting limits on the issuance of covered bonds. Regulations in Canada and rules proposed in the US Covered Bond Act limit covered bond issuance to 4 per cent of a deposit-taker's assets (in Canada) or liabilities (in the United States). Formal issuance caps have also been prescribed in the United Kingdom: the UK Financial Services Authority discusses all covered bond and other 'asset encumbrance' plans with issuers and can impose both issuance caps and higher capital charges. On the other hand, there are few such limits elsewhere in Europe and no common European regulatory limits. Italian law imposes formal caps on the amount of assets that can be reserved for secured creditors, but the limit is greater the higher the bank's capital ratio, and does not apply if capital ratios exceed certain thresholds. In most European countries, prudential supervisors must prevent cover pools from excessively encumbering bank assets by exercising their discretion in their normal oversight of institutions.

The secured nature of covered bonds means they combine some characteristics of securitisation with those of traditional senior unsecured bank bonds. However, they differ from securitisation in a number of ways. Unlike securitisation, the issuer of a covered bond can be a regulated credit institution, not a special purpose vehicle, and thus be subject to prudential oversight. The assets funded by the covered bond remain on the consolidated balance sheet of the issuer and form a bankruptcy-remote cover pool. However, unlike for asset-backed securities where the pool of assets typically does not change, issuers must remove non-performing or matured assets. They must also provide extra collateral as security in case the value of the assets depreciates during the term of the covered bond. Investors therefore bear little risk that assets securing a covered bond might become impaired. They are also not exposed to the prepayment risk that is inherent in the amortising payment structure of most asset-backed securities, since covered bonds are issued in the form of plain-vanilla fixed income securities that pay a periodic coupon and redeem all principal at a specific maturity. Finally, covered bonds are not structured with several tranches that carry different risk features and credit ratings like those in typical asset-backed securities.

Covered bonds were not immune from the effects of the financial crisis but did prove more resilient to severe market stress and, with European Central Bank (ECB) support, have recovered faster than other wholesale funding instruments, such as asset-backed securities and unsecured bank debt. The relative resilience of covered bonds is to be expected: the dual recourse and cover pool replacement provisions put covered bond investors in a better position than those holding asset-backed securities and unsecured debt. The European mortgages that typically back covered bonds also became less distressed than the US mortgages that backed many US residential mortgage-backed securities (RMBS). Nonetheless, despite providing more safety to investors, covered bond issuers' access to debt markets became seriously disrupted during the crisis, suggesting that the robustness of covered bonds should not be overstated.

Before the financial crisis, European covered bonds traded at a very small margin over the benchmark reference euro swap rate, with little variation

according to where in Europe they were issued. These spreads widened substantially after the collapse of Lehman Brothers in September 2008, and market conditions deteriorated further in subsequent months; spreads for German and French covered bonds peaked at around 100 and 140 basis points respectively in early 2009, while spreads for Spanish covered bonds peaked at around 180 basis points. Furthermore, issuance in primary markets stalled and liquidity became poor. At the same time, however, equivalent spreads for unsecured bank debt in the euro area rose by a lot more, peaking at about 250 basis points on average in 2009, while spreads for prime RMBS peaked at around 500 basis points.

The disruptions to covered bond markets prompted the ECB in May 2009 to put in place a program to purchase up to €60 billion of European covered bonds in the primary and secondary markets. This program was completed in June 2010. The aim of the program was to improve funding conditions for institutions issuing covered bonds, and to improve liquidity in the secondary market. The program largely achieved its goals: covered bond spreads narrowed substantially after the program was announced, while total gross issuance of covered bonds in 2010 increased by 20 per cent from 2009, to over €350 billion, a near-record amount. Issuance since the start of this year has also been at a record pace.

The net effect of increased covered bond issuance on banks' funding costs is uncertain. By committing bank assets to secure payments on covered bonds, unsecured senior bonds as well as more junior debt securities are effectively lowered in rank, so investors in them might demand higher returns to the extent that the impact on credit quality of those securities is perceived as material. Total wholesale funding costs therefore might not fall. European banks currently face higher costs of issuing senior debt, but it is not clear how much of the increase stems from the record pace of covered bond issuance, versus investor concerns about recent European Union proposals to change the treatment of senior debt of a distressed bank. Depositors are also subordinated, but are partly protected from this risk by deposit insurance schemes. While recognising that covered bonds subordinate other claims, banks argue that, provided issuance is not excessive, the capacity to issue covered bonds provides access to an additional and more robust source of funding. ✠

2. The Australian Financial System

Profitability of the Australian banking system increased further in the latest half year. The outlook for profits is favourable, given that bad and doubtful debt charges are expected to continue to decline in the period ahead. Even so, non-performing asset levels remain relatively high, particularly for business loans, though they have broadly stabilised in the past year. The flooding in Queensland and other recent natural disasters are unlikely to have a material impact on banks' loan quality. The banking sector is well placed to meet the more stringent Basel III capital and liquidity requirements that will be phased in over the next few years; it has already bolstered its capital position in recent years, and the Reserve Bank of Australia (RBA) and the Australian Prudential Regulation Authority (APRA) have announced the domestic approach to meeting the liquidity requirements.

A challenge for the industry in coming years will be adjusting to a likely slower pace of credit growth compared with the previous few decades, which will limit its growth opportunities. As yet, there is little evidence that banks are significantly loosening lending standards or taking on other risks in an attempt to sustain the earlier rates of growth. The slower rate of credit growth, in combination with ongoing strength in deposit growth, has eased the pressures on wholesale funding.

The recent natural disasters will result in a significant increase in claims on general insurers. The industry is well equipped to deal with this, because it is well diversified, and has robust reinsurance arrangements and large capital buffers. While industry-wide profits will fall, profits are still expected to be supported by solid underwriting results.

Banking System Profits

The four major Australian banks reported aggregate headline profits after tax and minority interests of $11.2 billion in their latest available half-yearly results (Table 2.1). In the corresponding period a year earlier, profits had been negatively affected by a one-off tax revaluation on these banks' New Zealand operations. Adjusting for this, profits in the latest half year were $3.7 billion higher than in the same period a year earlier. This increase was driven largely by an approximate halving in the charge for bad and doubtful debts (Graph 2.1). Net interest income and earnings from insurance and funds management operations also contributed to profit growth over the year. Gross earnings rose by 4½ per cent over the year, but this was partly offset by an 8 per cent increase in banks' operating expenses, mainly driven by technology investments and an increase in staffing expenses. The cost-to-income ratio is, however, around its lowest level on record. Consistent with the major banks' latest trading updates and profit releases, market equity analysts are forecasting further growth in profits in 2011, albeit at a slower pace than during the recent period, with ongoing rises in net interest income and further declines in bad and doubtful debt charges expected.

The regional Australian banks have reported more gradual increases than the major banks in their aggregate profits in recent periods, also driven by lower bad and doubtful debt charges. These banks were more severely affected by the downturn than the major banks, and though their profits, in aggregate, have recovered noticeably since 2009, they remain below pre-crisis levels. The regional

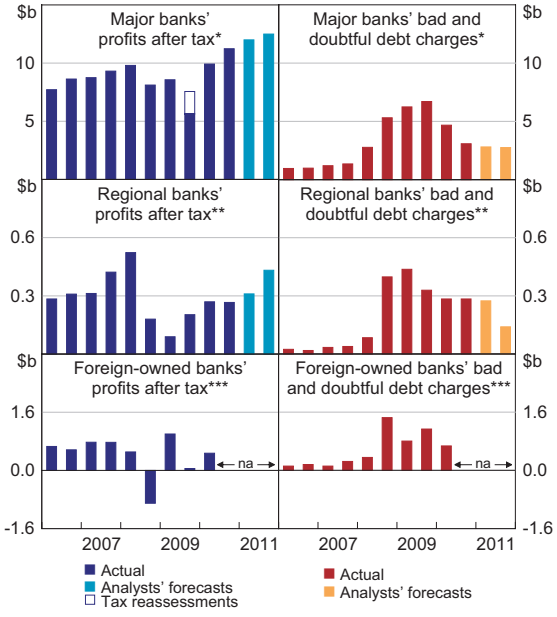
Table 2.1: Major Banks' Latest Half-yearly Profit Results[(a)]

Consolidated global operations

	2009 $billion	2010 $billion	Change $billion
Income			
Net interest income	23.5	23.8	0.3
Non-interest income	9.8	11.0	1.2
Expenses			
Operating expenses	15.3	16.5	1.2
Bad and doubtful debts	6.7	3.1	–3.6
Profit			
Net profit before tax	10.9	15.0	4.1
Net profit after tax and minority interests	7.6[(b)]	11.2	3.7

(a) Half-year to September for ANZ, NAB and Westpac; half-year to December for CBA
(b) Excludes a one-off tax reassessment on the major banks' New Zealand operations which lowered actual profit to $5.6 billion
Sources: RBA; banks' annual and interim reports

Graph 2.1
Banks' Profitability



* ANZ, NAB and Westpac report half-yearly to March and September, while CBA reports to June and December
** Suncorp Bank, and Bendigo and Adelaide Bank report half-yearly to June and December, while Bank of Queensland reports to February and August
*** All results are half year to June and December
Sources: APRA; Citigroup; Deutsche Bank; Morgan Stanley; RBA; UBS Securities Australia; banks' annual and interim reports

banks' aggregate charge for bad and doubtful debts in their most recent half-yearly results was about one third lower than its peak in 2009, whereas for the major banks this charge has roughly halved from the peak. Analysts are forecasting further increases in the regional banks' profits during 2011. However, some have moderated their expectations for the banks with larger relative exposures to Queensland, partly as a result of the recent flooding and cyclone events in that state. The profitability of the foreign-owned banks in Australia has been somewhat more variable than for the Australian-owned banks in recent years, though indications are that they remained profitable during the latest half-year.

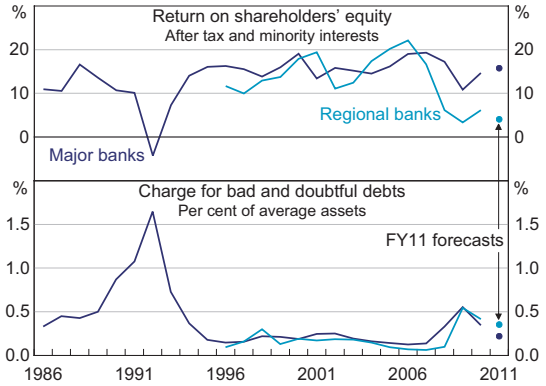
As the major banks' profits have recovered, their average return on equity has increased to near pre-crisis levels, at almost 15 per cent in 2010. Analysts are forecasting a further small rise in 2011 (Graph 2.2). The regional banks' return on equity fell by more during the crisis and remains below that of the major banks, but it has also begun to recover, reaching about 6 per cent in 2010. Analysts expect the regional banks' return on equity in 2011 to be below the level in 2010, partly reflecting the impact of the recent natural disasters.

Net interest income remains the dominant source of revenue for the Australian banks. Unlike many of the largest global banks, which had come to rely more on trading and investment income, the Australian banks have maintained their focus on traditional lending activities. The net interest margin (NIM) of the major banks has been broadly stable over the past five years or so, after an extended period when it had been declining. Within the crisis-affected period, the NIM initially declined further, though this was subsequently reversed and it has since moved within a fairly narrow range (Graph 2.3). In the latest half year, the reported NIM for the major banks' Australian operations declined by about 10 basis points. It was still 17 basis points higher than the trough in 2008, but similar to levels seen in the years preceding the crisis. The effects of the most recent round of interest rate increases (in November 2010) are not yet evident in most banks' published financial statements.[2] The NIM of the regional banks is lower than that of the major banks, and has been one factor behind the more modest improvement in their profits to date.

In recent reporting periods, the major banks' profits have also been supported by earnings from their insurance and funds management operations, which increased by 40 per cent in 2010 compared with the level in 2009, and now account for 10 per cent of their total income. This growth was driven by stronger investment returns and a pick-up in funds under management following a number of recent acquisitions. Even adjusting for acquisitions, insurance and funds management income was up strongly. Income from this source has been recovering after a period around 2008 when it had been subdued due to weakness in investment returns and slower net inflows.

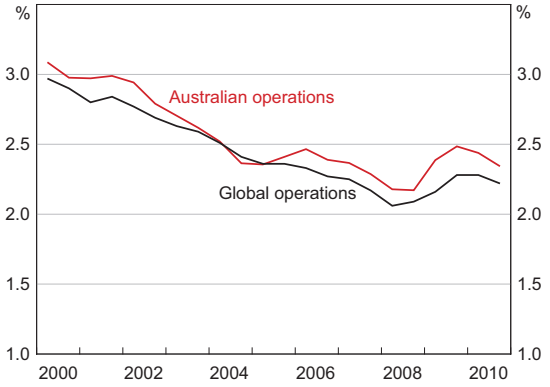
2 For more detail on developments in banks' net interest margins, see Fabbro, D and M Hack (2011), 'The Effects of Funding Costs and Risk on Banks' Lending Rates', RBA *Bulletin*, March, pp 35–41.

Graph 2.2
Banks' Profitability*



* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis
Sources: Citigroup; Deutsche Bank; Morgan Stanley; RBA; UBS Securities Australia; banks' annual and interim reports

Graph 2.3
Major Banks' Net Interest Margins*

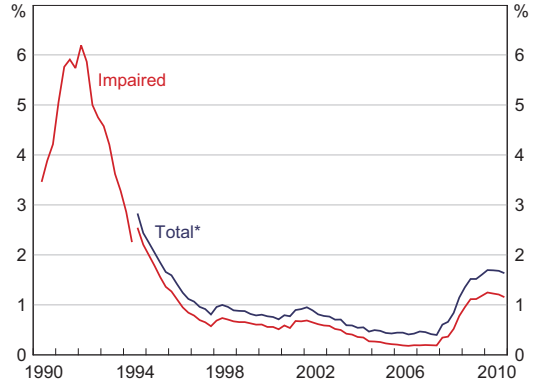


* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis
Sources: RBA; banks' annual and interim reports

Asset Quality

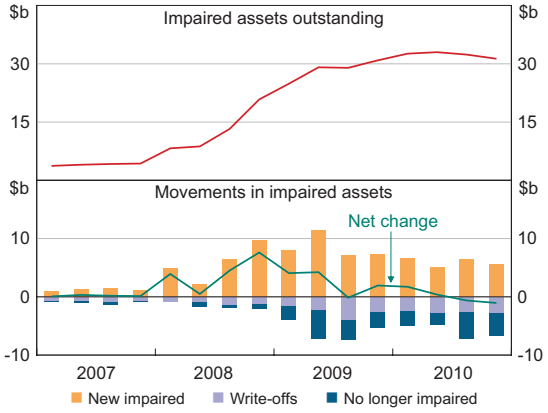
The asset quality of banks broadly stabilised in 2010, and was beginning to show slight signs of improvement towards the end of the year. The ratio of non-performing assets to total on-balance sheet assets reached 1.7 per cent in March 2010, and has since fallen slightly (Graph 2.4). The ratio for non-performing assets that are classified as impaired – consisting almost entirely of facilities that are not well-collateralised – has also edged down in the most recent quarters, to be slightly below the March 2010 level of 1.2 per cent of balance sheet

Graph 2.4
Banks' Non-performing Assets
Consolidated global operations, per cent of on-balance sheet assets



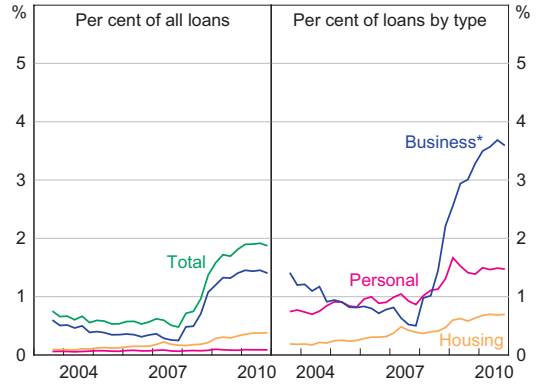
* Includes items 90+ days past-due that are well secured
Source: APRA

Graph 2.5
Banks' Impaired Assets
Consolidated global operations



Source: APRA

Graph 2.6
Banks' Non-performing Assets
Domestic books



* Includes lending to financial businesses, bills and debt securities, and other non-household loans
Source: APRA

assets. These non-performing asset ratios are well below the peaks seen in the previous, much more severe, downturn of the early 1990s, but seem to be taking longer to begin improving in earnest. While the inflows of new impaired assets and write-offs were broadly steady through 2010, the rate at which impaired assets were 'cured' increased in the second half of the year, resulting in a slight decrease in the level of impaired assets (Graph 2.5). Assuming this trend is maintained, this turn in the non-performing assets cycle appears consistent with the sharp reductions in the charges for bad and doubtful debts seen in banks' recent profit results.

In their domestic portfolio, banks' non-performing assets were broadly steady as a percentage of all on-balance sheet loans over much of 2010, before declining slightly in the December quarter (Graph 2.6). This decline was due to a modest improvement in the business loan portfolio, though the non-performing share of this portfolio, at 3.6 per cent, remains much higher than for the housing loan portfolio. Consistent with this, business loans have continued to account for around three quarters of banks' domestic non-performing loans. The share of housing loans that are non-performing was broadly unchanged over 2010, at around 0.7 per cent. Unlike non-performing business loans, most non-performing housing loans are classified as past-due rather than impaired, indicating that they remain well collateralised – an unsurprising outcome given the house price gains in recent years (Graph 2.7).

Troubled commercial property exposures have been the main contributor to the high impairment rate in banks' business loan portfolio in recent years. Promisingly, the share of commercial property exposures that is impaired fell in the December quarter 2010 for the first time in this cycle, down to 5.5 per cent from 6.2 per cent in September as banks liquidated some of their bad debts (Graph 2.8). Specific provisions held against impaired commercial property exposures also declined slightly over 2010. This modest improvement in the commercial property portfolio is consistent with the

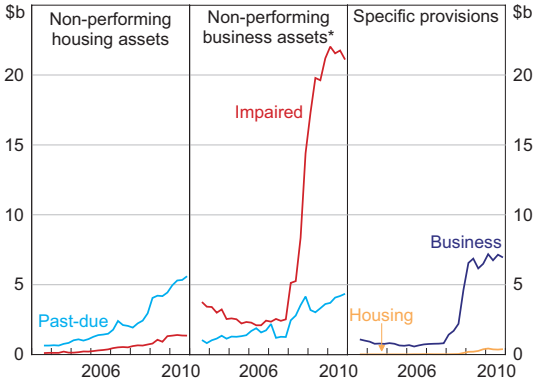
strengthening of economic activity and stabilisation of the commercial property market.

The non-performing share of the major banks' domestic loan books remains much lower than that for the smaller Australian-owned banks and foreign-owned banks (Graph 2.9). The share of non-performing assets on foreign banks' loan books has come down from a peak of 3.3 per cent in early 2009 to 2.5 per cent in December 2010, despite an outright contraction in their loan books over this period. The equivalent ratio for the smaller Australian-owned banks has increased over the past few years, reaching 3.4 per cent in December 2010, partly reflecting these banks' relatively large exposures to the commercial property sector, including property development.

Like their domestic assets, the performance of banks' overseas assets also looks to have stopped deteriorating in 2010: non-performing overseas assets fell to 2.3 per cent of banks' overseas loan books – a higher ratio than for their domestic portfolio – after reaching 3.7 per cent in mid 2009. This improvement has been underpinned by stabilising macroeconomic conditions in New Zealand, although banks remain conscious of downside risks for the New Zealand economy. In contrast, asset quality at the banks' UK operations has continued to deteriorate, albeit at a slower pace, amid a prolonged period of weak economic activity. As noted in the previous *Review*, the Australian banks have minimal exposures to the European countries whose sovereign debt sustainability and banking sector fragilities have been subject to market concerns.

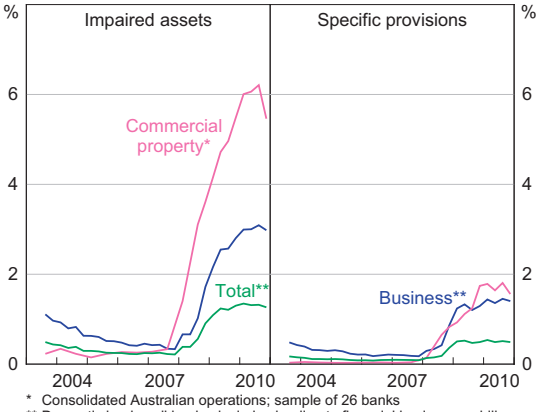
The recent natural disasters in Australia could impinge on banks' asset quality to some extent. However, the impact should be limited given that the affected regions account for a relatively small share of banks' total lending, and that most businesses should be able to resume operations fairly quickly and retain people in employment. Liaison with the major banks indicates that a large number of borrowers in flood-affected areas have

Graph 2.7
Banks' Asset Quality
Domestic books



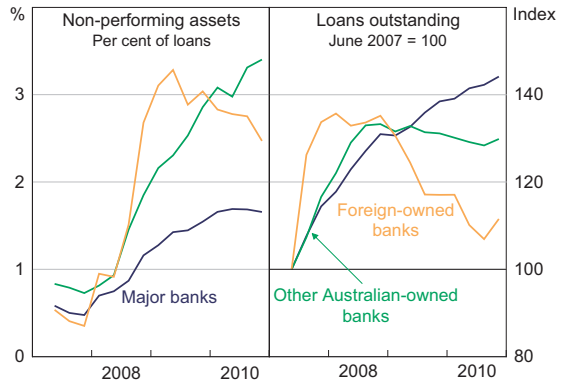
* Includes lending to financial businesses, bills and debt securities, and other non-household loans
Source: APRA

Graph 2.8
Banks' Asset Quality
Per cent of loans by type



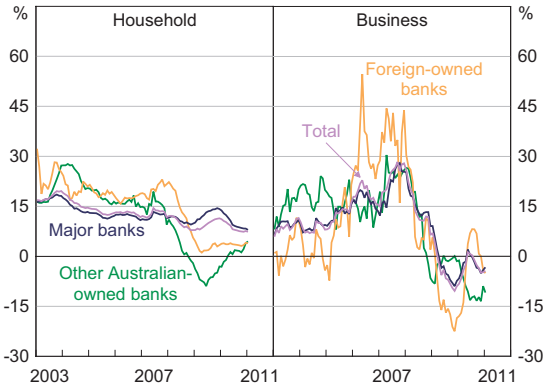
* Consolidated Australian operations; sample of 26 banks
** Domestic books; all banks; includes lending to financial businesses, bills and debt securities, and other non-household loans
Source: APRA

Graph 2.9
Banks' Asset Quality and Credit
Domestic books



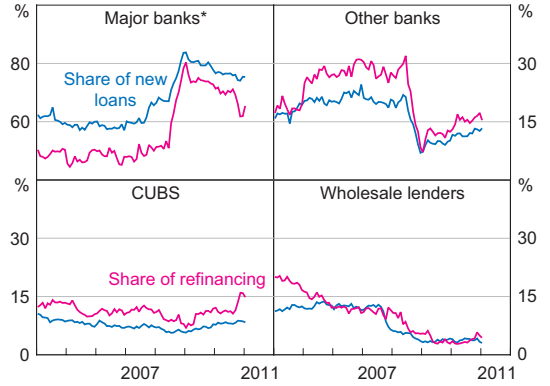
Source: APRA

Graph 2.10
Bank Credit Growth
Six-month-ended, annualised



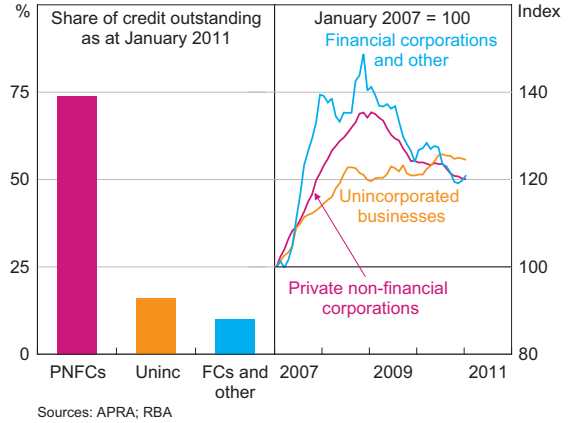
Sources: APRA; RBA

Graph 2.11
Owner-occupier Approvals
Share of total by number



* Includes Bankwest from December 2008
Sources: ABS; APRA; RBA

Graph 2.12
Business Credit by Borrower



Sources: APRA; RBA

been taking advantage of the banks' offers for hardship relief, including temporary repayment holidays. Smaller institutions whose loans are geographically concentrated in Queensland are likely to be more noticeably affected. Two regional banks have recently increased their bad debt charges in their latest half-yearly reporting periods on account of the expected flood impact.

Lending Growth and Credit Conditions

Banks have continued to expand their domestic loan books, albeit at a slower pace than in recent years as both households and businesses have been more cautious in their borrowing. Lending to households grew by 7.4 per cent in annualised terms over the six months to January 2011, more than offsetting a 4.3 per cent contraction in banks' business lending over the same period (Graph 2.10).

Housing credit accounts for most of the household credit extended by banks, and has continued to drive its growth. Competition in home lending has intensified in the past six months as second-tier banks, credit unions and building societies (CUBS) have regained some pricing competitiveness. Reflecting this, a rising share of owner-occupier home loan approvals – particularly for refinancing – has been by CUBS and, to a lesser extent, wholesale lenders and smaller Australian banks (Graph 2.11). However, the major banks still account for around three quarters of all new owner-occupier housing loan approvals, and their home loan books are growing at a faster pace than those of the smaller institutions.

In contrast, the decline in business credit since the second half of 2010 has been evident across all lenders, including foreign-owned banks, which had increased their lending earlier in the year. The recent decline in business credit was most pronounced for larger, non-financial corporations, which are the foreign banks' main customers (Graph 2.12). Among the reasons for this could be that these borrowers are more likely to be able to access global capital

markets at relatively cheaper rates, and that the recent appreciation of the Australian dollar has reduced the local-currency value of foreign-currency loans. While banks expect overall business lending to remain subdued in the near term, some expect a pick-up associated with the reconstruction effort following the recent natural disasters.

It appears unlikely that credit growth will return to the very high rates that were sustained in the pre-crisis period, since credit expansion during that period was significantly boosted by the one-time adjustment to financial deregulation and the shift to low inflation. This suggests banks' domestic growth opportunities are likely to be more limited in the future. If industry participants were to attempt to sustain earlier rates of domestic credit growth, they could be induced to take risks that may subsequently be difficult to manage. As yet, there is little sign that banks have been significantly relaxing their lending standards in a bid to stimulate credit growth. However, increasing competition in housing loans is starting to put pressure on lending standards. Some banks raised their maximum loan-to-valuation ratios in the second half of 2010 and early 2011, though this followed a period in late 2008 and early 2009 when many banks were tightening these criteria. The share of non-standard and line-of-credit loans declined as a share of new mortgage lending in late 2010 for some major banks, although this could partly reflect weaker demand for such loans.

The responsible lending requirements of the National Consumer Credit Protection regime, which came into effect for authorised deposit-taking institutions (ADIs) on 1 January 2011, should help limit any undue loosening in household lending standards. This regime, which replaced (and largely replicated) the state-based Uniform Consumer Credit Code, places a strong onus on lenders to ensure that loans are suitable for borrowers' circumstances, notably their ability to repay. Banks are now reportedly requiring both their branch and broker channels to seek additional information from potential borrowers to determine the suitability of a product; borrowers are also being required to provide more documentation in support of low-doc loans.

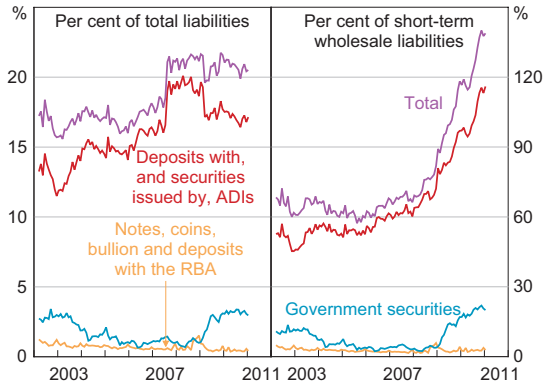
In banks' business lending, margins in the wholesale segment have reportedly narrowed in the past year, which banks attributed to softer demand, an increase in their appetite for larger deals, and the re-entry of some foreign banks into the segment. There was also some easing in non-price lending criteria for this segment. There have been no notable changes in lending criteria at the smaller end of the business loan market.

In an environment of slower domestic credit growth, banks may look to expand overseas. Recently, for example, some banks have been looking to increase their presence in the fast-growing Asian region, where there is a large pool of savings and relatively rapid credit growth in some countries. Currently, exposures to Asia (excluding Japan) account for a small share of the major banks' total offshore exposures, at around $50 billion, compared with total offshore exposures of around $650 billion. Offshore operations can offer growth and diversification opportunities, but they also raise a number of risk management and other challenges that need to be carefully handled. For example, there are challenges associated with being a new entrant to a market and having less familiarity with local market structures. The way in which banks structure their offshore investments can also have implications for how insulated the Australian operations would be from any problems emanating from overseas operations, and vice versa.

Funding Conditions and Liquidity

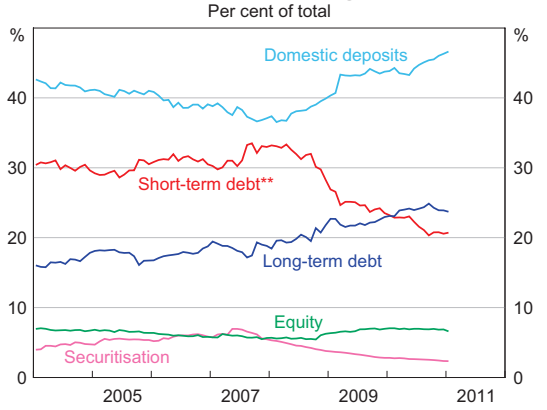
Banks continue to improve their liquidity position in the wake of the crisis. Their holdings of cash, deposits and highly marketable domestic securities as a share of their total short-term liabilities have increased strongly over recent years as the stock of short-term wholesale liabilities has continued to decline (Graph 2.13). Government securities make up a larger share of liquid assets than before the crisis, although

Graph 2.13
Banks' Liquid Assets*
Domestic books



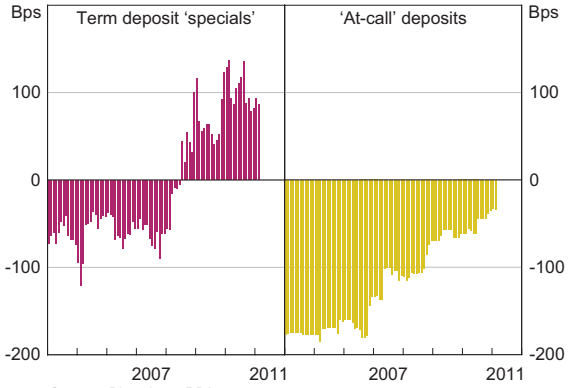
* Excludes non-resident assets
Source: APRA

Graph 2.14
Banks' Funding*
Per cent of total



* Adjusted for movements in foreign exchange rates
** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA; Standard & Poor's

Graph 2.15
Major Banks' Deposit Rates
Spreads over money market rates of equivalent maturity



Sources: Bloomberg; RBA

this has been steady for a number of quarters. Under the new Basel III liquidity guidelines, a smaller subset of assets will qualify as high-quality liquid assets, such that deposits and securities issued by ADIs will not be counted towards the new liquidity coverage ratio. Since Australian institutions do not have access to a sufficiently large pool of government securities, APRA and the RBA have developed an alternative approach that will meet the international standard. Under this approach, the RBA will, if required, provide banks with a committed liquidity facility secured against high-quality collateral currently eligible at the RBA for its open market operations (see the chapter on 'Developments in the Financial System Architecture' for further information).

In recent years, banks have been reducing their reliance on short-term wholesale debt because of increased market pressures and scrutiny from regulators. It has fallen from around one third of total bank funding in 2007 to around one fifth, replaced by long-term wholesale debt and deposit funding sources typically regarded as more stable (Graph 2.14). The deposit share of bank funding increased further in the second half of 2010, to 47 per cent, an increase of around 10 percentage points since early 2008.

A consequence of the banks' efforts to change their funding patterns has been stronger competition in the deposit market in recent years. Deposit rates remain at or around historically high spreads to money market rates, although the intensity of competition for term deposits may have abated somewhat in the second half of 2010 as banks' funding pressures have eased; it might now be that much of the adjustment from lower-rate to higher-rate deposit accounts has run its course. Rates paid on term deposit 'specials' have narrowed a little relative to equivalent-maturity money market rates (Graph 2.15). Reflecting the relatively high rates on offer, and perhaps their perceived safety, surveys indicate that households continue to view deposits as a preferred investment option. This has been reflected in the strong rate of growth of deposits

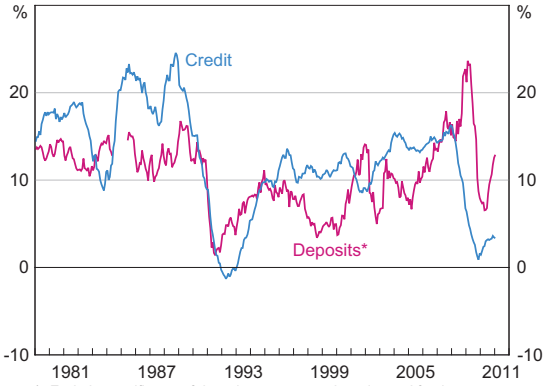
in recent years, which continues to exceed credit growth by a wide margin (Graph 2.16).

Given the attractiveness of deposit rates relative to short-term money market rates, and the current government guarantee on deposits up to $1 million through the Financial Claims Scheme, it is likely that some of the growth in deposits is due to investors in short-term wholesale instruments switching to deposits. Over the past six months, interest rates in the domestic money market have risen broadly in line with the policy rate. Spreads on three-month bank bills to the three-month overnight indexed swap (OIS) rate have traded within a range of 10 to 30 basis points (Graph 2.17).

The major Australian banks have maintained good access to local and offshore bond markets in the past six months, though they have required less of this type of funding, given the faster rate of deposit growth and still subdued credit growth. Their monthly issuance has averaged $7 billion since September 2010, compared with around $13 billion when the guarantee scheme for wholesale funding was in place. The cost of recent issuance has been largely unaffected by the ongoing sovereign debt concerns in Europe. Domestic secondary market spreads on the major banks' three-year debt, for instance, have narrowed somewhat over the past six months, and have recently been trading at around 75 basis points over swap, down from about 90 basis points in mid 2010 (Graph 2.18). For the other domestic banks, which made relatively more use of the guarantee, issuance volumes have fallen more markedly since their peaks in 2009 but are broadly in line with pre-crisis levels.

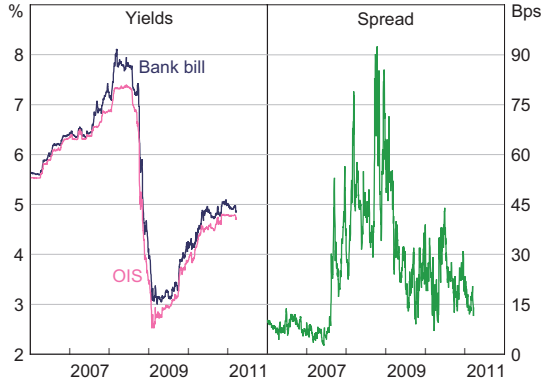
Some of the recent bond issuance has effectively been replacing maturing government-guaranteed paper, particularly that issued by the foreign-owned bank branches, which were restricted from issuing guaranteed debt with maturities longer than 15 months. Banks' total guaranteed wholesale liabilities outstanding have declined over the past six months from an average of $152 billion in August 2010 to around $128 billion

Graph 2.16
Credit and Deposit Growth
Year-ended



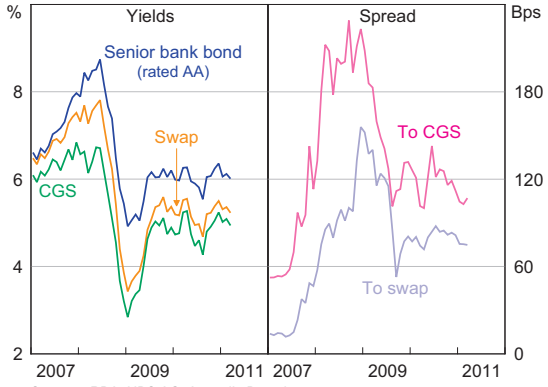
* Excludes certificates of deposit, government deposits, and foreign currency deposits; break in June 1984 due to change in reporting requirements; prior data are estimates
Source: RBA

Graph 2.17
3-month Interest Rates



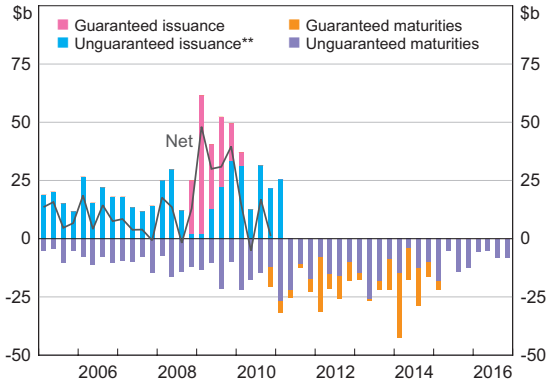
Sources: RBA; Tullett Prebon (Australia) Pty Ltd

Graph 2.18
Major Banks' Bond Pricing
3-year $A debt



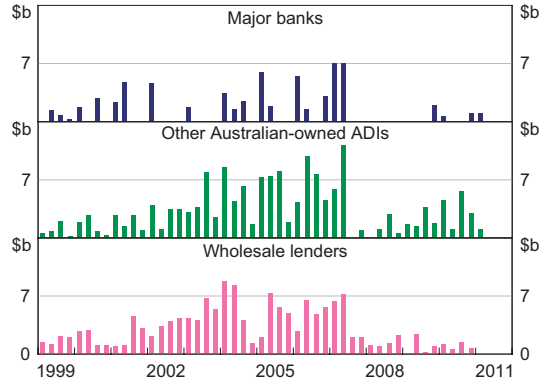
Sources: RBA; UBS AG, Australia Branch

Graph 2.19
Banks' Bond Issuance and Maturities*
A$ equivalent



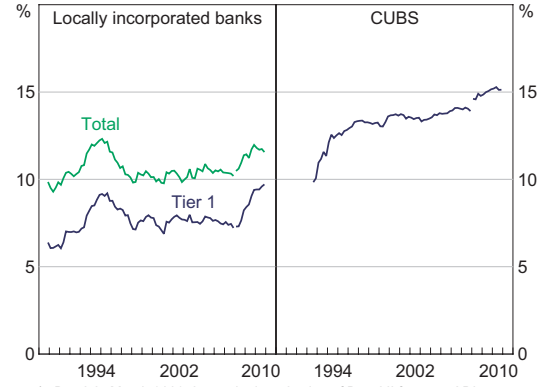
* Excludes 12-15 month paper, considered as 'short-term' under the Australian Government Guarantee Scheme
** March 2011 is quarter-to-date
Source: RBA

Graph 2.20
RMBS Issuance*



* March 2011 is quarter-to-date
Source: RBA

Graph 2.21
Capital Ratios
Per cent of risk-weighted assets*



* Break in March 2008 due to the introduction of Basel II for most ADIs
Source: APRA

in February 2011. Some banks have also recently sought to repurchase government-guaranteed bonds that had around one year left before maturity and replace them with unsecured, longer-term funding. These buy-back offers have had a variable take-up, however, partly because some investors in guaranteed bonds have 'hold to maturity' mandates.

The flow of bank bond maturities (both guaranteed and unguaranteed) is expected to be broadly stable for the next few years (Graph 2.19). Liaison with the major banks indicates that they anticipate being able to replace their guaranteed debt in these years and are generally ahead of their funding plans for the current year.

Issuance of residential mortgage-backed securities (RMBS) picked up in the second half of 2010, particularly from the smaller ADIs that have traditionally relied the most on this form of funding (Graph 2.20). Confidence in this market appears to be gradually returning, and primary market pricing has improved a little since the previous *Review*. The Australian Office of Financial Management continues to support the market, having purchased about one third of RMBS issuance during the second half of 2010. Losses from prime RMBS (after proceeds from property sales) continue to be fully covered by credit enhancements such as lenders' mortgage insurance (LMI), and no losses have been borne by investors in a rated tranche of an Australian RMBS.

Capital and Financial Markets' Assessment

The Australian banking system remains well capitalised, with the aggregate Tier 1 capital ratio increasing by 0.3 percentage points over the second half of 2010, to 9.7 per cent (Graph 2.21). After issuing large amounts of new equity in 2008 and 2009, most of the recent growth in banks' Tier 1 capital has been through retained earnings and dividend reinvestment plans. Lower tranches of capital have continued to mature over the past year; banks have not been rolling over their term subordinated debt, as markets and regulators are now placing less emphasis on Tier 2 capital. CUBS maintained their

higher capital ratios, with an aggregate Tier 1 capital ratio of around 15 per cent in December 2010.

Contributing to the rise in the banks' aggregate Tier 1 capital ratio in the second half of 2010 was a 1.2 per cent fall in risk-weighted assets. This reflects the ongoing shift in the composition of banks' loan portfolios towards housing loans, which typically attract much lower risk weights than business and personal loans. For the major banks, which are authorised by APRA to use their own internal models to derive risk weights, the fall in risk-weighted assets also reflects a slight decline in the risk weights they apply to different loan portfolios (Graph 2.22).

As a result of the strengthening of their capital levels in recent years, Australian banks are well placed to meet the more stringent Basel III capital requirements that are being phased in over the next decade or so. Their starting positions were also more favourable than for banks in some other countries because APRA applies Basel II standards more conservatively in its existing capital rules.

Australian bank share prices have generally traded within narrow ranges for much of the past year (Graph 2.23). Private-sector equity analysts have downgraded their profit forecasts for two of the regional banks that have the largest relative exposures to Queensland – by around 15 per cent since the start of the year – in light of the recent natural disasters. Accordingly, the share prices of the regional banks have underperformed the broader market since November, while those for the major banks have been similar to the broader market over this period.

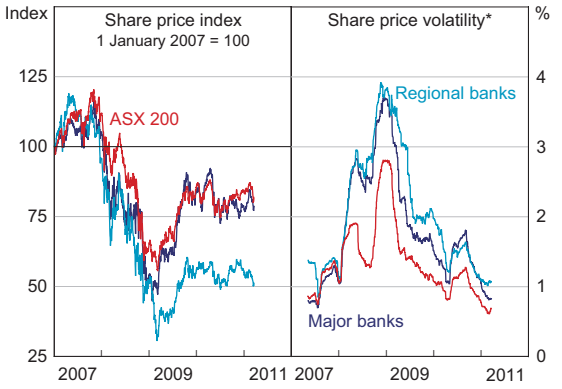
Banks' share price volatility has continued to decline since around the middle of 2010, as markets became less concerned that European sovereign debt problems could spill over to other regions' banking systems. Australian banks' credit default swap (CDS) premia have been largely unchanged since September 2010 and are generally a little below the CDS premia for large banks overseas.

Market-based valuation measures for banks have been in the vicinity of their long-term averages since mid 2010 (Graph 2.24). The forward price-to-

Graph 2.22
Major Banks' Credit Risk-weights
Consolidated global banking group*

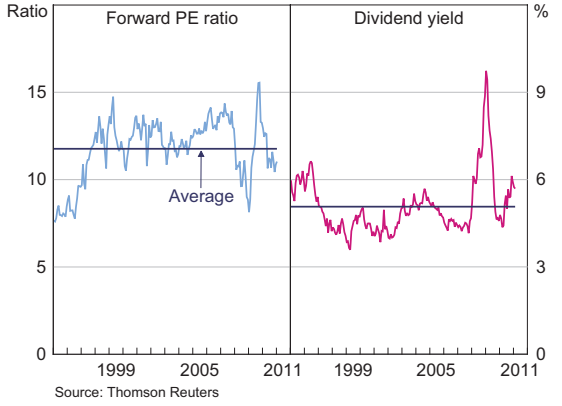
* On-balance sheet portfolios assessed under the Internal Ratings-based approach only
** Loans to households and small businesses that are secured by residential mortgages
Source: APRA

Graph 2.23
Financial Market Indicators



* Rolling 90-day standard deviation of daily returns
Sources: Bloomberg; RBA

Graph 2.24
Bank Valuation Indicators



Source: Thomson Reuters

earnings (PE) ratio has been little changed since late 2010 and the dividend yield – the amount paid in dividends relative to the share price – has been rising since mid 2010 as improved profitability has allowed banks to increase their dividend payments.

The Australian banks continue to have strong credit ratings. All four major banks remain AA-rated by Standard & Poor's (S&P), while the other Australian banks are distributed between S&P's upper-medium and lower-medium investment grade ratings. There have been few changes to Australian bank credit ratings in the past six months. However, Moody's has placed the major banks on negative watch for a possible downgrade from their current Aa1 rating, its second highest rating available. S&P are conducting a more general review of their rating methodology which will result in a reassessment of their global bank ratings later in the year.

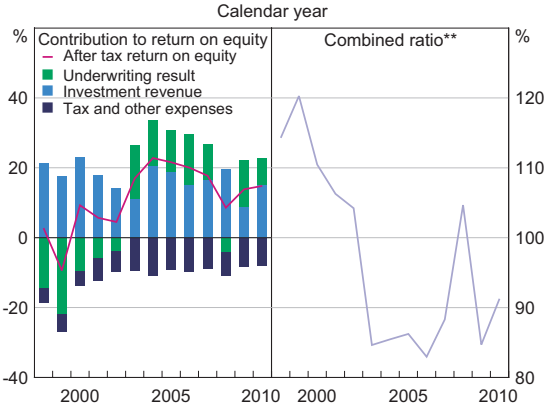
General Insurance

Since the previous *Review*, a number of natural disasters in Australia and New Zealand have focused attention on the Australian general insurance industry. Early indications are that some of these events, notably the floods and Cyclone Yasi in Queensland, will generate total claims on Australian insurers that are high by the standards of previous Australian natural disasters. To date, there have been about 145 000 claims lodged with insurers resulting from the recent Australian natural disasters, and it has been estimated that the final value of all claims from these events could reach around $4 billion (before recoveries from reinsurance).

Despite the magnitude of the recent events, the general insurance industry is well placed to cope with the claims. An important mitigating factor for the overall claims exposure of insurers is their reinsurance arrangements, which will cap the net amount they have to pay on claims arising from these events (see 'Box B: Reinsurance and the Australian General Insurance Industry'). Even so, claims on insurers will be higher in the current financial year, which will reduce industry profits.

Strong profitability in the previous year strengthened the industry's ability to cope with the recent major claims events. In the latest available data, which only include the impact of events through end December 2010, general insurers reported aggregate post-tax profits of $4.4 billion in 2010. This represented a return on equity of around 15 per cent, which is up from 9 per cent in 2008, but still a little below the average of the five years prior to that (Graph 2.25).

Graph 2.25
General Insurers' Performance*
Calendar year



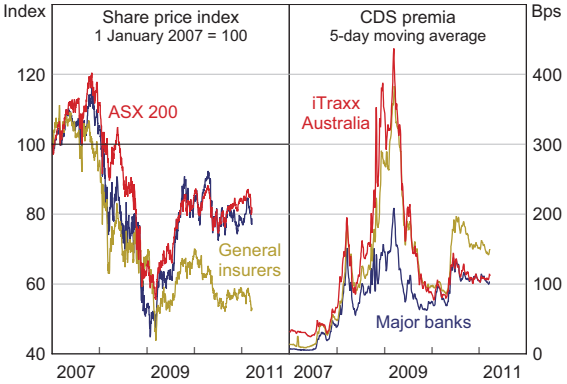
* Change in prudential reporting requirements in June 2010
** Claims and underwriting expenses as a per cent of net premium revenue
Source: APRA

In 2010, a pick-up in investment earnings offset a somewhat weaker underwriting result. Claims were boosted by the Melbourne and Perth storms, which each resulted in around $1 billion in claims, and the impact of the central Queensland floods in December. Aggregate claims paid (net of reinsurance and other recoveries) grew by 16 per cent in 2010, to $17 billion. At the same time, premium revenue grew by 4 per cent, similar to the average growth rate over the previous five years. This rise reflected both increases in premium rates, including for home and contents lines, and a pick-up in the number of policies written. The industry's weaker underwriting result in 2010 was reflected in the aggregate combined ratio – claims and underwriting expenses relative to net premium revenue – rising by 7 percentage points, to 91 per cent.

Consistent with the solid profits over recent years, the general insurance industry remains well capitalised. As at December 2010, the industry held capital equivalent to around twice the regulatory requirement. APRA is in the process of revising general insurers' capital standards, with the aim of making them more risk-sensitive and similar to the three-pillar framework currently in place for banks. The revised standards are due to be implemented in 2013.

S&P has recently reaffirmed the credit ratings of the largest Australian insurers, which are all A+ or higher, noting the high levels of capital and solid profitability as supportive factors. The share prices of the large insurers have slightly underperformed the broader share market since mid December, however (Graph 2.26). Insurers' CDS premia have been broadly stable over the past five months, and remain below the levels seen in mid 2010.

Graph 2.26
Financial Market Indicators



Sources: Bloomberg; JPMorgan; RBA

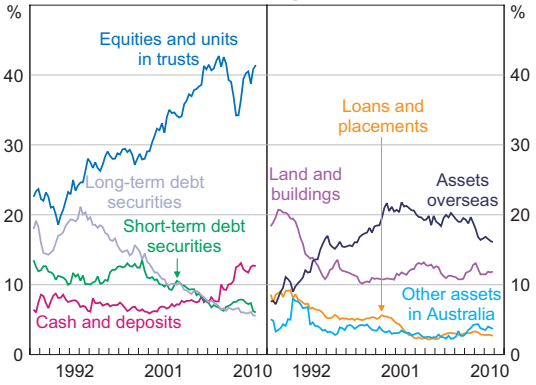
Operating conditions for the two largest providers of LMI in Australia – QBE and Genworth – appear to have improved. Both reported solid profits and a decline in claim ratios over the past year. Moreover, the LMIs are likely to be little affected by the recent Australian natural disasters given these events are unlikely to have a significant effect on Australian banks' asset quality. The Australian mortgage insurance operations of QBE and Genworth continue to be rated highly, with both rated AA- by S&P. However, after putting Genworth's US parent on review for possible downgrade following losses in its US mortgage insurance business, Moody's has also recently put Genworth's higher-rated Australian subsidiary on review. This review will consider the degree to which Genworth Australia's financial position and business operations may be affected by weakness at its parent.

Managed Funds

The total consolidated assets of domestic funds management institutions grew by 9 per cent in annualised terms over the six months to December 2010, compared with an average annual growth rate of 7 per cent over the past decade (Table 2.2). Asset growth was strongest at superannuation funds, which now account for 67 per cent of managed funds' assets. Assets also increased at life insurers over the December 2010 half year, while assets held by other major fund manager types fell.

The value of funds management institutions' holdings of equities and units in trusts increased considerably over the December 2010 half year, benefiting from improved market returns over the period (Graph 2.27). This was partly offset by falls in holdings of short- and long-term debt securities.

Graph 2.27
Allocation of Domestic Funds Under Management*



* Funds under management are on a consolidated basis; excluding 'assets overseas', individual asset types represent investments in Australia
Source: ABS

Table 2.2: Assets of Domestic Funds Management Institutions[a]

December 2010

	Level	Share of total	Six-month-ended annualised change	
			Jun 10	Dec 10
	$billion	Per cent	Per cent	Per cent
Superannuation funds (consolidated)	**947**	**67**	**2.1**	**15.5**
Superannuation funds (unconsolidated)	1 110		1.6	17.2
of which:				
Equities	365	33	–7.3	34.3
Assets overseas	180	16	0.3	10.5
Units in trust	177	16	–4.4	25.7
Cash and deposits	160	14	12.7	13.5
Land and buildings	79	7	14.0	10.3
Short-term securities	54	5	–0.9	–8.3
Long-term securities	52	5	16.6	–9.8
Loans and placements	11	1	8.6	10.9
Other assets in Australia[b]	33	3	42.9	–12.5
Life insurers (consolidated)[c]	**187**	**13**	**–8.3**	**10.6**
Public unit trusts (consolidated)	**251**	**18**	**–1.8**	**–1.7**
Public unit trusts (unconsolidated)	286		–0.1	0.6
of which:				
Listed property trusts	121	42	1.2	3.6
Unlisted equity trusts	97	34	2.3	5.3
Listed equity trusts	39	14	–5.3	–8.1
Other trusts	30	10	–5.1	–12.4
Other managed funds (consolidated)[d]	**38**	**3**	**–11.2**	**–39.9**
Total (consolidated)	**1 423**	**100**	**–0.6**	**9.3**
of which:				
All superannuation assets[e]	1 113		0.3	14.7

(a) Excluding funds sourced from overseas, government, other trusts, general insurance and 'other' sources
(b) Includes non-financial assets
(c) Includes superannuation funds held in statutory funds of life insurers
(d) Cash management trusts, common funds and friendly societies
(e) Superannuation funds plus an estimate of the superannuation assets held in the statutory funds of life insurers
Sources: ABS; RBA

Consolidated assets of superannuation funds increased at an annualised rate of 16 per cent over the six months to December 2010, to $947 billion. This growth was much stronger than the 2 per cent annualised growth recorded over the previous six-month period. To a large extent, this occurred because around 50 per cent of superannuation assets are held in equities and units in trusts, which recorded strong valuation gains over the half year. Accordingly, the net investment income of superannuation funds was well above recent averages, at around $55 billion for the December 2010 half (Graph 2.28). This compares with an average of around $15 billion per half year for the past decade. Net inflows to superannuation funds remained broadly steady at rates similar to those seen in recent years.

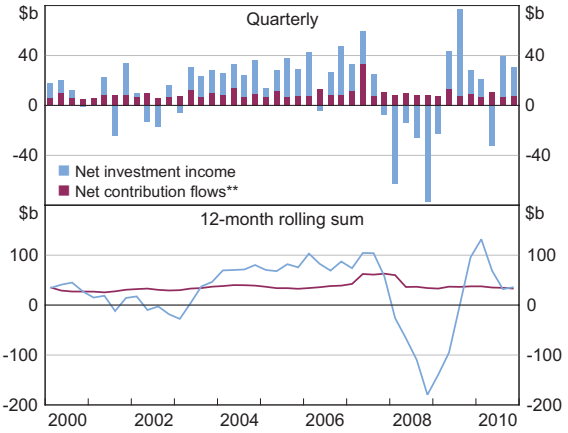
Life insurers' consolidated assets increased at an annualised rate of 11 per cent over the

December 2010 half year, with much of the growth attributable to superannuation business, which account for around 90 per cent of life insurers' assets. Like superannuation funds, a large portion of life insurers' assets are in the form of equities and units in trusts. As such, life insurers reported strong mark-to-market gains on their investments over the half year, recording around $14 billion in investment income (Graph 2.29). Life insurers recorded a total post-tax profit of $1.3 billion in the six months to December 2010, which was similar to the previous half year. Net premiums and net policy payments remained fairly stable over the year to December 2010.

The profitability of life insurers has contributed to their solid capital position in recent years, with the industry holding around 1.5 times the regulatory minimum at December 2010. APRA is in the process of revising life insurers' capital standards, which will better align their capital framework with those of general insurers and ADIs, and make it more risk sensitive.

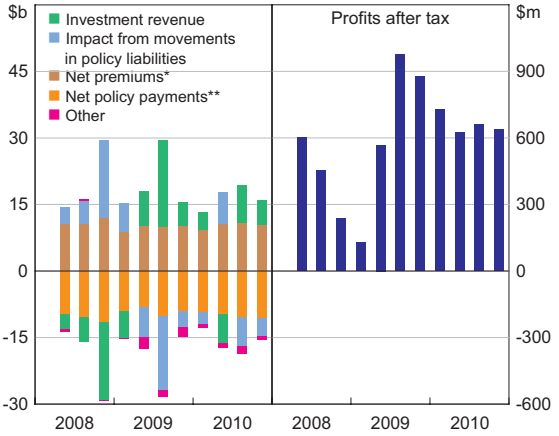
Outside of superannuation funds and life offices, the bulk of assets under management in Australia are invested in public unit trusts. On a consolidated basis, assets of public unit trusts fell at an annualised rate of around 2 per cent in the December 2010 half year. This was driven by lower asset holdings at the two smallest constituents: listed equity trusts and other trusts. Balances in listed property trusts and unlisted equity trusts rose over the half.

Graph 2.28
Superannuation Funds' Financial Performance*



* From December 2004, data cover entities with at least $50 million in assets only
** Total contributions received by funds plus net rollovers minus benefit payments
Source: APRA

Graph 2.29
Life Insurers' Financial Performance



* Sum of net policy revenue, premium-related fees and net policy revenue recognised as a deposit
** Sum of net policy expenses and net policy expenses recognised as a withdrawal
Source: APRA

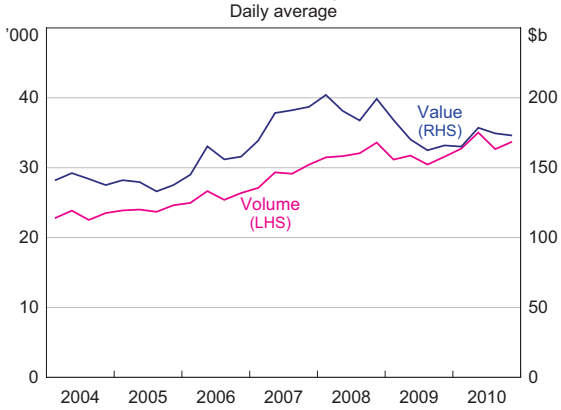
Market Infrastructure

Australia's payments system infrastructure has continued to perform well over the past six months, in an environment of more settled market conditions. Over this period, the number and value of high-value interbank payments have been relatively stable. Activity in foreign exchange transactions involving the Australian dollar has continued to increase in line with market-wide trends, with settlement of this larger volume of transactions proceeding smoothly. Lower volatility in financial markets has led to lower risk for central counterparties, although these entities have maintained a conservative approach to their risk management in light of uncertainty in markets offshore.

In Australia, high-value payment transactions settle on a real-time gross settlement (RTGS) basis through the Reserve Bank Information and Transfer System (RITS). In recent months, the number of transactions

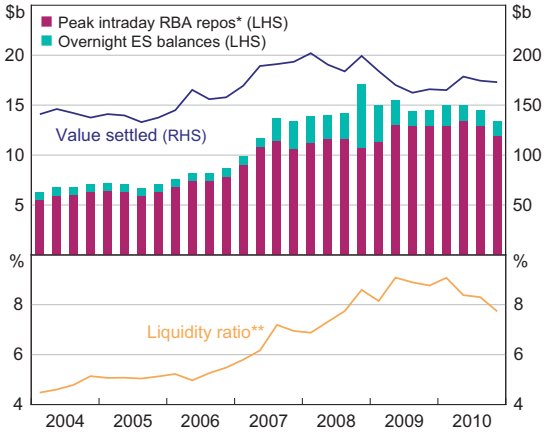
settled in this system has been close to its historical peak level; during the December quarter 2010, about 34 000 transactions were settled on average each day (Graph 2.30). This is about the same as at the peak in activity before the onset of the financial turmoil, and about 4 per cent below the most recent peak. By contrast, the value of RITS transactions was 14 per cent lower in the December quarter than its historical quarterly peak, averaging around $173 billion per day.

Graph 2.30
RITS Settled Payments
Daily average



Source: RBA

Graph 2.31
RITS Peak Liquidity
Daily average



* Maximum intraday cumulative balance of first leg RBA repos less second leg RBA repos
** Peak liquidity as a share of value settled
Source: RBA

RTGS transactions settle across Exchange Settlement Accounts (ESAs) held at the RBA; the availability of sufficient liquidity is critical in ensuring efficient settlement of payments between ESA holders. One way to measure this is to observe the peak in daily liquidity, measured as the sum of balances held overnight in ESAs and the maximum level of intraday repurchase transactions (repos) undertaken with the RBA. Peak daily liquidity was $13.4 billion in the December quarter, which is the lowest level since the second quarter of 2007 (Graph 2.31). The liquidity ratio, measured as peak liquidity over the total value settled in the system, has fallen recently, reflecting both relatively subdued payments values along with a decline in RITS participants' demand for precautionary settlement funds. Nevertheless, this measure of liquidity remains reasonably high when compared with the longer run.

In addition to RTGS transactions, RITS settles batches of net interbank obligations. The average daily value settled in the 9.00 am batch, which includes obligations arising from the clearing of low-value retail payments (such as cheques, debit and credit card transactions and direct entry), increased by 12 per cent in the December quarter 2010 compared with the previous quarter (Graph 2.32). Over the same period, the average daily value of obligations settled in the ASX's CHESS (Clearing House Electronic Sub-register System) batch increased by more than 30 per cent. Although the value settled in the CHESS batch is often strongly influenced by stock market turnover (by value), the most recent increase in the value of CHESS batch settlements looks to have coincided with significant growth in capital raisings during the last quarter of 2010.

Continuous Linked Settlement (CLS) Bank provides a mechanism for settling foreign exchange transactions on a payment-versus-payment basis, thereby eliminating foreign exchange settlement risk. CLS Bank currently settles transactions in 17 currencies, including the Australian dollar. Around $215 billion of transactions involving the Australian dollar were settled each day on average

during January 2011 (Graph 2.33). This is down somewhat from the peak in activity that coincided with the European sovereign debt concerns in the middle of 2010, but remains high in historical terms. While notably volatile in recent months, activity in Australian dollar transactions closely follows the trend across all currencies.

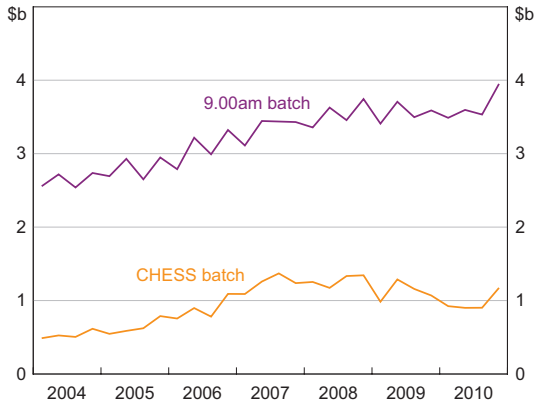
CLS Bank is chartered in the United States and regulated and supervised by the Federal Reserve System. Co-operative oversight by the central banks of the currencies that settle in CLS is, however, conducted through the CLS Oversight Committee, which is co-ordinated by the Federal Reserve and of which the RBA is a member. Members of the Oversight Committee receive regular communications from CLS Bank, which allows them to monitor the operation of CLS Bank's settlement service. There were no serious disruptions to the settlement service in the past six months.

The central counterparties operated by the Australian Securities Exchange, ASX Clear and ASX Clear (Futures), play a critical role in Australia's financial markets. Through a process known as novation, these entities interpose themselves between trades on Australia's major equity and derivatives markets – effectively becoming the buyer to every seller and seller to every buyer. While this reduces risk arising from bilateral exposures between participants, it also leads to the concentration of default risk within the central counterparties, which they manage through a range of risk controls. The robustness of these controls is examined by the RBA in its annual assessment of each central counterparty's compliance with the RBA's *Financial Stability Standard for Central Counterparties*.[3]

Generally benign conditions in the Australian market in the second half of 2010 meant that ASX Clear and ASX Clear (Futures) faced few challenges to their risk controls. Trading activity in equities and derivatives eased following strong growth in the first part of the year, while sharemarket volatility declined.

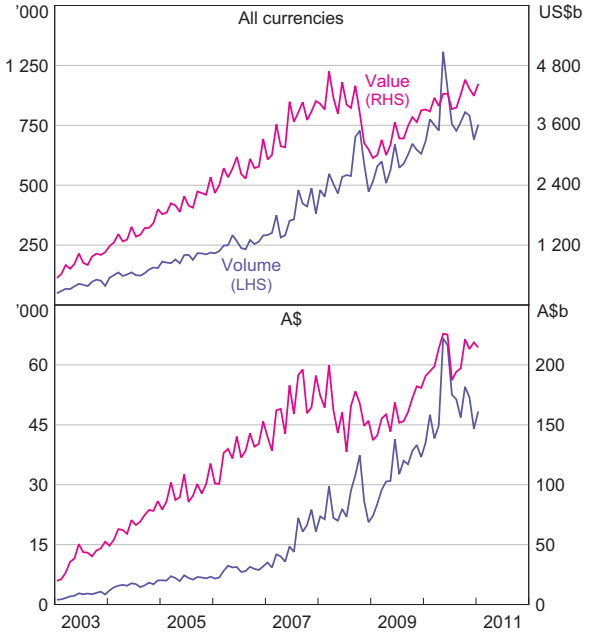
3 The most recent assessment is RBA (2010), '2009/10 Assessment of Clearing and Settlement Facilities in Australia', October.

Graph 2.32
RITS Batch Settlement
Daily average



Source: RBA

Graph 2.33
CLS Settlement
Daily average

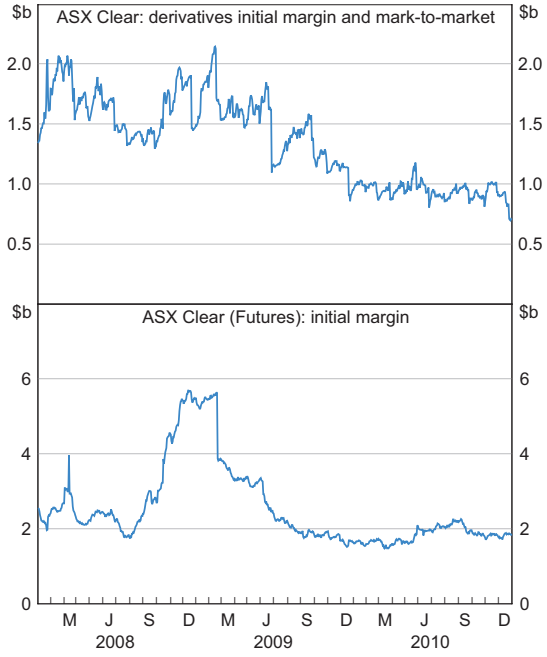


Source: CLS Bank

A consequence of lower volatility was that both central counterparties made fewer intraday margin calls to their participants; these calls are made when intraday price movements erode the margin posted against derivatives positions.

Even though conditions in the domestic market were fairly settled, the central counterparties maintained a conservative approach to risk management during the period. This stance was taken in light of remaining uncertainty in markets globally, which suggested the possibility of a return to volatility in the Australian market. The conservative approach taken was evident primarily in the decision by ASX Clear (Futures) not to decrease initial margin rates for any of the major derivative contracts until late in the year, despite the less volatile conditions (Graph 2.34). At ASX Clear, margin collected against derivatives positions (mainly in equity derivatives) was broadly flat over the second half, before falling away at the end of the year as traders delayed rolling over positions until after the holiday period.

Graph 2.34
Margins



Source: ASX

Outside of the central payments system infrastructure, the recent major floods in the eastern states saw some instances of temporary bank branch and ATM closures and minor disruptions to the distribution of cash and the processing of cheques. Through the use of contingency procedures, industry workarounds and some ADIs accessing their backup sites, the disruptions were minimised and payments processing typically operated at full or close to full capacity. The RBA, in co-operation with industry bodies and other regulators, closely monitored the situation and assisted in co-ordinating the industry response. The recent experience of processing disruptions at some major banks, unrelated to the floods, highlights the need for these contingency procedures, as well as for adequate investment in the necessary IT infrastructure.

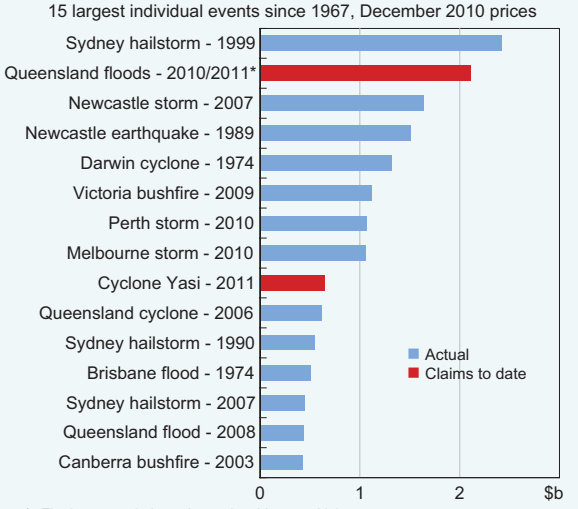
Box B

Reinsurance and the Australian General Insurance Industry

The recent floods, cyclone and other natural disasters in parts of Australia have caused a sharp increase in insurance claims on general insurers. Although general insurers are still working through their claims, early indications from their submissions to the industry body, the Insurance Council of Australia (ICA), suggest that some of these events will generate claims that are high by the standards of previous Australian natural disasters. According to the latest figures published by the ICA, the insurance industry has received nearly 50 000 claims, totalling $2.1 billion, from the flooding in Queensland. This would make this one of the largest Australian natural catastrophe claim events on record, as measured by the value of claims in constant price terms (Graph B1). Over 50 000 claims have also been received in relation to Cyclone Yasi, with an estimated claims value of $650 million.

More generally, there has been a pick-up in the frequency of large claim events in recent years. Nine of Australia's fifteen largest claim events since 1967, measured in constant price terms, have occurred since 2006. Consistent with this, total annual catastrophe claims, in constant prices, have averaged around $2 billion since 2006, compared with an average of $0.6 billion since 1970 (Graph B2, top panel). To some extent this increase reflects Australia's ongoing economic growth and rising population density, which can raise the value of claims from a given catastrophe event. To account for this, the ICA produces estimates of the value of claims from earlier catastrophes assuming they had

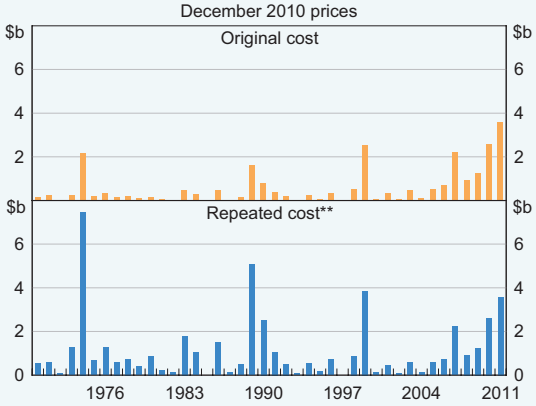
Graph B1
Australian Natural Catastrophe Insurance Claims
15 largest individual events since 1967, December 2010 prices



* The insurance industry is treating this as multiple events
Sources: ABS; Insurance Council of Australia; RBA

taken place under recent circumstances. Among other things, these 'repeated cost' estimates factor in changes in land use, building standards and economic development since the original event. These estimates indicate that the cost of recent catastrophe events has been more moderate by historical standards (Graph B2, bottom panel).

Graph B2
Claims from Natural Catastrophes in Australia*



* 2010 and 2011 include estimates for the recent natural disasters; 2011 is year-to-date
** Estimates of likely costs under recent circumstances
Sources: ABS; APRA; Insurance Council of Australia; RBA

Australian insurers are well placed to cope with the claims from the recent natural disasters. It is a standard part of their business to ensure they can meet their commitments to policyholders following events such as the Queensland floods. The Australian Prudential Regulation Authority (APRA) also promotes the resilience of insurers by mandating minimum capital holdings, supervising their risk management practices, monitoring their overall performance and, in the unlikely event of a shortcoming, requiring remedial action.

Reinsurance will play a significant role in capping the payouts by Australia's general insurers resulting from the recent natural disasters. Reinsurance is where an insurer pays a premium to transfer part of its claims risk to a reinsurer. This allows the original insurer to underwrite larger or unique risks; in effect, it is insurance for insurers. APRA's risk-based capital requirements for general insurers take into account both the insurer's risk profile and their reinsurance arrangements. Insurers must report details of their reinsurance arrangements periodically to APRA. They are also required to review their reinsurance arrangements regularly to ensure they remain compatible with their risk profile and risk appetite.[1]

Two particular forms of reinsurance mitigating the exposure of Australian insurers to recent natural disasters are single-event cover and 'aggregate' cover. The most common is a single-event policy which provides reinsurance cover (usually up to a limit) once claims due to a single catastrophe event exceed a certain threshold. An 'aggregate retention' policy provides cover (also up to a limit) once an insurer's cumulative claims from one or more events over a given period reach a certain threshold. In combination, these reinsurance arrangements can provide protection against a series of more moderate events, as well as one-off large events. Details of each insurer's reinsurance arrangements are generally not public. However, one large insurer in Australia has reported that the combination of its single event and aggregate retention reinsurance policies will cover more than three quarters of its gross claims from the flooding in Queensland.

Reinsurers are typically large specialist insurance companies with well-diversified global operations. For instance, the two reinsurers most commonly used in Australia, Swiss Re and Munich Re, have Australian operations that account for less than 6 per cent of their total global operations (Table B1). A large Australian claim event, such as the Queensland floods, therefore represents only a fraction of their normal level of claim payouts. It is not uncommon for reinsurance companies

1 For more information on reinsurance and minimum capital standards for Australian direct insurers, see Ian Laughlin (2011), 'Views from APRA', address to the Insurance Council of Australia's Regulatory Update Seminar, 9 March.

Table B1: Largest Domestic Reinsurers

	Global net premium revenue[a]		Standard & Poor's credit rating
	Total	Share earned in Australia	
	$billion	Per cent	
Munich Re	56.3	2.4[b]	AA–
Swiss Re	19.3	5.7	A+
Memo: largest domestic insurers[c]			
QBE	11.2	26.7	A+
IAG	7.1	78.7	AA–
Suncorp	6.4	90.7[b]	A+

(a) For the year ending December 2010; includes direct insurance and reinsurance premiums
(b) Share based on gross premium revenue
(c) Credit ratings are for the Australian insurance operations
Sources: RBA; Standard & Poor's; insurers' annual and interim reports

themselves to purchase reinsurance, a practice known as retrocession. Moreover, like Australia's domestic general insurers, reinsurers are closely monitored by regulators, both locally and in their home jurisdictions, to ensure they can meet their reinsurance commitments. The largest reinsurers operating in Australia are highly rated by international credit rating agencies, with each having a credit rating from Standard & Poor's of A+ or higher.

Though the reinsurers are well placed to meet the residual claims arising from the recent spate of natural disasters in Australia, it will probably cause them to reassess their reinsurance premiums. Several reinsurers have reported that the floods, in conjunction with Cyclone Yasi, the Christchurch earthquakes and the Melbourne and Perth storms, have prompted them to rethink their pricing for cover in the Asia-Pacific region. In addition, while it is too early to fully assess the impact of the recent earthquake and tsunami in Japan, this may place further pressure on the pricing of reinsurance.

Many direct insurers in Australia have had to pay to reinstate their reinsurance cover after it was triggered for the recent catastrophe claim payouts. These insurers will need to balance these additional costs with the capital savings obtained by reinsurance when renewing their cover for the next financial year. It might also be a challenge for some insurers to obtain the same reinsurance protection as contained in their 2010–2011 reinsurance programs. ✠

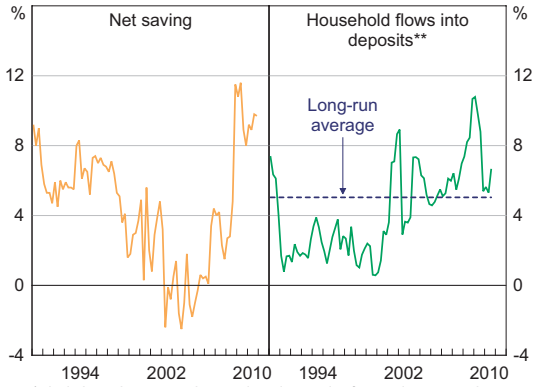
3. Household and Business Balance Sheets

Households are benefiting from solid growth in employment and wage incomes. They are continuing to consolidate their finances, saving at a much higher rate in recent years and slowing the pace of debt accumulation. Even so, household indebtedness is still at historically high levels, and debt-servicing requirements have recently increased. While indicators of financial stress remain muted, a continuation of the current period of borrowing restraint would help build additional resilience into household balance sheets. In the corporate sector, overall profit levels are high, but conditions diverge between sectors. The resources sector is benefiting from strong profit growth, robust balance sheets and good access to external funding. For non-resources companies, balance sheets also have been strengthened in recent years, but profit growth is not as robust and some sectors' access to funding has been more restricted.

Household Sector

In recent years, the household sector has adopted a more cautious attitude towards its borrowing and investment behaviour, which has been reflected in a sharp increase in the net household saving rate and a slower rate of balance sheet expansion. The net household saving rate was around 10 per cent in 2010, in contrast to the mid 2000s when there was very little net saving (Graph 3.1). Some households are using the increase in saving to pay down debt more quickly; this has been part of the reason why the pace of debt accumulation has slowed. Households have also been investing a larger share of their savings in deposits, reflecting an increase in

Graph 3.1
Saving Measures*
Per cent of household disposable income

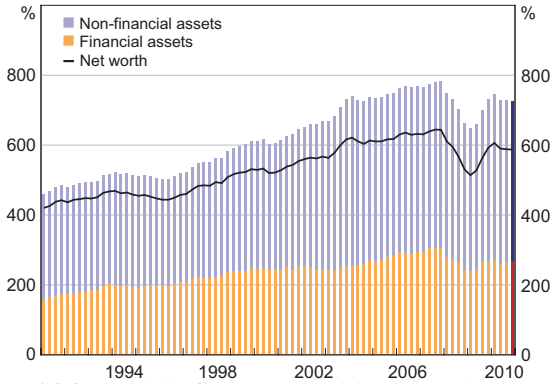


* Includes unincorporated enterprises; income is after tax, interest, and depreciation
** Four-quarter moving total
Source: ABS

deposits' relative return as well as their perceived safety. Overall, aggregate household debt and assets were both broadly stable as a proportion of household disposable income in 2010; household net worth remained around six times annual disposable income (Graph 3.2). Financial assets expanded by 6 per cent in 2010, with the share held as currency and deposits rising from 19 per cent to 26 per cent since 2007.

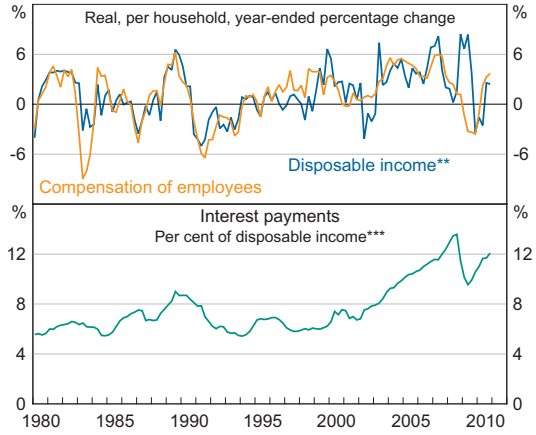
The change in household financial attitudes is also evident in survey data. According to Melbourne Institute surveys, the proportion of households that report that they are saving has risen in recent years, as has the share of households that believe that bank deposits and paying down debt are the 'wisest place for saving'; fewer now nominate equities or real estate in answer to this question. While mortgage refinancing activity picked up in 2010, an industry

Graph 3.2
Household Assets and Net Worth
Per cent of annual household disposable income*



* Before the deduction of interest payments; includes unincorporated enterprises; estimate for December 2010
Sources: ABS; RBA

Graph 3.3
Household Income Growth and Interest Payments*



* Household sector excludes unincorporated enterprises
** After the deduction of interest payments
*** Before the deduction of interest payments
Sources: ABS; RBA

survey suggests that the most common motivations for refinancing were to switch to a cheaper loan and consolidate debt, rather than increase the loan amount.

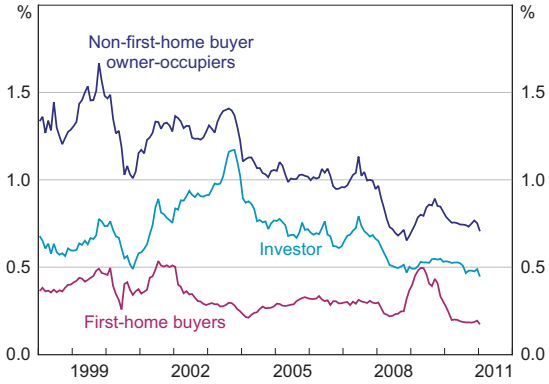
This apparent increase in the household sector's caution towards its finances is occurring alongside solid growth in incomes. As the labour market improved from 2009, real compensation of employees also recovered, increasing 3.7 per cent per household over the year to the December quarter 2010 (Graph 3.3). The outlook for employment – and thus labour income growth – is also favourable, given the strength in forward-looking indicators, such as job vacancies and advertisements.

The increase in saving and the reduced pace of debt accumulation by households are likely to have reflected a combination of factors. The saving rate had in fact already begun to turn around in about 2005, once the extended period of adjustment to lower inflation and financial deregulation was largely completed. The experience of the financial crisis and the increased uncertainty regarding future asset returns has prompted a further shift to greater financial caution across a range of fronts, including in the household sector. More recently, the increases in domestic interest rates from their recent trough have been making borrowing less attractive. Household interest payments as a share of disposable income increased from 10.6 per cent in the December quarter 2009 to 12.1 per cent in the December quarter 2010. This is still below the peak of 13.6 per cent reached in the September quarter 2008, and even with higher interest payments, real disposable income per household (after interest payments) increased by 2.4 per cent over the year to the December quarter 2010.

Reflecting all these factors, household debt has continued to grow at a much slower rate than in earlier years. Housing loan approvals as a share of credit were broadly flat in 2010 following falls from the elevated levels of 2009, when activity had been boosted by temporary, additional government subsidies for first-home buyers (FHBs) (Graph 3.4). This moderation in approvals has seen annualised growth in housing credit ease from 9 per cent over the six months to March 2010 to 7 per cent over the six months to January 2011 (Graph 3.5). Growth in both the owner-occupier and investor components have stabilised over the past few months, and are currently tracking at roughly the same rate.

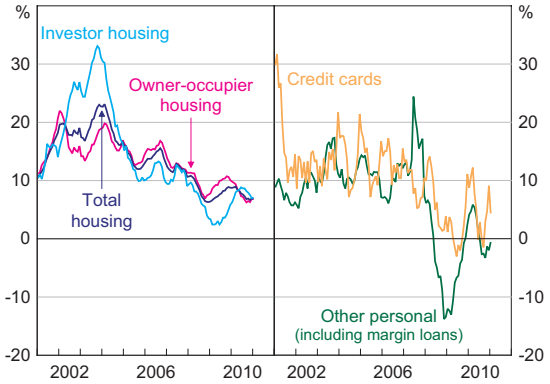
Other forms of borrowing by households are also relatively subdued; growth in credit card lending picked up in the second half of 2010 but has since

Graph 3.4
Housing Loan Approvals*
Per cent of housing credit outstanding



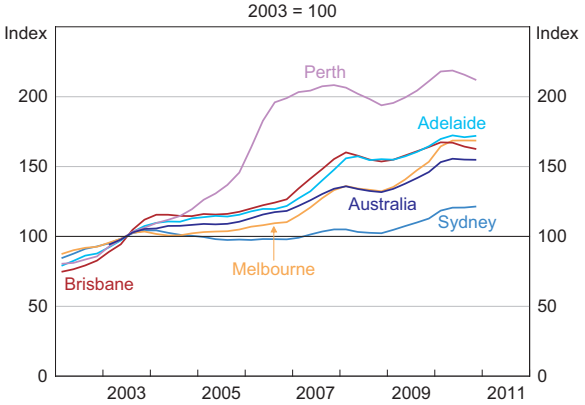
* Excludes owner-occupier refinancing and investor approvals for new construction and by 'others'
Sources: ABS; RBA

Graph 3.5
Household Debt Components
Six-month-ended annualised percentage change



Source: RBA

Graph 3.6
Capital City Dwelling Prices
2003 = 100



Source: RP Data-Rismark

declined and is well below the average pace of recent years, while the level of all other personal credit outstanding has recently been contracting.

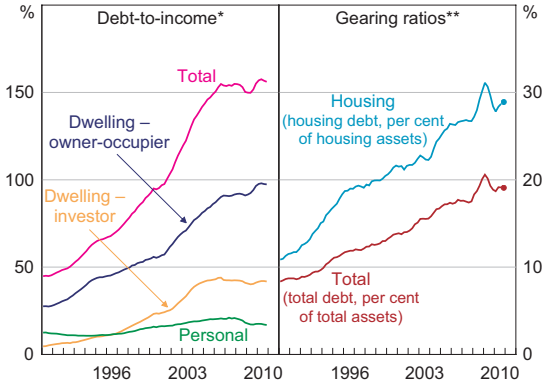
The moderation in demand for housing finance contributed to some cooling in the housing market in 2010. Nationwide housing prices rose 6 per cent over the year, compared with 11 per cent in 2009, and were fairly flat in the second half (Graph 3.6). The ratio of dwelling prices to income was broadly stable in 2010, at around the same level as in 2004. Although rental yields declined somewhat from their peak in 2008, they have generally been trending up since 2004. The increased propensity to pay down debt has also contributed to an increase in the rate of housing equity injection in the past few years.

Within the national average, though, there has been some regional divergence. Housing prices were firmer in Sydney and Melbourne for much of 2010, but have been drifting down in Perth and Brisbane. The strength in prices in Melbourne has occurred despite a greater expansion in housing supply than in the other cities, and is likely to have been driven by stronger than average growth in both population and loan approvals in Victoria.

Even though the pace of debt accumulation has moderated in recent years, aggregate household indebtedness and gearing remain around historically high levels (Graph 3.7). This means some households could now be more exposed to shocks to their incomes and financial circumstances. A continuation of the recent borrowing restraint would thus be a welcome development, as it would add further resilience to household balance sheets and avoid a build-up of risk in the household financial position.

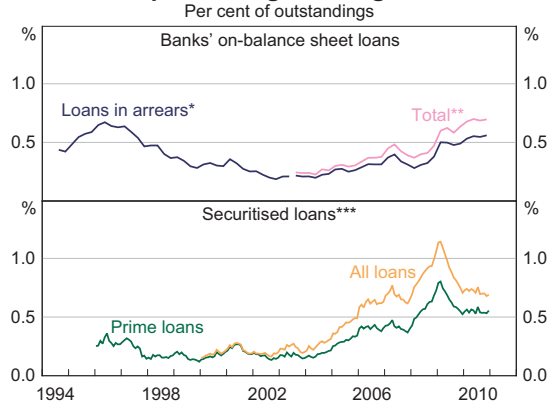
That said, a range of financial stress indicators show that the household sector is coping reasonably well with its debt levels and higher interest rates. While arrears rates on mortgages are higher than the low levels reached during the late 1990s and

Graph 3.7
Household Indebtedness and Gearing



* Excludes unincorporated enterprises; income is after tax and before the deduction of interest payments
** Includes financial assets of unincorporated enterprises and unfunded superannuation; estimates for December 2010
Sources: ABS; RBA

Graph 3.8
Non-performing Housing Loans
Per cent of outstandings



* Loans that are 90+ days past-due but otherwise well secured by collateral
** Includes 'impaired' loans that are in arrears (or are otherwise doubtful) and not well secured by collateral
*** Loans securitised by all lenders, 90+ days past-due; excludes 'self-securitisations'
Sources: APRA; RBA; Standard & Poor's

early 2000s, they remain low by international standards (Graph 3.8). By loan value, the share of non-performing housing loans on banks' balance sheets was around 0.7 per cent in December 2010, broadly unchanged since March 2010, and up 6 basis points from December 2009; the vast majority of these loans are well covered by collateral. Arrears on securitised housing loans were also stable in 2010, at about 0.7 per cent, though these data are becoming less representative of overall housing loan quality given the gradual decline in residential mortgage-backed securities outstanding (down about 47 per cent from the peak in 2007). As with housing loans, personal and credit card loan arrears have been little changed over the past year. As at December 2010, the non-performing rate for credit cards was 1.1 per cent, broadly unchanged since March 2008. The equivalent figure for other personal loans was 1.7 per cent in December 2010, which was up a little over the year, but well down from the peak in early 2009.

That housing loan arrears stabilised in 2010, despite further increases in interest rates, reflects a number of factors. First, unemployment declined. Second, a large share of borrowers repay ahead of schedule; recent liaison with major banks indicates that many borrowers have been able to absorb the recent increases in interest rates by reducing their prepayment rates without lifting their overall repayment by much, if at all. Recently, some borrowers have been looking to reduce their interest-rate exposure by shifting to fixed-rate loans. The share of new owner-occupier loans at fixed rates rose to about 8 per cent in January 2011, up from a low of about 2 per cent in early 2010.

According to securitised loan data (including self-securitised loans), the housing loan arrears rate remains higher in New South Wales than in the other states, but increased more sharply in Western Australia and Queensland, rising by 12 and 18 basis points, respectively, over the year to January 2011. Similar trends are evident at the regional level. While a small number of regions in western Sydney remain among the most affected by housing loan stress, Queensland has become more heavily represented. As at January 2011, six regions in Queensland were among the 15 regions nationwide that had the highest rates of housing loan arrears, compared with three in January 2010 (Graph 3.9). Even so, the overall arrears rates in these regions remain low in absolute terms.

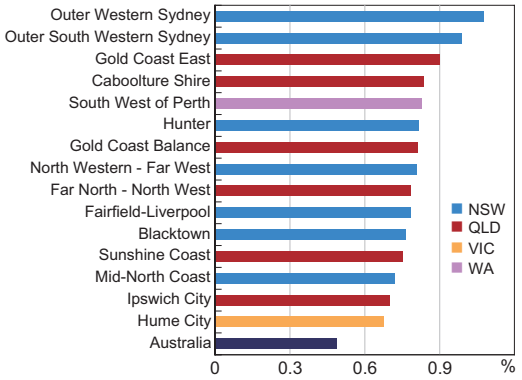
The pick-up in arrears in Queensland, which was evident even before the onset of the recent floods, is consistent with the softer property market in

the state, and has been exacerbated recently by higher-than-average unemployment. In response to the floods, many banks put in place hardship relief packages, including temporary repayment holidays, to help affected borrowers. While banks reported a large uptake in this hardship assistance, the floods are unlikely to cause a major increase in housing arrears to the extent that borrowers remain in employment.

Other indicators of financial stress confirm that household financial circumstances are, in aggregate, relatively strong. Rates of mortgagees' applications for property possession generally declined in the second half of 2010; for the year as a whole, these rates were below those seen in recent years (Graph 3.10). The exception was south-east Queensland (comparable data are not available for the entire state), where the rate of mortgagees' applications for property possession has continued to increase over the past few years. The nationwide rate of bankruptcies and other personal administrations declined further in the second half of 2010, and is now well below the peak in 2009.

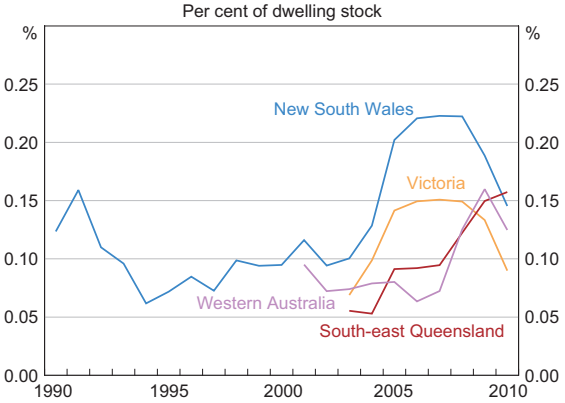
The relatively benign picture painted by these aggregate indicators of financial stress is consistent with household surveys, which show that only a small proportion of borrowers are highly geared. The latest Household, Income and Labour Dynamics in Australia (HILDA) Survey, for 2009 (before most of the recent increase in interest rates took place), showed a sharp decline in the share of households considered most vulnerable, that is, with both high debt-servicing ratios (DSRs) and high loan-to-valuation ratios (LVRs) (see also 'Box C: Household Experiences in the Downturn: Evidence from the HILDA Survey'). As well, less than 5 per cent of owner-occupier households in 2009 were in the lowest two income quintiles and had DSRs above 50 per cent. Even with the increase in interest rates since 2009, our estimates suggest that the share of such vulnerable households would still only be about 6 per cent of owner-occupiers with a mortgage and less than 2 per cent of all households.

Graph 3.9
Housing Loan Arrears by Region*
90+ days past due, per cent of outstandings, January 2011



* Prime loans securitised by all lenders; includes 'self-securitisations'
Sources: ABS; Perpetual; RBA

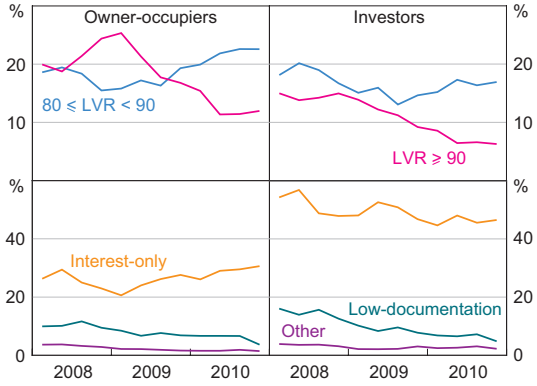
Graph 3.10
Applications for Property Possession*
Per cent of dwelling stock



* Includes applications for possession of some commercial, as well as residential, properties
Sources: ABS; state Supreme Courts

The risk profile of mortgage lending has also benefited from tighter lending standards in recent years. The share of new housing loans approved by banks with LVRs above 90 per cent was stable in the second half of 2010 after declining over the previous few years, while the proportion of low-documentation loans has continued to trend lower (Graph 3.11). While the share of new investor housing loans that are interest-only has always been relatively high, reflecting tax considerations, recently the interest-only share of owner-occupier loans has increased as well. Liaison indicates that these loans

Graph 3.11
Banks' Housing Loan Characteristics*
Share of new loan approvals



* LVR = loan-to-valuation ratio; 'Other' includes loans approved outside normal policies, and other non-standard loans; 'Interest-only' includes mortgages with 100 per cent offset accounts
Source: APRA

are popular because of the repayment flexibility they offer. The majority of borrowers with these loans continue to make principal repayments either directly into the loan or into a linked offset account; their repayment behaviour is not much different from those borrowers with standard principal-and-interest loans. Moreover, most lenders assess debt serviceability on the basis of principal and interest payments, not just interest payments.

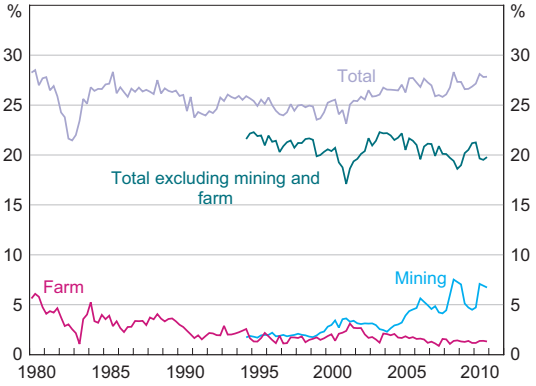
The performance of the 2009 cohort of FHBs is of particular interest given it has a high share of lower-income borrowers who made their home purchase during a period of low interest rates and at relatively high LVRs. Despite the increase in interest rates since 2009, liaison with major banks indicates that the 2009 cohort of FHBs is performing no worse, and in some cases better, than earlier cohorts. These FHBs are likely to have reduced their LVRs since they purchased their homes, given that they have made some principal repayments and housing prices have risen. Indications are that they have paid down their debt at a similar rate as earlier FHB cohorts had done after a year.

Business Sector

The economic recovery has seen the business profit share of GDP return to close to its 2008 peak. However, there are divergent outcomes at the sectoral level, with the share of mining sector profits well above its average level, while earnings for other non-financial businesses have been more stable relative to GDP (Graph 3.12). Mining profits rose by around 60 per cent in 2010, as the sector recovered from its recent profit downturn; in contrast, profits of other non-financial, non-farm businesses were slightly lower over the year. This divergence is also evident in company announcements during the latest corporate reporting season. On a matched sample basis, underlying profits for listed ASX 200 resources companies were around 68 per cent higher in the second half of 2010 compared with the corresponding period in 2009, while profits for other non-financial companies were little changed. In line with this stronger performance, share market analysts are forecasting listed resources companies' earnings to increase by 64 per cent in the 2010/11 financial year, compared with expected growth of around 4 per cent in the earnings of other listed non-financial companies (Graph 3.13).

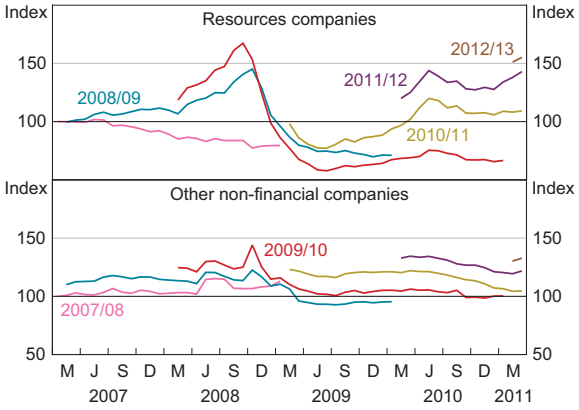
Earnings expectations have been revised down for the retail sector, reflecting the more cautious approach to spending by consumers, while the

Graph 3.12
Business Profits*
Per cent of GDP



* Adjusted for privatisations
Sources: ABS; RBA

Graph 3.13
Analysts' Earnings Expectations
ASX 200 companies, January 2007 forecast of 2007/08 earnings = 100



Sources: RBA; Thomson Reuters

stronger Australian dollar is expected to weigh on profits in sectors such as manufacturing and tourism. The recent heavy rain and flooding in Queensland have also reduced earnings expectations for some large non-financial firms with significant exposures to Queensland. However, these firms' geographically diversified operations and the likely boost from future reconstruction work have limited this. The floods also adversely affected survey measures of business conditions and confidence, but indications are that the fall will be temporary.

In the unlisted (generally smaller) business sector, preliminary credit bureau data suggest that profitability improved in 2010, but remains below pre-crisis levels: the median after-tax return on assets of firms in the sample was 5.5 per cent in 2010 compared with 6.3 per cent in 2007. The share of loss-making businesses returned to pre-crisis levels, falling by 5 percentage points to 20 per cent in 2010, although among smaller firms the share that is loss-making remains above average (Table 3.1). By sector, the improvement in profitability among unlisted companies appears to be more broadly based than among listed companies.

Table 3.1: Unlisted Loss-makers[(a)]
Per cent

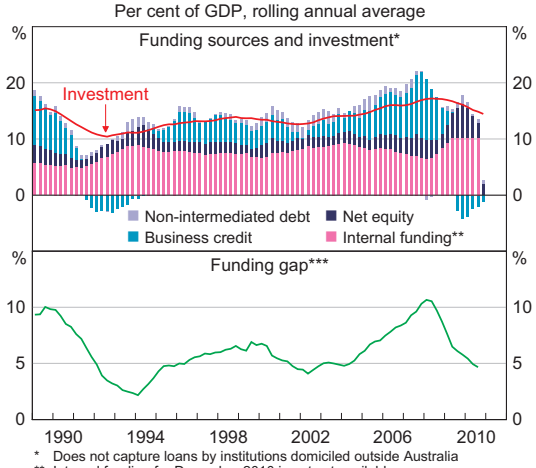
	2005	2006	2007	2008	2009	2010
By size (total assets)						
Less than $1 million	23	26	27	27	36	37
$1 million to $10 million	21	18	21	22	26	22
$10 million to $100 million	18	18	18	18	22	18
$100 million or greater	18	17	17	17	22	14
By industry						
Agriculture, forestry & fishing	26	36	30	32	35	35
Utilities	18	23	27	23	29	18
Manufacturing	18	18	19	18	23	18
Mining	46	39	41	43	41	34
Rental, hiring & real estate services	21	19	22	21	33	18
Services	23	22	23	25	29	24
Wholesale & retail trade	15	15	15	13	18	14
Construction, transport & other	16	11	12	10	17	13
Total	**21**	**19**	**20**	**20**	**25**	**20**

(a) Share of firms with negative net profit after tax in the year
Sources: Dun & Bradstreet (Australia); RBA

Another indicator of the profitability of smaller businesses is the profit share of GDP of unincorporated enterprises. This has hovered around 8 per cent since 2007, after declining from an average of 10 per cent in the 1980s, as some small firms and partnerships incorporated, and traditionally unincorporated businesses in some sectors, such as agriculture, declined as a share of output. In contrast, the corporate profit share has risen from an average of 16 per cent in the 1980s to 19 per cent since 2007.

Strong profits overall have translated to robust internal funding for businesses in recent years, with these funds accounting for 10 per cent of GDP in the September quarter 2010, compared with a long-run average of about 8 per cent (Graph 3.14, top panel). Firms' retained earnings rose as they initially responded to the financial crisis by retaining cash and paying down debt (thus lowering interest payments), with the recent recovery in earnings growth also supportive. However, it is likely that a large part of these retained earnings has been concentrated in the mining sector, where strong profit growth has been accompanied by a traditionally lower dividend payout ratio than other sectors. Resources companies have recently announced plans to significantly increase distributions, which could result in a decline in the share of internal funding in the future.

Graph 3.14
Business Funding and Investment
Per cent of GDP, rolling annual average



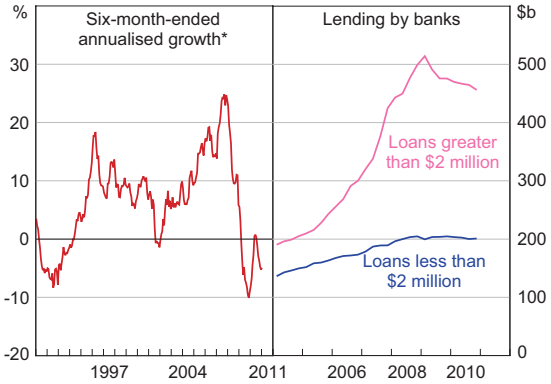
* Does not capture loans by institutions domiciled outside Australia
** Internal funding for December 2010 is not yet available
*** Investment less internal funding
Sources: ABS; ASX; Austraclear; RBA

Equity raisings moderated in 2010, following a period when firms sought to rebalance their capital structure away from debt and towards equity in response to the crisis. Listed corporates' net equity raisings amounted to $26 billion in 2010, which is roughly in line with the annual average between 2003 and 2007, though down from the $74 billion raised in 2009. Equity raisings were strong in the final quarter of 2010, however, driven mainly by increased issuance by real estate and resources companies.

External debt funding remains subdued, with a decline in business credit in the second half of 2010 offsetting solid corporate non-intermediated debt issuance. Bond issuance by non-financial corporates was weak in the first half of 2010, but picked up in the second half of the year, with issuance over the six months to January 2011 reaching $15.6 billion, compared with $9.7 billion over the previous six-month period. Most of this recent issuance has been into offshore markets, with much of it being placed by resources companies seeking funding for new projects. The strong demand from offshore investors reflects the strength of the Australian economy, strong commodity prices, and some credit rating upgrades in 2010.

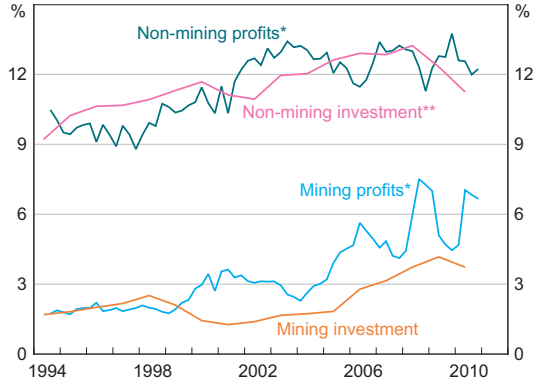
After broadly stabilising in the first half of 2010, business credit began to contract again in the second half of the year, falling by 5 per cent in annualised terms over the six months to January 2011 (Graph 3.15). However, the most recent monthly figures show that the rate of decline has slowed. The decline in business credit over the second half of 2010 was mainly driven by falls in lending to corporates, with lending to (generally smaller) unincorporated enterprises more stable. Even so, syndicated loan approvals (to large non-financial businesses) picked up strongly in the December quarter, with around $32 billion in deals, the largest quarter of approvals since

Graph 3.15
Lending to Businesses



* Seasonally adjusted and break adjusted; includes lending by non-bank financial institutions and securitised loans, but excludes lending to non-residents
Sources: APRA; RBA

Graph 3.16
Business Profits and Investment
Per cent of GDP



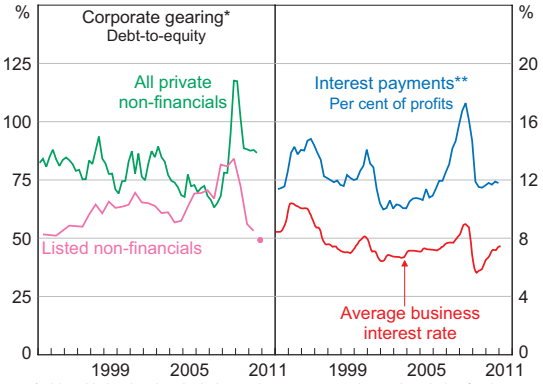
* Gross operating profits; inventory-valuation adjusted; excludes unincorporates
** Excluding livestock; adjusted for second-hand asset transfers between private and other sectors
Sources: ABS; RBA

December 2007. Although reduced appetite for debt and tighter credit supply are likely to have weighed on business borrowing in recent quarters, ongoing weakness in large business borrowing also reflects firms turning to alternative forms of finance, including offshore bond markets.

Overall, it is unlikely that firms are facing widespread financial constraints to their investment capacity. Investment as a share of GDP has fallen since its 2008 peak. Combined with strong internal funding, this has seen firms' aggregate external funding requirements fall significantly (Graph 3.14, bottom panel). There is some divergence between sectors: mining investment is at historically high levels, supported by robust retained earnings and good access to external funding, while credit remains more difficult to access for firms in some other sectors, such as small property developers (Graph 3.16).

Declining business debt levels together with solid profits and equity raisings in recent years have seen a further reduction in business gearing. Book value gearing for listed non-financial corporates fell to 49 per cent in the second half of 2010 from a peak of 84 per cent in 2008, and well below the long-run average level of 66 per cent (Graph 3.17, left panel). The fall was primarily driven by strong growth in

Graph 3.17
Business Sector Finances

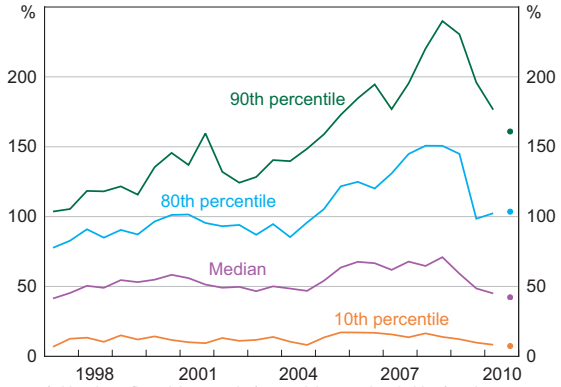


* Listed is book value, includes real estate companies and excludes foreign companies, and its latest observation includes only companies that have reported to December 2010; all private is market value
** Interest on intermediated debt from Australian-domiciled financial institutions
Sources: ABS; APRA; Morningstar; RBA; Statex

retained earnings and reductions in debt by resources companies. The post-2004 run-up in gearing of the most highly leveraged companies has now been largely unwound (Graph 3.18). Like households, many companies are apparently adopting a more cautious approach to the use of debt; in the case of some of these firms, though, this might have been at the behest of their creditors. Credit bureau data suggests that gearing of unlisted companies also declined over 2010, particularly for the most

Graph 3.18
Listed Companies' Gearing Ratios*

Distribution of largest 250 listed companies ranked by total assets

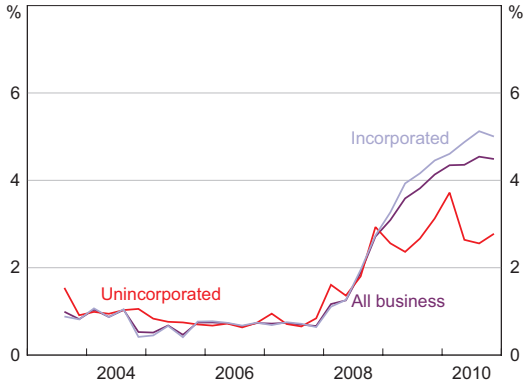


* Listed non-financial companies' gross debt over shareholders' equity at book value; excludes foreign companies, includes real estate companies; latest observation includes only companies that have reported to December 2010

Sources: Morningstar; RBA

Graph 3.19
Banks' Non-performing Business Assets*

Domestic books, per cent of outstandings by type



* Includes 'impaired' loans and 90+ days past-due items that are well secured by collateral; excludes lending to financial businesses; includes bills and debt securities

Sources: APRA; RBA

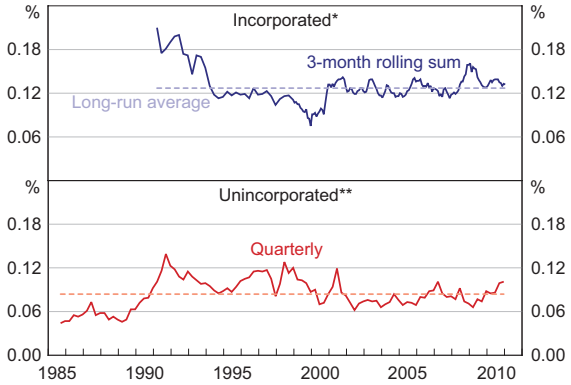
leveraged companies, mainly reflecting increases in equity. Unlisted firms appear to have retained a greater share of their profits in 2010. These firms may be relying more on internal funding to finance their daily activities, with a survey of small to medium-sized businesses showing cash flow management to be a persistent concern since the onset of the crisis, although this has diminished recently.

This deleveraging has seen business interest payments as a share of profits remain well below long-run average levels despite the recent increases in business loan interest rates. Interest payments accounted for 12 per cent of business profits in the December quarter 2010, below the peak of 17 per cent in the June quarter 2008 (Graph 3.17, right panel). Within this, the ratio of unincorporated businesses' interest payments to their profits fell from its June quarter 2008 peak of 11 per cent to 8 per cent in the December quarter 2010.

The non-performing domestic business loan ratio levelled out over 2010, and now stands at 4.4 per cent for non-financial businesses (Graph 3.19). Within this, a little less than one half of the troubled loans are to the commercial property sector, including developers of residential property. The non-performance rate remains higher for loans to the incorporated sector at 5 per cent in December 2010, up from 4.5 per cent a year earlier. Over the year to December, the non-performing ratio for loans to unincorporated businesses declined a little, to 2.8 per cent. While most firms have been resilient in the face of tighter financing conditions, a few had taken on significant amounts of leverage, and not all of them have been able to refinance in the new environment. It is likely that these firms account for much of the deterioration in loan performance over the cycle.

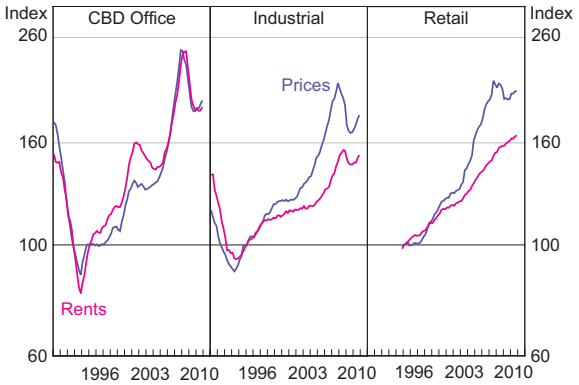
Business failures, a lagging indicator of business financial health, remain modest. The rate at which incorporated businesses are entering external administration fell over the second half of the year to around its long-run average level (Graph 3.20). Queensland, which experienced a sharper increase in corporate failures than the rest of the country during 2008 and early 2009, continues to have an above-average rate of failures. The failure rate among unincorporated businesses has picked up over the past two years, and is now a little above average.

Graph 3.20
Business Failures
Per cent of businesses in each sector



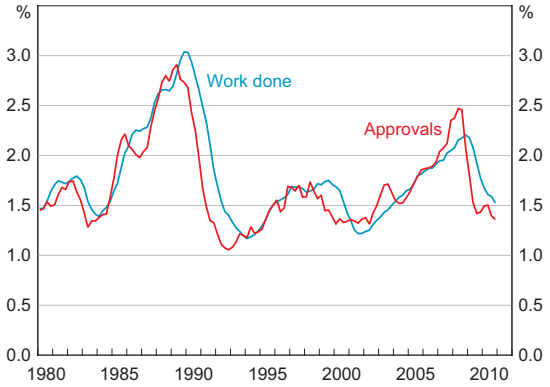
* Companies entering external administration, pre-1999 data are quarterly
** Business bankruptcies
Sources: ABS; ASIC; ITSA; RBA

Graph 3.21
Commercial Property
March 1995 = 100, log scale



Sources: Jones Lang LaSalle; Property Council of Australia; RBA

Graph 3.22
Commercial Property Construction
Per cent of GDP, 12-month rolling sum



Sources: ABS; RBA

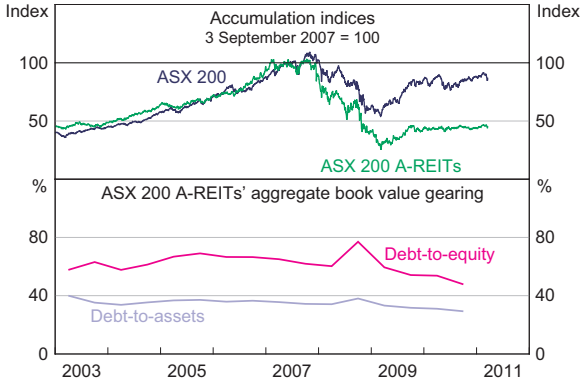
Commercial Property

Conditions in the commercial property market have continued to stabilise, with rents and property prices recovering in most segments (Graph 3.21). The recent downturn in the commercial property market has been much less severe than that in the early 1990s, particularly for the office property sector. This is largely attributable to the smaller supply overhang and the less pronounced economic slowdown compared with the earlier episode. Vacancy rates now look to have peaked, falling modestly since June 2010. Construction activity is still subdued, but appears to be stabilising, with the share of approvals broadly levelling out since late 2009. Commercial property approvals and work done as a share of GDP have fallen by around 45 per cent and 31 per cent from their respective peaks (Graph 3.22).

The weakness in new commercial property development in part reflects ongoing tightness in lending conditions. Industry liaison suggests that developers continue to face stricter collateral and covenant requirements, as well as higher pre-commitment/pre-sales ratios. Data for December 2010 indicate that banks have reduced their domestic commercial property exposures (actual and limits) by about 15 per cent since March 2009, although the pace of contraction is slowing. Commercial property loan impairments also appear to be stabilising. The share of banks' commercial property exposures that were impaired fell over the December quarter, as banks liquidated a number of large bad debts. Commercial property exposures nonetheless still account for a disproportionate share of banks' impaired business assets.

Non-bank sources of commercial property finance remain constrained. Commercial mortgage-backed security markets reopened in 2010, but aggregate issuance has been well below the levels prevailing

Graph 3.23
Listed Real Estate Investment Trusts



Sources: Bloomberg; Morningstar; RBA

before the crisis, while mortgage trusts have seen a sharp fall in funds under management since 2007. In response, some larger developers have turned to non-intermediated debt to meet their financing needs. Superannuation funds – which are attracted by the higher yields on offer in the sector – are also investing, albeit on a small scale.

Equity raisings by Australian Real Estate Investment Trusts (A-REITs) slowed over 2010 to $4.5 billion compared with $13.5 billion in 2009. This may partly reflect these trusts having achieved their target balance sheet restructuring – the aggregate debt-to-equity ratio of ASX 200 A-REITs has fallen from 77 per cent in December 2008 to 48 per cent as at December 2010 (Graph 3.23). It may, however, also reflect weaker market conditions – between September 2007 and December 2010, the ASX 200 A-REITs accumulation index under-performed the broader market index and price-to-book ratios fell below one. More recently, ASX 200 A-REITs' equity market returns have edged up as the sector stabilised. December 2010 half profits broadly exceeded market expectations, with aggregate headline profits for a matched sample of ASX 200 real estate companies rising by 19 per cent compared with the June 2010 half year.

Box C

Household Experiences in the Downturn: Evidence from the HILDA Survey

The Household, Income and Labour Dynamics in Australia (HILDA) Survey is a panel study, interviewing the same households each year since 2001. The latest survey was released in December 2010, covering interviews conducted mainly between August and November 2009. Because the same households are interviewed each year, comparison with the 2008 survey provides detailed insights into the effects of the crisis and economic slowdown over the 2008–2009 period, and how Australian households responded to them.

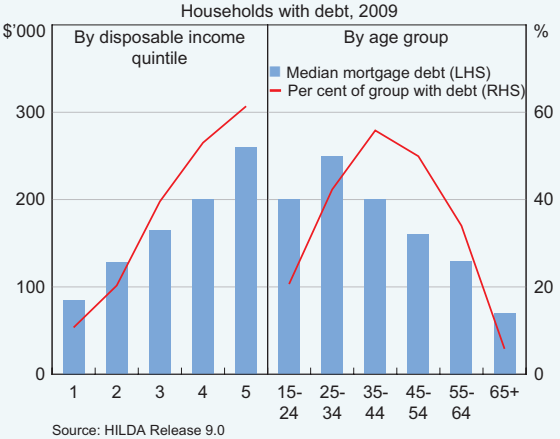
Between any two years, some households report a fall in weekly income derived from wages and salaries, unrelated to changes in the households' membership. Around 27 per cent of respondents to the 2009 survey had experienced such a decline in income from the previous year, compared with an average of 24 per cent in the previous five annual surveys. Many of these declines in income in 2009 were associated with one or more household members experiencing an adverse transition in their labour market status: either becoming unemployed or working fewer hours. Around 6.9 per cent of all households reported that at least one member experienced a spell of unemployment in the period between their 2008 and 2009 interviews, after having been employed at the time of their interview in 2008. A further 4.3 per cent of households reported that at least one member switched from full-time to part-time work (but was not unemployed at any point). Of these 11.2 per cent of households reporting an adverse labour market transition, over one half also reported a fall in wage and salary income over the year, even though around 80 per cent were employed by the time of the 2009 interview. The share of households reporting an adverse labour market transition in the 2009 survey was higher than in previous surveys, in line with deteriorating labour market conditions in this period: between the 2007 and 2008 surveys, for example, the proportion was 1.6 percentage points lower, at 9.6 per cent.

Around 37 per cent of Australian households had owner-occupier mortgage debt in 2009, up from 31 per cent in 2001. This debt was largely concentrated in households in the top two income quintiles (those with annual after-tax household income of $77 500 or more), with these households holding around 70 per cent of mortgage debt in 2009. More of these households had a mortgage, and those that did had higher loan balances on average (Graph C1). Only 10 per cent of mortgage debt was held by households in the bottom two income quintiles. In addition, low-income indebted households were more likely than

Graph C1

Indebtedness Measures

Households with debt, 2009



Source: HILDA Release 9.0

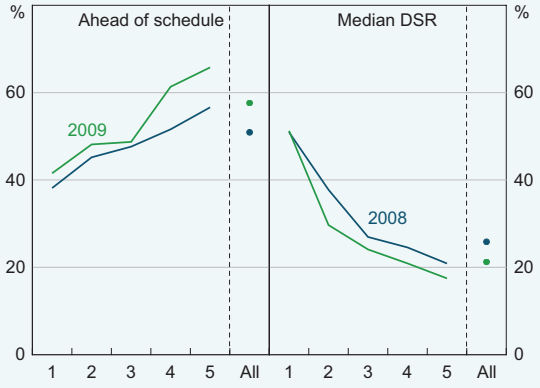
those with high incomes to be aged over 55. These older households tend to have smaller mortgages and higher net asset holdings than younger households with mortgages. Low-income households with mortgage debt also tend to have much higher incomes in previous and subsequent years, suggesting that this group includes many small business owners that have volatile earnings. Households are more likely to have a mortgage if their head is of prime working age: the share peaks at 56 per cent for households in the 35 to 44 year age bracket.

In line with movements in aggregate measures of housing gearing (see Graph 3.7 in the 'Household and Business Balance Sheets' chapter), the median loan-to-valuation ratio for indebted owner-occupiers increased from 37 per cent to 44 per cent between 2004 and 2008, but was unchanged in 2009. Almost two thirds of the increase in aggregate debt reported between 2008 and 2009 was accounted for by an increase in the amount of debt owed by households aged 55 and over, even though they were only one fifth of all households with mortgages. Both the share of these households with debt rose and their average loan balance grew more strongly than for younger households. This suggests that a greater share of households are carrying debt as they approach the traditional early retirement age than was the case a few years ago. Contributing factors include: less downsizing by older households; larger mortgages – including amounts redrawn – taking more time to repay; increased use of reverse mortgages; and people working longer.

Between 2008 and 2009, indebted owner-occupiers were more likely than outright owners were to experience an adverse employment shock – 13.2 per cent compared with 6.8 per cent.[1] This reflects the greater prevalence of retirees within the group of outright owners, relative to those with mortgages. For example, 74 per cent of outright owner households were aged over 55, compared with only 19 per cent of those with mortgages. Similarly, households that owned their house outright were around half as likely to participate in the labour force as those with a mortgage – 43 per cent compared with 90 per cent.

Between August 2008 and April 2009, the average standard variable mortgage interest rate fell by almost 4 percentage points. There is evidence to suggest that some households used this period as an opportunity to pay down their mortgage ahead of schedule, for example by maintaining the size of their regular repayments despite required repayments falling. Around 58 per cent of the households with mortgage debt reported being ahead of schedule on their mortgage payments as at the 2009 survey, compared with 51 per cent as at the 2008 survey (Graph C2, Table C1). The increase was especially apparent among the high-income households that owe the bulk of the debt. Nevertheless, around 54 per cent of households with mortgage debt did actually reduce their mortgage repayments between 2008 and 2009, compared with only

Graph C2
Mortgage Repayments
By disposable income quintile, households with debt



Source: HILDA Release 9.0

1 Outright owner-occupier households previously had mortgages but have since paid them off, or are households that have paid for their current home with equity or cash.

Table C1: Household Debt and Income Experience
2008 to 2009, per cent of respondents

	All households	No income fall or labour market shock[a]	Income fell[a]	Labour market shock
All households[b]	100.0	68.0	26.7	11.2
Per cent with debt	37.0	32.8	48.1	44.7
of which:[b]				
Reduced total repayment	54.0	54.2	52.6	58.8
Ahead of schedule	57.6	58.0	60.3	62.0
Improved payment position	18.3	17.4	19.7	15.2
DSR>50 per cent	8.8	10.0	6.0	3.4

(a) Fall of $20 or more in gross weekly income derived from wages and salaries
(b) Does not sum to 100
Source: HILDA Release 9.0

26 per cent between 2007 and 2008, when interest rates were rising. Households were more likely to reduce their mortgage repayments if at least one member experienced an adverse labour market transition. But households whose wage and salary income fell were no more likely than others to reduce their repayments; this might reflect that temporary fiscal policy measures during 2009, including tax cuts and one-off bonus payments, were supporting households facing income shocks. In line with the reduction in mortgage repayments, the median debt-servicing ratio (DSR) – the percentage of household disposable income required to service actual principal and interest payments on an owner-occupier mortgage – also fell, from 26 per cent to 21 per cent between the two surveys. For many households, the DSR on the *required* repayment would have fallen by more.

In the 2009 survey, a larger share of households improved their repayment position (by moving from on schedule to ahead, or from behind schedule to either on or ahead of schedule) than did the reverse – 18 per cent compared with 11 per cent. Almost one half of indebted owner-occupier households were ahead of schedule in both 2008 and 2009, with only 1 per cent reporting that they were behind schedule in both survey years. Households that had high debt-servicing requirements were more likely to take advantage of the low-interest-rate environment and improve their repayment position; they had been less likely to be ahead of schedule in 2008. Of the households with owner-occupier mortgages, those that experienced an adverse labour market transition were slightly less likely to improve their repayment position than those that did not – 15 per cent compared with 18 per cent.

Together with the pattern of payment reduction, this suggests that at least some households experiencing an adverse labour market outcome in the 2008–2009 period were able to cushion its effects using the fiscal transfers and falls in interest rates that also occurred in that period.

4. Developments in the Financial System Architecture

International agreement was reached in late 2010 on the main elements of the international bank capital and liquidity reforms, known as Basel III. Since then the focus has been on finalising the details of the agreed reforms and determining how these can best be implemented across countries. As highlighted in the September 2010 *Review*, one of the key outstanding areas for Australia related to the proposed liquidity coverage ratio (LCR). In particular, there were doubts that the LCR could work in countries where there are insufficient eligible liquid assets for banks to hold. This was resolved in December 2010, with the Basel Committee on Banking Supervision (BCBS) agreeing on alternative arrangements for such countries.

Two other areas of importance in recent months have been the continuing work at the international level on identifying financial institutions that are systemic in a global context and ways to strengthen their loss absorbency, and the move towards central clearing of over-the-counter (OTC) derivatives. Work has also continued on improving supervisory intensity and effectiveness, to complement the new Basel III regulations. This work, which is being led by the Financial Stability Board (FSB), aims at ensuring national supervisory agencies have the independence, resources and tools to perform their work effectively. The FSB is also undertaking work on issues such as shadow banking and credit rating agencies, as well as several peer reviews.

The key items on the international financial regulatory agenda and implications for Australia are outlined below.

The International Regulatory Agenda and Australia

Strengthening the capital framework for ADIs

The new framework for bank capital was largely agreed in September 2010. In December 2010, the BCBS published additional details in *Basel III: A global regulatory framework for more resilient banks and banking systems*. The Basel III framework sets out rules for higher and better-quality capital for banks and other deposit-taking institutions, better risk coverage and a new (non-risk-based) leverage ratio. It also includes measures to promote the build-up of capital that can be drawn down in periods of stress.

As detailed in the September 2010 *Review*, the minimum requirement for higher-quality capital is being increased. When implemented fully on 1 January 2015, the new minimum will be 4.5 per cent of risk-weighted assets for common equity and 8.0 per cent for total capital. New 'capital conservation' and 'counter-cyclical capital' buffers are to be phased in over three years commencing 1 January 2016; from 1 January 2019, the required minimum total capital ratio plus conservation buffer will be 10.5 per cent of risk-weighted assets. With these details now decided, efforts are being focused on implementing the new standards at a national level. In Australia, the Australian Prudential Regulation Authority (APRA) has begun the process for developing draft prudential standards for authorised deposit-taking institutions (ADIs) to give

effect to the reforms. APRA anticipates that it will begin consultation on these measures from mid 2011 and continue in 2012.

The BCBS has also recently released follow-up details on two outstanding capital-related matters:

- criteria for the eligibility of instruments to be counted as non-common equity Tier 1 and Tier 2 capital; and
- guidance for national authorities on operating the counter-cyclical capital buffer.

The first of these is aimed at enhancing the quality of bank capital by requiring that all classes of capital instruments are available to absorb losses at the point of non-viability. During the financial crisis, a number of distressed banks globally were rescued by the public sector injecting funds in the form of common equity and other forms of Tier 1 capital. While this protected depositors, it also meant that Tier 2 capital instruments (mainly subordinated debt), and in some cases, Tier 1 instruments, did not absorb any losses. From 1 January 2013, in order for an instrument issued by a bank to be included in non-common equity Tier 1 capital or in Tier 2 capital, it must have a provision that allows it to either be written down or converted into common equity, at the option of the relevant authority, when a trigger event occurs. The capital eligibility of instruments issued prior to 1 January 2013 that do not have this provision will be phased out. Instruments with such write-down/conversion features at the point of non-viability are sometimes referred to as 'gone concern' contingent capital. The BCBS is also continuing its work on 'going concern' contingent capital. These instruments would be triggered well before the bank becomes unviable, when equity falls below some pre-specified level.

Other bodies have also been examining measures to enforce losses on other asset classes. The European Commission recently launched a public consultation on a crisis management framework for the European Union (EU). Alongside more traditional bank resolution tools, such as splitting a firm into a 'good bank' and 'bad bank', it includes proposals for converting debt to equity, or writing down debt. In the United States, the *Dodd-Frank Wall Street Reform and Consumer Protection Act* includes a provision prohibiting the use of taxpayers' funds to prevent the liquidation of any financial institution; the intention is that shareholders and creditors, not taxpayers, should bear losses in any bank failure in the future. The Federal Deposit Insurance Corporation has recently approved a rule that underlines this intent by clarifying the way it will treat certain creditor claims when an institution is liquidated. Recent legislation passed in Germany allows losses to be imposed on senior and subordinated debtholders without necessarily liquidating the bank. One element, called a reorganisation plan, gives shareholders and debtholders the discretion to restructure a struggling institution by imposing losses on subordinated and senior debtholders. A second element gives the German regulator discretionary power to arrange for the transfer of systemically relevant assets and liabilities to a 'good bank', while leaving all other assets and liabilities, such as subordinated and senior debt, within the remaining entity. Legislation was passed in Ireland in December 2010, giving the Government the power to impose losses on junior debtholders to protect financial stability.

The counter-cyclical capital buffer is a macro-prudential policy tool directed against the build-up of system-wide risk. The aim of the buffer is to ensure that banks are holding extra capital to absorb losses when a downturn comes. To operate the buffer, the relevant authorities in each jurisdiction would monitor credit growth and a range of related indicators and use these to assess whether credit conditions are adding to system-wide risk. Based on this they will determine whether a counter-cyclical buffer should be imposed (within the range of zero to 2.5 per cent of risk-weighted assets), or varied once it is in place. Any increases in the buffer are to be preannounced

by up to 12 months to give banks time to accumulate the extra capital; reductions in the buffer would take effect immediately in order to support banks' capacity to continue lending in a downturn. While the operation of the buffer will be a matter for national discretion, the BCBS guidelines envisage that it would only be imposed in conditions of unusually high risk-taking by credit providers and hence, would be mostly set to zero. In principle the buffer could also be used to lean against an upswing in credit, though the existing prudential tools can serve the same purpose, including bank-specific Pillar 2 capital add-ons and other supervisory interventions. As with the rest of the Basel III reforms, APRA would be responsible for making and disclosing any decision to require or amend this buffer. However, it is anticipated that the Reserve Bank would provide analysis to inform any such decision about the buffer.

Strengthening liquidity risk management by ADIs

Complementary to the capital reforms, the BCBS outlined major changes to banks' liquidity risk management policies in September 2010, and set out the details in *Basel III: International framework for liquidity risk measurement, standards and monitoring*, in December 2010. This document clarified a key element of the liquidity reforms for countries, such as Australia, that do not have enough eligible liquid assets for banks to hold. As reported in the September 2010 *Review*, the new standard, as originally proposed, would have been unworkable in Australia. Under the LCR requirement, high-quality liquid assets (classed as 'Level 1' assets) comprise the highest quality government or quasi-government securities, cash and central bank reserves. However, the supply of government and quasi-government securities, which forms the bulk of Level 1 assets in most jurisdictions, is relatively limited in Australia and several other countries. Up to 40 per cent of the LCR requirement can be met through a second level of eligible liquid assets ('Level 2' assets), which includes certain non-bank corporate debt and covered bonds, and which would be subject to a haircut. However, a recent review by APRA established that, at this point in time, there are no such assets that trade in liquid enough markets to qualify as Level 2 assets in Australia.

To make the LCR requirement workable for countries in Australia's position, the BCBS' final framework incorporates three alternative treatments for the holding of liquid assets. The first option, and the one that APRA and the Reserve Bank have agreed should be adopted in Australia, involves allowing banks to establish contractual committed liquidity facilities with their central banks, subject to an appropriate fee; the committed amount would then count towards the LCR requirement. The two other alternative options endorsed by the BCBS were not seen as workable in Australia. One option exposes banks to the risks of holding liquid assets in a different currency; the other allows Level 2 assets to exceed the 40 per cent limit (subject to a higher haircut), but this too is impractical in Australia as outlined above.

Under the approach to be adopted in Australia, an ADI will be able to establish a facility with the Reserve Bank, large enough to cover any shortfall between the ADI's holdings of high-quality liquid assets and the LCR requirement. Qualifying collateral for the facility will comprise all assets eligible for repurchase transactions with the Reserve Bank under normal market operations. In return for the committed facility, the Reserve Bank will charge a market-based commitment fee. The fee is intended to leave participating ADIs with broadly the same set of incentives to prudently manage their liquidity as their counterparts in jurisdictions where there is an ample supply of high-quality liquid assets in their domestic currency. A single fee will apply to all institutions accessing the facility.

APRA is to apply the LCR to the larger ADIs (around 40 in number). It will require them to show that they have taken all reasonable steps towards meeting the

LCR through their own balance sheet management (see below) before relying on the Reserve Bank liquidity facility. The remaining ADIs will generally be exempt from the LCR requirement; these ADIs will continue to be subject to the simpler 'minimum liquid holdings' regime. APRA and the Reserve Bank will undertake a consultation process in 2011 and 2012 on the details of the facility, including the fee. While the LCR will not formally apply until 1 January 2015, there will be an observation period prior to this, during which banks must report to supervisors their overall LCR and information on all the components. Depending on industry feedback, APRA anticipates issuing its revised liquidity standard by end 2012.

The implementation timetable provides ADIs time to prepare for the LCR requirement and to adjust their liquid asset holdings. The LCR involves a test against a liquidity stress scenario lasting for 30 days. Banks could therefore reduce their LCR liquid assets requirement by replacing very short duration (less than 30-day) liabilities with longer-dated liabilities. This reduces the size of the liquid assets portfolio that needs to be held under the scenario (and in Australia's proposed arrangements, the size of the required liquidity facility at the Reserve Bank). As noted in 'The Australian Financial System' chapter, Australian banks have already been extending the term structure of their liabilities in recent years.

Systemically important financial institutions

In November 2010, the G-20 Leaders endorsed the FSB's proposals on reducing the moral hazard posed by systemically important financial institutions (SIFIs). These relate to the 'too big to fail' problem highlighted in the recent crisis, where public sector support was needed to rescue several large globally active financial institutions. The proposals seek to minimise the future need for such support. The G-20 agreed to distinguish between those institutions that are systemically important in a global context – termed global SIFIs (G-SIFIs) – and those that are important only in a domestic context. Given the greater risk they pose to the global financial system, the G-20 agreed that G-SIFIs should: have higher loss absorbency than the new Basel III minimum; be subject to rigorous and co-ordinated risk assessments by international supervisory colleges; and be required to develop international recovery and resolution plans. Countries where G-SIFIs are headquartered should negotiate institution-specific crisis co-operation agreements within cross-border crisis management groups and subject their G-SIFI policy measures to review by a new Peer Review Council of the FSB.

The FSB and national authorities, in consultation with relevant standard-setters, are in the process of determining those institutions to which the G-SIFI recommendations will initially apply. The BCBS has been asked to develop a methodology for the FSB to identify banks that are G-SIFIs. This methodology is still being developed but is likely to draw on key indicators relating to a bank's size, the scale of its cross-border assets and liabilities, interconnectedness (linkages with other institutions in the financial system), substitutability (the extent to which other institutions in the financial system can provide the same services in the event of a failure) and complexity. The BCBS is also considering the merits of measures to enhance the loss absorbency of G-SIFIs, including capital surcharges. The FSB will consider developments in these areas at its meeting in the middle of 2011. As experience is gained over time, the FSB will also review how to extend the SIFI framework to cover a wider group of SIFIs, including financial market infrastructures, insurance companies and other non-bank financial institutions that are not part of a banking group. Also, the International Association of Insurance Supervisors (IAIS) has been asked to develop a methodology for the FSB to identify insurance companies that are G-SIFIs.

The G-20 also endorsed a policy framework to apply to all SIFIs (domestic and global) including

improvements to resolution regimes to make distressed SIFIs easier to resolve, especially through identifying key attributes of such regimes, and more intensive supervisory oversight for SIFIs.

Several countries have begun setting higher prudential requirements for their SIFIs ahead of an agreement being reached by the FSB and BCBS. For example, in Switzerland, legislation currently being proposed would require its two largest banks to hold much higher levels of regulatory capital than required by Basel III in an effort to reduce systemic banking risks in Switzerland. Specifically, it proposed that Credit Suisse and UBS be required to hold total regulatory capital equivalent to 19 per cent of their risk-weighted assets. On top of the Basel III minimum requirement of 4.5 per cent common equity, this total would include a conservation buffer of 8.5 per cent (compared with 2.5 per cent under Basel III) and a 6 per cent 'progressive component' or surcharge. The latter two components would be allowed to include some contingent capital, with conversion triggers at 7 and 5 per cent common equity.

Financial market infrastructure

An area of increasing importance, both globally and for Australia, is the regulation of OTC derivatives markets. At the international level this work has largely been under the auspices of the FSB, but also involves bodies such as the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO). These bodies have been working on how to implement the commitment by the G-20 that all standardised OTC derivative contracts should be centrally cleared by end 2012. The major jurisdictions have begun implementing reforms in their markets, which in turn will shape the markets in which Australian banks operate. Of particular importance is the Dodd-Frank Act in the United States, which requires US-regulated banks to centrally clear all instruments deemed to be clearable from July 2011. Legislation has also been proposed in Europe that would have a similar effect. Such changes, when implemented, will over time change the clearing environment in the United States and Europe, and also globally given the importance of these centres in international financial markets.

The Reserve Bank and the other Australian regulatory agencies have been contributing to international policy discussions regarding OTC derivatives regulation. Discussions have also commenced on possible clearing solutions with industry representatives.

One aspect of the Basel III capital rules relates to counterparty credit risk. The treatment of central counterparties (CCPs) under these rules is yet to be finalised. However, it is already clear that higher capital charges will apply to non-centrally cleared OTC derivatives. This, together with strengthened capital requirements for bilateral OTC derivative exposures, will create strong incentives for banks to move exposures to CCPs. APRA will implement these measures as part of its package of Basel III changes. These measures will need to be taken into account in the Australian response to the G-20 commitment on central clearing.

The CPSS and IOSCO recently issued, for public consultation, new and more demanding international principles for payment, clearing and settlement systems. While these systems, known collectively as financial market infrastructures (FMIs), generally performed well during the crisis, there were lessons to be learnt from that experience as well as over the period following the issuance of similar sets of principles earlier in the decade. Further, more robust and efficient FMIs are important not only to reduce the risk of contagion between highly interconnected financial institutions but also to ensure that they are, overall, better placed to withstand future financial shocks.

The proposals are for a comprehensive set of 24 new principles applying to all systemically important payment systems, central counterparties, central securities depositories, securities settlement

systems, and trade repositories. When finalised, the new principles will replace the three existing sets of standards (for systemically important payment systems, central counterparties and securities settlement systems), and introduce principles for trade repositories for the first time. Compared with the current standards, the new principles introduce more demanding requirements for:

- the financial resources and risk management procedures an FMI uses to cope with the default of participants;
- the mitigation of operational risk; and
- the links and other interdependencies between FMIs through which operational and financial risks can spread.

Combining the range of existing standards into a single set of principles will also provide greater consistency in the oversight and regulation of FMIs globally.

The CPSS and IOSCO have invited comments on the proposals by 29 July 2011, following which final principles will be released in early 2012. It will then be up to national authorities to include the final principles in their legal and regulatory frameworks. Australian agencies are participants in this work via their membership of the CPSS (the Reserve Bank) and IOSCO (Australian Securities and Investments Commission (ASIC)).

Supervisory intensity and effectiveness

The importance of effective supervision was discussed in the September 2010 *Review* in relation to SIFIs, but also applies to banks and regulated institutions more generally. Strong regulations can only be effective if backed up by strong supervision and enforcement. Moreover, supervisors must have the powers to be able to detect problems proactively and intervene early to reduce the impact of potential stresses on individual institutions and therefore on the financial system as a whole.

International bodies such as the FSB and the BCBS, as well as the International Monetary Fund (IMF) and World Bank though their Financial Sector Assessment Program (FSAP), have been examining the area of supervisory intensity and effectiveness. The FSB released a report on this in November, identifying the following actions as being necessary to deliver more effective and intense supervision:[4]

- ensuring that supervisors have unambiguous mandates, sufficient independence and appropriate resources;
- providing supervisors with the full suite of powers necessary for effective early intervention;
- improving supervisory standards to reflect the complexity of financial institutions and the system as a whole; and
- increasing the frequency of assessments of supervisory regimes.

In this context, FSB members, including Australia, are to conduct self-assessments of their banking and insurance supervisory frameworks against the international standards for banking (the BCBS Core Principles) and insurance (the IAIS Core Principles). The self-assessments should identify deficiencies and corrective actions relating to: supervisory mandates and independence; supervisory powers; and comprehensive consolidated supervision. These self-assessments are due to be submitted to the FSB around mid 2011 (for the banking principles) and early 2012 (for the insurance principles); Australia is likely to comply with both sets of principles.

Also, the BCBS, IAIS and IOSCO are tightening their core principles, implementation standards, assessment methodologies and criteria to provide enhanced guidance to supervisors and more support to assessors, including FSAP assessments. The BCBS will report on its work in this area to the FSB by end 2011.

4 Financial Stability Board (2010), *Intensity and Effectiveness of SIFI Supervision: Recommendations for Enhanced Supervision*, November.

Shadow banking

There has been increased focus by national and international authorities on the 'shadow' banking system. This refers to institutions, such as investment banks, structured investment vehicles, money market mutual funds and hedge funds, which are involved in the credit intermediation chain but which are not subject to the same prudential framework as banks. The interest in these institutions is based on two related factors. First, the financial crisis in the United States was propagated in part by institutions in the shadow banking system. This prompted regulators to consider extending the regulatory perimeter to cover firms that proved systemic during the crisis (or that may become systemic in a future crisis). While certain institutions, such as hedge funds, were not especially implicated in the recent crisis, they can be highly leveraged and closely interconnected with the rest of the financial system. As such, they have the potential to amplify and propagate stresses. Second, the tighter regulatory framework for banks and other regulated institutions has the potential to increase the incentives for business to migrate to the less regulated shadow banking system.

Given these concerns, at their November 2010 meeting, the G-20 Leaders requested that the FSB, in collaboration with other international standard-setting bodies, develop recommendations to strengthen the regulation and supervision of the shadow banking system. In response, the FSB is: clarifying the scope of the shadow banking system; developing potential approaches to monitor shadow banking institutions; and developing possible regulatory measures to address the issues posed by shadow banking.

Several countries and the EU have already taken steps to better monitor and/or regulate non-bank institutions, especially hedge funds and credit rating agencies (CRAs). In the United States, the newly established Financial Stability Oversight Council, comprised of key financial sector regulators, recently released a framework to measure the systemic importance of non-bank financial firms. Non-bank institutions identified as systemic will be subject to tougher prudential requirements and required to submit resolution plans.

As discussed in the September 2010 *Review*, while intermediaries outside the core of the financial system exist in Australia, they account for a much smaller share of financing than in some other countries.[5] Nevertheless, the regulatory framework for these institutions has strengthened over the past year or so. In particular, the regulatory coverage of credit products has been expanded to cover investor housing loans, and the operation of the *Corporations Act 2001* has been extended to cover margin lending.

Credit rating agencies

In October 2010, the FSB released principles for reducing reliance on CRA ratings. The background to this work is the view that CRAs, while not a direct cause of the financial crisis, did not adequately alert investors to the high risks posed, in particular, by structured finance products. The aims of the principles are to reduce the potential for ratings to be relied on in a mechanistic way and to remove the implicit 'seal of approval' they provide. The FSB has asked the standard-setters to develop specific policy actions that will be needed to implement the principles. It acknowledges that doing so will take time, given the need for some market participants to build risk-management capabilities. The Australian authorities support the general principle of reducing reliance on ratings for structured credit products, but consider that rating agencies provide a useful service for corporate and financial institution ratings. Smaller, less-sophisticated institutions should not be forced to rely on internal credit assessments alone, given the resources that would require.

5 Reserve Bank of Australia (2010), Box B: 'The Shadow Banking System in Australia', *Financial Stability Review*, September.

Separately, there have also been developments at the country level. In February 2011, IOSCO reviewed the regulatory programs for CRAs in Australia, the EU, Japan, Mexico and the United States. The focus was on assessing recent developments against IOSCO's principles in the areas of:

- quality and integrity of the rating process;
- independence and conflicts of interest;
- transparency and timeliness of ratings; and
- measures for dealing with confidential information.

The IOSCO review found that while the structure and specific provisions of regulatory programs across the five jurisdictions differ, the principles are embedded in each of the programs.

FSB review process

The FSB is currently undertaking a country peer review of the Australian financial sector. The review is part of a program the FSB has for examining all of its members' financial sectors over the next couple of years. The review of Australia is focusing on two issues: Australia's follow-up to relevant recommendations from the IMF FSAP that was undertaken in 2006; and features of the Australian financial landscape that supported our relatively strong performance during the global financial crisis. The Reserve Bank has contributed material to help inform the review, along with other Australian regulatory agencies. The results of the review will likely be published in the second half of 2011.

The FSB has also continued its program of thematic reviews, which aim to strengthen adherence to international standards in particular areas. Thematic reviews on risk disclosure practices of financial institutions and mortgage underwriting and origination practices have recently been published. A follow-up review on compensation practices is underway to assess country progress since the 2010 review. A review on deposit insurance is also planned for later this year. Reserve Bank staff were part of the expert team reviewing mortgage underwriting and origination practices.

Other Domestic Developments

In December 2010, as part of a package of measures affecting the financial system, the Government announced its intention to amend the *Banking Act 1959* to allow ADIs to issue covered bonds, which are debt instruments that are backed by a segregated pool of high-quality assets. As discussed in 'Box A: Covered Bonds', holders of covered bonds have dual recourse, with a preferential claim on the cover pool assets and a non-preferential claim on any residual assets of the issuer. Preliminary consultation with industry on a regulatory framework for issuance of covered bonds in Australia has begun, with exposure draft legislation due to be released shortly.

ADIs have to date not been permitted to issue covered bonds because this would conflict with the depositor preference provisions of the Banking Act. The Government therefore intends to amend the Act to give covered bondholders a priority claim over the cover pool assets, thereby to that extent pushing depositors and unsecured creditors down the queue in the event of a wind-up of an ADI. Given these implications, the Government announced that there would be a consultation process on an appropriate level of a cap to be placed on covered bond issuance by institutions. Partly to alleviate concerns about the potential impact of covered bonds on depositors, the Government also confirmed in December that the Financial Claims Scheme (FCS) would become permanent.

Work of the Council of Financial Regulators

The Council of Financial Regulators (the Council) continues to monitor international financial sector developments and their relevance for Australia. Recently, the Council considered Australia's position

on some of the developments outlined above, as well as issues around bank funding and competition, some of which were taken up in the Government's December package. The Council has an ongoing program of work reviewing issues related to the FCS and will continue to work with the Government, particularly on those aspects that are due to expire in October 2011. The Council also continues to review Australia's financial crisis management arrangements to ensure they take account of international experiences and developments.

Improving disclosure for retail investors

ASIC is continuing its work on improving financial product disclosure for retail investors and allowing for more straightforward comparisons between products and business models. Two consultative processes have recently commenced, one relating to disclosure requirements for hedge funds and another for over-the-counter contracts for difference (CFDs).

For hedge funds, the proposal involves the introduction of disclosure principles and benchmarks that set out the specific characteristics of the fund that should be addressed in the Product Disclosure Statement (PDS). This includes information on fund structure, investment strategies and the use of short selling. It is also proposed that periodic reporting of information (such as funds under management and investment returns) be a benchmark disclosure in the PDS. The proposals for over-the-counter CFDs also involve a benchmark-based disclosure model as well as guidelines on advertising for these instruments. Under both the hedge fund and CFD proposals, issuers would be required to report on a 'comply or explain' basis how they meet the benchmarks.