

Financial Stability Review

MARCH 2010

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Reserve Bank

The material in this *Financial Stability Review* was finalised on 24 March 2010.

The *Financial Stability Review* is published semi-annually in March and September.
It is available on the Reserve Bank's website (www.rba.gov.au).

The *Review* uses data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey, which was initiated and is funded by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this publication should not be attributed to either FaHCSIA or the Melbourne Institute. For copyright and disclaimer notices relating to data in the *Review* see the Bank's website.

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ISSN 1449-3896 (Print)
ISSN 1449-5260 (Online)

Overview

The period since the last *Financial Stability Review* has seen further recovery in the global financial system from the extreme dislocation experienced in late 2008 and early 2009. Prospects for growth of the world economy have picked up, and conditions in a number of asset markets have improved, though performance has varied widely across countries. The improved environment has enabled a number of countries to wind back some of the extraordinary support measures that were put in place at the height of the crisis. However, significant challenges and uncertainties for the global financial system remain.

Confidence in financial markets has recently been affected by concerns about sovereign credit risk, particularly in Europe. Nonetheless, over the past six months, risk pricing in financial markets has generally moderated, and bank funding conditions have improved.

In the large advanced economies, the major banks have broadly returned to a position of modest profitability after a period of significant losses. The recent pick-up in bank profitability has owed significantly to the passing of one-off securities write-downs which were concentrated mainly in 2008. However, losses arising from banks' on-balance sheet lending remain high, and are likely to weigh on profits for some time. This is contributing to tight credit supply, and the interaction between conditions in the financial and real sectors in these economies remains an area of ongoing risk.

In contrast, conditions in the Asian region (outside Japan) are much more buoyant. The effects of the global crisis on financial sectors in the region were less severe than in the North Atlantic countries, and confidence across the region has been recovering as economic growth has picked up. There has been a marked turnaround in capital flows to the region, and attention in a number of these economies is now focused on rising inflationary pressures. In China and India this situation has prompted recent measures to tighten monetary conditions.

The Australian financial system remained resilient through the crisis period and, in aggregate, banks experienced only a relatively shallow downturn in underlying profits. The quality of banks' housing loan portfolios has proven to be very high by international standards, notwithstanding a modest increase in loan arrears. There has been a more significant deterioration in the quality of banks' business loan portfolios, particularly for commercial property, and this remains an area to watch closely in the period ahead. Nonetheless, recent indications are that banks' overall loan losses may have peaked and that profits have again begun to increase. While the regional and foreign-owned banks experienced a somewhat larger deterioration in performance during the downturn than did the majors, the more recent improvement has been broadly based across all categories of banks.

Funding conditions for Australian banking institutions have continued to improve since the time of the last *Review*. Demand for new issuance of residential mortgage-backed securities has

been strengthening, and this should assist smaller lenders in funding their loans in the period ahead. Spreads in wholesale markets more generally have narrowed further, though they remain higher than pre-crisis levels. Banks have experienced improved access to offshore funding markets, and the general narrowing of risk spreads has increased the relative attractiveness of issuing in the unguaranteed market. As a result, the banks had substantially reduced their use of the wholesale funding guarantee by early 2010.

In these circumstances, the Government announced in February that the guarantee scheme would be closed to new issuance after 31 March 2010, acting on advice from the Council of Financial Regulators that the scheme was no longer needed. A number of other countries including the United States, France and the United Kingdom have also moved recently to close their wholesale guarantee schemes. Given that Australian banks had already wound back their issuance of guaranteed liabilities in response to movements in market pricing, the removal of the wholesale guarantee is not expected to have a material impact on their overall funding costs.

The household and business sectors in Australia are benefitting from improved economic conditions. Household incomes have continued to grow solidly over the past couple of years, partly reflecting the impact of policy measures taken during the economic slowdown and, more recently, stronger employment growth. While households have generally been more cautious in their borrowing behaviour than in the pre-crisis period, their demand for housing credit strengthened noticeably during 2009, and this has been associated with stronger growth in housing prices. In recent months, however, higher interest rates appear to have had a dampening effect on housing finance. Unlike households, Australian businesses have undertaken significant deleveraging over the past couple of years. This has been partly

induced by tighter credit supply conditions, but has also reflected efforts by businesses to strengthen their balance sheets by raising additional equity and reducing debt. There are signs that this deleveraging process may now be drawing to a close, with business credit having begun to stabilise over recent months and indications that credit supply conditions for the business sector are becoming less restrictive.

Overall, the domestic financial and non-financial sectors have performed relatively well over the past couple of years during what has been an extremely difficult period internationally. With the world economy now recovering, financial risks appear to be abating. Nevertheless, market sentiment in the major advanced economies remains fragile, and vulnerable to the possibility that further bad news could trigger a renewed heightening of risk aversion. The situation in the Asian region is very different, with the main risks at present being those associated not with risk aversion, but with rapid credit growth and rising asset prices.

Considerable work is underway within various international bodies, including the G-20, the Financial Stability Board, and the Basel Committee on Banking Supervision (BCBS), to review the financial regulatory structure in light of the lessons from recent experience. The key elements of proposed reforms include measures to strengthen bank capital and liquidity requirements and to improve accounting standards, along with a range of other measures aimed at reducing systemic risk. The BCBS is currently conducting an extensive quantitative impact study of the main proposals and is due to finalise its revised capital and liquidity standards by the end of the year. Australia is an active participant in these international bodies, and the Reserve Bank is co-ordinating closely with other domestic agencies in considering Australia's response to these international regulatory developments. ❖

The Global Financial Environment

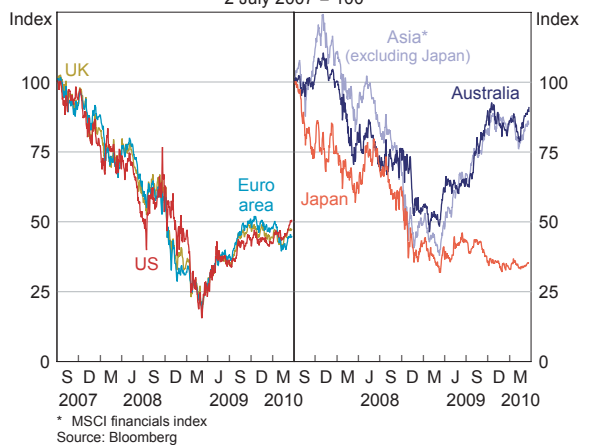
Sentiment towards banks has improved markedly since the turmoil of late 2008 and early 2009. While market-based indicators of risk in the financial sector generally remain above pre-crisis levels, many banking systems have returned to profitability, and capital and funding positions have been bolstered. Public sector support arrangements for the financial sector have been wound back in a number of countries.

Confidence, however, remains fragile. A particular concern, focused on Europe, is the effect of the build-up in government debt on sovereign credit risk and the potential for contagion to other funding markets. More generally, investors are wary about the resilience of economic and financial conditions to the withdrawal of the extraordinary stimulus policies that supported the recovery. An ongoing concern is the interplay between the financial sector and the real economy, as in many countries credit supply remains tight and loan losses continue to weigh on bank profits.

Profitability and Capital

Confidence in the global banking system over the past six months has been relatively steady overall, when compared with the swings between panic and relief seen in the preceding twelve months. The sharp recovery in many bank share prices between March and September 2009 has been broadly maintained in most countries, with Japanese banks an exception (Graph 1). There remains large dispersion by region, consistent with differing macroeconomic outcomes. In the United States, the euro area, the United Kingdom and Japan, banking

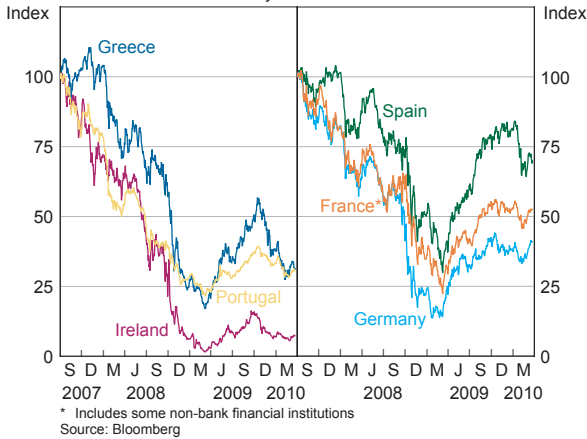
Graph 1
Banks' Share Prices
2 July 2007 = 100



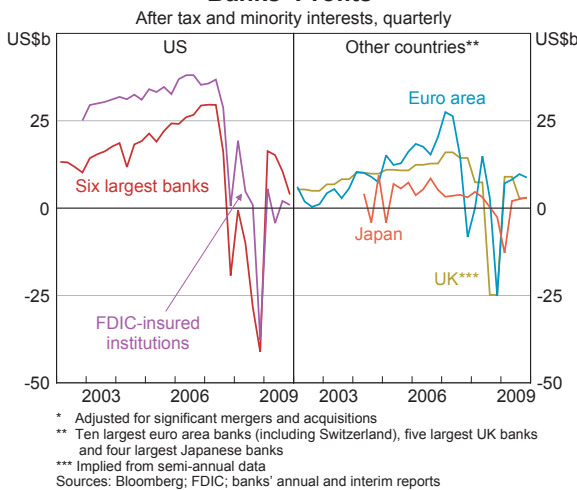
sector share price indices are 50 per cent or more below mid-2007 levels, whereas in Australia and Asia (excluding Japan) prices are less than 20 per cent below. Japanese bank share prices have also been relatively more affected by investor concerns about the possible impact of regulatory changes aimed at increasing the quality of bank capital.

The softer tone evident in recent months for some euro area bank share prices has reflected concerns in sovereign debt markets in some parts of Europe, particularly Greece (Graph 2). A large near-term debt refinancing need has focused attention on the size of Greek fiscal debt, and this in turn has affected confidence in the stability of the euro, and in some European debt markets (discussed further below in the section on wholesale funding markets and credit). European banks have the greatest exposures to Greece, although these are generally a small share of their overall assets.

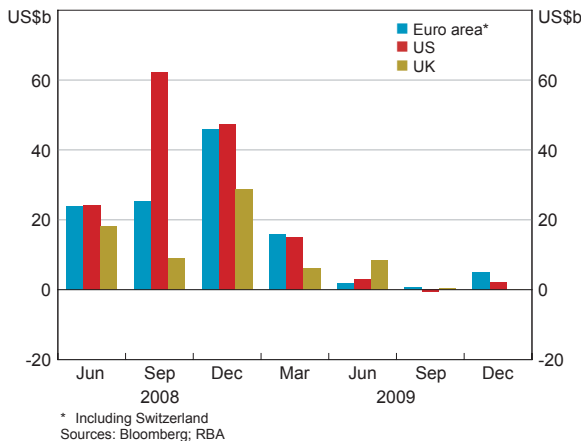
Graph 2
Euro Area Banks' Share Prices
2 July 2007 = 100



Graph 3
Banks' Profits*



Graph 4
Banks' Securities Write-downs



The broad recovery in sentiment towards banking systems in most major countries since early 2009 has reflected their general return to profitability. For a sample of large banks in the United States, euro area, the United Kingdom and Japan, aggregate profits have been recorded recently, after heavy prior losses (Graph 3). Nonetheless, the latest profit results are generally modest by the standards of preceding years and within these samples some banks continued to report losses. Industry-wide data from the United States show that larger banks have recently tended to perform better than their smaller counterparts. The level of profits for all Federal Deposit Insurance Corporation (FDIC) insured institutions was barely positive over 2009; around one third of institutions were unprofitable in the December quarter and 78 failed in the six months to end February 2010, compared to 68 over the preceding six months.

Bank profits, particularly for larger banks, have been supported by easier financial conditions. Interest margins have generally increased since 2008 for larger banks, consistent with historically steep yield curves in the major markets, better funding conditions and banks being able to charge higher risk premiums for loans. For the typically larger banks with investment banking operations, market conditions have aided profits in 2009 with high volatility boosting trading returns and widening bid-ask spreads, and a pick-up in underwriting income coming from debt and equity raising activity. The firmer tone in securities markets has helped to limit securities write-downs, following those of 2008 that were so damaging for the larger banks (Graph 4).

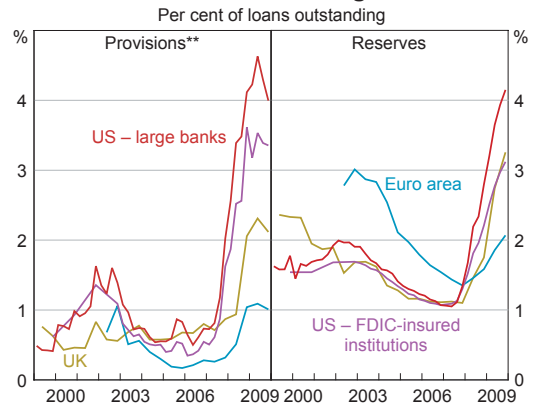
Economic conditions, however, continue to weigh on bank performance through the lagged effect on loan-loss provisions (Graph 5). In the United States, provisions amount to over 3 per cent of loans, more than double the level seen in the early 1990s. Nonetheless, this measure has shown signs of stabilisation in recent quarters, and in the other major markets the trajectory of the rise has flattened

in the most recent data. Bankers and regulators alike have been reluctant to predict the future drag on profits from provisions: that will ultimately depend on outcomes for the economy and asset prices, the quality of prior lending decisions, and the adequacy of reserves already built up. Reserves for a sample of large European banks are notably lower than their counterparts in the United States and the United Kingdom; that said, European property markets have generally not suffered the same price falls seen in these countries, and the rise in unemployment has generally been less pronounced (as discussed below in the section on loan quality and asset prices).

While it was the larger banks that were mainly affected by securities losses, poor loan performance is a greater concern for the smaller banks. In the United States, small-to-medium sized banks, which together account for a little under half of the assets of US banks, have around 10 to 15 percentage points more of their assets in loans than larger banks (Graph 6). They also have a higher concentration in loans linked to real estate, particularly commercial property, where conditions remain very difficult.

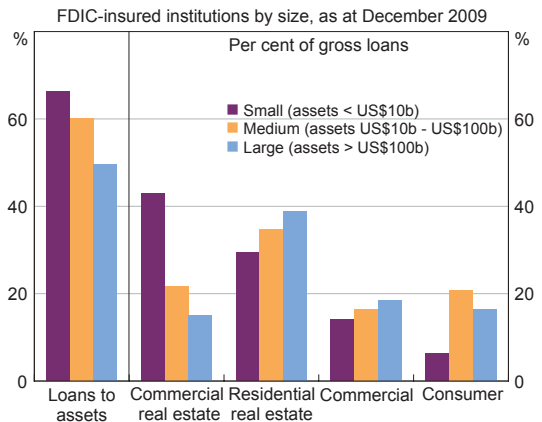
Banks are continuing to strengthen their balance sheets by raising capital, restraining dividends and selling non-core assets. The need for government capital has diminished, as private markets have become more willing to participate in equity raisings and, in a number of cases, government capital support arrangements have been withdrawn (Graph 7). Under the US TARP, of the US\$200 billion used under the Capital Purchase Program, over US\$130 billion has been repaid, though mostly by the largest institutions; some smaller banks were still applying for capital injections up until the closing date in late 2009. In Europe, a number of large financial institutions have also repaid their government capital injections. A number of institutions in Europe have issued, or announced an intention to issue, contingent capital securities, instruments designed to top-up an

Graph 5
Banks' Loan Loss Provisions and Reserves*



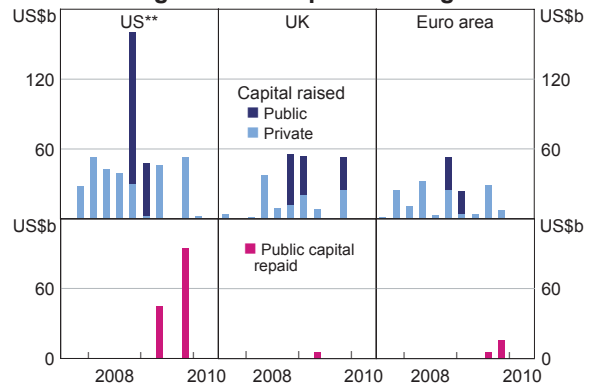
* Six largest US banks, five largest UK banks and six largest euro area banks (including Switzerland) for which data are available; adjusted for significant mergers and acquisitions
** Annualised values of quarterly (US, FDIC and Europe) or semi-annual (UK) provisions; not seasonally adjusted
Sources: Bloomberg; FDIC; banks' annual and interim reports

Graph 6
US Banks' Loans



Source: FDIC

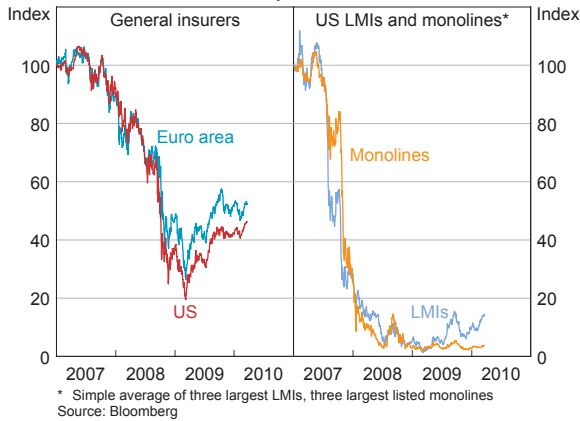
Graph 7
Large Banks' Capital Raisings*



* Six largest US banks, five largest UK banks and ten largest euro area banks (including Switzerland); adjusted for significant mergers and acquisitions
** March quarter 2010 is quarter to date
Sources: Bloomberg; US Treasury; banks' annual and interim reports and press releases

Graph 8
Insurers' Share Prices

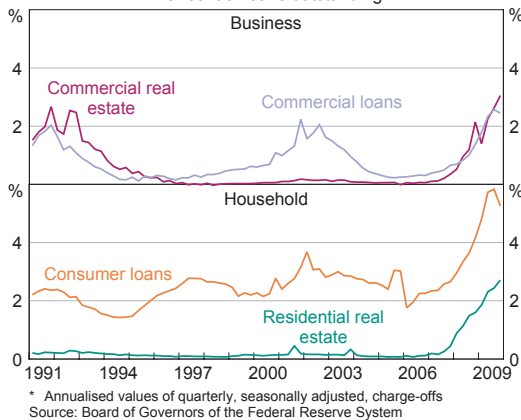
1 January 2007 = 100



Graph 9

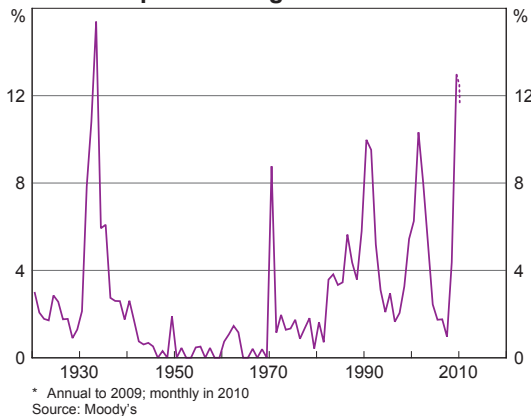
US Commercial Banks' Loan Charge-offs*

Per cent of loans outstanding



Graph 10

Global Speculative-grade Default Rate*



institution's capital ratio should it breach a pre-set trigger point.

Profits of large general insurers in the US and the euro area have shown a similar pattern to banks, returning to modest profitability in 2009 after large asset-related losses in 2008. Share price movements for these insurers have also mirrored the general trend for banks, remaining relatively steady for the past six months after the strong recovery from early 2009 (Graph 8). Reinsurers' profitability has also risen, with increased underwriting as primary insurers look to lower their risk profile. A number of areas in the insurance industry, however, remain severely weakened. US lenders' mortgage insurers (LMIs) generally continued to report losses in 2009, weighed down by claims arising from mortgage defaults and low rates of new business. Large monoline insurers also generally recorded losses over 2009, reflecting their exposures to US residential mortgage-backed securities and related collateralised debt obligations.

Loan Quality and Asset Prices

Loan quality remains a concern in many major economies, given the depth of the downturn in activity and asset prices, questions over the strength and durability of the recovery, and the usual lags between economic downturns and problem loans. In contrast, for many – particularly emerging – countries, concerns are more focused on buoyant asset markets and their possible implications for future loan quality.

In the United States, a feature of the recent cycle has been the broad-based deterioration in loan quality. The rise in charge-offs for business loans has been similar to recent downturns, but charge-offs for household loans are well above the peaks of the past 20 years (Graph 9). In the December quarter 2009, charge-offs on loans for real estate – both commercial and residential – increased further. In the euro area and United Kingdom, loan losses also increased over 2009, mostly reflecting business loans (including commercial property).

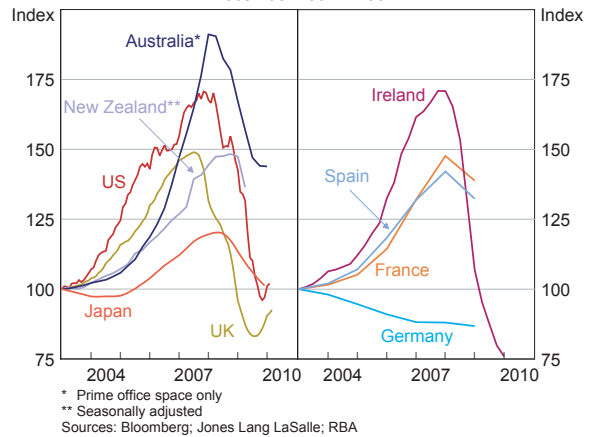
An indication of the pressure on business loan exposures is that, in late 2009, the global default rate on corporate speculative-grade debt rose above the peaks of recent downturns, to reach its highest level since the 1930s (Graph 10). A feature of many recent corporate defaults has been low recovery rates for creditors, partly reflecting the easy terms on which the debt had been made available (see *Box A: Global Recovery Rates on Corporate Defaults*). Nonetheless, there are some early signs that the default rate may have peaked, reflecting the general improvement in macroeconomic and financial conditions.

The quality of commercial property loans in a number of countries continues to be affected by large falls in collateral values. Commercial property prices in the United States and the United Kingdom are around 40 per cent below their peaks, reflecting high vacancy rates and difficult financing conditions (Graph 11). These declines are much steeper than in large euro area countries. The most recent commercial property price data available point to some early signs of recovery: in the United States, prices have risen by 6 per cent over the three months to January 2010, and in the United Kingdom prices have risen by 11 per cent since the trough.

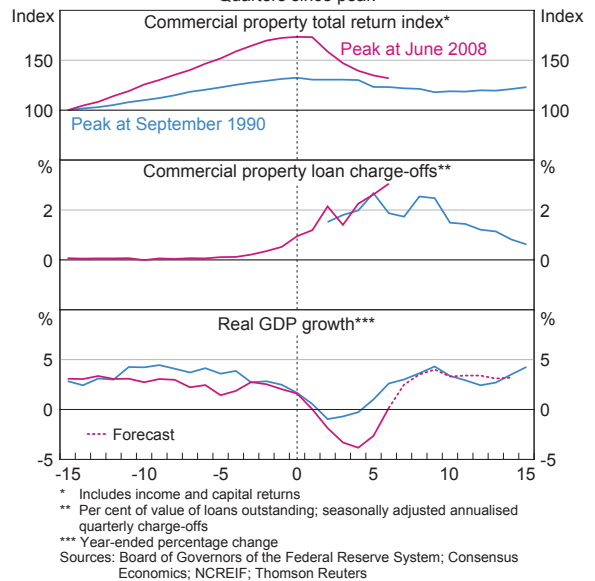
Price falls of the magnitude seen over the past couple of years are likely to continue to underpin write-offs in the period ahead. In the United States, in the previous cycle in the 1990s, commercial property charge-offs remained high for a number of years after the peak in prices. In the current cycle, charge-offs are already above the previous peak, and the current cycle in commercial property prices and GDP growth is more severe (Graph 12).

The quality of residential real estate loans also remains under pressure, particularly in the United States. Despite residential real estate write-offs already being historically high in the United States, the share of non-performing housing loans on US bank balance sheets rose further in December 2009, to 8 per cent, well above

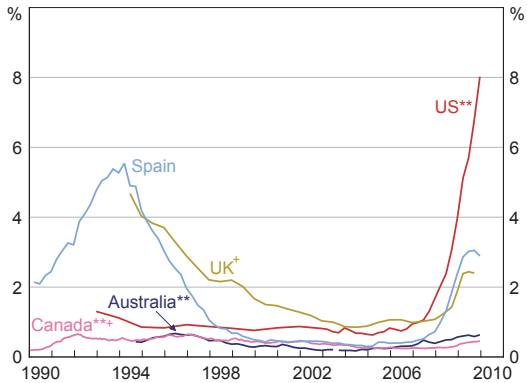
Graph 11
Commercial Property Prices
December 2002 = 100



Graph 12
US Commercial Property
Quarters since peak

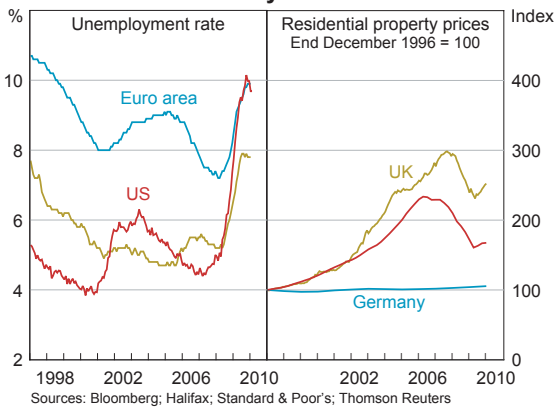


Graph 13
Non-performing Housing Loans
 Per cent of loans*



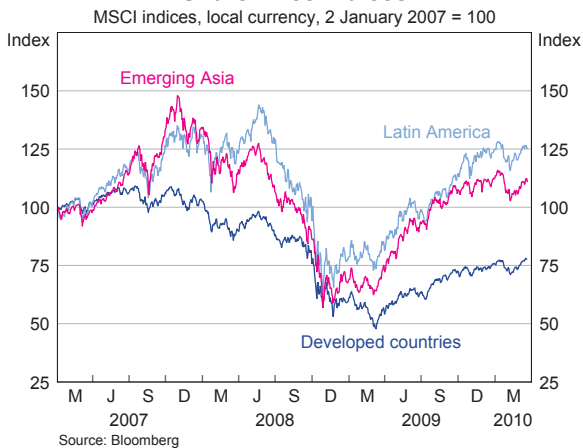
* Per cent of loans by value. Includes 'impaired' loans unless otherwise stated. For Australia, only includes loans 90+ days in arrears prior to September 2003.
 ** Banks only.
 + Per cent of loans by number that are 90+ days in arrears.
 Sources: APRA; Bank of Spain; Canadian Bankers' Association; Council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

Graph 14
Loan Quality Indicators



Sources: Bloomberg; Halifax; Standard & Poor's; Thomson Reuters

Graph 15
Share Price Indices



Source: Bloomberg

comparable data for other countries (Graph 13). The US Government and lenders have attempted to assist households in payment arrears by establishing programs under which loan terms can be amended, but many participants have subsequently lapsed back into arrears. Loan quality remains particularly poor on sub-prime mortgages, with around one quarter of such mortgages more than 30 days in arrears, but prime loans, whether on lenders' balance sheets or securitised, are also showing historically high arrears rates. Non-performing loans are also high in the United Kingdom and Spain, though there are some signs of stabilisation in the most recent observations.

Differences in housing loan quality across countries have been influenced by labour market conditions and housing prices, although earlier variations in lending standards have also played a crucial role. Of the major economies, the United States has had both the sharpest rise in unemployment rates (currently around 5 percentage points above the trough) and the steepest fall in house prices (currently almost 30 per cent below the peak on one measure) (Graph 14). In recent months there have been some modest improvements in these drivers of housing loan quality in a number of countries. Unemployment is off the October 2009 peak in the United States and, by late 2009, house prices in the United States and the United Kingdom had risen by 4 and 9 per cent respectively from their troughs.

While large asset price declines are a current concern in a number of countries, in others the focus is on the potential for buoyant asset markets to be a cause of future problems. This reflects the wide variation in macroeconomic conditions, and the accommodating financial conditions that generally continue to prevail, even in countries where growth has been robust.

These concerns are relevant for a number of emerging countries. One indication of the shift in financial conditions they have experienced is the sharp turnaround in capital flows: net portfolio inflows to emerging markets were around US\$70 billion in 2009 compared with net outflows of around US\$60 billion in 2008. Consistent with this, share price indices in

emerging Asia and Latin America have risen strongly, and significantly outperformed those in developed countries (Graph 15). In China, credit growth in the year to February 2010 was above average at 27 per cent, though it has slowed in recent months. The People's Bank of China has raised the reserve requirement ratio for large banks on two occasions early in 2010, noting expectations of higher inflation.

Concerns about buoyant financial conditions have not, however, been restricted to emerging countries: a number of industrialised countries have announced measures prompted by concerns about housing market developments. In February 2010, the Canadian Government announced new restrictions, including a reduction in loan-to-valuation ratios (LVRs), for some types of residential mortgages to be eligible for insurance by the government-owned mortgage insurer. Also in February, the Swedish financial regulator recommended limiting LVRs on new mortgage lending.

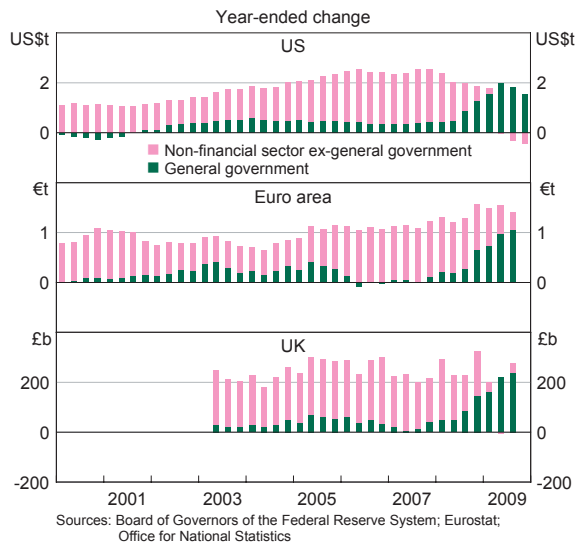
Wholesale Funding Markets and Credit

The recovery in economies and financial markets has received significant assistance from policy actions to stimulate economies and support financial sectors. One indication of the marked easing in fiscal policy is that, over the past year, while households and businesses in the United States, the euro area and the United Kingdom have largely stopped borrowing in net terms, the effect of this on the flow of new debt has been broadly offset by increased borrowing by governments (Graph 16).

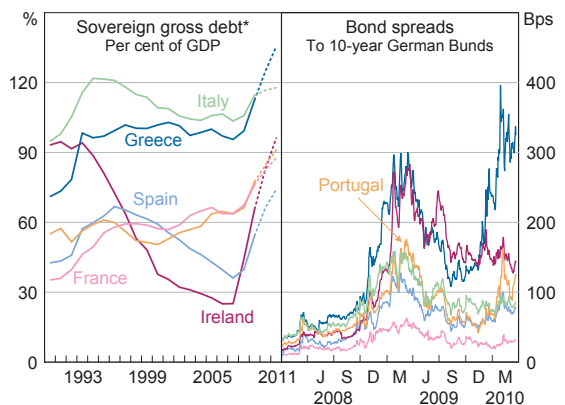
The degree of fiscal expansion raises broad questions about the resilience of economies to its eventual withdrawal, and the potential for longer-term crowding out of private sector borrowing if government deficits remain high. For some investors, a more immediate concern in recent months has been the sustainability of public finances for some countries. That these concerns are particularly focused on Greece reflects that it

has a high ratio of public debt to GDP, a large budget deficit, and that it needs to roll-over a large amount of debt this year, with a significant amount falling due in April and May. There have also been some doubts about the accuracy of government finance figures. The heightened concern of investors has been reflected in wider spreads on Greek sovereign bonds, though yields are still low in absolute terms. Recently these spreads have narrowed somewhat from their peak, following announced actions by the Greek Government to improve its finances, and speculation about European Union financial support (Graph 17).

Graph 16
Domestic Non-financial Debt Flows



Graph 17
Euro Area Government Debt Indicators



This environment presents a difficult challenge for policymakers. In the euro area, policy flexibility for any individual country to handle fiscal adjustment is limited by the common currency and there is unease that the strains associated with Greece could flow onto other countries in the euro area with high debt and also to the euro itself. Such contagion is the broader financial stability concern, as the amounts involved with Greece are not large in a global context: foreign banking sector claims on Greece typically amount to less than 1 per cent of their total assets, with the bulk of funds sourced from European banks (Table 1). European banks are also the main funders of other European countries where government debt levels have been a recent market focus.

Another policy-related consideration for financial markets is the potential effect of the eventual withdrawal of the current, very accommodative, monetary policy stance. While the major central banks have flagged that low interest rates will be maintained for some time, recent significant central bank net purchases of securities under quantitative easing policies are drawing to a close; the Bank of England has already achieved its target level of purchases and the US Federal Reserve has flagged that it will achieve its target by the end of March 2010. Central bank balance sheets in the United States, euro area and the United Kingdom remain significantly larger than their pre-crisis levels, though some liquidity support measures have already been wound back

Table 1: Foreign Bank Claims on Euro Area Countries^(a)
Ultimate risk basis, as at 30 September 2009, per cent of lending country's total bank assets^(b)

Reporting banks (by headquarter location)	Greece	Ireland	Italy	Portugal	Spain	Subtotal	Euro area
Euro area banks	0.4	0.8	2.1	0.5	1.5	5.3	12.4
<i>of which:</i>							
<i>German</i>	<i>0.4</i>	<i>1.8</i>	<i>1.9</i>	<i>0.4</i>	<i>2.2</i>	<i>6.7</i>	<i>13.4</i>
<i>French</i>	<i>0.7</i>	<i>0.6</i>	<i>4.3</i>	<i>0.3</i>	<i>1.6</i>	<i>7.6</i>	<i>13.8</i>
<i>Dutch</i>	<i>0.4</i>	<i>1.0</i>	<i>2.3</i>	<i>0.4</i>	<i>3.9</i>	<i>8.0</i>	<i>22.6</i>
<i>Belgian</i>	<i>0.5</i>	<i>2.5</i>	<i>3.1</i>	<i>0.7</i>	<i>2.8</i>	<i>9.5</i>	<i>27.0</i>
<i>Spanish</i>	<i>0.0</i>	<i>0.3</i>	<i>1.0</i>	<i>1.7</i>	<i>–</i>	<i>3.1</i>	<i>6.2</i>
<i>Portuguese</i>	<i>1.4</i>	<i>0.7</i>	<i>0.8</i>	<i>–</i>	<i>4.1</i>	<i>6.9</i>	<i>11.7</i>
Swiss banks	2.6	0.6	0.9	0.1	0.6	4.9	16.2
UK banks	0.1	1.8	0.8	0.2	1.1	4.0	10.2
US banks	0.1	0.4	0.4	0.0	0.4	1.3	4.3
Japanese banks	0.1	0.2	0.6	0.0	0.3	1.2	5.6
Australian banks	0.0	0.1	0.5	0.0	0.1	0.7	2.2

(a) Based on 24 countries reporting to the BIS

(b) Monetary financial institutions used as a proxy for total bank assets for countries in the euro area

Sources: BIS; RBA; Thomson Reuters; central banks

(Graph 18). The US Federal Reserve has developed a range of tools to assist in the process of removing policy accommodation, including establishing the ability to pay interest on bank reserves, engage in reverse repurchase agreements and offer term deposits.

Bank funding markets in the major countries have generally been resilient to the recent focus on sovereign risk. Over the past six months, spreads have fallen further in all major short-term interbank funding markets, and spreads on long-term bank debt have also narrowed (Graph 19). These developments have encouraged banks to make use of normal funding arrangements, and to reduce their use of government support measures, such as central bank liquidity support and government guarantees on bank debt.

Reflecting the better conditions, a number of countries have closed – or announced an imminent closure of – their bank wholesale funding guarantee schemes to new borrowing (Table 2).

Table 2: Announced Final Date for Guaranteed Issuance^(a)

Country	Date
United States	31-Oct-09
Canada	31-Dec-09
France	31-Dec-09
Korea	31-Dec-09
United Kingdom	28-Feb-10
Australia	31-Mar-10
New Zealand	30-Apr-10
Sweden	30-Apr-10
Ireland ^(b)	01-Jun-10
Denmark ^(b)	30-Jun-10
Finland	30-Jun-10
Germany ^(b)	30-Jun-10
Netherlands	30-Jun-10
Spain ^(c)	Jun-10
Belgium	31-Oct-10

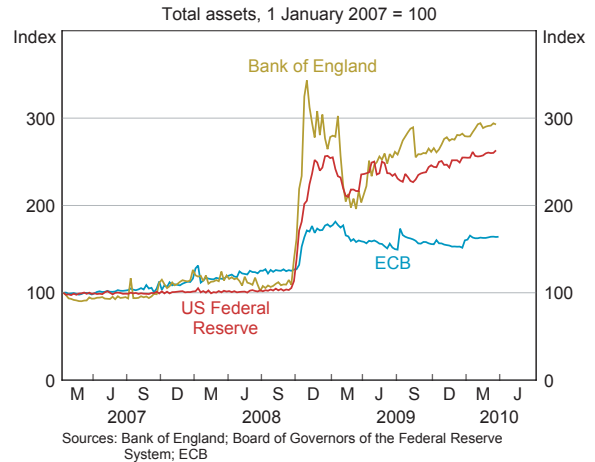
(a) Selected countries.

(b) Legislation for schemes in Denmark and Germany set until 31 December 2010 and in Ireland until 29 September 2010, but EC approval required for further extensions every six months.

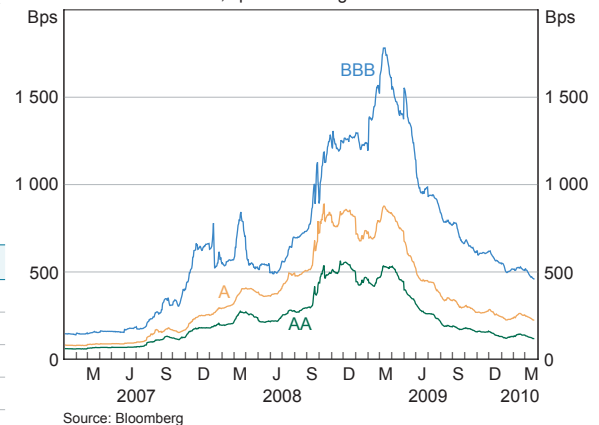
(c) Exact final date unconfirmed.

Sources: BIS; central banks; debt management offices and guarantee administrators; treasury departments.

**Graph 18
Central Banks' Balance Sheets**

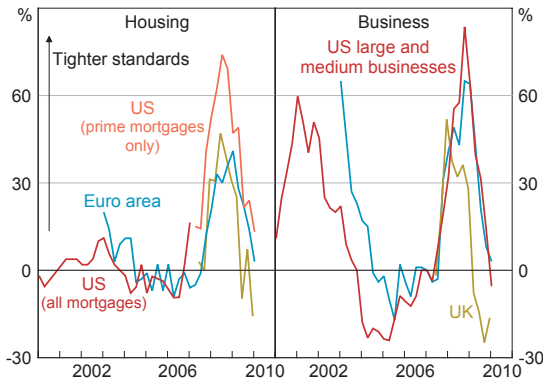


**Graph 19
US Banks' Bond Spreads**
All maturities, spread to US government bonds



In contrast, in December 2009 a number of countries in Europe gained European Commission approval to extend their schemes past the previously announced closure date. Around this time, the ECB noted that many European banks have a significant amount of debt maturities in the next two years and that, at least for some institutions, the improved outlook may remain partly reliant on existing support arrangements. Other support arrangements for European bank funding also remain in place, such as the ECB's covered bond purchase program under which the ECB has purchased over €40 billion of the €60 billion allocated towards the program.

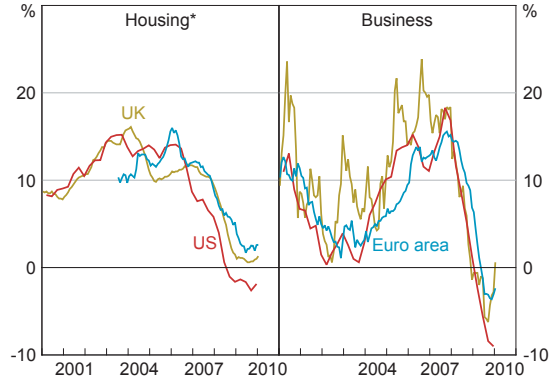
Graph 20
Credit Standards*



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

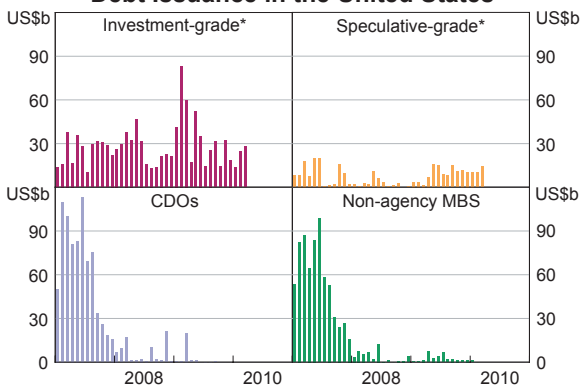
Graph 21
Intermediated Credit Growth

Six-month-ended annualised percentage change, seasonally adjusted



* Euro area data adjusted by the RBA for securitisations
Sources: Bank of England; Board of Governors of the Federal Reserve System; ECB; RBA

Graph 22
Debt Issuance in the United States



* Non-financial corporate issuance; March 2010 is month to date
Sources: JPMorgan; SIFMA; Thomson Reuters

Despite funding conditions for banks having improved significantly since the crisis, banks in the major advanced countries remain cautious and credit supply weak. Loan officer surveys generally show that credit standards remain tight in the major countries although they have eased somewhat in recent months (Graph 20).

But these surveys also show that credit demand is subdued, particularly among businesses, reflecting their desire to reduce leverage, access to alternative sources of funding and reduced ability to borrow given the weakness in collateral values.

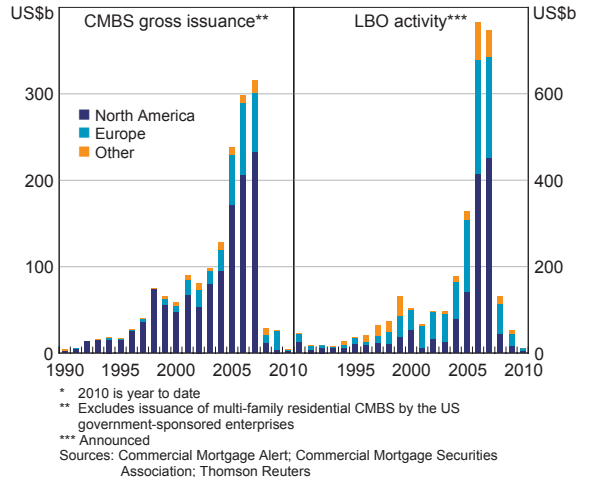
Reflecting these demand and supply conditions, business credit growth remained negative over the six months to December 2009 in the United States, the euro area and the United Kingdom, although the pace of contraction appears to be slowing (Graph 21). Housing credit growth has not fallen as sharply, but it remains quite weak. In the United States, housing credit declined over the six months to December although, as in the euro area and the United Kingdom, the downturn in housing finance appears to be stabilising.

Capital market funding, an alternative to bank credit for larger corporate borrowers, also remains relatively subdued. Investment-grade corporate bond issuance remains at levels similar to mid 2009 (Graph 22). Speculative-grade debt issuance has been reasonably solid over 2009, though this appears to have been primarily for refinancing purposes. Issuance of more complex structured credit products such as collateralised debt obligations (CDOs), non-agency mortgage-backed securities (MBS) and commercial MBS (CMBS) remains negligible and generally only possible where there is official-sector support. Debt to finance riskier transactions such as leveraged buy-outs (LBOs) remains difficult to obtain, although merger and acquisition activity is showing signs of picking up (Graph 23).

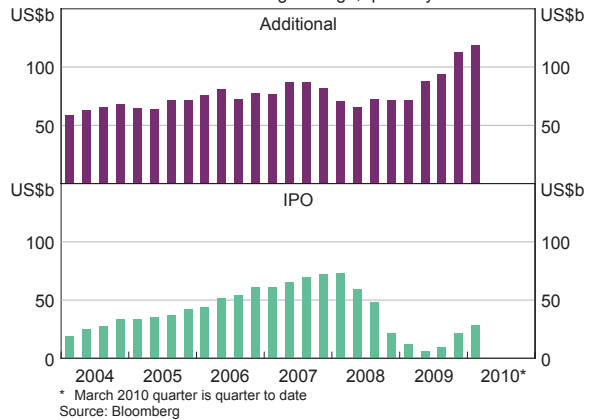
In contrast to subdued borrowing, corporates have been actively raising equity, particularly in the second half of 2009 (Graph 24). The pick-up in equity issuance has been primarily undertaken by existing firms, with initial public offerings (IPOs) still relatively subdued, though recovering. Much of the equity raised by firms has been used to pay back debt or otherwise bolster balance sheets.

Overall, the actions of banks, businesses and households are all consistent with a gradual improvement in financial conditions overlaid with an ongoing cautious approach to risk in the wake of the financial crisis. This aversion to debt is hardly surprising, given the shocks they have experienced to the terms and availability of funding, to cashflows available to service debt, and to asset values. Moreover, there are considerable challenges ahead, as the exit from highly stimulatory fiscal and monetary policies, and the attendant impact on growth, inflation, government finances and funding markets will need to be carefully managed.

Graph 23
Global Market Activity*
Annual



Graph 24
Global Equity Issuance
12-month rolling average, quarterly

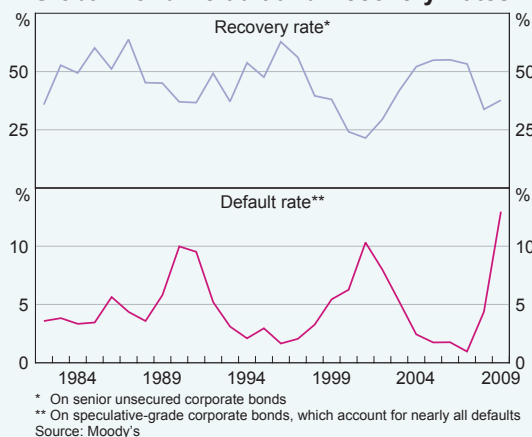


Box A

Global Recovery Rates on Corporate Defaults

Recovery rates on defaulted bonds are naturally cyclical. When defaults are at their highest, recovery rates tend to be lower, because the market for the bankrupt firms' assets is typically relatively weak at such times, and potential purchasers may themselves have limited financial resources or be unable to access capital (Graph A1). In the most recent global cycle, when the average default rate for lower-rated firms reached 13 per cent in 2009, the average recovery rate on senior unsecured bonds fell to 38 per cent. This is relatively low by historical standards, but not as low as the recovery rates seen in the early 2000s.

Graph A1
Global Bond Default and Recovery Rates



In the recent period, many of the corporates that ran into difficulty had greatly increased their leverage in the lead-up to the crisis; this had often been facilitated by a significant loosening of lending standards. In particular, loan covenants, such as interest-coverage ratios, were often relaxed, delaying

creditor intervention in failing firms, and reducing remaining asset values once defaults occurred. Many of the highly leveraged companies were associated with private equity investors, where higher gearing is typically part of the investment strategy. According to Standard & Poor's, for defaults in 2008 and 2009, recovery rates on bonds associated with leveraged buy-outs were 13 percentage points lower than for bonds without this association.

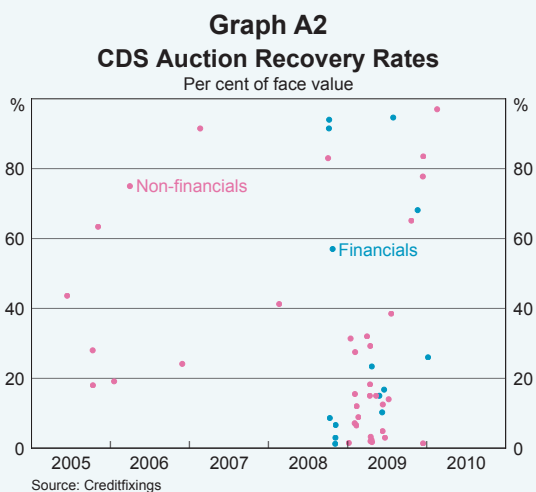
While lending standards had been eased in the boom, they have subsequently been tightened. As a result, many distressed firms have been unable to source finance, even from lenders that traditionally service this market segment. In the United States, debtor-in-possession loans – first-ranking loans provided to firms in Chapter 11 (reorganisation) bankruptcy – are reportedly more difficult to obtain than in previous recessions. A lack of access to finance also affects potential purchasers of distressed assets and can make it harder to recover value from a defaulted company.

More timely and disaggregated data on recovery rates can be obtained for the subset of defaulting corporations that have credit default swaps (CDS) written on their bonds. In 2009, the average recovery rate on senior unsecured bonds implied from 32 CDS auction results was around 24 cents in the dollar, below the long-term average of the universe of senior unsecured bonds (Graph A2). In some cases, recovery rates were close to zero. To date in 2010, there have been relatively few auctions.

The fall in recovery rates has been particularly severe for creditors of some defaulting banks and financial institutions. For example, recovery rates on senior

bonds issued by the three Icelandic banks were between 1 and 7 cents in the dollar, while Lehman Brothers' senior bondholders recovered less than 9 cents in the dollar. One reason why the recovery rates for some financial institutions have been low is the structural subordination of bondholders. In the case of Lehman Brothers, a significant amount of its assets was pledged as collateral and therefore liquidated at distressed prices by counterparties at the time of default. As a result, many of these counterparties joined the pool of unsecured creditors with their balance of unpaid claims. In addition, many Lehman assets were held in subsidiary entities, with creditors of those subsidiaries paid in full before funds were available for the parent bondholders. A few financial institutions, namely Fannie Mae, Freddie Mac and Bradford & Bingley, had recovery rates close to 100 per cent after receiving government guarantees on their senior unsecured bonds. The terms of the government rescues meant that 'credit events' were deemed to have occurred, triggering CDS auctions.

While a number of factors have served to lower recent recovery rates, the increase in distressed debt exchanges over the past two years has helped to support recovery rates. Distressed debt exchanges are essentially an out-of-court bankruptcy



arrangement, where borrowers and creditors agree to materially change the features of outstanding debt. Since 2008, around one third of bankruptcies have been distressed debt exchanges, compared to an historical average of around 10 per cent. The agreements appear to result in a quicker emergence from bankruptcy and higher recovery rates for debt holders. Moody's calculates that when distressed exchange defaults are excluded, the average recovery rate on senior unsecured bonds in 2009 falls from 38 per cent to 27 per cent. ❖

The Australian Financial System

The Australian financial system has remained resilient in the face of the financial and economic turmoil that has affected many developed countries over recent years. Income streams for banks have remained comparatively stable, losses from securities and loans have been relatively mild and, as a whole, the banking system has continued to be very profitable. Initial indicators suggest that the gradual rise in bad debts is likely to have peaked, and this has strengthened the outlook for profits. The availability of funding has also improved, allowing banks to reduce their use of the Australian Government wholesale funding guarantee. Lending to businesses has contracted over the past six months as businesses have tended to access non-intermediated sources of funds and to deleverage, but banks have continued to expand lending for housing.

Profits and Asset Quality of the Banking System

The four major banks reported headline profits after tax and minority interests totalling around \$6 billion in their latest available half yearly results (Table 3). This result was about \$2 billion lower than in the same period last year, though the fall almost entirely reflects a one-off tax revaluation that affected New Zealand operations. The smaller banks have generally also remained profitable, despite being more severely affected by the downturn. The regional banks, in aggregate, reported \$0.2 billion in profit for the latest half year, slightly higher than for the same period in the previous year, as they benefited from a fall in bad and doubtful debt expenses. Foreign-owned banks have recovered some earlier losses made when the

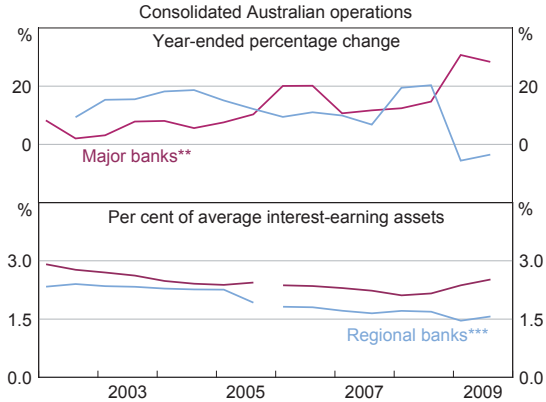
Table 3: Major Banks' Latest Half Year Profit Results^(a)
Consolidated global operations

	2008 \$billion	2009 \$billion	Change \$billion
Income			
Net interest income	20.0	23.4	3.4
Non-interest income	9.2	9.6	0.4
Expenses			
Operating expenses	14.3	15.4	1.1
Bad and doubtful debts	5.7	6.7	1.0
Profit			
Net profit before tax	9.2	10.9	1.7
Net profit after tax and minority interests	7.5	5.6	-1.8

(a) Half year to September for ANZ Banking Group, National Australia Bank and Westpac Banking Corporation; half year to December for Commonwealth Bank of Australia. Includes St George Bank and Bankwest.
Sources: RBA; banks' annual and interim reports

Graph 25

Australian-owned Banks' Net Interest Income*

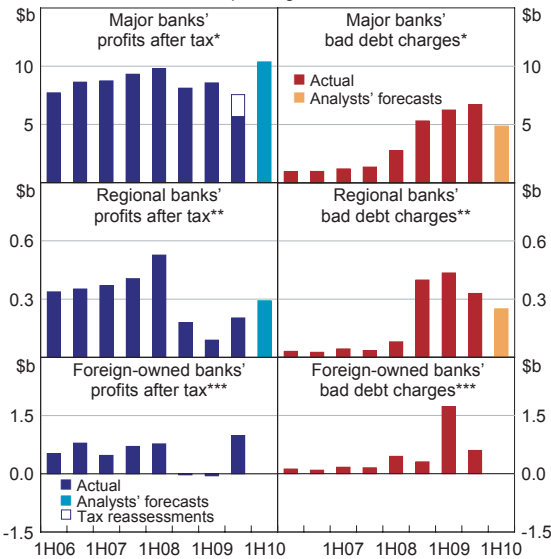


* From 2006 data are on an IFRS basis; prior years are on an AGAAP basis.
 ** Second half figures are annualised half year to December for CBA and half year to September for ANZ, NAB and Westpac. Includes St George, and Bankwest from the first half of 2009.
 *** Second half figures are annualised half year to December for Suncorp-Metway and Bendigo and Adelaide Bank, and half year to August for Bank of Queensland.
 Sources: RBA; banks' annual and interim reports

Graph 26

Profitability

Banks operating in Australia



* Second half figures are half year to December for CBA and half year to September for ANZ, NAB and Westpac. Includes St George, and Bankwest from the first half of 2009.
 ** Second half figures are half year to December for Suncorp-Metway and Bendigo and Adelaide Bank, and half year to August for Bank of Queensland.
 *** Second half figures are half year to September. Includes Bankwest up to the second half of 2008.
 Sources: APRA; Citigroup; Morgan Stanley; UBS; banks' annual and interim reports

impact of the financial turmoil peaked and bad debt charges spiked sharply. Profits have picked up more recently as their bad debt charges in the half year to September 2009 receded.

Net interest income, which accounts for the main share of total revenue, has underpinned the profitability of the major banks and offset some of the rise in expenses. In the last 12 months, net interest income from domestic operations grew by 28 per cent at the major banks, reflecting balance sheet growth and a recovery in the spread between borrowing and lending rates (Graph 25). Results from the smaller regional banks indicate that net interest income has fallen by 3 per cent in the latest half year, even though their margins seem to have widened slightly in that period.¹

One of the reasons why the Australian banks' earnings have remained comparatively stable is that their business models were focused on domestic lending. As a result, they had relatively little exposure to the kinds of securities that were a significant source of losses in the North Atlantic countries worst affected by the financial crisis. However, provisioning charges for bad and doubtful debts have weighed on profits since 2008. After adjusting for mergers, the major banks reported bad and doubtful debt charges of \$7 billion in their latest half yearly results, compared with \$6 billion in the same period a year earlier (Graph 26). The subsidiaries of foreign banks operating in Australia, which also mainly engage in retail lending, have seen their bad debt charges increase slightly over the year. On the other hand, bad debt charges at regional banks and foreign bank branches appear to have fallen since the first half of 2009, having earlier risen more sharply than those of the major banks.

Despite rising charges for bad and doubtful debts over the latest formal reporting period, commentary by the major banks and equity analysts, in conjunction

1 See Brown A, M Davies, D Fabbro and T Hanrick (2010) 'Recent Developments in Banks' Funding Costs and Lending Rates' RBA Bulletin, March.

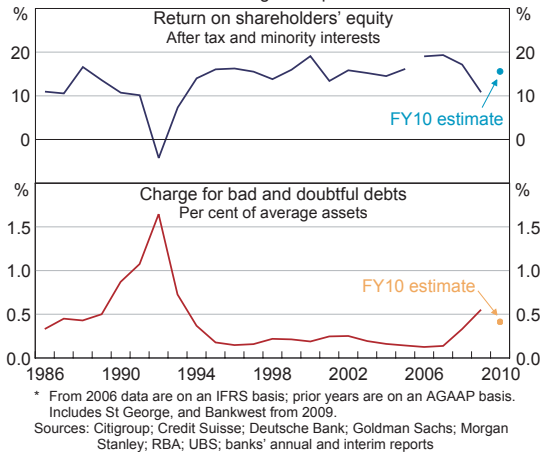
with more timely quarterly data, indicate that the peak in bad debt charges for the major banks occurred in the fourth quarter of 2008 (Graph 27). Analysts therefore generally expect banks' return on equity to increase in the 2010 financial year from a very shallow trough of 11 per cent in 2009.

The ratio of non-performing assets (NPA) to total on-balance sheet assets increased modestly during the period of financial turmoil, but has remained broadly flat at around 1½ per cent since mid 2009 (Graph 28).

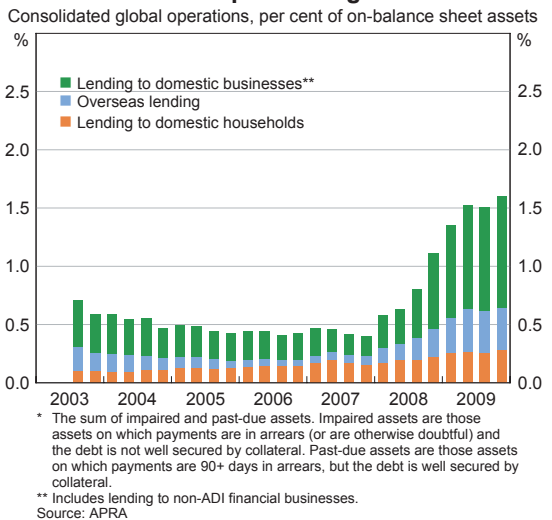
The current deterioration has been much less severe than those of either the early 1990s recession, when the NPA ratio reached more than 6 per cent, or the recent recession in the United States where it was 3 per cent as at the end of 2009. As in the early 1990s, most of the recent increase in the NPA ratio resulted from the pick-up in non-performing loans (NPL) to the business sector. The consequences of this for overall asset quality have been more limited, however. This is partly because the recent economic downturn has been less severe, but also because the banking sector now has a much smaller direct exposure to business lending (at around 40 per cent of total credit outstanding compared with around 60 per cent in the early 1990s). The Australian banks' overseas lending operations recorded larger rises in NPAs than the domestic operations, mainly reflecting the more pronounced deterioration in economic conditions abroad, but this added relatively little to the globally consolidated NPA figures. The very minor deterioration in loans made to the domestic household sector has not materially affected the overall NPA ratio.

With the improvement in economic and financial conditions, the value of assets newly classified as being impaired has stabilised and more customers have tended to revert back to performing status (Graph 29). Banks have also been active in recognising losses, writing off impaired assets from their balance sheets throughout the last two years.

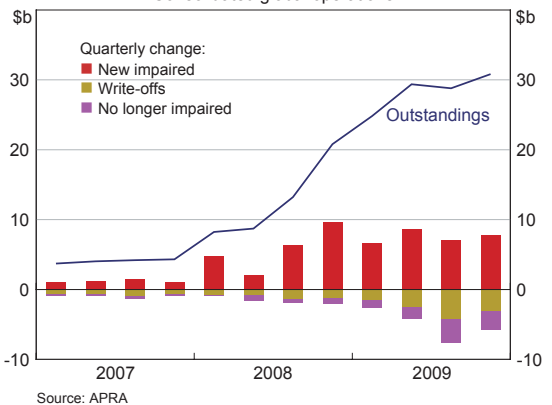
Graph 27
Major Banks' Profitability*
Consolidated global operations



Graph 28
Banks' Non-performing Assets*
Consolidated global operations, per cent of on-balance sheet assets



Graph 29
Banks' Impaired Assets
Consolidated global operations



Banks' commercial property exposures have been an important component of impaired assets and have continued to deteriorate somewhat further over the past six months (Graph 30). Much of the recent rise in impairments has been accounted for by loans to highly geared property developers, many of which were on the books of the smaller Australian-owned banks. These borrowers are often among the first to experience difficulties when financial and/or economic conditions turn for the worse. In order to conserve capital, banks are screening commercial property borrowers more closely, requiring additional

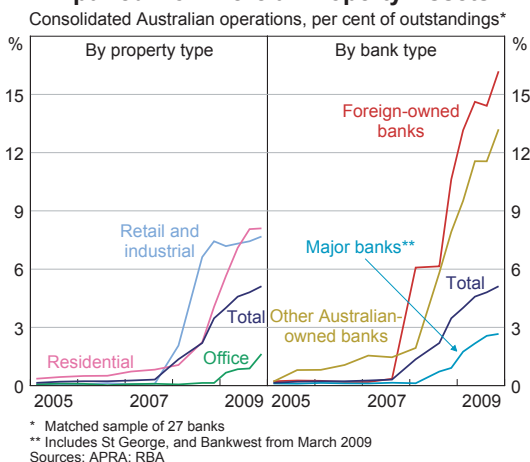
documentation and collateral while also shifting their focus toward higher-quality projects. With the higher cost of funds being passed onto customers, the quantity of loans demanded by property developers has also declined, as some projects have become unviable.

In banks' domestic business loan portfolios, the NPL ratio stood at 3 per cent as at December 2009. This is around 35 basis points higher than six months earlier. The increase in this ratio over recent years was initially driven by a small number of exposures to highly geared companies with complicated financial structures and/or exposures to the commercial property sector. As the economy began to slow in mid 2008, the incidence of non-performing business loans became more broadly based.

Banks have continued to report very low NPL ratios for their domestic housing loan portfolios – which account for around 60 per cent of aggregate on-balance sheet loans. The NPL ratio for banks' domestic housing lending stood at 0.63 per cent as at December 2009, which is broadly flat over the past six months but up slightly from 0.57 per cent a year earlier. Most of the locally incorporated banks reported a reduction in housing NPL ratios over the second half of the year, reversing the broad-based increases in 2008 (Graph 31). The ratios for credit unions and building societies are lower than for banks; they have also fallen slightly over the past six months, to 0.15 per cent and 0.28 per cent respectively. While recent interest rate rises may raise debt-servicing pressures for some borrowers in the period ahead, more prudent lending criteria should help to limit the share of new customers that would otherwise enter arrears over the medium term (see below).

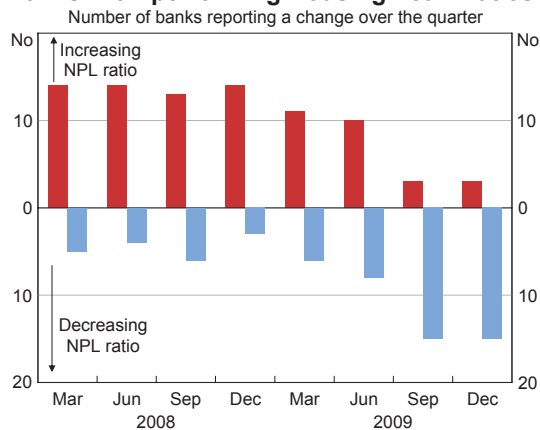
Consistent with the more difficult economic and financial conditions faced abroad, part of the increase in Australian banks' bad debts has been due to their overseas operations. The overall effect of offshore lending on Australian banks' total NPA has been relatively small because overseas exposures

Graph 30
Impaired Commercial Property Assets



Graph 31

Banks' Non-performing Housing Loan Ratios*



only account for around one quarter of their assets. In contrast to many overseas banks, the major Australian banks did not aggressively push beyond traditional geographical or product markets over recent years to seek out higher-yielding, but higher-risk, assets. In New Zealand and the United Kingdom – which together account for about two thirds of total foreign exposures – the major banks’ balance sheets also contain a significant share of lending to the traditionally less risky household sector, albeit less than for their domestic operations.

Reflecting their focus on domestic lending, most of the foreign claims of the Australian banks represent their local banking operations in New Zealand and the United Kingdom (Graph 32). They engage in relatively little cross-border lending; this accounts for just 6 per cent of total assets. Given concerns about sovereign credit risk in smaller European countries, it is worth noting that Australian bank exposures to these countries are very small (Table 4). Most of these loans are to the European private non-financial sector and other banks; exposures to the smaller countries in the euro area amount to around ¼ of one per cent of total assets.

Table 4: Australian-owned Banks’ Claims on Europe

Ultimate risk basis, as at end December 2009

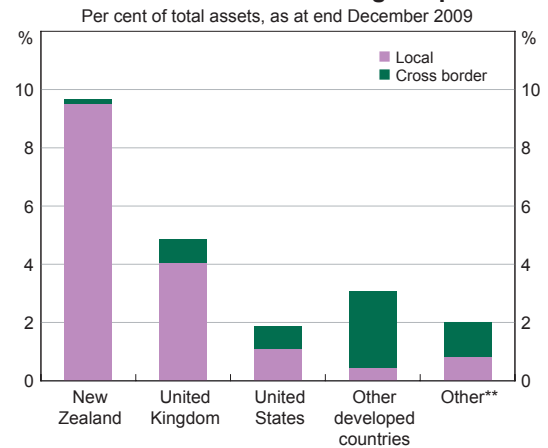
	Total \$ billion
France	11.5
Greece	0.0
Germany	11.0
Ireland	4.1
Italy	12.9
Netherlands	7.7
Portugal	0.5
Spain	3.0
Other countries	5.7
Euro area	56.4

Source: APRA

Capital and Liquidity

The Australian banking system remains well capitalised, with the aggregate Tier 1 capital ratio rising by 0.8 percentage points to 9.4 per cent over the six months to December 2009 (Graph 33).² This ratio is at its highest since at least the late 1980s when comparable data first became available. The

Graph 32
Australian-owned Banks’ Foreign Exposures*



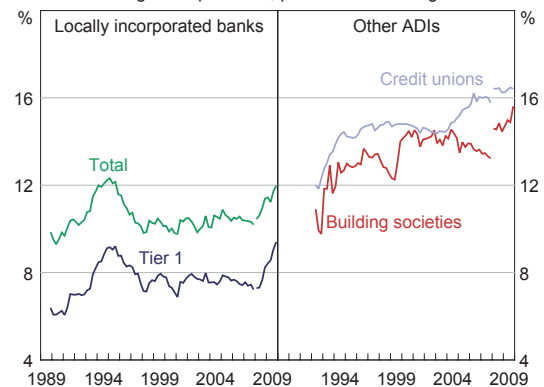
* Ultimate risk basis

** Claims on developing countries, international organisations, offshore centres, and unallocated claims

Source: APRA

Graph 33
Authorised Deposit-taking Institutions’ Capital*

Consolidated global operations, per cent of risk-weighted assets



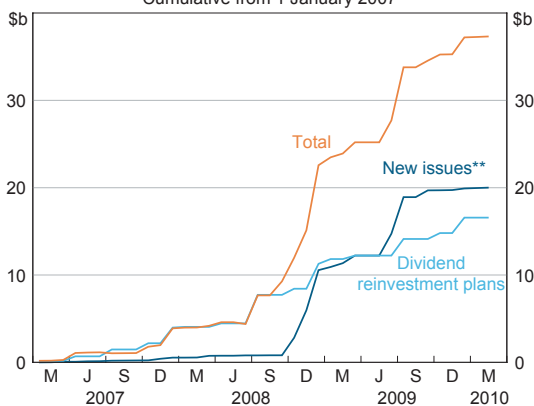
* Break in March 2008 due to the introduction of Basel II for most ADIs

Source: APRA

² Tier 1 capital includes accounting equity items such as ordinary shares and retained earnings, which protect senior creditors from asset losses on a ‘going concern’ basis. Tier 2 capital consists of items such as cumulative preference shares and subordinated debt which, for contractual reasons, only absorb losses on a ‘gone concern’ basis, that is, in a wind-up.

aggregate Tier 2 capital ratio on the other hand has been broadly flat over the past half year. Reflecting these developments, the sector's total capital ratio has risen by around $\frac{3}{4}$ of one percentage point to 12 per cent as at the end of 2009. The credit union and building society sectors are also well capitalised, with aggregate total capital ratios of about 16 per cent. Individual institutions' ratios are well in excess of the prudential capital requirements, reflecting prudent capital management throughout the recent financial turmoil.

Graph 34
Major Banks' Equity Raisings*
 Cumulative from 1 January 2007



* Excludes acquisitions; includes St George
 ** Includes new placements and employee share purchase plans
 Source: ASX

Graph 35
Counterparty Default Probabilities*
 Simple average of major banks' estimates



* 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

The increase in Tier 1 capital in the most recent reporting period builds on earlier increases that have been taking place since around the end of 2007. The cumulative increase was predominantly driven by equity raisings undertaken in late 2008 and the middle of 2009 (Graph 34). The major banks have issued a combined \$37 billion of ordinary equity in this time, largely through a combination of new share issuance and dividend reinvestment plans. The regionals have issued a further \$2 billion over this time. These raisings have seen the share of banking system capital accounted for by ordinary shares rise to almost 50 per cent in December 2009, after this share had declined to around 30 per cent in 2006. Banks have also grown their capital base organically, partly through cuts to dividend payments made to shareholders.

As well as raising new equity and retaining profits, banks' aggregate regulatory capital ratio has been boosted by a decline in risk-weighted assets of 2 per cent over the year to December 2009. The bulk of this decline was driven by a reduction of on-balance sheet corporate credit exposures (as discussed below). However, this was partly offset by an increase in the average risk-weight of these exposures, with the major banks' estimates of the average probability of default for corporate counterparties increasing by around $\frac{1}{2}$ of one percentage point to $1\frac{1}{2}$ per cent over the year to December 2009 (Graph 35). Average default probability estimates for residential mortgages have increased only very slightly and remain around 1 per cent. More generally, recent developments in banks' capital ratios are similar to the experience of the early 1990s, during which banks issued significant amounts of new Tier 1 capital and, at the same time, falls in business credit contributed to a decline in the sector's aggregate risk-weighted assets.

Banks are also holding significantly more liquid assets than they were prior to the onset of the financial market turmoil. Following a step-up in the second half of 2007, the sum of their cash, deposits and highly marketable domestic securities as a share of total domestic liabilities was around 21 per cent in January 2010, or 103 per cent of short-term

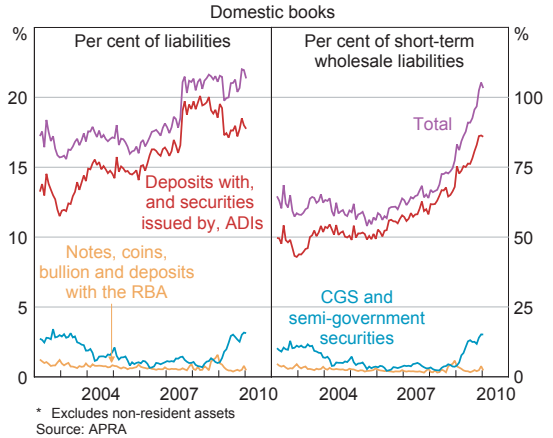
wholesale liabilities (Graph 36). Whereas the bulk of the earlier rise in this ratio reflected increased holdings of securities issued by other authorised deposit-taking institutions (ADIs), the share of liquid assets accounted for by government securities has risen recently from a low base. It is not yet clear what assets will count as high-quality liquid assets for regulatory purposes when revised standards are introduced; the definition of liquid assets is one of the issues still under consideration at the international level by the Basel Committee on Banking Supervision and domestically by APRA (see the *Developments in the Financial System Architecture* chapter).

Financial Markets' Assessment

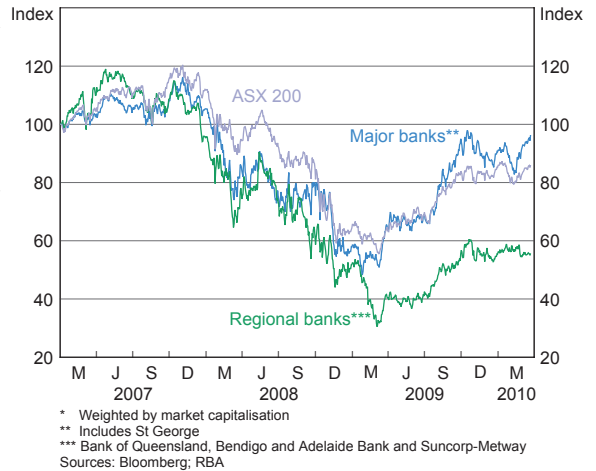
Australian banks' share prices were subject to downward pressure during the worst of the risk aversion in 2008 and early 2009, but subsequently rebounded as financial conditions improved and sentiment towards banks recovered. Bank share prices have been more stable recently, in line with the movement in the broader market (Graph 37). For the major banks, share prices are currently around 20 per cent lower than their 2007 peaks, while share prices of regional banks remain around 55 per cent lower. With market uncertainty having subsided, share price volatility for banks and the market as a whole has declined. The daily movement in banks' share prices has averaged 1½ per cent since September 2009, compared with a significantly higher peak in late 2008.

Australian banks' credit default swap (CDS) premiums – the price paid by investors to insure against the possibility of a credit event such as default on bank debt – have also narrowed significantly since the peak of the crisis. The cost of insuring five-year senior debt of the four major Australian banks is around 80 basis points, well below peaks of over 200 basis points reached in early 2009, but above pre-crisis levels. CDS premiums for large banks in the United States, Europe, and the United Kingdom are higher, at 100 basis points or more.

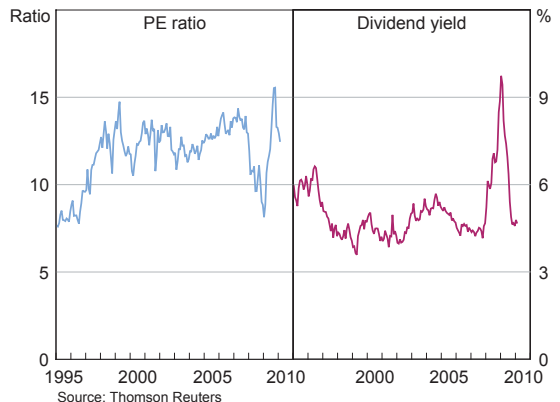
Graph 36
Banks' Liquid Assets*



Graph 37
Banks' Share Prices*
End December 2006 = 100



Graph 38
Indicators of Bank Valuation



The movements in banks' share prices are reflected in market-based valuation measures (Graph 38). The general trend in these measures was to indicate that in 2008 bank share prices were low relative to historical norms as general risk aversion saw shares sold with little discrimination based on profitability or soundness. Subsequently, however, valuation measures have reverted to more normal levels. Banks' forward price-to-earnings (PE) ratio rose quickly as share prices recovered during 2009, but as the earnings outlook firmed, the ratio declined to around its long-run average. Similarly, the dividend yield – the amount paid out in dividends relative to the share price – has reverted back to more normal levels of around 5 per cent, reflecting lower dividends and the earlier rise in share prices.

The largest Australian banks have maintained high credit ratings, consistent with their strong performance and sound capital position. The four major banks' senior debt is rated AA by Standard &

Poor's (S&P). Only six of the other 100 largest banking groups in the world currently have an equivalent or higher credit rating; this has been an important factor in ensuring the major banks' ongoing access to long-term debt markets. S&P and Fitch have the major banks on a stable outlook; Moody's has maintained the negative outlook that it assigned early last year, but currently rates the majors more highly at Aa1. Outside of the major banks, S&P recently affirmed Macquarie Bank's long-term rating of A, and revised up the outlook from 'negative' to 'stable' based on a more positive medium-term financial position. The only Australian-owned bank to have been downgraded by S&P since mid 2008 is Suncorp-Metway (Table 5). However, several subsidiaries of foreign banks have had their ratings lowered, in line with their offshore parents, while National Australia Bank's subsidiary in the United Kingdom was downgraded from AA- to A+ in mid 2009.

Table 5: Long-term Credit Ratings of Banks operating in Australia^(a)
As at 23 March 2010

	Current	Outlook	Last change Direction	Date
AMP Bank	A	Stable	+	April 2008
ANZ Banking Group	AA	Stable	+	February 2007
Arab Bank Australia	A-	Stable	n.a.	January 2007
Bank of Queensland	BBB+	Stable	+	April 2005
Bankwest	AA	Stable	+	December 2008
Bendigo and Adelaide Bank	BBB+	Stable	+	February 2005
Citigroup	A+	Negative	-	December 2008
Commonwealth Bank of Australia	AA	Stable	+	February 2007
HSBC Bank Australia	AA	Negative	+	July 2006
ING Bank (Australia)	A+	Stable	-	September 2009
Macquarie Bank	A	Stable	n.a.	November 1994
Members Equity Bank	BBB	Stable	+	August 2006
National Australia Bank	AA	Stable	+	February 2007
Rabobank	AAA	Negative	+	August 1998
Rural Bank	BBB	Stable	+	August 2007
Suncorp-Metway	A	Stable	-	January 2009
Westpac Banking Corporation^(b)	AA	Stable	+	February 2007

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

(b) St George Bank has been subsumed by Westpac Banking Corporation and no longer has a separate banking licence or credit rating
Source: Standard & Poor's

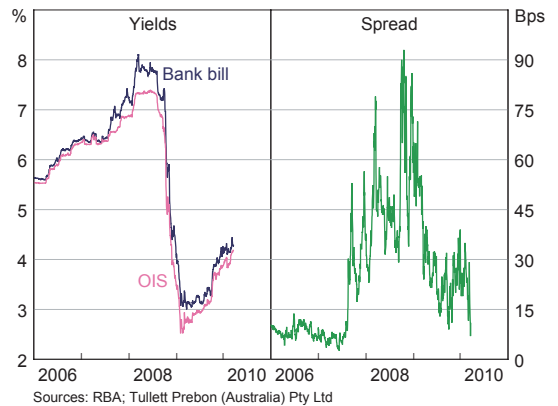
Funding Conditions and Government Guarantee Arrangements

As financial market conditions have become less stressed, funding conditions for Australian lenders have also recovered. General access to markets has improved and the cost of wholesale funding has fallen as the severe risk aversion which spilled over into global capital markets from the North Atlantic financial crisis countries abated. Accordingly banks have substantially reduced their use of the liquidity support offered by the Reserve Bank through its domestic market operations and issued less Australian Government guaranteed debt. Instead, banks have increasingly issued unguaranteed debt. As a result of the improved conditions, the Treasurer recently announced the closure of guarantee arrangements for wholesale debt to new borrowing. However, competition for deposits remains intense.

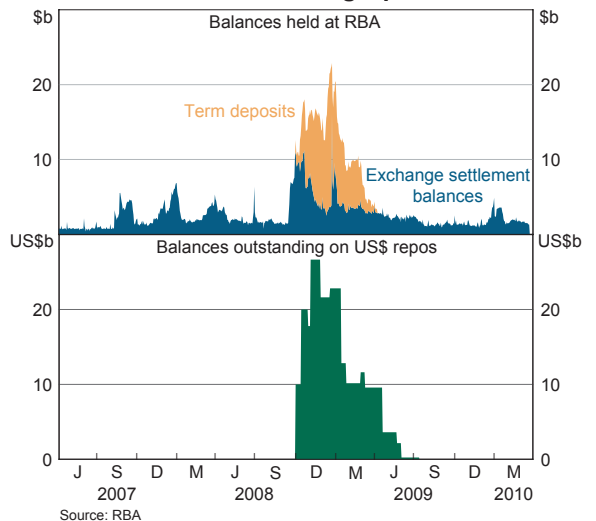
Interest rates in domestic money markets have risen from their multi-decade lows, while spreads on three-month bank bills to the three-month overnight swap rate (OIS) have tightened by around 80 basis points since their peak in late 2008 (Graph 39). Since the previous *Review*, spreads have continued to be volatile but have remained well below the peaks reached in the crisis period. Current spreads are generally higher than in the immediate pre-crisis period, but that was a period when risk was generally being underpriced.

There has been considerably less demand for the facilities made available through the Reserve Bank's domestic market operations since the crisis peak in late 2008 (Graph 40). As noted in the previous *Review*, balances held as term deposits or exchange settlement accounts at the Reserve Bank ran down quite quickly over the first half of 2009. And as the extreme shortage of US dollars in international markets eased, there was a fairly rapid run-down of balances outstanding under swap arrangements with the US Federal Reserve over the same period.

Graph 39
3-month Interest Rates



Graph 40
Reserve Bank Dealing Operations



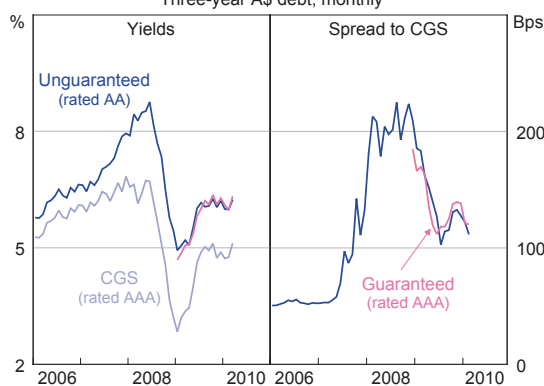
In line with these developments, the Reserve Bank judged it appropriate to scale back the support to the financial system that was warranted during the worst of the spill-over in risk aversion. The only new development since the last *Review* has been that the Reserve Bank allowed the level of exchange settlement balances to rise in late December 2009 to address some year-end funding pressures, but otherwise balances have generally remained between \$1½–2 billion.

Conditions in both domestic and offshore long-term bank debt markets have also markedly improved from late 2008 and early 2009. Domestic secondary market spreads on the major banks' three-year unguaranteed bonds, for instance, have fallen by around 70 basis points to around 110 basis points over Commonwealth Government Securities (CGS) in the past 12 months (Graph 41). Spreads in a number of markets have narrowed sufficiently

for it to be cheaper for highly rated banks to issue unguaranteed bonds than to pay the 70 basis point guarantee fee. As a result, the share of issuance under the guarantee arrangements fell significantly and was close to zero by the beginning of this year (Graph 42). More recently, there has been some renewed issuance of guaranteed debt, mainly by smaller banks, prior to the Scheme's closure (see below). Outstanding guaranteed short-term debt and large deposits (greater than \$1 million), which are considerably less than guaranteed long-term funding, are well off their peaks, having fallen since early in 2009 as risk aversion has abated. The current amount outstanding under the Guarantee Scheme is \$169 billion.³

Graph 41
Major Banks' Bond Pricing*

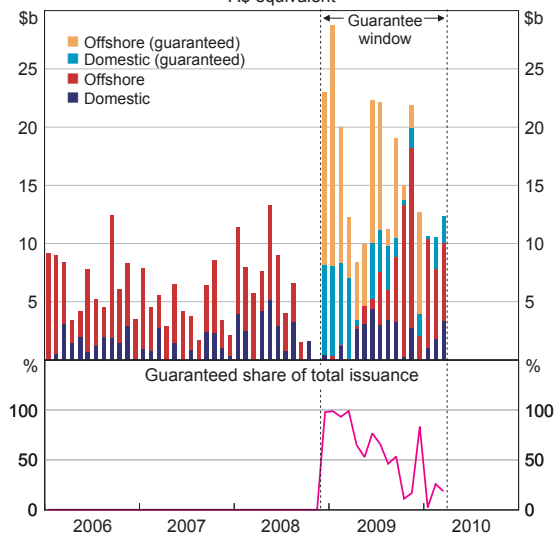
Three-year A\$ debt, monthly



* Includes fee for guaranteed issues
Sources: RBA; UBS AG, Australia Branch

Graph 42
Australian Banks' Bond Issuance*

A\$ equivalent



* March 2010 is month to date; excludes 12-15 month paper, considered as 'short-term' under the Australian Government Guarantee Scheme
Source: RBA

Reflecting the improved funding conditions, and the closure of guarantee arrangements in a number of countries, the Council of Financial Regulators advised the Australian Government that the local guarantee arrangements were no longer required. Subsequently, the Treasurer announced in early February that the Guarantee Scheme for Large Deposits and Wholesale Funding would be closed to new borrowings as at the end of March 2010. Existing guaranteed liabilities will continue to be covered by the Scheme to maturity for wholesale funding and term deposits, or to October 2015 for at-call deposits. Deposits under \$1 million will continue to be guaranteed separately under the Financial Claims Scheme (refer also to *Developments in the Financial System Architecture*).

Banks have issued \$177 billion of long-term debt over the past 12 months, including the debt covered by the Scheme.⁴ This is significantly more than their aggregate issuance of \$92 billion in 2008, and well above issuance of \$58 billion in 2007. Most of the recent issuance has been into offshore markets and is mainly denominated in US dollars (though swapped back to Australian dollars – see also *Box B*:

3 For a detailed review of the guarantee arrangements see also Schwartz C (2010) 'The Australian Government Guarantee Scheme', RBA Bulletin, March.

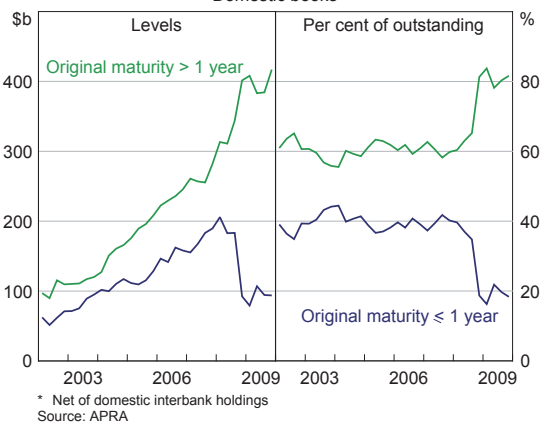
4 See also Black S, A Brasil and M Hack (2010) 'Recent trends in Australian Banks' Bond Issuance', RBA Bulletin, March.

Foreign Currency Exposure and Hedging Practices of Australian Banks). Another development has been that the issuance of Australian dollar denominated bonds by foreigners has recovered somewhat. As a result the natural counterparties to the banks' foreign exchange hedging transactions have returned to the market and the cost of swapping debt back into Australian dollars has narrowed a little.

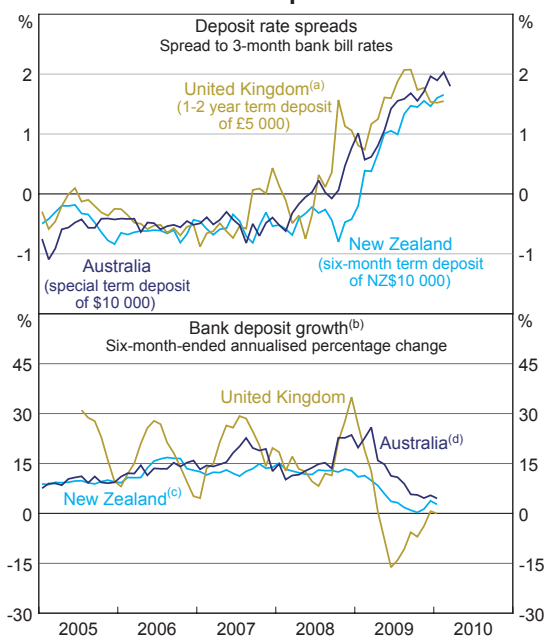
To some extent, the relatively strong bond issuance over the past 12 months reflects banks' increased funding requirements. They have undertaken the financing of a larger share of household mortgages lately, offsetting the decline in lending by mortgage originators following the dislocation in securitisation markets. It also reflects banks seeking to lengthen the maturity profile of their liabilities in response to increased focus on funding and liquidity risk. Accordingly, the share of banks' outstanding wholesale debt with an original maturity of more than one year has increased from around 60 per cent in June 2008 to around 80 per cent in December 2009 (Graph 43).

Also reflecting a focus on what is perceived to be a more stable source of funds, banks have continued to compete vigorously for deposits by offering higher interest rates, particularly on term deposits. 'Special' term deposit rates offered by the major banks are now 180 basis points above the three-month bank bill rate, compared with a spread of around 75 basis points at the end of December 2008, and typically negative spreads prior to the crisis (Graph 44). Competition for deposits is also strong in the major banks' other key markets, with deposit spreads having increased in both New Zealand and the United Kingdom. Banks also appear to be competing for deposits by cutting fees. The largest banks have reduced their exception fees for deposit accounts – which are charged when the terms of a banking product are breached – and a few banks have introduced deposit accounts that reimburse the fee for withdrawing money from some other banks' ATMs.

Graph 43
Banks' Non-intermediated Debt*
Domestic books



Graph 44
Bank Deposits



- (a) Spread is to the UK one-year swap rate.
(b) Data are seasonally adjusted and adjusted for some series breaks. Excludes certificates of deposit. Foreign currency deposits are excluded for Australia and New Zealand, but are included for the United Kingdom.
(c) Household deposits only.
(d) Includes deposits from large credit unions and building societies.
Sources: APRA; Bank of England; Bloomberg; RBA; RBNZ

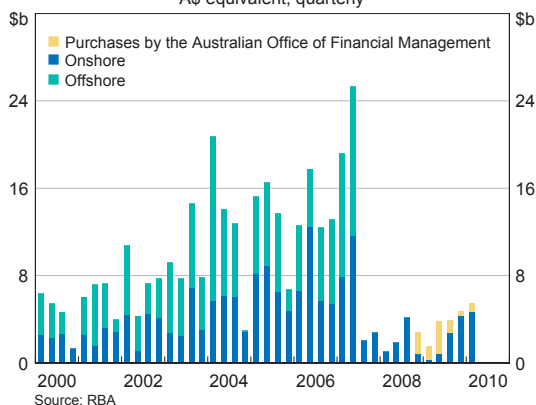
While deposits with ADIs in Australia continue to rise, their growth has slowed markedly from the very rapid rates in 2008. Over the six months to January 2010, total deposits in Australia increased at an annualised rate of 4½ per cent, which is broadly in line with growth in the major banks' other key markets, but well below growth rates of around 25 per cent seen in late 2008 and early 2009. The slowing in domestic deposit growth reflects a combination of slower overall balance-sheet growth and the fact that deposit growth in 2008 had been boosted by the shift away from riskier asset classes occurring at that time. The heightened competition for deposits has

added to banks' average funding costs relative to the cash rate.

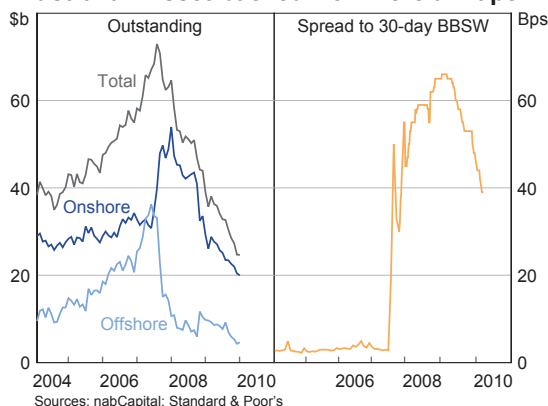
As with other wholesale markets, Australian securitisation markets have also shown signs of improvement, although spreads remain considerably wider than before the market turmoil began. Secondary market spreads on AAA-rated residential mortgage-backed securities (RMBS) tranches have fallen by 240 basis points over the past 12 months, to 140 basis points above the three-month bank bill swap rate. In mid 2007, by comparison, it was possible to sell AAA-rated RMBS at spreads of around 15 basis points. Issuance of these instruments totalled \$14 billion in 2009, which represents a noticeable pick-up from the \$10 billion of issuance in 2008, but is still well down on the \$50 billion issued in both 2006 and 2007 (Graph 45). Around half of RMBS issuance in 2009 were purchased by the Australian Office of Financial Management (AOFM), though the participation of private investors increased through the year. Issuance has strengthened further in the early part of 2010. Losses on prime RMBS (after proceeds from property sales) continue to be fully covered by credit enhancements such as lenders' mortgage insurance, and no losses have been borne by investors in a rated tranche of an Australian RMBS.

Conditions in shorter-term securitisation markets have also improved, reflected in declining spreads on asset-backed commercial paper (ABCP). Since their peak, ABCP spreads have fallen by almost 30 basis points, to be around 40 basis points above the one-month bank bill swap rate (BBSW) (Graph 46). While market participants report that they continue to have little difficulty rolling over paper, the amount of ABCP outstanding continues to decline, falling to \$25 billion in December 2009. This reflects the ongoing amortisation of existing loan pools (i.e. loan repayments) as well as some reduction in the supply of assets typically funded by ABCP (such as lending by mortgage originators).

Graph 45
Australian RMBS Issuance
A\$ equivalent, quarterly



Graph 46
Australian Asset-backed Commercial Paper



Lending Growth and Credit Conditions

In aggregate, Australian banks continued to grow their domestic loan books over the past six months, as they have been less constrained by the need to repair balance sheets than was the case in some other countries. Yet there has been a notable slowing in credit growth since late 2007 as weakness in the financial and real sectors abroad began to affect Australian economic conditions (Graph 47).

Domestic business credit contracted between early 2009 and early 2010, with falls reported across most bank and non-bank lenders. Bank business credit fell at an annualised rate of 10 per cent over the six months to January 2010, although the decline appears to be coming to an end; the most recent monthly figures show the amount of business credit outstanding being broadly flat. Part of the reason for the fall in business credit over the past year is that demand for intermediated debt has been weak. As discussed in more detail in the *Household and Business Balance Sheets* chapter, companies have raised a greater share of their funding from equity markets following the crisis and some have paid down debt to reduce their leverage. Some larger corporates have also recently issued debt in wholesale markets, after this source of funding had dried up in late 2007 and they had increasingly been forced to roll-over debt by resorting to bank loans. As financial conditions improve further, some of that shift to bank financing is now reversing.

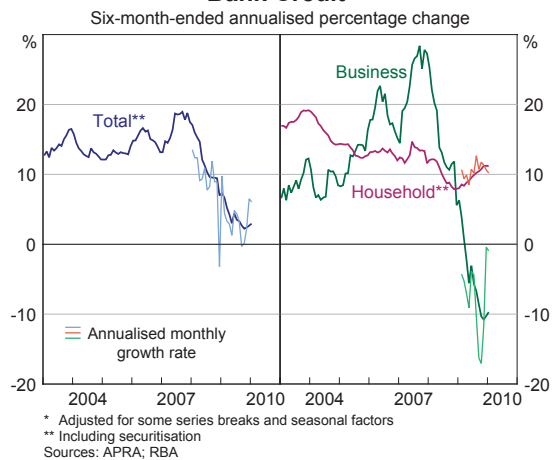
On the supply side, banks have also tightened the terms and conditions under which they are willing to extend credit to businesses and households. This contrasts with the easing in standards seen in earlier years, and reflects the banking sector's response to a perceived increase in the probability of default among most categories of borrowers. As these risks have risen, banks have sought to conserve capital by directing their lending towards

less risky ventures. Over the past couple of years, banks have generally also raised risk margins and strengthened non-price loan conditions, such as collateral requirements and loan covenants.

All types of banks have curtailed the business credit they extend, but this has been most pronounced among the foreign-owned banks (Graph 48). The activities of these banks had been one of the factors driving the previous strong growth in business lending, particularly in the larger-value segment where they had made notable gains in market share over recent years. While a small number of institutions have recently pulled back from the

Graph 47

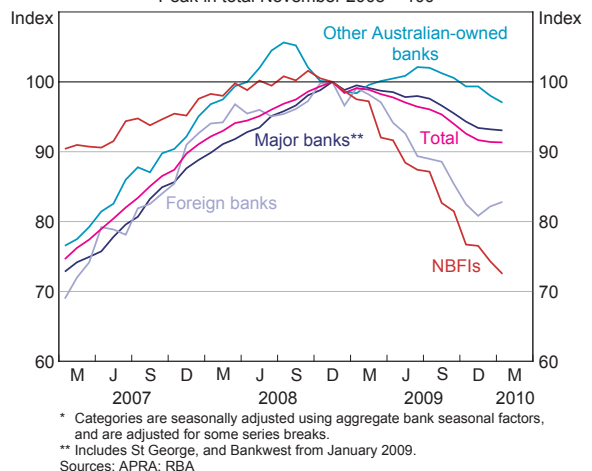
Bank Credit*



Graph 48

Business Credit*

Peak in total November 2008 = 100



domestic market, there has been little evidence of a generalised withdrawal. Foreign-owned banks have, on balance, continued to participate in recent syndicated loan deals, just as they did throughout the turmoil period, and in the past couple of months their overall lending has begun to pick up. At the same time, credit extended by the major banks has stabilised over recent months, and these banks have generally increased their lending to smaller unincorporated businesses over the past year.

In contrast to business credit, bank lending to households has remained resilient, and is currently growing at an annualised rate of 11 per cent over the six months to January 2010, compared to 10 per cent over the six months to July 2009 (refer back to Graph 47). This is faster than overall household credit growth, as lending by non-banks has been softer. Lending growth over 2009, much of which had been to first-home buyers in the first half of the year, has occurred against a backdrop of more stringent lending standards at most lenders. There has been some further reduction in maximum loan-to-valuation ratios (LVR) over the past six months, with most of the largest lenders

no longer offering new customers loans with LVRs greater than 90 per cent. Likewise, banks have paid closer attention to other sources of credit risk, particularly among first-home buyers where lenders now typically require minimum 'genuine savings' of 5 per cent.

The major banks have continued to drive the growth in housing lending. They accounted for around 80 per cent of new owner-occupier loan approvals at the end of 2009, compared to around 60 per cent in mid 2007. In contrast, lenders that had previously relied more heavily on securitisation for funding – such as wholesale lenders and the smaller Australian-owned banks – continued to account for a lower share of loan approvals than they did in mid 2007. Credit unions and building societies' current share of new owner-occupier loan approvals is broadly similar to what it was at the beginning of 2008, following some small gains over recent months.

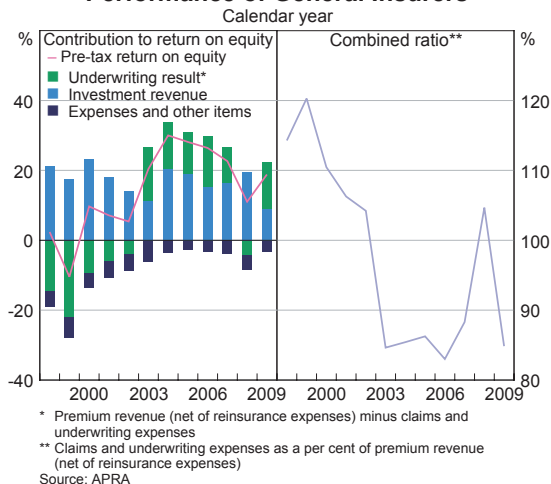
General Insurance

General insurers remained profitable throughout the financial turmoil. The Australian insurance industry reported overall post-tax profits of \$4 billion in the year to December 2009, compared with around \$2 billion in the previous year. The pre-tax return on equity was 19 per cent in the latest year, in line with the 10-year average (Graph 49). These results were underpinned by stronger underwriting returns, after insurers recorded losses on these operations in 2008. Reflecting this, insurers' aggregate combined ratio – claims and underwriting expenses relative to net premium revenue – fell to 85 per cent in 2009, consistent with ratios reported between 2003 and 2006.

Underlying this result was a rise in net premium revenues. Part of this growth was attributable to rising premium rates (particularly in personal lines), as insurers adjusted prices in response to an increase in claims related to storms and bushfires in 2008

Graph 49

Performance of General Insurers



and early 2009 (Graph 50). There had also been an increase in insurers' measured claim liabilities over 2008 arising from a reduction in risk-free interest rates (which are used to discount expected future claim payments). Claim expenses declined by almost 20 per cent in 2009, as risk-free rates rose over the year and insurers benefited from the absence of any major claim events in the second half of the year. Only \$7 million of estimated insured catastrophe losses were incurred in the six months to December, compared with insured catastrophe losses of \$1.1 billion (including from the Victorian bushfires and floods in Queensland) in the first half of the year.

Partly offsetting improved underwriting performance, returns on invested premiums were around 50 per cent lower in 2009. This was partly because prices on fixed-income securities declined in response to rising yields on benchmark securities; interest income on investments was also lower following the sharp decline in the cash rate in late 2008. General insurers are likely to have benefited only a little from the strong rise in equity prices over the past year; investments in equities accounted for less than 5 per cent of their investment assets as at December 2009, with the majority of assets being interest-bearing.

The general insurance industry remains soundly capitalised, with the industry holding capital equivalent to almost double the regulatory minimum as at September 2009 (the latest available data). Several of the large insurers

have strengthened their capital positions by raising a combined \$625 million in equity since mid last year. The four largest Australian insurers generally maintained high credit ratings throughout the financial turmoil, and are currently rated A+ or higher by S&P with stable rating outlooks (Table 6). One small insurer (Australian Family Assurance Limited), however, was declared insolvent by APRA in 2009, and eligible claims made on this insurer before October 2010 will be covered by the Government under the Financial Claims Scheme: Policyholder Compensation Facility. This insurer had been authorised to conduct only run-off business since 2000 – not taking any new business – and its failure was due to company-specific events, rather than broader developments in financial and economic conditions.

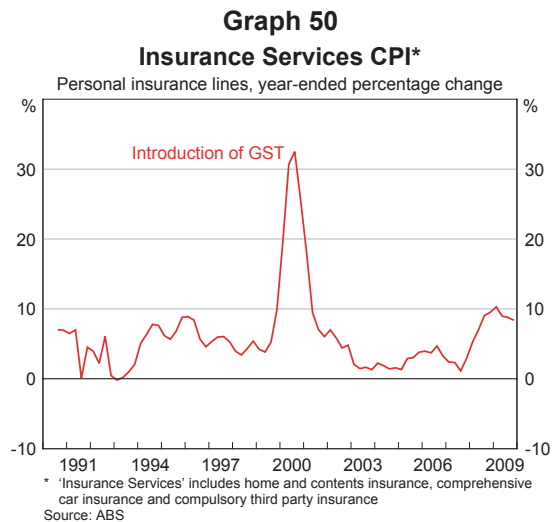


Table 6: Financial Strength Ratings of Large Insurers
As at 23 March 2010

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

Source: Standard & Poor's

The share prices of the largest listed Australian general insurers have lagged behind the major banks but recovered around 40 per cent from their low point in March 2009 (Graph 51). Consistent with a general abatement of risk aversion, general insurers' CDS premiums have fallen from their early 2009 peaks, to be around 90 basis points, slightly above the broader market average.

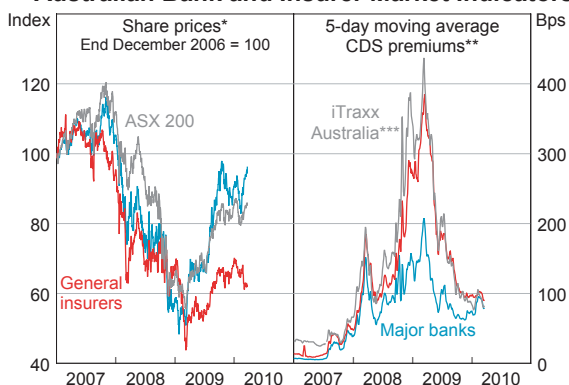
A significant share of Australian insurers' reinsurance cover is provided by several of the large global reinsurers, which in the latest year reported a rise in profits, and as at December 2009 held capital

in excess of the regulatory minimum. Despite a recent decline in the price of reinsurance – related to improving supply because of a strengthening in reinsurers' balance sheets – analysts expect the global reinsurance industry to record solid profits in the year ahead. Several of the largest reinsurance companies have generally maintained high credit ratings over the past year and, at present, are rated A+ or higher by S&P.

Unlike their US peers, the two largest providers of lenders' mortgage insurance (LMI) in Australia – QBE and Genworth – experienced a slight decline in mortgage arrears over the past year. These insurers also benefited from earlier measures taken to tighten their underwriting standards – such as lowering the maximum LVR for loans that they will cover, and the introduction of 'genuine savings' requirements – as well as previous rises in premium rates. Reflecting this, the Australian mortgage insurance operations for QBE and Genworth reported solid profits in 2009, and they are currently rated AA- by S&P with stable outlooks.

Graph 51

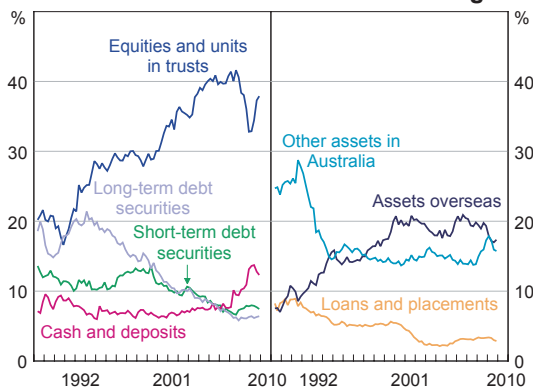
Australian Bank and Insurer Market Indicators



* Market-capitalisation-weighted indices. 'Major banks' includes St George; 'general insurers' are IAG, QBE and Suncorp-Metway.
 ** Senior 5-year CDS premiums. 'Major banks' excludes St George from 1 December 2008.
 *** Break in series due to change in data source.
 Sources: Bloomberg; JPMorgan; RBA

Graph 52

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

Managed Funds

The Australian funds management industry continued to benefit from the recovery of financial asset values over much of 2009. Domestic funds under management increased at an annualised rate of 23 per cent over the six months to December 2009, mainly due to the stronger performance of superannuation funds and life insurers (Table 7). Much of the increase in assets reflected valuation changes attributable to a rebound in equity markets rather than new inflows into these funds. Consistent with this, the share of funds invested in domestic equities and units in trusts increased from 33 per cent to 38 per cent over the year to December 2009, though this is still below the mid-late 2007 peak (Graph 52). In contrast, overall holdings of cash and deposits were little changed over this period; although their share of funds under management remains near the peak, they represent only 12 per cent of the total.

Table 7: Domestic Funds under Management^(a)
December 2009

	Level \$billion	Share of total Per cent	Six-month-ended annualised change	
			Jun 09 Per cent	Dec 09 Per cent
Superannuation funds (consolidated)	846.2	63.4	10.9	31.6
Superannuation funds (unconsolidated)	1 019.7		12.6	31.1
<i>of which:</i>				
<i>Cash and deposits</i>	161.7	15.8	21.7	1.2
<i>Loans and placements</i>	9.8	1.0	14.8	28.9
<i>Short-term securities</i>	52.9	5.2	21.3	43.9
<i>Long-term securities</i>	56.0	5.5	1.8	34.0
<i>Equities</i>	323.0	31.7	25.8	55.3
<i>Units in trusts</i>	152.1	14.9	20.7	33.4
<i>Other assets in Australia^(b)</i>	97.8	9.6	15.7	9.6
<i>Assets overseas</i>	166.4	16.3	-18.3	32.7
Life insurers^(c) (consolidated)	182.0	13.6	-2.7	25.0
Public unit trusts (consolidated)	259.4	19.4	-5.1	8.3
Public unit trusts (unconsolidated)	296.5		-4.9	15.0
<i>of which:</i>				
<i>Listed property trusts</i>	122.6	41.4	-4.1	-0.4
<i>Listed equity trusts</i>	46.3	15.6	-10.3	-10.9
<i>Unlisted equity trusts</i>	99.3	33.5	-1.1	70.5
<i>Other trusts</i>	28.3	9.5	-8.2	-1.8
Other managed funds^(d) (consolidated)	47.9	3.6	-14.2	-23.0
Total (consolidated)	1 335.5	100.0	4.1	22.9
<i>of which:</i>				
All superannuation assets ^(e)	1 008.8	75.5	8.7	31.0

(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 the statutory funds of life insurers

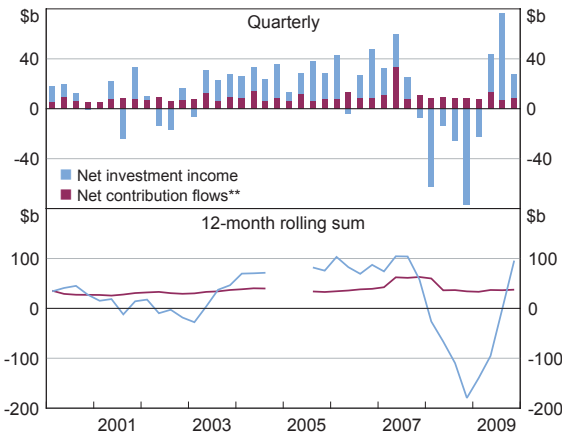
(d) Cash management trusts, common funds and friendly societies

(e) Superannuation funds plus an estimate of the superannuation assets held in the statutory funds of life insurers

Sources: ABS; RBA

Graph 53

Superannuation Funds' Financial Performance*



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

Superannuation funds recorded gains on their investment portfolios of almost \$96 billion in the year to December 2009, partly offsetting losses of around \$180 billion recorded in the previous year (Graph 53). Inflows to superannuation funds have also picked up a little in recent months, and are broadly in line with net contributions observed in previous years.

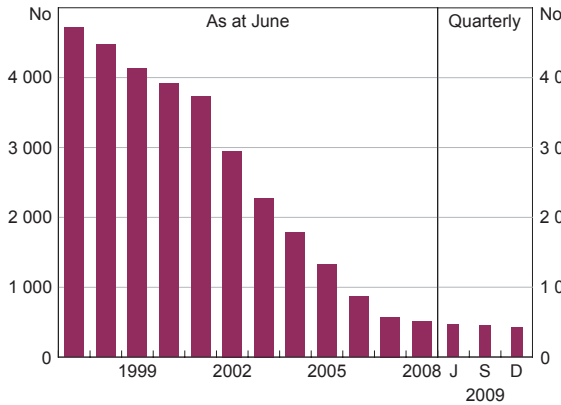
The superannuation industry's long-run trend of consolidation has continued, with the number of APRA-regulated funds (that have more than four members) falling from 505 to 429 since 2008 (Graph 54).

Life Insurers

Life insurers' consolidated assets rose at an annualised rate of 25 per cent over the six months to December 2009, after having declined over 2008 and early 2009. Most of this rise reflected valuation gains on superannuation assets held in life offices, which account for around 90 per cent of life insurers' aggregate assets. Life insurers recorded aggregate investment revenues of around \$27 billion in the six months to September 2009 (the latest available data), compared with investment losses of \$24 billion in the half year to March (Graph 55). However, because much of these recent investment gains were attributable to the insurers' policyholders rather than their shareholders, the net effect on profits was much smaller, with aggregate post-tax profits rising to \$1½ billion in the half year to September 2009. Profits were also supported by stronger direct premium revenues, which rose by around 12 per cent in the year to the September quarter 2009, indicating that demand for more traditional life insurance products has strengthened. Consistent with their higher profits, life insurers improved their capital position over the past year, on average, and held capital equivalent to around 1½ times the regulatory minimum as at September 2009.

Graph 54

APRA Regulated Superannuation Funds
 Funds with more than four members



Source: APRA

Superannuation Funds

Superannuation funds' (consolidated) assets under management rose at an annualised rate of around 30 per cent over the six months to December 2009, to be 21 per cent higher over the past year. This pick-up was due to stronger growth in most asset classes, particularly in domestic equities and units in trusts, which accounted for about one half of total (unconsolidated) superannuation assets as at December.

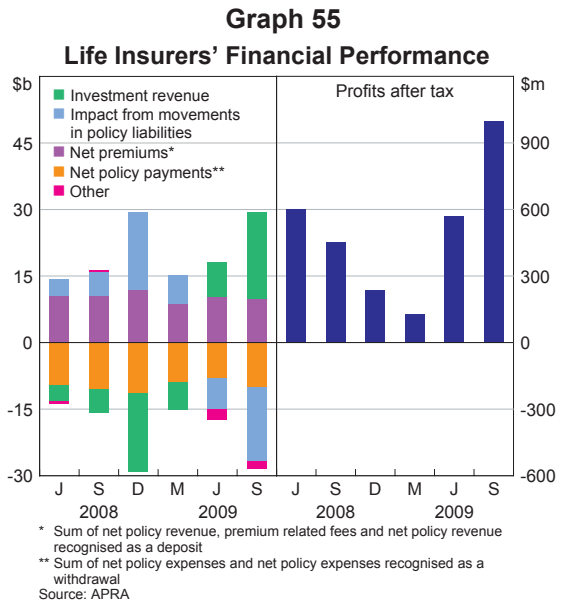
Public Unit Trusts and Other Managed Funds

Outside of superannuation funds and life offices, much of the remaining funds under management are invested in public unit trusts. On a consolidated basis, public unit trusts' assets rose at an annualised rate of around 8 per cent over the six months to December 2009, to be 1½ per cent higher over the past year. While assets in listed equity trusts declined over the half year to December, they remained stable for listed property trusts, and rose strongly for unlisted equity trusts. Despite this increase, unlisted equity trusts' assets remain around 20 per cent below their late 2007 peak.

As noted in previous *Reviews*, the mortgage trust industry was also affected by developments in financial markets and the broader economy, with many trusts experiencing an outflow of funds. Given the illiquidity of their underlying assets, most open-end pooled mortgage funds ceased paying redemptions on request. More recently, some funds have offered investors the option to make partial withdrawals, funded from available cash. To improve investor access to frozen funds, the Australian Securities and Investments Commission (ASIC) had previously introduced provisions which allow fund operators to satisfy withdrawal requests from investors experiencing acute hardship, in priority to other investors. In December 2009, further relief measures were announced which allow for more streamlined and equitable withdrawal arrangements to be put in place as cash becomes available within frozen mortgage and property funds. As at January 2010, Australian mortgage trusts' funds under management were around 30 per cent below their mid 2007 peak.

Market Infrastructure

The payment system infrastructure continued to perform well through the crisis period, although settlements and clearing-house operations were

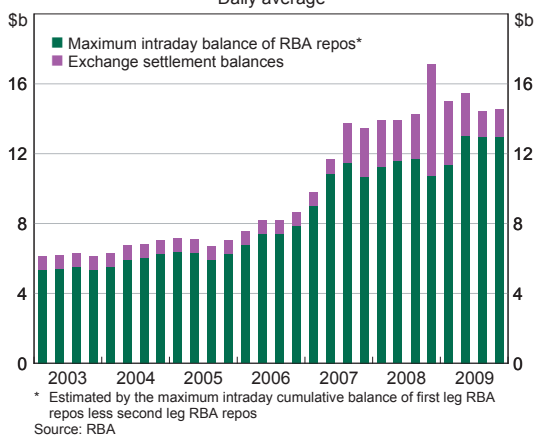


affected in a number of ways by heightened aversion to risk. Participants demanded increased liquidity buffers and other safeguards, and central banks around the world, including the Reserve Bank, responded to these conditions by expanding their domestic liquidity operations. As conditions have improved, there has been less need for support, which is reflected in the decline in exchange settlement balances the banks hold at the Reserve Bank. The volume of transactions processed by clearing and settlement facilities fell with the general decline in underlying financial market activity during the crisis period, but has largely recovered since.

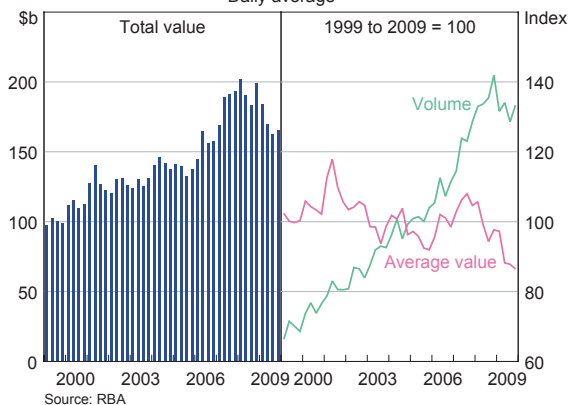
In Australia, high-value transactions settle on a real-time gross settlement basis through the Reserve Bank Information and Transfer System (RITS). Efficient operation of the payment system requires participants to hold sufficient cash at the Reserve Bank to meet their payment obligations. When market conditions are stable, the aggregate demand for cash balances is typically small. Conversely, uncertainty is reflected in increased demand for cash balances held with the central bank. Following the collapse of Lehman Brothers

in September 2008, daily overnight exchange settlement balances peaked at \$16 billion but have since declined to around \$1½ billion (Graph 56 and Graph 40). This reduction has more than offset an increase in the value of intraday repurchase transactions (repos) undertaken with the central bank over recent quarters. Observable system liquidity – measured as the sum of daily overnight exchange settlement balances and maximum intraday repos with the Reserve Bank – is off its late-2008 peak but remains higher than levels prevailing earlier in the decade.

Graph 56
Observable System Liquidity in RITS
 Daily average



Graph 57
RITS Settled Payments
 Daily average



RITS continues to operate smoothly with orderly settlement activity underpinned by ample system liquidity. There are emerging signs in the data that settlement activity, which slowed during 2008 and 2009, may be picking up. Nevertheless, average daily settlements remain nearly 17 per cent below the 2008 peak in value terms, and 6 per cent lower in volume terms (Graph 57). The average transaction size declined as larger-value transactions (over \$100 million) fell more sharply than smaller-value transactions during the market turmoil.

Additional system liquidity and fewer large-value payments have allowed a greater proportion of settlements to occur earlier in the day. On average in 2009, 50 per cent of daily settlement values were completed by 13:45, an hour earlier than in 2007, at which time there was a more discernable peak in settlement activity that occurred late in the day (Graph 58). There has been no indication since the onset of the crisis period of more regular disruptions to settlement activity or operational discontinuities that have required more frequent extensions to RITS operating hours or greater recourse to the Reserve Bank's overnight repo facility.

Clearing of transactions in equity and derivative markets is conducted by two central counterparties, the Australian Clearing House (ACH) and SFE Clearing Corporation (SFECC). Transactions between buyers and sellers in these markets are 'novated' to the respective clearing houses, a process whereby one contract between two initial counterparties is replaced with two new contracts, one between each contracting party and the clearing house. Novation exposes the central counterparty to risk in the event of a participant's default, and this is typically provisioned for by a combination of margins and other risk management tools.

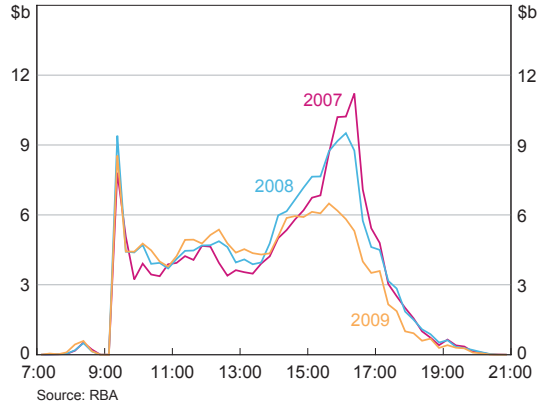
Despite growth in overall activity in the half year to December 2009, the scale of risk exposure assumed by the clearing houses supporting the equities and derivatives markets has declined. One measure

of such exposures is the value of margin held by the central counterparties against participants' positions in derivatives markets. Less volatile markets have led to a reduction in initial margin intervals, and the value of initial margins held has declined (Graph 59). Mark-to-market margin has similarly declined.

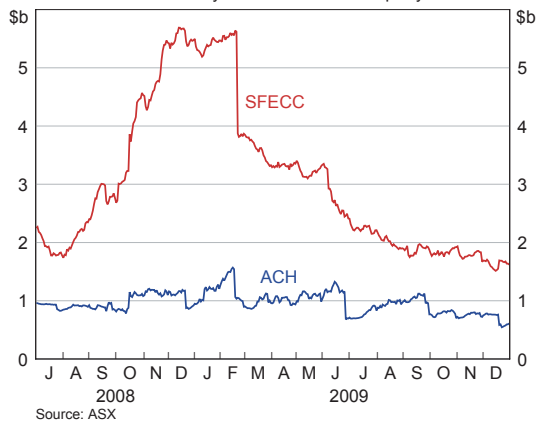
The central counterparties also monitor credit risk and maintain a 'watch list' of participants deemed to warrant more intensive monitoring. An improvement in financial conditions has reduced the number of participants on the ACH watch list to one as at the end of December 2009 from a peak of 15. No participant remains on SFECC's watch list.

There were no noteworthy settlement issues arising from clearing house activity in the second half of 2009. The average rate of failed securities settlements remained low at around ½ of one per cent of total settlements. Because of the complexities involved in aligning securities delivery in a global market, some rate of failure is common to all equity clearing and settlement systems, but Australia remains at the low end of international comparisons.

Graph 58
RITS Settled Payments
15-minute intervals



Graph 59
Initial Margin
Total held by each central counterparty



Box B

Foreign Currency Exposure and Hedging Practices of Australian Banks

Australian banks source a significant share of their funding for domestic lending from offshore debt markets, mainly in the United States. Much of this debt is raised through medium to longer-term bond issuance or short-term commercial paper programs. As at March 2009 around 20 per cent of banks' total liabilities were denominated in foreign currencies. Despite this apparent on-balance sheet currency mismatch, the long-standing practice of swapping the associated foreign currency risk back into local currency terms ensures that fluctuations in the Australian dollar have little effect on domestic banks' balance sheets.

According to the latest available data for 2009, banks' main foreign currency exposure was through foreign debt liabilities which, when netted against foreign currency debt assets, amounted to a net foreign currency debt position of \$339 billion, up from \$186 billion in 2005 (Table B1).¹ The value of derivatives held against this on-balance sheet debt position in order to hedge the foreign currency risk increased to \$414 billion in 2009, leaving an open long position on foreign currency debt of \$75 billion.

Banks' equity liabilities are entirely denominated in local currency terms, but they have foreign

Table B1: Foreign Currency Exposure and Hedging Practices of Australian Banks^(a)
\$ billion

	2005	2009
Debt		
Net foreign currency exposure	-186	-339
Derivatives	168	414
Open foreign currency debt position	-18	75
Equity		
Net foreign currency exposure	33	23
Derivatives	-10	-5
Open foreign currency equity position	23	18
Open foreign currency position debt & equity	5	92
Residual derivatives	-5	-54
Net foreign currency position	1	38
Per cent of assets	0.1	1.6

(a) A negative number denotes a net foreign currency liability position
Source: ABS; RBA

¹ See *Foreign Currency Exposure*, ABS Cat No 5308.0, March Quarter 2009 and D'Arcy P, M Shah Idil and T Davis (2009), 'Foreign Currency Exposure and Hedging in Australia', *RBA Bulletin*, December, pp 1–10 for a broad discussion of the latest survey.

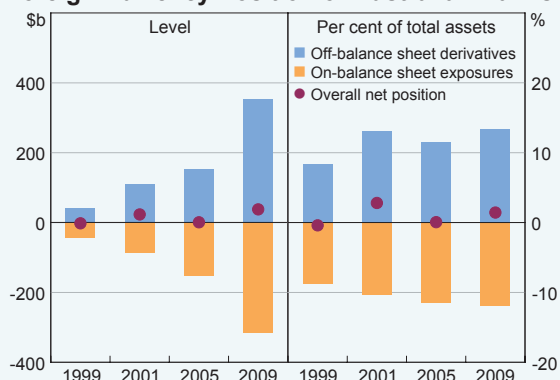
currency exposures arising from their direct equity investments in offshore banking operations, predominantly in New Zealand and the United Kingdom. The off-balance sheet derivative position held against these exposures is smaller since there is less motivation to hedge long-term commitments against relatively short-term exchange rate fluctuations.

Additionally, banks held \$54 billion of derivatives not specifically allocated to positions in debt or equity. At least part of these derivative positions is likely to have been used to hedge the remaining overall net balance sheet exposure (\$92 billion after accounting for open debt and equity positions) rather than specific transactions.² The result is that banks, in aggregate, maintained a net foreign currency position in 2009 of \$38 billion (or just 1.6 per cent of total bank assets). This net position has been relatively stable over time, with derivatives hedging broadly matching the growth in gross on-balance sheet exposures (Graph B1). Furthermore, while the gross dollar value of foreign currency risk and derivatives have grown quickly at an average annualised rate of around 20 per cent over the past decade, they have maintained a relatively stable share of around 12 per cent of the asset base they support, though the recorded figure was somewhat smaller in 1999 when only the major banks were surveyed.

Around 50 per cent of banks' foreign currency liabilities had maturities of more than one year, while the remaining short-term debt was roughly evenly split between that with maturity of less than one year but greater than 90 days and that with maturity of less than 90 days. The derivative instruments used to hedge the foreign currency risk associated with these exposures varied, though banks showed a clear preference for foreign exchange swaps to hedge shorter-term liabilities, and cross-currency interest

2 See Becker C and D Fabbro (2006), 'Limiting Foreign Exchange Exposure through Hedging: The Australian Experience', Reserve Bank Research Discussion Paper 2006-09.

Graph B1
Foreign Currency Position of Australian Banks*



* Total banking sector (except 1999 which is limited to major banks)
Sources: ABS; APRA; RBA

Graph B2
Cross-currency Swap Spreads
Foreign currency to AUD



Sources: Bloomberg; RBA

rate swaps for term debt. Since the gross banking-related flows are very large, the market segments which are most liquid tend to be the ones where the banks are most active.

While banks have little net exposure to foreign currency risk, the rising cost of hedging has made it more expensive to diversify the funding base across several offshore markets (Graph B2).³ Cross-currency basis swap spreads – paid by Australian entities to

3 See Davies M, C Naughtin and A Wong (2009), 'The Impact of the Capital Market Turbulence on Banks' Funding Costs', RBA Bulletin, June, pp 1–14.

hedge both the principal and interest payments on foreign currency bonds – have widened from 5–10 basis points before the crisis for US dollar issuance, to around 30–40 basis points. The all-in cost of hedging other major currencies into Australian dollars has increased even further, due to the additional swap leg between those currencies and the US dollar. More recently, the elevated cross-currency basis swap has given non-residents an incentive to issue Australian dollar-denominated Kangaroo bonds, with issuance picking up significantly in recent months. These non-residents are the natural counterparties to the local banks' hedging transactions as they hedge their Australian dollar exposures back into foreign currencies, which in turn, puts downward pressure on the cross-currency basis swap. ❖

Household and Business Balance Sheets

Households and businesses have weathered the recent downturn relatively well. The economic recovery is supporting incomes, surveys of household and business finances indicate a positive outlook, and arrears rates and other measures of financial stress remain at much lower levels than were seen in the early 1990s. The household sector directly benefited from the boost to incomes from government payments and sharply lower interest rates, as well as the support these measures have given to the economy more generally; these measures are now being unwound as the economy strengthens. Households have been showing some inclination to strengthen their financial position by increasing saving and reducing the pace of borrowing, though gearing remains at historically high levels. Businesses have been deleveraging over the past year, reflecting both a more cautious approach to finances and more stringent terms and pricing for credit, although there are signs that access to debt funding has become a little easier in recent months.

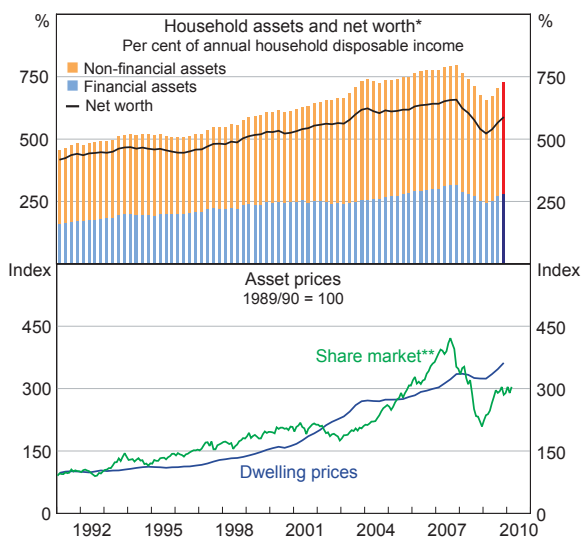
Household Sector

The past year has seen a substantial improvement in the aggregate financial position of the household sector. Reflecting the recovery in asset values from their earlier falls, net worth per household increased by an estimated 11 per cent in the year to December 2009, with the March quarter 2010 likely seeing further increases. Prices of dwellings, which account for around 60 per cent of household assets, rose by around 10 per cent over the year to December (Graph 60). The value of households' financial assets

also increased, due mainly to higher equity prices, which were up by around 30 per cent in the year to end December. As at the end of 2009, average net worth stood at a little below six times annual household disposable income. Although this is below its pre-crisis multiple, this is mainly a reflection of ongoing growth in household incomes; in dollar terms, net worth was around \$610 000 per household in December, only a little below its 2007 peak.

Pressure on household incomes from the economic downturn is also abating. Unemployment looks to have peaked at a lower rate than had been expected earlier, with strong growth in both full-time and part-time employment since mid 2009; surveys

Graph 60
Household Assets and Asset Prices



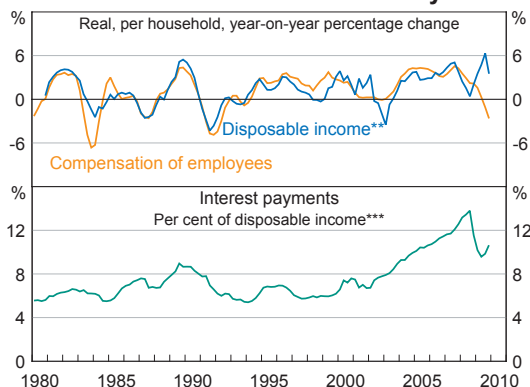
* Income is before the deduction of interest payments; includes income and financial assets of unincorporated enterprises. Estimates for December quarter 2009.

** All Ordinaries Index to March 2000, then ASX 200
Sources: ABS; APM; RBA; REIA; Thomson Reuters

of employers' hiring intentions signal continuing good prospects. Earlier softness in the labour market had led to a fall in aggregate compensation of employees (which typically comprises around three quarters of the household sector's disposable income): it declined by 2.6 per cent in real terms for the year to December 2009 when compared with the previous year (Graph 61). Through the downturn, however, disposable incomes were boosted by accommodative fiscal and monetary policy settings. As a result, total disposable income per household increased by 3.5 per cent in real terms, and 6.6 per cent in nominal terms, over the same period.

Graph 61

Household Incomes and Interest Payments*



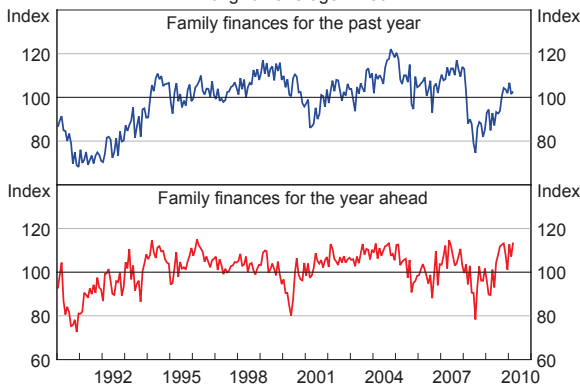
* Household sector excludes unincorporated enterprises
 ** After the deduction of interest payments
 *** Before the deduction of interest payments
 Sources: ABS; RBA

Household interest payments have increased a little as a share of disposable income since mid 2009; this ratio stood at 10.6 per cent in the December quarter 2009, after having previously declined by 4 percentage points from its earlier peak. While household incomes have, in aggregate, been boosted by the decline in interest rates over late 2008 and early 2009, lower rates would have put downward pressure on the incomes of those households holding more interest-bearing assets than liabilities.

Reflecting the combination of increasing asset prices, supportive policy measures, and an improving labour market, households have become increasingly optimistic about their financial situation. Since the release of the previous *Financial Stability Review*, survey measures of households' perceptions of current financial circumstances have continued to improve, following a period when confidence had been weakened by the financial crisis (Graph 62). Credit card usage patterns have reflected this evolution: in recent months both transactions and outstanding balances picked up, after having been broadly unchanged over 2008 and the first half of 2009 (Graph 63). The pattern of net credit card

Graph 62
Consumer Sentiment

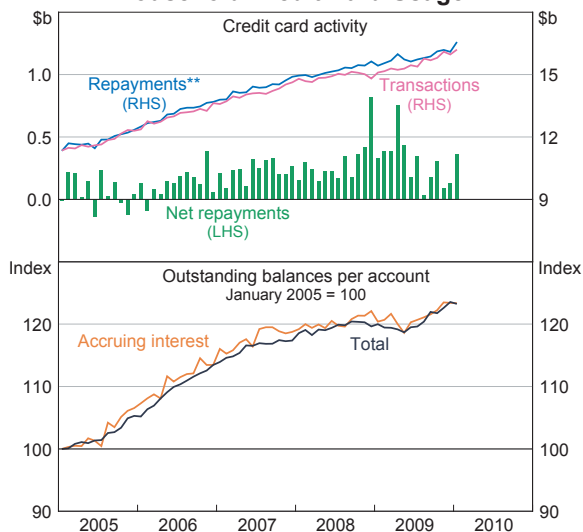
Long-run average = 100



Source: Melbourne Institute and Westpac

Graph 63

Household Credit Card Usage*



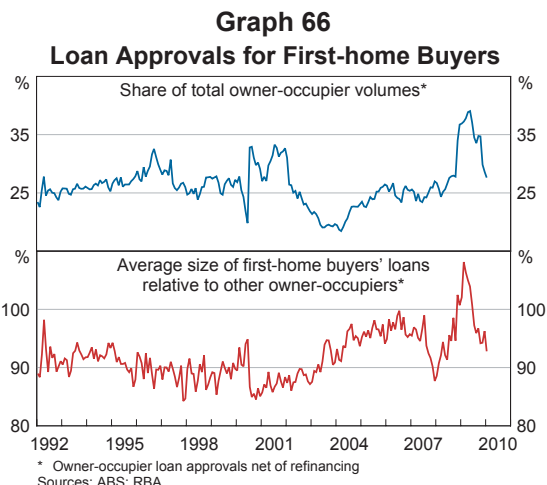
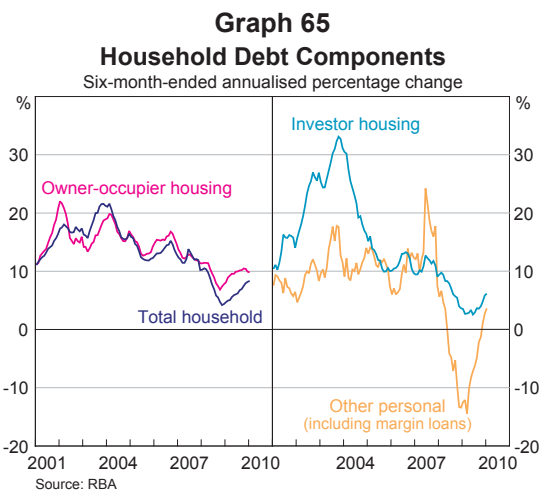
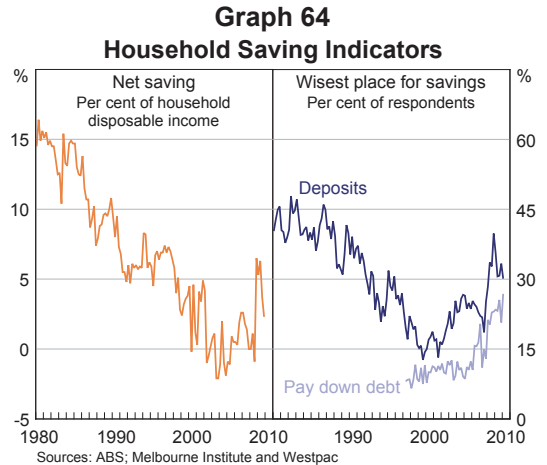
* Personal credit cards; seasonal and calendar adjustment with X-12-ARIMA
 ** Repayments of outstanding balances, interest and other charges
 Source: RBA

repayments is consistent with some households having used government stimulus payments to repay outstanding balances, particularly those accruing interest.

Despite the recent pick-up in credit card usage, households still seem to be taking a fairly conservative overall approach to finances. Over the past year they have, in aggregate, been saving around 4 per cent of disposable income, compared with little net saving over much of the past decade, though this has declined more recently (Graph 64). When asked about the wisest place for savings, survey respondents continue to nominate deposits or debt repayment ahead of other less conservative investments; in part, though, the relative appeal of deposits is likely to have reflected the high deposit interest rates that have been on offer.

Total outstanding household debt has been growing at a much slower pace than in the previous decade. After slowing to an annualised rate of 4.7 per cent in the six months to January 2009, the pace of growth in borrowings has strengthened to 8.3 per cent over the six months to January 2010 (Graph 65). Within this, borrowings for owner-occupier housing increased at an annualised rate of 10 per cent. The past six months have seen the share of first-home buyer activity fall back towards its longer-run average, after having earlier increased strongly in response to government grants and lower interest rates. With the phasing out of the various first-home buyer incentive schemes, the first-home buyer share of the number of loan approvals has fallen to 28 per cent, down from a peak of 39 per cent in May 2009 (Graph 66). The relative size of first-home buyer loans has also recently declined, after briefly rising well above that of other owner-occupiers during the peak of activity in early 2009.

Household borrowing for investment purposes – which had slowed the most during the crisis – has shown some signs of turning around in recent months. As the share market strengthened and



became less volatile in the second half of 2009, outstanding margin debt began to recover a little of the sharp decline seen in the previous 18 months. Despite this, gearing levels on margin loans are currently low by historical standards, suggesting that both lenders and borrowers are approaching margin lending more cautiously than before the crisis.

Investor housing credit growth has also picked up recently, reaching an annualised rate of 6.2 per cent in the six months to January 2010. This is consistent with investors becoming more confident about the outlook as housing prices have strengthened. Lending standards for new investor loans have

tightened over the past two years; relatively fewer investor loans are now being written with higher loan-to-valuation ratios (LVRs) or lower documentation standards (Graph 67). There has also been a decline in the share of interest-only loans, though it is still the case that close to one half of all new investor housing borrowers have the option of making no principal repayments, reflecting the tax advantages of this funding strategy.

Lenders have also been adjusting their criteria for new loans to owner-occupiers. While the strong response to first-home buyer incentive schemes initially saw some lower-quality loans approved – including an increase in the share of housing loans with deposits of less than 10 per cent – banks have since tightened maximum LVRs and other elements of their underwriting standards. Together with a fall in the proportion of first-home buyer loan approvals, this has seen a decline in the share of new owner-occupier housing loans with an LVR above 90 per cent, from a peak of 27 per cent in the March quarter 2009 to 17 per cent by the end of the year. Partial credit bureau data suggest that the creditworthiness of recent first-home buyers has been broadly similar to earlier cohorts of first-time borrowers.

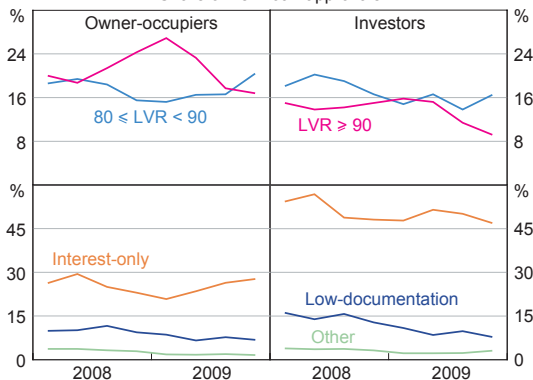
Ongoing growth in household debt has further increased the gearing of household balance sheets. Households' aggregate debt is equivalent to around 20 per cent of aggregate assets, having increased by a couple of percentage points in recent years; this ratio is well above the average of the period since financial deregulation (Graph 68). Outstanding housing-related debt is currently equivalent to 29 per cent of housing assets, with this measure having also increased in recent years.

Increased indebtedness raises households' exposure to shocks to their incomes and financial circumstances. Yet although the Australian household sector as a whole has become more indebted, it remains the case that there is only a small share of very highly geared borrowers.

Graph 67

Banks' Housing Loan Characteristics*

Share of new loan approvals

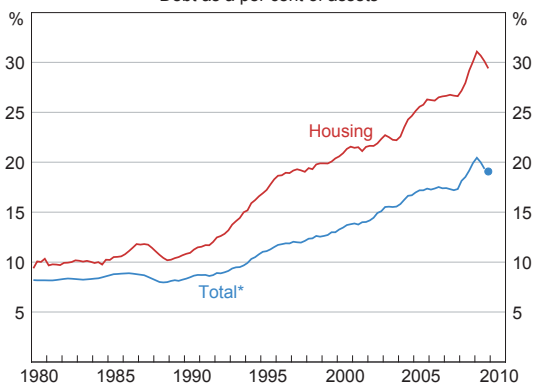


* LVR = loan-to-valuation ratio; 'Other' includes loans approved outside each bank's standard serviceability policy, and other non-standard loans; 'Interest-only' includes mortgages with 100 per cent offset accounts
Source: APRA

Graph 68

Household Gearing Measures

Debt as a per cent of assets

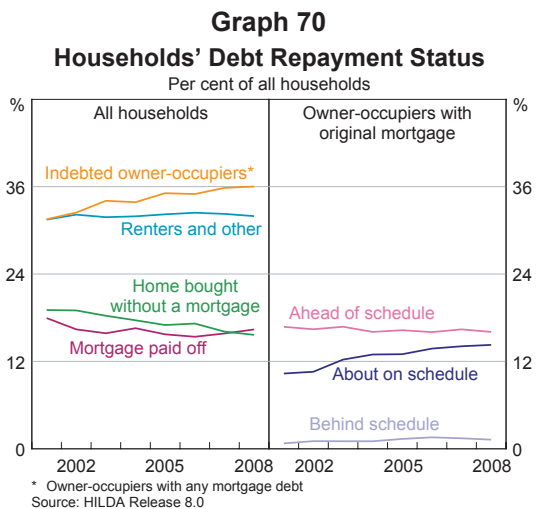
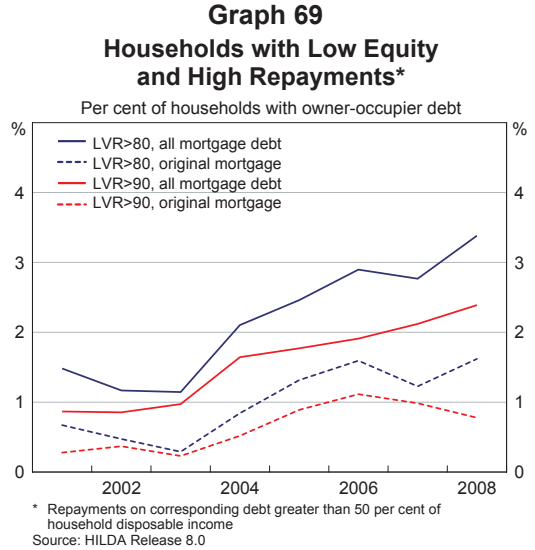


* Includes financial assets of unincorporated enterprises. Estimate for December quarter 2009.
Sources: ABS; RBA

In general, households appear well placed to meet their debt repayments. Based on the most recent HILDA Survey data, in late 2008 – a period when housing loan interest rates were at their highest in more than a decade – around 2 per cent of households with owner-occupier mortgages fulfilled two criteria indicating possible increased vulnerability: they spent more than 50 per cent of their disposable incomes on mortgage repayments; and they had an LVR of 90 per cent or more (Graph 69). There has been an increase in loans with lower deposits and second or refinanced mortgages, but most of these borrowers were generally only facing a moderate repayment burden. Although the share of households fulfilling at least one of these criteria has risen in recent years, it was still the case that more than 90 per cent of owner-occupier households with mortgages had an LVR below 80 per cent and/or a debt-servicing ratio below 30 per cent of income.

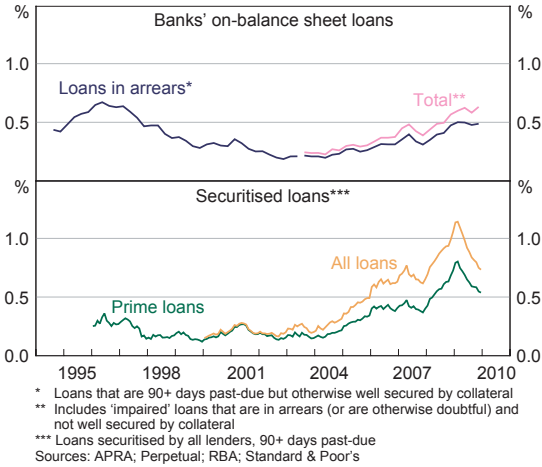
The share of households with negative equity is estimated to be very low, with HILDA data suggesting that these households have historically been no more likely to be behind in repayments than other indebted households. Indebted owner-occupier households only comprise around one third of all households, and within this group only a very small share have been behind schedule in their repayments in recent years (Graph 70). Moreover, more than one half of owner-occupiers whose original mortgage is still outstanding have been ahead of schedule on their repayments in recent years; this buffer suggests that households' aggregate debt-servicing capacity was quite strong heading into the recent economic downturn.

Reflecting the generally sound financial position of the majority of households, and the improvement in the economic environment, indicators of household financial stress have been showing signs of stabilising over recent months. While

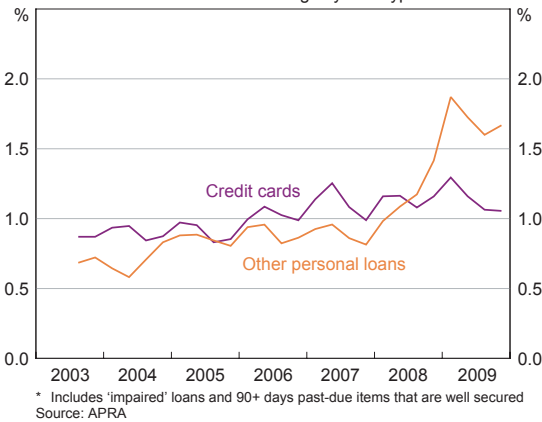


delinquency rates on mortgage payments remain higher than the longer-run average, they have levelled out recently, and are low relative to international experience. By loan value, the share of non-performing housing loans on banks' balance sheets was around 0.6 per cent as at December 2009, little changed over the second half of the year, and around 7 basis points higher than a year earlier; most of these loans remain well covered by collateral (Graph 71).

Graph 71
Non-performing Housing Loans
 Per cent of outstandings



Graph 72
Banks' Non-performing Personal Loans*
 Per cent of outstandings by loan type



The interpretation of recent movements in securitised loan arrears rates has been complicated by the decline in the amount of outstanding securitised loans.⁵ As at December 2009, the share of prime securitised loans in arrears for 90 or more days was a little above the equivalent measure for banks' on-balance sheet loans, while the arrears

⁵ The value of outstanding securitised loans has declined from \$204 billion in June 2007 to \$116 billion in January 2010, due to the amortisation and refinancing of existing securitised loans, and the almost total cessation of new RMBS issuance over much of this period. This has greatly changed the characteristics of the securitised loan pool; in particular, since only mortgages currently not in arrears are securitised, earlier strong growth in securitisations initially put downward pressure on the arrears rate.

rate across all types of securitised housing loans was higher, at around 0.75 per cent. The difference mainly arises because the securitised loan pool includes non-ADI loans (of which a larger share have lower documentation), as well as non-conforming loans. The latter are made to borrowers with impaired credit histories or borrowers who do not otherwise meet traditional lenders' credit standards; they do not make up any part of ADI lending, and only comprise less than 1 per cent of outstanding domestic loans.

This low, and shrinking, share of lower-quality loans has been an important factor in Australian housing loan delinquencies remaining at a relatively low level. The recent levelling out in housing loan arrears rates also reflects the improved economic and financial conditions discussed above, including lower household interest payments; arrears rates on (securitised) variable-rate loans fell by 31 basis points over the year to December 2009, in contrast to a 2 basis point increase for fixed-rate loan arrears over the same period (variable-rate mortgages make up around 80 per cent of all mortgages). Although interest rates have been rising more recently, at least part of the effect of this on arrears rates should be cushioned by the improving labour market. The recovery in housing prices is also likely to have been supportive lately, since higher prices increase the equity on which borrowers are able to draw, increasing the potential for them to resolve their overdue payments by refinancing or selling the property.

According to securitised loan data, housing arrears rates have trended downwards across all states, with New South Wales experiencing the largest improvement. Nationwide, it is estimated that currently around 27 000 households are 90 or more days in arrears on their housing loans, compared with an estimate of 23 000 at the end of 2008.

Arrears rates on other household loans have also improved over the past year. After peaking at 1.3 per cent in the March quarter 2009, the arrears rate for credit cards has recently declined by around 25 basis points (Graph 72). The rate on other

personal loans has fallen by a similar amount, in part due to an improvement in arrears on margin loans, reflecting the stronger share market performance.

Indicators of more severe household financial distress are also showing signs of improvement. The rate of mortgagees' court applications for property possession declined substantially over the second half of 2009 (Graph 73). For New South Wales and Victoria, the rate of possession applications has fallen to 2005 levels, after a number of years where it had been higher than average. Queensland and Western Australia have also seen a substantial falling off in possession activity. The decline in mortgagees' court applications is likely to have reflected both improved financial circumstances that have enabled some delinquent borrowers to catch up on repayments, and a pick-up in the housing market, allowing other households in arrears to sell properties to repay debt. Another contributing factor has been the declining share of outstanding loans made by non-traditional lenders, which in the past have tended to act more quickly than other lenders in obtaining and executing possession judgments. In recent months there has also been a levelling out in the rate of bankruptcies and other personal administrations, after it rose between 2005 and 2009, and it remains the case that only a very small proportion of households have reached such an extreme of financial distress.

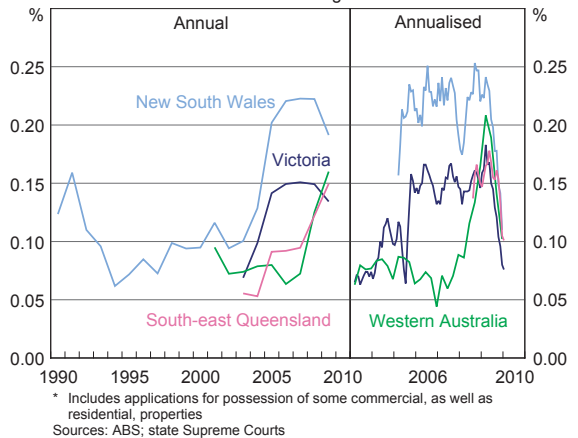
Business Sector

Relatively favourable economic conditions, strong profits and overall moderate gearing preceding the downturn meant that businesses were, in aggregate, well placed to handle the difficulties of the recent period. A small number of companies had employed highly geared business models, however, leaving them particularly exposed to the slowdown in the real economy and the disruption in debt finance availability; within this group, property and infrastructure managers were also

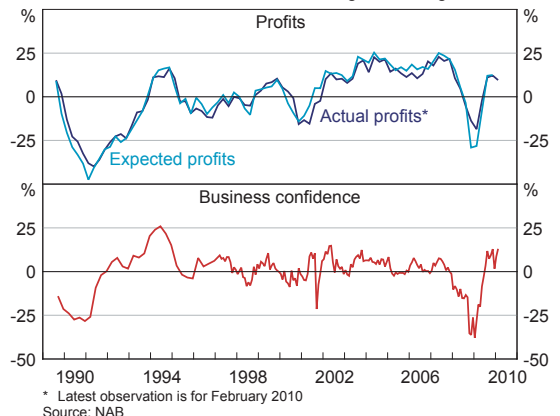
exposed to asset price declines. While economic conditions are now improving, firms continue to report above-average difficulty in obtaining finance, though this too appears to be easing.

Although business profits weakened in the recent challenging economic environment, indications are that there has been some recovery since mid 2009. Signs of an improving outlook have been reflected in survey measures of actual and expected profits, which have been well above their long-run averages in recent months, while business confidence has also rebounded strongly (Graph 74). While aggregate business profits

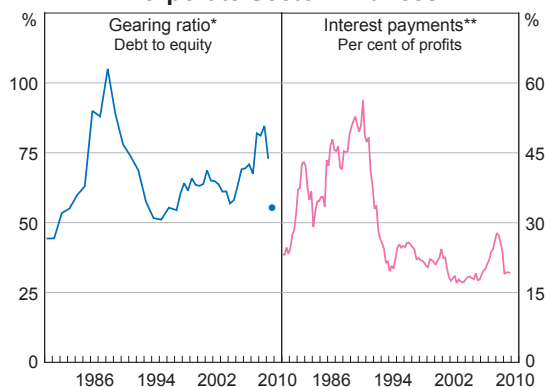
Graph 73
Applications for Property Possession*
Per cent of dwelling stock



Graph 74
Business Conditions Surveys
Net balance, deviation from long-run average

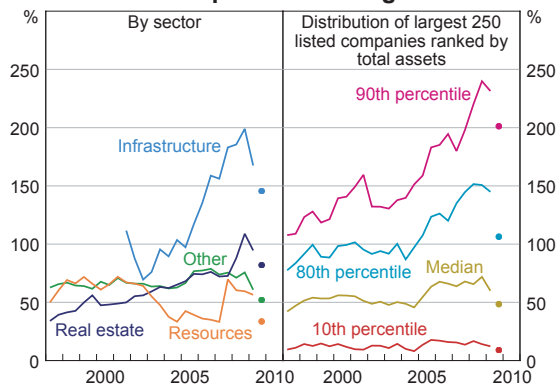


Graph 75
Corporate Sector Finances



* Listed non-financial companies' gross debt/shareholders' equity at book value; excludes foreign companies, includes real estate companies. Latest observation includes only companies that have reported to December 2009.
** ABS data prior to 1994, RBA data thereafter. Profits are measured as non-financial corporations' gross operating surplus.
Sources: ABS; Morningstar; RBA; Statex

Graph 76
Listed Companies' Gearing Ratios*



* Listed non-financial companies' gross debt/shareholders' equity at book value; excludes foreign companies, includes real estate companies. Latest observation includes only companies that have reported to December 2009.
Sources: Morningstar; RBA

declined by 2½ per cent in the year to December 2009 (according to the national accounts measure), they increased by 4½ per cent in the December quarter. An improvement was also evident in financial results announced during the latest corporate reporting season: on a matched sample basis, underlying profits for listed non-financial ASX 200 companies were around 20 per cent higher in the December 2009 half compared with the six months to June, though they were around 15 per cent weaker than the December 2008 half.

Reflecting these improving prospects, share market analysts' earnings forecasts for listed companies have been revised upwards over recent months, with less variation among analysts, indicating both an optimistic and less uncertain profits outlook. Resource companies' earnings are expected to recover strongly in the 2010/11 financial year, with an expected increase of around 45 per cent over forecast profits for the current financial year, due to improved commodity prices and production volumes; earnings for other non-financial firms are expected to increase by around 15 per cent over the same period.

The improving economic environment suggests that businesses remain well placed to service debts, even as interest rates rise from recent lows. A further boost to business finances has come from declining debt levels and equity raisings over the past year, which together have reduced the listed corporate sector's aggregate gearing ratio to around 55 per cent at December 2009, down from around 85 per cent at the end of 2008, and well below the peaks of the late 1980s (Graph 75).

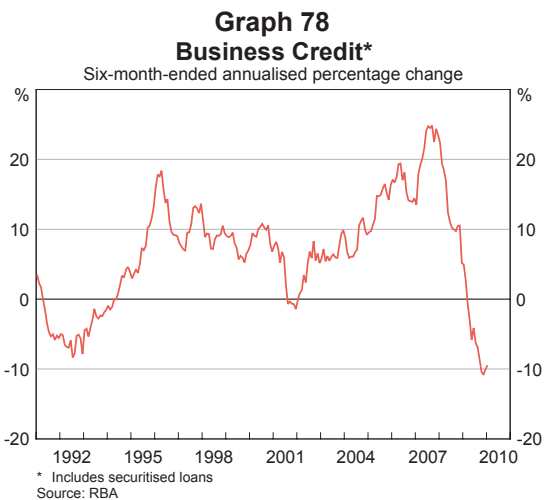
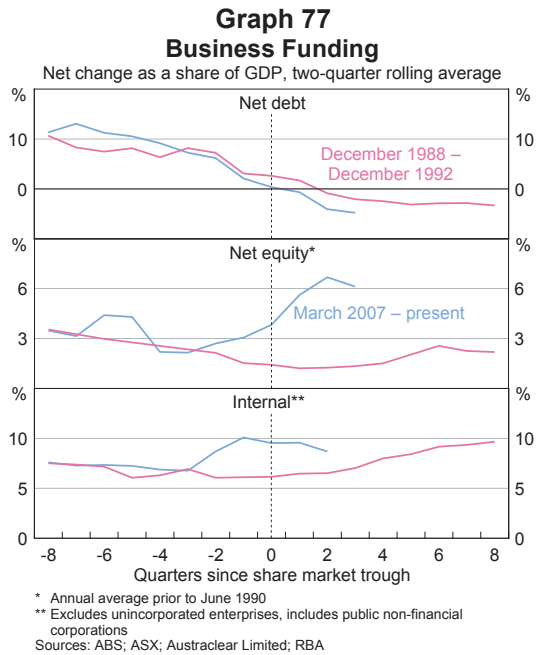
Pre-crisis, gearing ratios among resource and other non-financial companies had remained fairly steady at below 80 per cent (Graph 76). In the real estate and infrastructure sectors, though, highly geared business models became more prevalent and overall gearing increased significantly, to more than 100 per cent for both sectors. This minority of highly geared firms was particularly vulnerable to the recent constriction in debt finance availability; for firms with short-term refinancing needs, it led variously to asset sales, write-downs, and equity raisings. As more highly geared firms took advantage of improved market conditions to access equity finance and pay down debt, the distribution of listed companies' gearing ratios narrowed appreciably over the second half of 2009.

More recently, there have been indications that the business sector is entering a new phase of balance sheet adjustment, with an increasing number

of equity raisings being announced to fund investments (including acquisitions) rather than as recapitalisations. There has also been a pick-up in initial public offerings, in line with improved share market conditions. As a source of external funds, the net amount of equity raised in the six months to December 2009 was equivalent to around 6 per cent of GDP, up from an average of 2½ per cent over the previous ten years (Graph 77). This is a notable contrast to the early 1990s slowdown, when equity was a more limited support for business finances. Internal funding sources have continued to hold up well in the recent episode, with retained earnings equivalent to around 8 per cent of GDP, a couple of percentage points higher than in the early 1990s. Improving profitability suggests that firms will continue to have good internal sources of finance to fund investment expenditure.

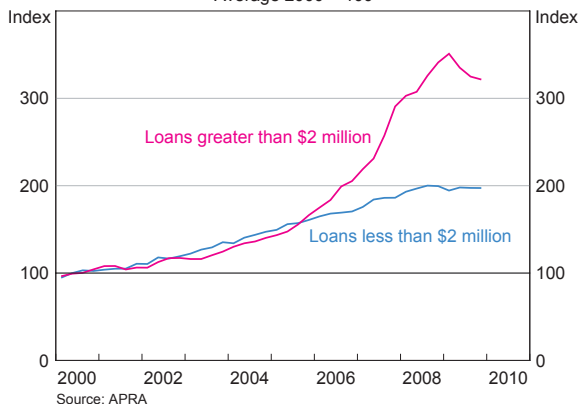
In contrast, external debt financing has slowed substantially. The recent period has seen a noticeable contraction in business credit (Graph 78). In the past couple of months, however, there have been signs of stabilisation: liaison with lenders and businesses suggests an increasing preparedness of lenders to extend credit, and there are early signs of an uptick in commercial loan approvals.

Partly driving the recent slowdown in credit growth was subdued demand from business borrowers in the face of the uncertain economic environment. Banks had also tightened lending standards, both as a response to the higher risk arising from the economic and financial environment (and the associated increase in loan impairments), and as an upward correction of standards following a period when, at least for some lenders, risk was arguably being priced inadequately (see *The Australian Financial System* chapter for further discussion). Over the course of 2008, average interest spreads over the cash rate increased by a little under 200 basis points for new variable-rate loans for

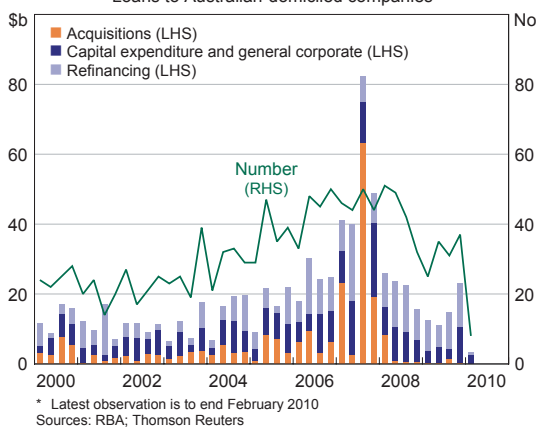


both large and small businesses; since mid 2009 spreads have declined a little for large businesses, though spreads on new small business loans are yet to see much change. Banks have also been enforcing more stringent non-price refinancing terms, including tighter loan covenants, collateral requirements, and one-off refinancing fees.

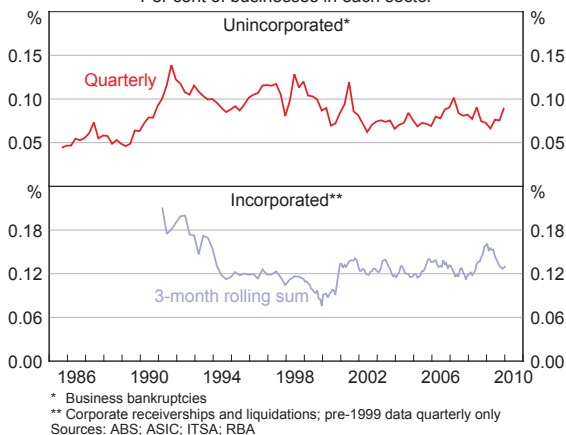
Graph 79
Banks' Business Lending by Loan Size
 Average 2000 = 100



Graph 80
Syndicated Loan Approvals*
 Loans to Australian-domiciled companies



Graph 81
Business Failures
 Per cent of businesses in each sector



Across business types, the decline in outstanding debt was concentrated in lending to larger corporations, particularly by foreign banks, while credit outstanding to smaller businesses (which rely more heavily on bank funding) was little changed in net terms, remaining around mid-2008 levels (Graph 79). Borrowing conditions for larger firms have recently been improving, though, and activity in the syndicated loan market has picked up a little, with \$23 billion of new facilities approved in the December quarter – around the quarterly average over the past decade – though to date in the March quarter activity has been subdued (Graph 80). Notably, whereas the bulk of loan approvals over 2008 and 2009 were purely for refinancing of existing debt, the December quarter saw an increase in loans approved for general corporate purposes such as capital expenditure; this is further indicative of a turning point in businesses' balance sheet adjustments. Corporate bond issuance also picked up in 2009, totalling \$30 billion (up from around \$12 billion in 2008), although only \$4 billion of this was issued domestically.

The overall strength of the business sector's financial position ahead of and into the downturn is demonstrated in ongoing low business failure rates, which remain around the levels of recent years, and well below the highs of the early 1990s (Graph 81). As discussed in *The Australian Financial System* chapter, non-performing business loans have increased, reaching 4.1 per cent of banks' total business loans in December 2009. This was led by the commercial property sector, where around 5.1 per cent of exposures were impaired as at December 2009, although as discussed below, underlying conditions in the commercial property sector have now begun to improve.

Commercial Property

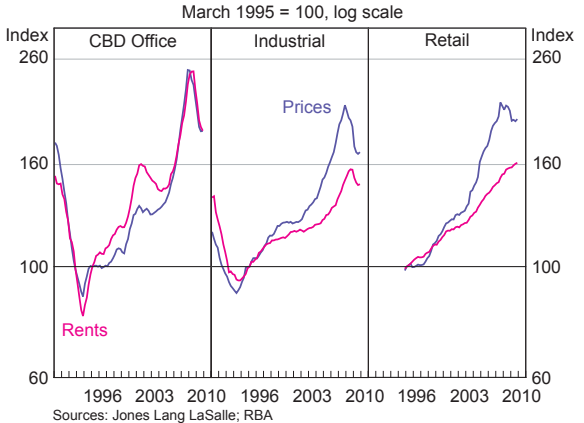
The improvement in the economic environment since mid 2009 has underpinned a stabilisation of conditions in the commercial property market. Rents and capital values for office and industrial premises,

while still well below their mid-2008 peaks, are no longer rapidly declining, reflecting a modest increase in white-collar employment and a pick-up in overall business activity (Graph 82). The relative strength of the retail sector over the past couple of years has seen rents and prices in this market segment remain broadly unchanged.

The Australian commercial property market has also been supported by a relatively low level of excess supply in the current episode. Whereas the commercial property boom of the late 1980s saw construction work done average close to 3 per cent of GDP in the three years to June 1990, work done in the three years to December 2008 averaged a more moderate 2 per cent of GDP (Graph 83). Another reason for the more benign outcome was the timing of the financial sector turmoil, with many planned projects being interrupted by lenders withdrawing finance before construction was underway. This supply experience contrasts with that of the late 1980s, when a much larger share of building projects were completed, exacerbating the effect on rents and prices of slowing underlying demand from tenants. Although a large aggregate supply overhang was avoided in the current episode, there are some market segments where new stock additions have been contributing to higher vacancy rates, which are continuing to weigh on rental earnings. In particular, the very low vacancy rates in Perth and Brisbane CBD office property markets in 2006 and 2007 prompted a relatively strong supply response, while additions to suburban and regional districts have weighed on rents in other states.

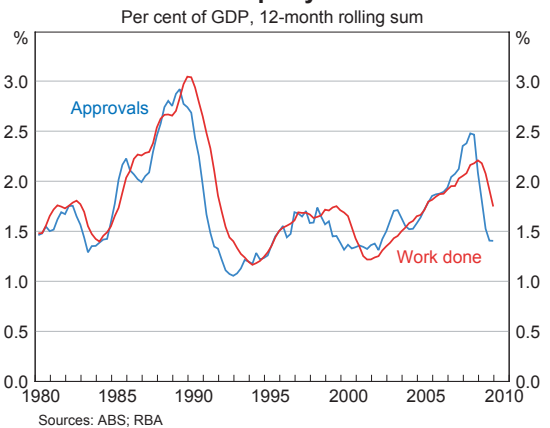
Reasons why the availability of funding for commercial property development contracted more than for other business purposes include that banks reacted promptly to the early deterioration in the loan quality of a small number of large commercial property exposures; they

Graph 82
Commercial Property



Graph 83

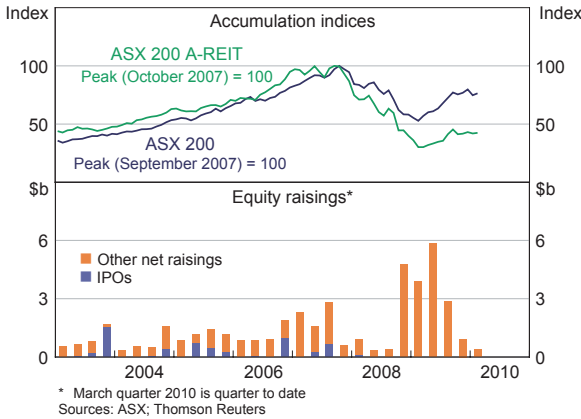
Commercial Property Construction



were also concerned that asset valuations had become stretched. A reduced appetite for lending is still apparent, although liaison with lenders and commercial property borrowers has indicated that this has eased slightly in recent months. Although some larger commercial property firms have issued bonds over the past year, they have done so at elevated spreads, while issuance of other forms of debt securities – such as commercial mortgage-backed securities or debentures – remains subdued.

Graph 84

Listed Real Estate Investment Trusts



The reduction in the availability of debt finance, together with downward asset revaluations, induced substantial equity raisings by listed real estate investment trusts (REITs), with \$13.5 billion of net raisings over the course of 2009 (Graph 84). Over this period equity-raising activity was supported by a turnaround in investor sentiment: after falling much further than the market as whole over 2008, since March 2009 share prices for listed REITs have improved in line with the broader market, though they remain more than 50 per cent below their October 2007 peaks. Reflecting still-soft commercial property prices, listed REITs' balance sheets have continued to be affected by downward asset revaluations, which were equivalent to around 5 per cent of assets in the second half of 2009, after declines equivalent to 10 per cent of assets were seen in the previous two half-years. However, the slowing pace of these, combined with continuing net debt repayments and equity raisings, has seen the aggregate debt-to-equity ratio of listed REITs decline from 91 per cent in June 2009 to 81 per cent in December, though this is still high when compared to the longer-run average of around 60 per cent.

Developments in the Financial System Architecture

International agencies are continuing their efforts to improve the regulatory infrastructure in response to the financial crisis. Considerable work is being undertaken, led by the G-20, the Financial Stability Board (FSB) and the Bank for International Settlements (BIS) and their associated committees, on developing policies to strengthen financial systems globally. For financial institutions that are prudentially regulated, this work has continued to be focused on: strengthening capital regulations, including addressing procyclicality; strengthening liquidity requirements; and other 'macroprudential' policies that are designed to prevent the build-up of risk for the system as a whole. For other parts of the financial system and markets, efforts are focused on strengthening the core infrastructure and ensuring that all systemically important activity is subject to appropriate oversight.

The relevant Australian regulatory agencies (APRA, ASIC, the Australian Treasury and the Reserve Bank) are monitoring and contributing actively to this work via their membership of the various international bodies. The Australian agencies continue to co-ordinate their work through the Council of Financial Regulators (the Council), which is chaired by the Reserve Bank.

These reforms will inevitably raise the cost of intermediation above pre-crisis levels, and it will be important to ensure an appropriate balance between this cost and the benefit of financial systems being subject to stronger standards. In order to help policymakers assess this balance, the Basel Committee on Banking Supervision (BCBS) is

undertaking a detailed quantitative impact study (QIS) of the proposed changes during the first half of 2010. The QIS will quantify the cumulative effect of all elements of the capital and liquidity reform proposals and will therefore produce important results on the suitability of the reforms and their calibration as a package. APRA is leading Australia's contribution to this work and is consulting with Australian authorised deposit-taking institutions (ADIs) involved in the study. APRA and the Reserve Bank are also participating in a BCBS exercise that is taking a 'top-down' look at the capital and liquidity proposals by determining benchmarks against which they will be judged, and assessing their likely macroeconomic effects.

In setting the new regulations, it will be important that the international standard-setters provide scope for some tailoring to national circumstances. This is particularly relevant for countries such as Australia, where regulatory arrangements have worked effectively over recent years and severe stress in the financial system was avoided. An area that should not be overlooked is the importance of getting the right balance between more regulation and more effective enforcement of existing regulations and standards.

The key items on the international financial regulatory agenda and some implications for Australia are outlined below, followed by details of other work being progressed by the Council and other financial regulatory developments in Australia.

The International Regulatory Agenda and Australia

Strengthening the Capital Framework for ADIs

The global financial crisis revealed a number of inadequacies in the capital framework for banks globally: the quality and quantity of capital were called into question in many banks; capital was defined inconsistently across countries; and there was a lack of transparency in disclosure, such that market participants could not fully assess the quality of capital and compare institutions. The view that the capital framework needed strengthening was an early and central consensus among national and international regulatory bodies.

The BCBS has been the main driver of international reforms in this area over the past year or so and last December it released *Strengthening the Resilience of the Banking Sector*, a consultative document proposing major changes to increase the **quality, consistency and transparency of the capital base**. These include enhancing a bank's capacity to absorb losses on a going concern basis, such that the predominant form of Tier 1 capital will be common shares and retained earnings; hybrid capital instruments with an incentive to redeem will be phased out. These measures will be introduced in a manner that allows for an orderly transition to the new capital regime. Transparency (and therefore market discipline) is to be improved by requiring all elements of capital to be disclosed, along with a detailed reconciliation to the reported accounts. APRA expects to generally follow the agreed international timetable when implementing the new standards in Australia, which on current planning would see new requirements in place by the end of 2012.

In addition, the BCBS is working to strengthen the **risk coverage of the capital framework**. More capital will be required for counterparty credit risk exposures arising from derivatives, repos and

securities financing activities. This will strengthen the resilience of individual banks and reduce the risk that shocks might be transmitted from one institution to another through the derivatives and financing channels.

The BCBS has been developing a non-risk-weighted simple **leverage ratio** requirement as a supplement to the Basel II risk-weighted capital adequacy rules. This ratio is intended to help contain any build-up of excessive leverage in the banking system and guard against attempts to 'game' the risk-based requirements. To ensure comparability, the details of the leverage ratio will be harmonised internationally. The relevant Australian agencies continue to have concerns that such a ratio could weaken the principle that capital should be allocated against economic risk; in any case, there is no evidence that banking systems in countries with leverage ratio requirements have systematically outperformed those that do not. Nonetheless, its introduction has been agreed at the international level and Australia will work with other BCBS member countries in coming months on settling the various implementation details and, in doing so, seek to minimise the potential for any unintended or otherwise undesirable effects.

Proposals are also being developed by the BCBS that would require banks to increase capital in the good times that can then be run down during a downturn. One such proposal involves the introduction of target **counter-cyclical capital buffers** above the re-designed minimum capital requirements. This could work in the form of a system-wide capital surcharge that would vary in response to specific indicator variables such as the deviation of credit from its longer-term trend. This proposal is currently at a relatively early stage of development and further work is needed to specify operational details. The BCBS will review a fully detailed proposal at its July 2010 meeting. Other proposals designed to lean against the cycle include the use of more forward-looking provisioning based on expected losses, rather than current arrangements that base provisions on losses already incurred. The BCBS is also looking into

a potential role for contingent capital instruments that are triggered to convert to equity in times of crisis.

These more recent proposals follow measures announced by the BCBS in July 2009 (and reported in the September 2009 *Review*) to ensure that the risks relating to trading activities, securitisations and exposures to off-balance sheet vehicles are better reflected in minimum capital requirements, risk management practices and accompanying public disclosures. APRA's proposals to give effect to these changes were released in December 2009, in the discussion paper *Enhancements to the Basel II Framework in Australia*, along with associated draft prudential standards. Subject to consultation, the changes will be implemented from 1 January 2011, though they are not expected to have a significant effect on ADIs in Australia.

Strengthening Liquidity Risk Management by ADIs

The BCBS is also at the forefront of efforts to make banks' liquidity risk management systems more robust to demanding market conditions. At the same time as releasing its proposals on capital, the BCBS released a second consultative document, *International Framework for Liquidity Risk Measurement, Standards and Monitoring*. It proposed to introduce a global minimum liquidity standard for internationally active banks that includes a 30-day liquidity coverage ratio requirement (relevant for stressed funding situations), underpinned by a longer-term structural liquidity ratio. This in turn would be likely to mean that banks would need to hold more cash or highly liquid assets such as government or highly rated private sector bonds.

The BCBS is yet to decide whether the final standard will use a narrow definition of liquid assets (comprising cash, central bank reserves and high quality sovereign paper), or a broader definition, which would also include high quality private sector paper. The QIS will quantify the

effect and trade-offs involved in either definition. The proposed definition of liquid assets is one that is particularly relevant for Australia and other countries with low levels of government debt. In a number of such countries, a narrow definition may be unworkable due to the low levels of public sector securities on issue.

While the liquidity proposals released by the BCBS were broadly anticipated by APRA in its September 2009 discussion paper on this issue, APRA's final prudential standards on liquidity have been postponed to the middle of 2011, given the importance of the results of the QIS. Implementation and, if necessary, transition arrangements are to be finalised once the BCBS's final standards are clearer. APRA has established a working group with Reserve Bank representation to consider the industry feedback on the proposals and finalise robust standards that reflect the realities of the Australian marketplace.

Macroprudential Policies and Oversight

While national prudential regulators have long engaged in the supervision of individual financial institutions – so-called microprudential regulation – it has been argued that the recent crisis exposed the shortcomings of that approach, especially in relation to systemic banks. There has consequently been increased interest in the usefulness of additional, macroprudential policies and approaches to the oversight of financial institutions, with the overall aim of promoting financial system stability. While views differ on the exact definition of macroprudential policy, a general approach is that it covers policies that seek to prevent the build-up of system-wide risk and the often procyclical nature of these risks. Numerous streams of work are underway to address these issues, at various stages of development, largely driven by the FSB and, insofar as they affect deposit-taking institutions, the BCBS.

As noted above, the BCBS has a program of work to address **procyclicality**. While some of these

policies (for example, loan-to-valuation caps for sectors exhibiting excessive credit growth) were in use in several countries before the recent crisis, the difficulties experienced by a number of large, internationally active financial institutions have prompted the FSB and BCBS to undertake further work in this area.

The FSB and BCBS have also been looking at the ‘too big to fail’ problem and the associated moral hazard issues raised by the extensive financial rescue packages implemented globally. One element of the problem is the difficulty in defining which entities are ‘systemic’ or ‘too big to fail’. Whether a particular firm falls into this category or not will depend on the state of the economy and financial system at the time; it will also depend not just on the firm’s size, but on the types of financial services it provides, its complexity and interconnections with the rest of the financial system. These considerations were examined in detail in a joint report released by the IMF, BIS and FSB in November 2009 on *Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations*, and are the subject of further analysis in a working group of the BCBS.

Irrespective of the precise definition of systemically important financial institutions (SIFIs), work has commenced on examining policy options to reduce the probability and effect of their failure, and to improve resolution mechanisms, so that failures that do occur can be dealt with in a smooth and timely manner. Related to this work, there are a number of proposals to strengthen core financial infrastructures to reduce the risk of contagion (see below).

One option to reduce the probability that SIFIs might fail is that they could face tougher prudential requirements, both in terms of the capital and liquidity they would have to hold, and the supervisory oversight to which they would be subject. The FSB is also investigating the feasibility of initiatives to simplify the structures of SIFIs. There is also a focus on improving existing practices for supervising SIFIs, including those that have

significant cross-border operations. With this in mind, the FSB has initiated the establishment of supervisory colleges for large internationally active banks and insurers, to promote better sharing of information across jurisdictions.

To improve resolution mechanisms, the FSB is encouraging the development of firm-specific contingency and resolution plans (or ‘living wills’) to mitigate the disruption of financial institution failures and reduce moral hazard in the future. These plans are expected to include funding measures for preserving liquidity and making up cash flow shortfalls in adverse situations, as well as actions to scale down or sell business lines. This initiative is particularly relevant for the large cross-border banks, where inconsistencies between national legal frameworks can otherwise impede resolution.

A preliminary assessment of options for addressing the ‘too big to fail’ issue will be presented by the FSB to the June 2010 G-20 Leaders’ Summit. Given the different types of institutions and national and cross-border contexts involved, a mix of approaches is likely to be necessary. It is too early to ascertain the appropriateness of any of the proposals for Australian ADIs, though the elements of the financial infrastructure which have worked well in Australia to date need to be acknowledged and given appropriate weight. In particular, it will be important to ensure that policies directed at the activities of the top 30 to 40 large internationally active banks do not unduly disadvantage financial institutions focused on regular domestic lending, which generally did not experience the same sorts of troubles.

Financial Market Infrastructure

Efforts are underway by policymakers internationally to strengthen core financial market infrastructures, particularly payment and settlement systems and central counterparties. While such infrastructures generally performed well during the recent financial crisis, the experience has highlighted the importance of ensuring that high standards are maintained and, if necessary, strengthened.

Accordingly, in February 2010 the relevant standard-setting bodies, the BIS Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO), launched a review of their standards for financial market infrastructures, namely the:

- *Core Principles for Systemically Important Payment Systems* (issued in 2001);
- *Recommendations for Securities Settlement Systems* (issued in 2001); and
- *Recommendations for Central Counterparties* (issued in 2004).

Revised drafts of all three standards are intended to be issued for public consultation by early 2011. Australian agencies are participating in this review via their membership of the CPSS (Reserve Bank) and IOSCO (ASIC), and both agencies are participating in several working groups established to advance the detailed work of the review.

Separately, the CPSS and IOSCO are already developing guidance on how the *Recommendations for Central Counterparties* (CCPs) should be applied to those CCPs that handle over-the-counter (OTC) derivatives. This guidance will also cover other relevant infrastructures handling OTC derivatives such as trade repositories. This work has been prompted by the recent or imminent commencement of CCPs for OTC derivatives and trade repositories in the United States and Europe. The CPSS and IOSCO will issue a consultation document on the guidance in coming months.

Consistent with these international developments, in Australia the Reserve Bank is working with APRA and ASIC to promote safe, efficient and robust practices in the Australian OTC derivatives market. One aspect of this is promoting the use of CCP clearing and settlement facilities for OTC derivative transactions. Related to this, in October 2009 ASIC released proposed guidance on the *Regulation of Clearing and Settlement Facilities*. This was in part

to provide assistance with the licensing process to entities – typically from offshore – seeking to operate such facilities in Australia. The *Corporations Act* requires that any operator of a clearing and settlement facility in Australia obtains a licence or be granted a Ministerial exemption from the licence requirement. Issues addressed in the proposed guidance include the circumstances in which an Australian clearing and settlement facility licence will be required, and when licensing as an overseas operator, rather than a domestic operator, would be appropriate. This latter point involves, among other things, a judgement on the sufficient equivalence of the overseas regulatory regime under which a non-Australian facility would operate. Following this consultation process, ASIC intends to publish the regulatory guide in due course. The Reserve Bank published guidance on how it assesses sufficient equivalence for this purpose in 2009. The Bank also established arrangements at that time around the reliance it places on the overseas regulator's oversight of foreign CCPs' activities.

Differentiated Nature and Scope of Financial Regulation

Another issue that arose in the crisis was whether all systemically important financial activity was currently subject to appropriate oversight. Following a request by the G-20 and the FSB, in January 2010 the Joint Forum released a *Review of the Differentiated Nature and Scope of Financial Regulation*. The report analysed key issues arising from differentiated financial regulation in the international banking, securities and insurance sectors. It also reviewed gaps in the scope of regulation as it relates to different financial activities, focusing on unregulated or lightly regulated entities or activities, where systemic risks may not be fully captured. The report made 17 recommendations for improvements in financial regulation, grouped in five areas: issues arising from regulatory differences across the three sectors that affect similar financial products;

supervision and regulation of financial groups, focusing on unregulated entities within those groups; residential mortgage origination, focusing on minimum underwriting standards practised by different types of mortgage providers; hedge funds, especially those that pose systemic risk; and credit risk transfer, especially credit default swaps and financial guarantee insurance.

The BCBS, IOSCO and the International Association of Insurance Supervisors are currently considering how best to implement the report's recommendations and APRA and ASIC will consider domestic implementation once this has been completed. The Joint Forum, which is currently chaired by ASIC, is also considering mandates to progress recommendations on conglomerate supervision in the report.

In Australia, APRA has recently released proposals for supervising certain conglomerate groups. In particular, the proposals cover groups containing APRA-regulated entities that have material operations in more than one industry regulated by APRA and/or contain material unregulated entities (financial or otherwise). The objective of the proposals is to ensure that APRA's supervision adequately captures the risks to which APRA-regulated entities within the conglomerate groups are exposed and which, because of the operations or structures of the group, are not adequately captured by the existing arrangements. APRA is accepting feedback on the proposals until June 2010, after which it is expected that draft prudential standards will be prepared.

In September 2009, the IOSCO Task Force on Unregulated Financial Markets and Products (TFUMP) published recommendations for regulatory enhancements in the areas of securitisation and credit default swaps. The recommendations relate to disclosure, alignment of incentives in the securitisation value chain and independence of service providers. ASIC (which is co-chair of the Task Force) is currently in discussions with the Australian Securitisation Forum about developing industry standards to implement the TFUMP

recommendations. IOSCO has also recently published a template to be used by members in gathering information from hedge funds (with a focus on data relevant to systemic risk) with a view to sharing the data with other regulators. The template builds on the data collection recommendations set out in an earlier IOSCO report on Hedge Fund Oversight. ASIC is examining the implementation implications of the report.

Credit Rating Agencies

Following international efforts to improve the regulatory oversight of credit rating agencies (CRAs), led principally by IOSCO, national authorities have begun to introduce reforms in their local markets. In November 2008, the Australian Government announced that ASIC would revoke a licensing exemption for the three major global CRAs and require all CRAs to hold an Australian Financial Services (AFS) Licence. On top of the general licensee obligations set out in the *Corporations Act*, ASIC has imposed special conditions on AFS licences granted to CRAs. Licensed CRAs are required, among other things, to: comply with IOSCO's revised *Code of Conduct Fundamentals for Credit Rating Agencies* (on an 'if not why not' basis to 30 June 2010 and mandatory thereafter); lodge with ASIC an annual report detailing compliance with IOSCO's Code; review ratings affected by material changes to rating methodologies within six months of the change; have in place for credit analysts a training program that has been independently assessed as adequate and appropriate; and refrain from 'notching' credit ratings for an anti-competitive purpose. These improvements will, in substantial respects, align Australia's regulation of CRAs with IOSCO principles and with regulation passed or proposed in major markets such as the United States, Europe and Japan.

A CRA may apply for an AFS licence that either authorises it to issue credit ratings to retail and wholesale investors (a retail licence) or wholesale investors only (a wholesale licence). CRAs that wish

to obtain a retail licence (to give general advice by issuing ratings to retail investors) must comply with general licensee obligations under the *Corporations Act* that afford additional protections to retail investors. One such obligation is to have an internal dispute resolution procedure in place and to hold membership of an approved external dispute resolution (EDR) scheme. An alternative to court actions, EDR schemes provide quick, low-cost and independent resolution of disputes between retail investors and AFS licensees involving claims of up to \$150 000 (increasing to \$280 000 on 1 January 2012). This step, together with the removal since 1 January 2010 of the exemption that protected CRAs from any liability for their ratings published in prospectuses and other documents, is intended to make CRAs more accountable for their ratings.

In the event, while the three major global CRAs operating in Australia each applied for, and received, a wholesale AFS licence, they did not apply for a retail licence. Consequently, since 1 January 2010 none of them are offering ratings to Australian retail investors. In these circumstances, they are required to ensure that their ratings are not disclosed (and to restrict a third party from disclosing those ratings) in a retail prospectus or product disclosure statement. They must also ensure that their ratings are not disclosed in any other manner that could reasonably be regarded as being intended to influence a retail client in making a decision about a particular class of financial product, unless required by law (for example, a disclosing entity's continuous disclosure obligations).

Peer Review Process

Ensuring that the various international regulatory standards are up to date and take on the lessons from the crisis is a significant task. In addition, it is equally important that regulators understand how the standards are being implemented and how effective they are. The FSB has recently launched a

peer review process of its member countries which will aim to evaluate their adherence to international standards for regulation and supervision. This will involve periodic 'thematic' reviews across countries as well as more wide-ranging reviews of single countries. All members of the FSB will be subject to these reviews and non-member countries will be encouraged to undergo similar evaluations. One key aim of the FSB's approach is to encourage a 'race to the top' in the adoption of best-practice international regulatory policies and standards. The process aims to complement existing international reviews conducted by the IMF and World Bank, namely the Financial Sector Assessment Program and the Reports on the Observance of Standards and Codes. The resulting final report of a peer review is expected to be made public. Following publication of the report, countries' implementation of agreed actions will be monitored by the FSB. The FSB aims to complete three 'thematic' reviews and three country reviews in 2010. As a member of the FSB, Australia is participating in the thematic peer review on compensation that is underway currently (represented by the Australian Treasury) and has volunteered to undergo a country peer review in 2011.

Compensation and Incentives

The first of the FSB's thematic peer reviews, which is underway, covers the implementation of its *Principles for Sound Compensation Practices*. The Principles were the international response to the concern that compensation practices in the financial sector had encouraged excessive risk taking. A template was distributed to FSB members in December 2009 so they could seek feedback from financial institutions and other stakeholders on progress and practical experiences in implementing the Principles (or the respective national rules). The FSB expects to complete its review shortly and publish the resulting report. To help supervisors review banks' compensation

practices and assess their compliance with the FSB Principles, the BCBS recently issued *Compensation Principles and Standards Assessment Methodology*.

In Australia, APRA is responsible for the implementation of the FSB Principles by ADIs and insurers. In November 2009, APRA released its final prudential requirements on remuneration, and an associated prudential practice guide, which incorporate modifications resulting from a second round of public consultation during 2009. Firms were expected to begin the transition to meet the new standards from 1 December 2009; they will take effect from 1 April 2010, by which time APRA requires that a Board Remuneration Committee must be established and a suitable Remuneration Policy be in place. APRA-regulated institutions will be expected to conform to the intent and the substance of the standards; if APRA judges that the remuneration arrangements of an institution are likely to encourage excessive risk taking, APRA has several supervisory options, including the power to impose additional capital requirements on that institution.

Other Domestic Developments

Government Guarantees

On 7 February 2010, the Government, acting on the advice of the Council of Financial Regulators, announced the withdrawal of the Guarantee Scheme for Large Deposits and Wholesale Funding for new liabilities from 31 March 2010.⁶ A key consideration behind the Council's advice was that financial conditions had improved such that the Guarantee Scheme was no longer needed. The Council also considered that it would be inappropriate for the Guarantee Scheme to remain in place for a significantly longer period than in most other countries. A number of key G-20 countries have already closed their schemes and market sentiment has been resilient to these closures. Existing guaranteed liabilities of ADIs will continue to

be covered by the Guarantee Scheme until maturity for wholesale funding and term deposits, or to October 2015 for 'at call' deposits. At the same time, the Government also announced that the Guarantee of State and Territory Borrowing would close to new issuance on 31 December 2010.

The withdrawal of the Guarantee Scheme for Large Deposits and Wholesale Funding does not affect the Government's guarantee of deposits up to and including \$1 million under the Financial Claims Scheme (FCS). The parameters of the FCS are to be reviewed by the Government in October 2011. In order to provide policy advice to the Government well ahead of this date, the Council has commenced an examination of various aspects of the FCS, including the future level of the cap. A number of other countries are also examining their deposit insurance coverage, particularly where temporary unlimited caps were implemented at the height of the financial market disruption in late 2008. Further work has also been undertaken on operational aspects of the FCS for ADIs. In January 2010, APRA released, for consultation, proposals for ADIs to provide data to APRA on their deposit account-holders, so depositors can be paid in a timely manner should claims under the FCS be made. Feedback was also requested on how depositors could receive their payments in a timely and secure way. The requirement that ADIs be able to identify the aggregate balance for each account-holder is important, as the FCS cap applies to the total balance of each account-holder at an ADI, not each account.

Financial Crisis Management

Throughout 2009, both APRA and the Treasury examined Australia's prudential framework to ensure that it provides for the effective supervision of prudentially regulated institutions and, where necessary, management of distress at such institutions. This work also considered lessons from public sector interventions internationally through the crisis. As a result, further legislative changes to

⁶ See Schwartz C (2010), 'The Australian Government Guarantee Scheme', *RBA Bulletin*, March, pp 19–26.

ensure that APRA can take appropriate action to assist in the prevention of, and respond to, institutional distress have been developed and included in a draft Bill that has recently been the subject of public consultation. In related work, the Council agencies have prepared joint crisis management plans over the past couple of years and have recently tested those plans through a crisis simulation exercise.

Market Supervision

As discussed in the September 2009 *Review*, the Government announced that ASIC will take over, from market operators including the ASX, responsibility for supervision of real-time trading on all of Australia's domestic licensed financial markets. This includes responsibility for market surveillance and participant supervision. ASIC and ASX are well progressed in arranging the transfer, which is expected to occur during the September quarter of 2010. Legislation giving effect to the transfer has been passed and the regulations setting out details of the proposed supervision arrangements are currently being prepared. ASIC has established a Market Supervision Advisory Panel to advise on its approach to its new responsibilities. The panel includes members from the financial services industry with experience in the legal, compliance, retail and institutional aspects of broking.

In addition, ASIC has begun a public consultation process on the proposed new market integrity rules that are to apply to trading on ASX and SFE markets. The consultation paper released by ASIC states that the proposed new rules will be based on the existing rules of these markets, while clarifying the supervisory responsibilities of ASIC and market operators. The proposed approach to dealing with breaches of the rules, which is very similar to the current ASX disciplinary tribunal, is also set out in the consultation paper.

National Regulation of Consumer Credit

As mentioned in the September 2009 *Review*, the Government introduced legislation in mid 2009 to enhance regulation of consumer credit provision with the commencement, on 1 July 2010, of the National Consumer Credit Protection regime. This new system replaces (and largely replicates) the state-based Uniform Consumer Credit Code, with a consistent national licensing system and consumer protection obligations for all credit providers and credit assistants. Following public consultation, the first set of final regulations was released in March 2010. Further regulations will be issued in coming months, dealing with several issues, including proposed modifications to the securitisation entity exemption and a proposed regulatory framework with respect to pre-existing credit contracts. ❖

