Financial Stability Review

SEPTEMBER 2012

Contents

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Overview

The euro area sovereign debt and banking crisis has continued to weigh on global financial conditions in the period since the previous *Financial Stability Review*. Although fears of a liquidity crisis in the euro area were generally assuaged earlier in the year following the European Central Bank's (ECB's) large-scale lending to banks, concerns about the resilience of sovereign and bank balance sheets in the region have persisted. Developments in Greece and Spain, in particular, triggered a renewed bout of risk aversion and market volatility between April and July, as markets became less confident that these and other euro area countries could return their fiscal positions to more sustainable paths. Sovereign borrowing costs and risk premiums rose to record levels in some euro area countries and global share prices declined. These events added to broader doubts about the viability of the monetary union, spurring investors to move capital out of the most troubled countries to avoid redenomination risk should they exit the euro. This put further funding strain on banks in the region, many of which have been under pressure for some time given the deteriorating economic conditions in the euro area and their exposures to sovereigns with weak fiscal positions.

Since August, there has been a noticeable improvement in market sentiment and risk pricing in the euro area. This mainly reflected the ECB's announcement of a sovereign bond purchase program, known as Outright Monetary Transactions. European authorities also recently announced plans to more closely integrate the region's financial regulatory structure, including by centralising bank supervision under the ECB; in addition, there has been further progress towards the establishment of the expanded and permanent European bailout mechanism. Despite these steps, some of the longer-term policy measures involve significant implementation risk, and many of the underlying problems in the euro area are yet to be effectively resolved. Fiscal deficits remain large; many banks need to repair their balance sheets further; and the adverse feedback loop between sovereign and bank finances has yet to be broken. Given these ongoing difficulties, markets will likely remain sensitive to any setbacks in dealing with the euro area crisis. Along with the weaker near-term outlook for global growth, the euro area problems will continue to pose heightened risks to global financial stability in the period ahead.

Outside the euro area, the major advanced country banking systems have generally continued on a gradual path to recovery in recent quarters. However, sentiment towards them has also been held back by the risk of a disorderly resolution to the European problems and softer economic indicators in some of the largest economies, including the United States and China. While asset quality measures have generally improved, underlying profitability of the major banking systems remains subdued. Weak property market conditions and the financial market and regulatory pressures on certain bank business models are continuing to weigh on the outlook for many large banks.

Asian banking systems have largely been resilient to the euro area problems, partly because of their domestic focus. While non-performing loan ratios are generally low, vulnerabilities may have built up during recent credit expansions, which could be revealed in the event of a significant decline in asset prices or economic activity. As some banking systems in Asia are now quite large, there is a greater chance that problems in them could have adverse international spillovers.

Against this backdrop, the Australian banking system has remained in a relatively strong position. Pressures in wholesale funding markets have eased since late last year, allowing the large banks to maintain good access to international bond markets during the past six months. Banks' bond spreads have narrowed, and are now comparable to levels in mid 2011, prior to the escalation of the euro area debt problems. This has enabled the banks to issue a larger share of their bonds in unsecured form than they did at the beginning of the year when tensions in global funding markets were high. Even so, banks have reduced their relative use of wholesale funding further as growth in deposits has continued to outpace growth in credit. While the Australian banks have little direct asset exposure to the most troubled euro area countries, they remain exposed to swings in global financial market sentiment associated with the problems in Europe. They should be more resilient to such episodes though, given the improvements they have made to their funding, liquidity and capital positions over recent years. Around half of the banks' funding now comes from customer deposits, which is a broadly similar share to a number of other comparable countries' banking systems.

The Australian banks' asset performance has improved a little over the past six months, but the aggregate non-performing loan ratio is still higher than it was prior to the crisis, mainly reflecting some poorly performing commercial property loans and difficult conditions being experienced in some other parts of the business sector. In aggregate, the banks' bad and doubtful debt charges have declined more substantially since the peak of the crisis period. However, they now appear to have troughed, which has contributed – along with higher funding costs and lower credit growth – to a slower rate of profit growth in recent reporting periods. While this has prompted a renewed focus by banks on cost containment, at this stage, it has not spurred inappropriate risk-taking. With demand for credit likely to remain moderate, a challenge for firms in a competitive banking environment will be to resist the pressure to ease lending standards to gain market share in the pursuit of unrealistic profit expectations.

The household and business sectors have continued to display a relatively prudent approach towards their finances in recent quarters. Many households continue to prefer saving and paying down their existing debt more quickly than required, which has contributed to household credit growth being more in line with income growth in recent years. Although there are some isolated pockets of weakness, aggregate measures of financial stress remain low. Ongoing consolidation of household balance sheets would be desirable from a financial stability perspective, as it would make indebted households better able to cope with any future income shock or fall in housing prices.

After a period of deleveraging, there has recently been a pick-up in business borrowing, though businesses' overall recourse to external funding remains below average. While the uneven conditions in the business sector have been contributing to the weaker performance in banks' loan portfolios in recent years, business balance sheets are in good shape overall. Aggregate profit growth of the non-financial business sector has moderated recently, but profits remain around average as a share of GDP.

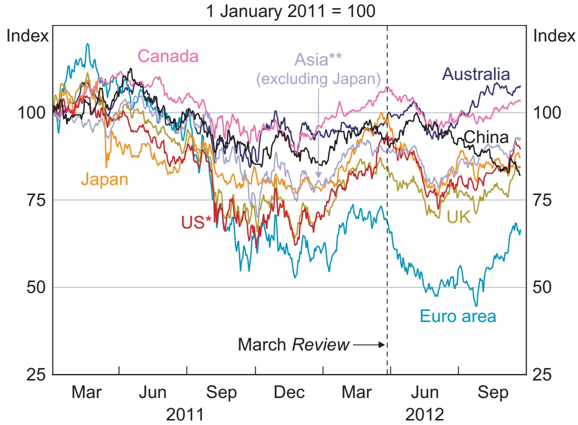
Managing the risks posed by systemically important financial institutions (SIFIs) continues to be a focus of the international regulatory reform agenda. A principles-based policy framework for domestic systemically important banks (so-called D-SIBs) is close to being finalised, complementing the framework for dealing with global SIBs agreed last year. Work to strengthen resolution regimes for global SIFIs and extend the SIFI framework to non-bank financial institutions is also underway. Progress has also been made both globally and domestically on several other initiatives, including reforms to the regulation of financial market infrastructures and over-the-counter derivatives. Domestically, the Australian Prudential Regulation Authority has been continuing the process of implementing the Basel III bank capital and liquidity reforms in Australia, as well as finalising reforms to the regulatory capital framework for insurers and introducing prudential standards for superannuation funds. As noted in the previous *Review*, Australia has this year undergone an IMF Financial Sector Assessment Program review. The results, which are due to be published later this year, confirm that Australia has a stable financial system, with robust financial regulatory, supervisory and crisis management frameworks. ✠

1. The Global Financial Environment

Since the March *Review*, global financial markets have been through another period of heightened risk aversion and volatility associated with an escalation of the euro area sovereign debt crisis and related banking sector problems. Greece and Spain have been a particular focus of market attention during this period. The difficulties these and other euro area countries are having in returning their fiscal positions to more sustainable paths and resolving banking sector problems have raised doubts about the viability of the monetary union. This contributed to further capital outflows from the most troubled countries and greater financial market fragmentation in the euro area. The pressures were evident around the middle of the year in rising yields on sovereign bonds issued by some of the most troubled euro area countries and declining euro area bank share prices (Graph 1.1). A weakening of economic activity in the euro area also contributed to the adverse feedback loop between sovereign and bank balance sheets. Outside the euro area, financial market sentiment in recent months was weighed down by the events in Europe, as well as concerns about the health of the global economy following the release of softer economic indicators in some large economies, including China and the United States.

Since August, there has been a marked improvement in global financial market sentiment, largely reflecting the European Central Bank's (ECB's) plans to intervene in sovereign debt markets to help preserve the euro area monetary union. The improvement has been reflected in the pricing of a range of risk assets, including declines in spreads on southern euro area sovereign bonds and increases in euro area bank share prices, which are now only a little below the level they were at the time of the previous *Review*. Despite the recent improvement, market confidence in euro area banks is still generally weak, and there are ongoing concerns about some banks' solvency. Confidence in the global financial system remains fragile and susceptible to further setbacks in dealing with the euro area crisis or a further softening in global economic growth.

Graph 1.1
Banks' Share Prices
1 January 2011 = 100



* Market capitalisation-weighted index of 18 large banks
** MSCI financials index
Source: Bloomberg

The Euro Area Crisis and Sovereign Debt Markets

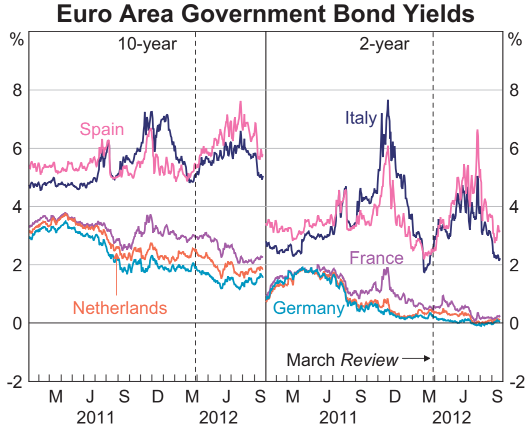
The euro area sovereign debt and banking crisis has been a continued source of market concern during the six months since the previous *Review*.

Developments in Greece and Spain, in particular, sparked renewed market stress in Europe at various points between April and July. In the lead-up to the elections in Greece, concerns that its bailout package might not be adhered to prompted speculation that the country may exit the euro area. Deposit outflows accelerated at Greek banks as depositors sought to avoid redenomination risk. These concerns eased somewhat after parties supportive of the bailout package were elected in June, but market participants remain doubtful that Greece can meet the terms of its package and continue to receive financing, given that economic conditions are still deteriorating. The risk that Greece might exit the euro, imposing losses on holders of financial contracts in Greece and possibly spurring contagion to other countries, therefore continues to weigh on asset prices in the region.

In Spain, the recent concerns have mostly been about the weakness of its banking system and what this might mean for its deteriorating public finances. Spanish banks have been suffering from poorly performing property exposures and weak economic conditions for a few years now, and the part-nationalisation of Spain's third-largest bank (BFA-Bankia) in May triggered renewed market concerns about their position. Spanish sovereign and bank bond yields rose sharply, and the Spanish banking system further increased its reliance on central bank liquidity (Graph 1.2). The Spanish authorities took a number of steps to shore up confidence in the system, including strengthening provision requirements on still-performing property development loans and commissioning independent stress tests of the banks. In June, Spain sought financial assistance from the European Union (EU) of up to €100 billion to help recapitalise troubled Spanish banks, and the European authorities formally agreed to this in July. Stress tests to determine the capital needs of individual Spanish banks are due to be released around the end of September. Spain also recently announced that it will establish a 'bad bank' later this year to remove certain non-performing assets from the balance sheets of Spanish banks that have received public funds, and manage these assets over time.

While investors initially responded favourably to the announcement of the Spanish bank bailout package, market sentiment quickly reversed as attention focused on the increase in government debt this funding would entail. Together with the poor state of regional government finances in Spain, this contributed to fears that a more comprehensive sovereign bailout package would be required, along the lines of those already provided to Greece, Ireland and Portugal. In this environment, attention naturally also turned to Italy because of the state of its public finances, and Italian sovereign (and bank) bond yields rose around the middle of the year. Meanwhile, in June, Cyprus became the fifth euro area country to request international financial assistance when it asked for funds to help recapitalise its banking system (which has significant exposures to Greece) and finance its budget deficit. In contrast to these developments in southern Europe, government bond yields for northern euro area countries continued to decline over the past six months, with German and Dutch short-term yields recently falling below zero. This largely reflects safe-haven flows given these countries' better fiscal positions.

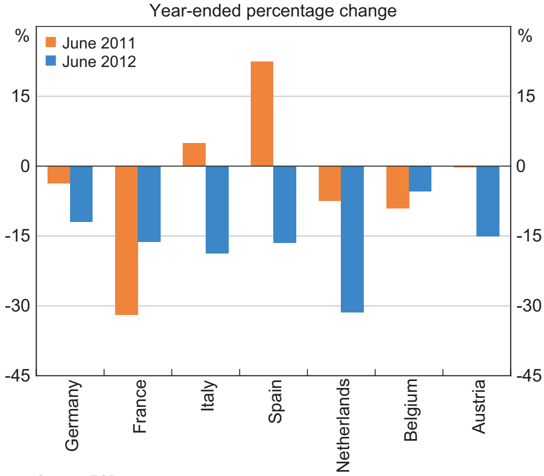
Graph 1.2
Euro Area Government Bond Yields



Source: Bloomberg

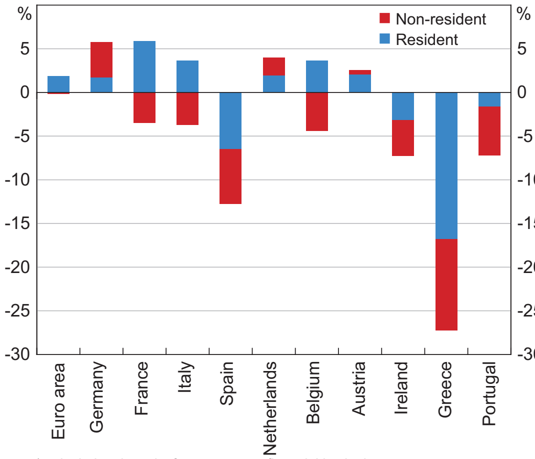
As recent events added to broader doubts about the viability of the monetary union, there was a general move to reduce cross-border exposures within the euro area. This was evident in significant capital outflows from some troubled euro area countries over the past year: foreign holdings of these governments' debt declined sharply; euro area banks reduced their holdings of debt (mainly government and bank debt) issued outside their home jurisdictions (Graph 1.3); and non-domestic depositors withdrew funds from banks in most euro area countries (Graph 1.4). Cross-border financial institutions have been seeking to match their liabilities and assets in individual euro area countries more closely, to protect themselves if one of these countries should exit the euro. In particular, banks have been reducing funding shortfalls in the more troubled euro area countries by further cutting back their exposures there, reinforcing broader efforts to deleverage and refocus on their core activities. Some European banks have reportedly increased their borrowing from national central banks in the host countries where they have subsidiaries and branches, rather than from the central bank in their home country as was typical in the past.

Graph 1.3
Banks' Holdings of Non-resident Euro Area Bonds
Year-ended percentage change



Source: ECB

Graph 1.4
Change in Private Sector Deposits*
Year to June 2012, per cent



* Includes deposits from monetary financial institutions
Source: Central banks

European authorities have announced a number of measures in recent months to help alleviate market strains and keep the euro area intact. In early August, the ECB said that it was considering purchasing short-term sovereign debt in secondary markets, given its view that the exceptionally high risk premia observed in some sovereign debt markets and the associated financial fragmentation are hampering the transmission of monetary policy in the euro area. The details of a new sovereign bond-buying program, known as Outright Monetary Transactions (OMT), were released in September. The ECB will only purchase sovereign debt of euro area countries that have an EU assistance program and are meeting the attached policy conditionality. There will be no *ex-ante* limit on purchases, which will be focused on the shorter end of the yield curve, particularly securities with 1–3 year residual maturities. The ECB's holdings will rank equally with existing senior creditors, in contrast to the position taken in the Greek debt restructuring.

While the OMT has yet to be activated, the ECB's announcements have contributed to a marked narrowing of spreads on southern euro area sovereign bonds, particularly at the shorter end of the yield curve. The Spanish Government is considering requesting EU financial assistance in order to qualify for the OMT, but have reserved their decision until it is clearer what policy conditionality would be attached; Italian officials have said that an assistance program for Italy is not warranted at this stage. While the ECB's decision to support sovereign debt markets should improve financing conditions in the euro area, it does not resolve underlying debt sustainability problems. Continued progress towards fiscal sustainability (and further bank balance sheet repair) will therefore be necessary to avoid further bouts of market volatility in response to economic and political setbacks.

European policymakers have also taken steps to more closely integrate the region's financial regulatory structure. The European Commission recently announced plans to phase in a new single supervisory mechanism in the euro area, whereby the ECB would assume ultimate responsibility for the supervision of all euro area banks by 2014 and national supervisory authorities would continue to undertake day-to-day supervisory activities. This proposal is aimed at ensuring that bank supervision is applied consistently across the euro area, and has a region-wide focus. Centralised oversight by the ECB might also make it feasible for the euro area's permanent bailout fund, the European Stability Mechanism, to be given the authority to recapitalise banks directly rather than by channelling funds through sovereigns. A direct approach would avoid raising the debt of already strained sovereigns and could thereby help curtail the adverse feedback loop between bank and sovereign balance sheets. A new supervisory structure will take some time to put in place, though, as it will involve difficult reallocations of supervisory resources. A complete banking union will also require integrated deposit insurance and resolution mechanisms, and in the longer run, deeper fiscal integration; these reforms could prove more difficult to achieve politically.

As the uncertainties in the euro area increased investor risk aversion, government bond yields in a range of advanced countries outside the region (including Australia) generally continued to decline over the past six months (Graph 1.5). In addition to safe-haven flows, central bank bond purchases as part of quantitative easing programs have helped reduce yields in the United Kingdom and the United States.

Graph 1.5
Government Bond Yields

Source: Bloomberg

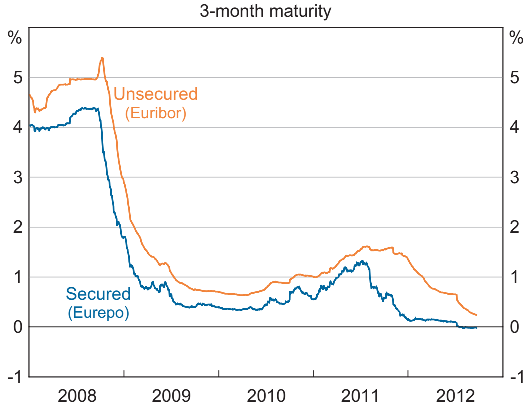
Government debt and deficits are also high in the United States and Japan, and the International Monetary Fund projects the ratios of these countries' government debt to GDP to reach very high levels within a few years. Because these countries have their own currencies, they do not face the same risks of a sudden loss of investor confidence in their fiscal positions and resulting capital outflows as do members of a currency union like the euro area. A more imminent risk to global financial stability from this quarter would be if fiscal policy were tightened severely enough in the short term that it significantly weakened economic growth: if not handled appropriately, the so-called 'fiscal cliff' facing the United States next year could be a trigger for such a scenario. That said, a sudden increase in government bond yields cannot be ruled out. At current low interest rates, even an increase in yields to the levels of a few years ago would impose sizeable mark-to-market losses on banks and other investors. Liquidity pressures could also ensue in some markets if a fall in bond prices and/or a credit rating downgrade required more collateral to be posted to counterparties.

Bank Funding Conditions and Markets

ECB policy actions and announcements over the course of the year have brought interbank borrowing costs down, but overall funding conditions for banks in the euro area remain strained. The ECB cut the rate it pays on its deposit facility from 0.25 per cent to zero in July, in an attempt to stimulate activity in short-term interbank markets. Despite these actions, the volume of interbank lending remains weak, especially across borders, and even in secured lending (repo) markets, liquidity has been low. Concerns about counterparty risk and collateral quality have also resulted in greater differentiation in lending rates across banks, which has been inhibiting the transmission of euro area monetary policy. As some securities are now seen as lower quality and a significant portion of the remaining high-quality collateral has been pledged to the ECB, the pool of unencumbered high-quality assets available to euro area financial markets has declined at the same time as demand for these assets as collateral has been particularly strong. As a result, repo lending rates involving these assets have been slightly negative over recent months (Graph 1.6).

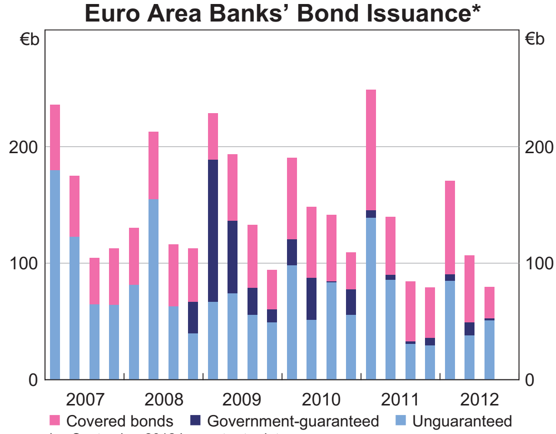
Conditions in term funding markets have also been relatively subdued. Euro area banks have issued around €185 billion of bonds since April, compared with €225 billion in the same period last year, though there has been a pick-up in issuance activity since the details of the ECB's OMT program were announced in early September (Graph 1.7). A significant share of bond issuance over the past six months has been retained by banks to provide them with additional collateral for central bank funding. While some banks have not needed to issue as much debt this year because they obtained ample three-year funding in the ECB's earlier refinancing operations, many banks have seen their market access curtailed, especially for unsecured debt. Some banks in Cyprus and Spain, in particular, have been forced to rely more heavily on collateralised borrowing from the ECB or their national central bank given their difficulties accessing term markets (Graph 1.8). The ECB broadened further the range of collateral eligible for its liquidity operations over recent months as some banks' collateral had reportedly been depleted. The increased reliance of many euro area banks on central bank funding could eventually complicate exit strategies, especially if banks are not able to return to wholesale markets by the time the large stock of three-year loans from the ECB matures in 2015.

Graph 1.6
Euro Interbank Interest Rates
3-month maturity



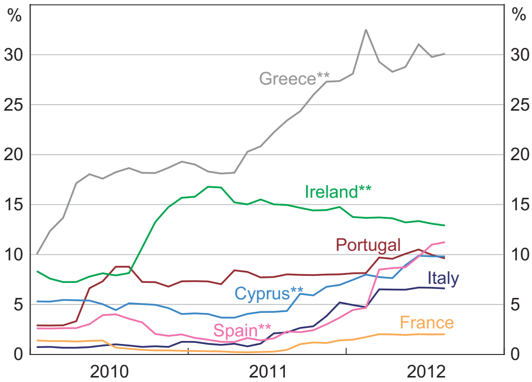
Source: Bloomberg

Graph 1.7
Euro Area Banks' Bond Issuance*



* September 2012 is quarter-to-date
Sources: Bloomberg; Dealogic; RBA; Thomson Reuters

Graph 1.8
Central Bank Lending to Banks in Selected Euro Area Countries
By national central bank, share of national total bank assets*

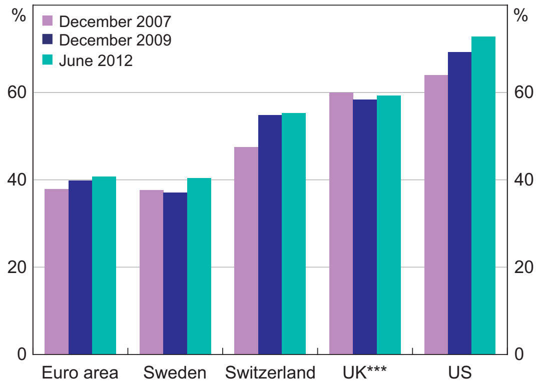


* Banks proxied by credit institutions except Cyprus, France and Portugal which use the broader category of monetary financial institutions
** Includes estimate of emergency liquidity assistance
Sources: RBA; central banks

As euro area banks have increased their collateralised borrowing from the ECB and become more reliant on covered bonds and other forms of secured funding, concerns have also been raised about their increasing asset encumbrance. The structural subordination of unsecured creditors that this entails could ultimately result in higher unsecured funding costs for banks in the future. Accordingly, there have been calls for banks to improve their reporting on asset encumbrance to address some of the market uncertainty. Over the longer term, unsecured debt holders' concerns about potential subordination and lower recovery rates may also be exacerbated by the introduction of bail-in and other resolution options in Europe that are currently being developed.

The euro area problems have been contributing to periods of volatility in wholesale funding markets for banks in other countries for some time, though these spillover effects have generally been fairly limited. Bank bond spreads rose in April and May across a number of markets, though they remained well below levels seen in late 2011, and have since declined. Bank bond issuance outside the euro area has remained subdued over recent quarters given the market volatility and slow credit growth in most countries. Banks in a number of major markets have also been increasing the share of their funding from customer deposits over recent years, thereby reducing their reliance on less stable market-based funding, particularly short-term wholesale debt (Graph 1.9). This has contributed to higher funding costs as banks replace cheaper wholesale funding with more expensive customer deposits and term debt.

Graph 1.9
Customer Deposit Funding*
Share of total funding**

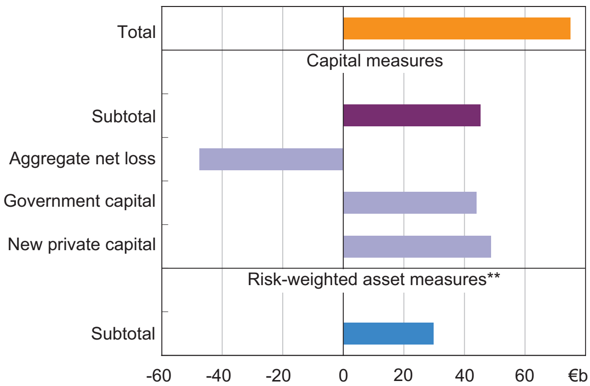


* Total deposits excluding deposits from banks and other monetary financial institutions; ratios across banking systems are subject to definitional differences; certificates of deposit are classified as wholesale debt in all countries except the US, where these instruments are eligible for deposit insurance
** Total liabilities including equity less derivatives and other non-debt liabilities
*** December 2007 and December 2009 data are for banks, while June 2012 data are for all monetary financial institutions
Sources: FDIC; central banks

Banks' Capital Positions

Euro area banks have continued to strengthen their capital positions in response to market and regulatory pressures. In aggregate, the large euro area banks increased their core Tier 1 capital ratio by 1.2 percentage points (or about €75 billion) over the year to June 2012, to 10.5 per cent (Graph 1.10). The majority of this increase came from higher capital levels, mainly retained earnings and the conversion of hybrids to common equity; there was little issuance of new equity given depressed share prices in the region. Most of the large European banks did not require government assistance to meet the target imposed by the European Banking Authority (EBA) of a 9 per cent core Tier 1 capital ratio by June 2012, plus a buffer to allow for valuation losses on their EU sovereign exposures. However, given their

Graph 1.10
Change in Euro Area Banks' Core Tier 1 Capital*
Year to June 2012

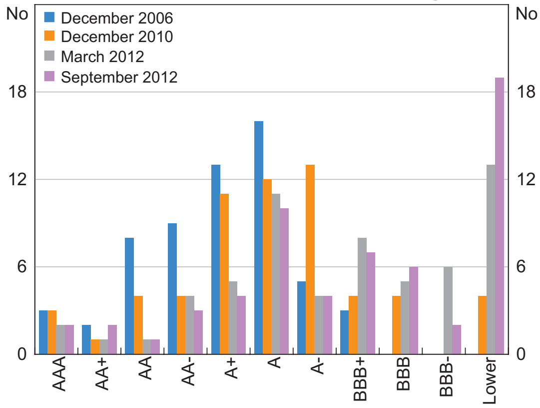


* 44 large banks from across the euro area; latest available data used where banks have not reported for June 2012

** Capital equivalent effect of changes in risk-weighted assets

Sources: SNL Financial; banks' annual and interim reports

Graph 1.11
Euro Area Banks' Credit Ratings*



* Fixed sample of 60 large institutions from across the euro area; predominantly Standard & Poor's local long-term ratings, unless unrated, then Moody's senior unsecured

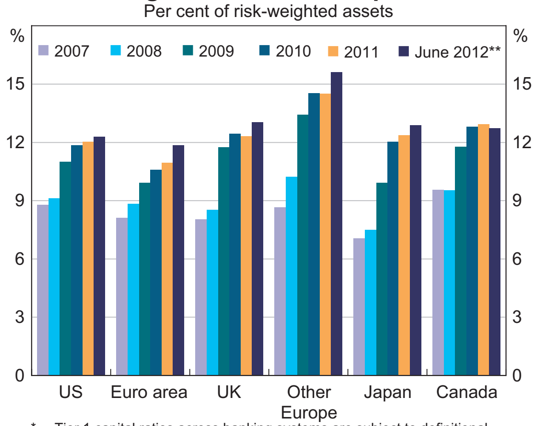
Sources: Moody's; RBA; Standard & Poor's

sizeable losses, a number of banks from the most troubled euro area countries required government capital injections to meet the target. A decline in risk-weighted assets of about 4 per cent also boosted the euro area banks' aggregate capital ratio over the year to June. Total assets fell by less than risk-weighted assets, mainly due to banks' shedding assets with above-average risk weights.

Despite the recent steps to strengthen capital positions, market confidence in many euro area banks remains low. This reflects ongoing doubts about the asset quality and hence solvency of some banks, particularly those from the most troubled euro area countries where economic activity is quite weak. This has been evident in various market indicators, including elevated bond and credit default swap premia, as well as low credit ratings. Indeed, around one-third of a sample of large euro area banks are currently rated sub-investment grade (Graph 1.11). More broadly, euro area banks' equity valuations remain at very low levels, despite increases in bank share prices over the past couple of months.

Large banks outside the euro area have also continued to strengthen their capital positions over recent periods (Graph 1.12). This has mainly been through retaining earnings, in many cases

Graph 1.12
Large Banks' Tier 1 Capital*
Per cent of risk-weighted assets



* Tier 1 capital ratios across banking systems are subject to definitional differences; includes the weighted average of: 19 large US banks, 52 large institutions from across the euro area, the four largest UK banks, 13 large other European banks, the three largest Japanese banks and the six largest Canadian banks

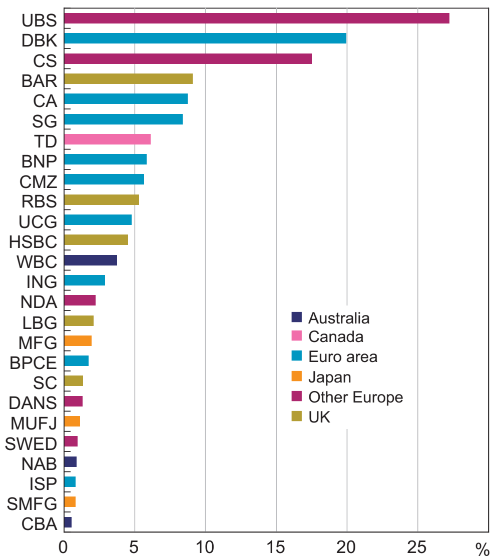
** July 2012 used for Canada; latest available data used where banks have not reported for June 2012

Sources: Bloomberg; FDIC; RBA; SNL Financial; banks' annual and interim reports

supported by dividend payout ratios that are still below pre-crisis levels. Many banks have been able to increase their capital ratios even though the introduction of Basel 2.5 capital rules raised risk weights for certain trading book assets and securitisations. The revised capital standards, which have been implemented in all major jurisdictions except the United States, particularly affected banks with large capital markets businesses, among them some large European banks (Graph 1.13).

Although large banks in the major advanced countries have significantly strengthened their balance sheets over the past few years, many will need to take further action to meet the tougher regulatory requirements that are being phased in over coming years. In particular, many banks need to increase common equity positions to meet the Basel III capital requirements, as well as the extra capital buffers that will apply to those banks deemed systemically important. The Basel Committee on Banking Supervision estimated that, as at December 2011, the world's largest banks required a total of around €370 billion in extra capital (equivalent to about 2½ per cent of their risk-weighted assets) to meet the Basel III minimum capital requirements.[1] Even though most banks have increased their capital ratios since then, some still have further to go. Many banks also need to alter their funding structures to meet the Basel III liquidity and funding ratios.

Graph 1.13
Increase in Risk-weighted Assets due to Basel 2.5
December 2011*



* January 2012 for Canadian banks and March 2012 for Australian banks
Source: Banks' financial disclosures

Improving capital and funding positions will take time to achieve and banks therefore need to be transitioning now. Because banks' progress will come under market and supervisory scrutiny, laggards run the risk of being forced to take quicker and potentially more drastic action at a later date. Raising capital or retaining earnings to meet higher capital requirements will be difficult for banks with depressed share prices and weak earnings prospects, so many of them are still looking to deleverage by reducing assets and exiting capital-intensive businesses. This is reflected, for example, in the current plans of large European banks to reduce their aggregate risk-weighted assets by about 7–8 per cent by 2015. They have targeted their biggest reductions at corporate and investment banking, but also exposures to parts of Europe where economic conditions are weakest. The overall effect of this deleveraging on financial conditions and markets is likely to be noticeable, but limited by the fact that a number of banks headquartered outside Europe are looking to expand into certain markets where European banks are pulling back.

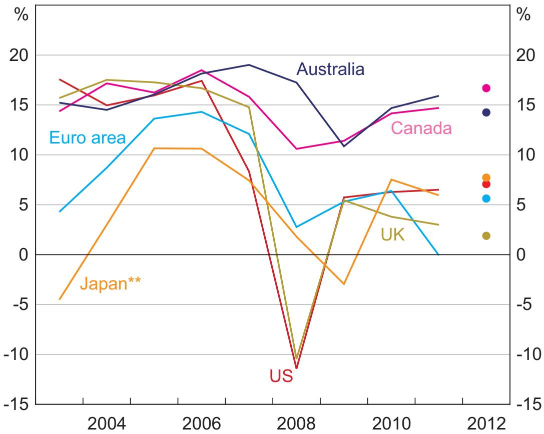
Bank Profitability

The profitability of the major banking systems remains subdued. Annualised returns on equity for the largest banks in euro area, Japan, the United Kingdom and the United States averaged 2–8 per cent in the first half of 2012, well below the rates recorded prior to 2008 (Graph 1.14). Returns were broadly unchanged from those recorded in 2011, with the exception of the large euro area banks, whose average returns in 2011 were held down by sizeable write-downs on their goodwill and Greek sovereign exposures. Many of the smaller and more domestically focused banks in the weakest economies in Europe have recorded large losses in recent reporting periods.

The recent modest profitability of large banks in the major advanced economies reflects a number of

1 Basel Committee on Banking Supervision (2012), 'Results of the Basel III Monitoring Exercise as of 31 December 2011', September, p 2.

Graph 1.14
Large Banks' Return on Equity*
After tax and minority interests



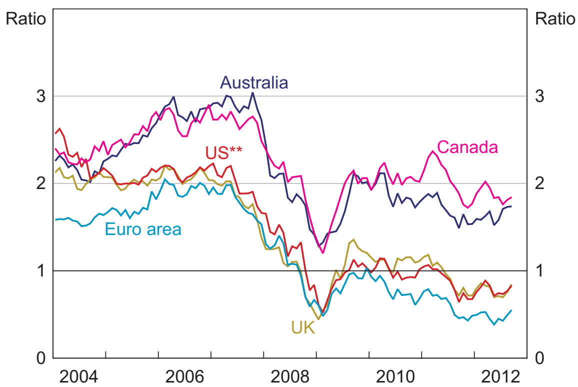
* Return on equity of the six largest US banks, eight largest listed euro area banks, four largest UK banks, three largest Japanese banks, six largest Canadian banks and four largest Australian banks; adjusted for significant mergers and acquisitions; 2012 profit is annualised and total equity is assumed constant from last reporting date
** 2003–2007 results are to financial year ended 31 March
Sources: Bloomberg; RBA; banks' annual and interim reports

factors. Most banks have recorded little or no growth in net interest income, with credit growth remaining weak and net interest margins being weighed down by higher funding costs and the prolonged low interest-rate environment. Investment banking income has also been under pressure as volatile financial market conditions reduced trading revenues and demand for capital markets services. While declines in loan-loss provisioning have boosted profits of large UK and US banks in recent reporting periods, some euro area banks' provisions have risen due to deteriorating economic conditions within the region and ongoing weakness in the Spanish property market. Some large banks have also incurred significant legal/regulatory expenses arising from previous inappropriate business practices, such as poor mortgage practices in the United States, the mis-selling of payment protection insurance in the United Kingdom, and the recent LIBOR manipulation scandal. JP Morgan recently recorded large trading losses on its synthetic credit portfolio, highlighting the consequences of inadequate risk controls and unconventional investment strategies. A further factor contributing to lower returns on equity is that the large banks are holding higher levels of capital now, as noted earlier.

Recent returns recorded by the large banks in the major banking systems are well below those typically demanded by equity investors, as well as banks' own targets. Investors also appear to be expecting banks' profitability to remain subdued, with market valuations of banks' equity well below book valuations – that is, banks' price-to-book ratios are below 1 (Graph 1.15). Consistent with these low equity valuations, equity analysts are forecasting the large global banks to post average returns on equity of 5–7 per cent for 2012 as a whole, and only slightly higher returns in 2013; these forecasts were revised down during the past six months as the global macro-financial environment deteriorated (Graph 1.16). Low equity valuations may also reflect some investor scepticism over banks' asset valuations and/or an additional risk premium required by investors to compensate for heightened uncertainty. These concerns are likely to be especially relevant for euro area banks at the current juncture.

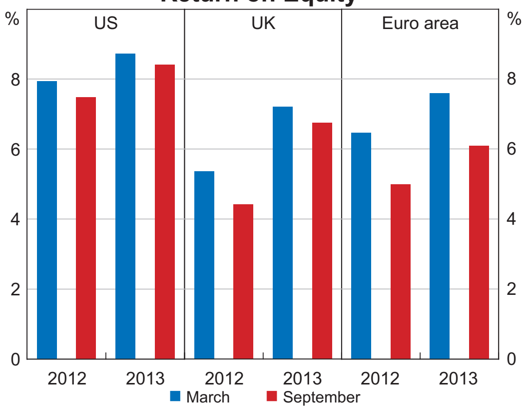
In contrast to many of their international peers, the profitability of the large Canadian and Australian banks has remained robust over recent periods, with returns on equity generally averaging around 15 per cent, consistent with stronger economic and

Graph 1.15
Banks' Price-to-book-value Ratios*



* Monthly; September 2012 observation is the latest available
** Diversified financials
Source: Bloomberg

Graph 1.16
Analysts' Forecasts of Large Banks' Return on Equity*



* Simple average of consensus forecasts of banks' annual return on equity; includes the six largest US banks, the four largest UK banks and the eight largest listed euro area banks

Source: Bloomberg

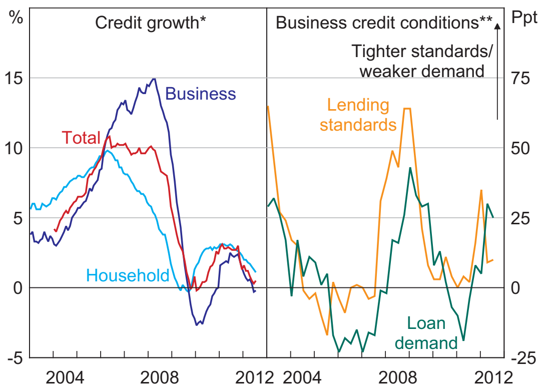
financial conditions in their home markets (see 'The Australian Financial System' chapter). Analysts are forecasting these banks' returns to remain at similar levels in 2013. The more favourable earnings outlook for large Canadian and Australian banks, along with the healthier state of their balance sheets, is reflected in equity valuations that are close to long-run average levels, unlike in many other advanced countries.

Credit Conditions and Asset Quality

Weaker economic activity and difficult funding conditions in the euro area have been associated with falls in region-wide credit during the first half of 2012, and little growth in credit over the past year (Graph 1.17). Credit conditions continued to tighten in the region during the first half of the year as banks passed on higher funding costs and toughened non-price loan terms. The ECB's bank lending survey showed a net balance of banks tightened their business and household loan standards in the March and June quarters, albeit less so than in late 2011. Credit demand by households and businesses has been contracting more sharply than in late 2011, with investment intentions likely being pared back because of the weak economic outlook and, in some cases, tighter financing conditions.

Weakness in credit growth has been most pronounced in the troubled euro area economies; credit declined over the past year by around 4–5 per cent in Greece, Ireland, Portugal and Spain. Supply-side factors are likely to have contributed to this. For example, interest rates on new bank loans to non-financial corporations have increased noticeably since 2011 in these countries (as well as in Italy), whereas they have generally fallen in northern euro area countries in line with the lower ECB policy rate (Graph 1.18). Divergence in interest rates across euro area countries has been most evident for small business loans, given their higher risk. As they

Graph 1.17
Euro Area Credit Conditions

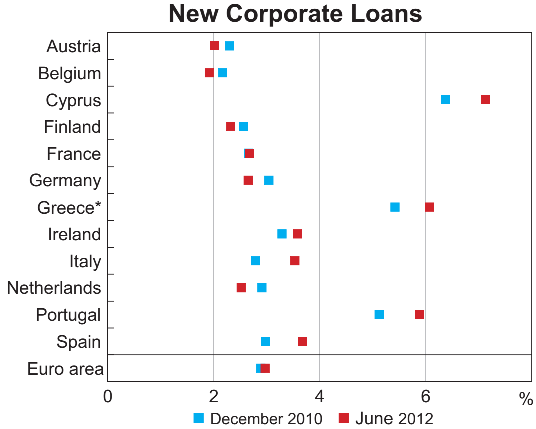


* Year-ended percentage change; credit growth series not adjusted for securitisations prior to 2009

** Net percentage of respondents reporting tighter standards/weaker demand

Sources: ECB; RBA

Graph 1.18
Average Interest Rates on New Corporate Loans



* Interest rate on outstanding corporate loans

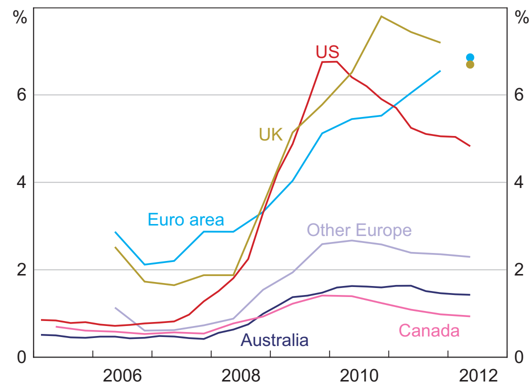
Source: ECB

do not have access to alternative sources of debt finance via capital markets, tight lending conditions for small businesses could have a negative effect on economic activity within the region, with the potential for adverse second-round effects on banks' asset performance. Even some large businesses in the euro area currently have more limited access to capital markets than usual because of the current low credit ratings of their sovereigns.

Banks' asset quality has come under continued pressure in the euro area as economic and financial conditions have weakened to a point that is similar to the adverse scenario used in last year's EBA stress tests. The large euro area banks' average non-performing loan (NPL) ratio increased significantly over 2011 and the first half of 2012, in contrast to most other jurisdictions where NPL ratios have continued to drift down from crisis peaks (Graph 1.19). Average NPL ratios are currently highest for Cypriot, Greek, Irish and Italian banks, but a number of banks from other countries in the region also have very high ratios (Graph 1.20). There is also significant market concern about the asset quality of many Spanish banks given that property prices continue to decline in Spain and current property valuations may come under further downward pressure because of future asset purchases by the 'bad bank' being introduced in Spain.

In the United States, banks' NPL ratios have trended lower over recent quarters, in line with the gradual improvement in parts of the US economy. Non-performing ratios for commercial and consumer loans have now declined to around their long-run average levels, while the ratio for commercial real estate loans has fallen sharply, consistent with the partial recovery in commercial real estate prices (Graph 1.21). In contrast, residential real estate NPLs remain at very high levels of around 8 per cent; although around one-fifth of housing loans are estimated to be in negative equity given the decline in housing prices. There are tentative signs of a recovery in the housing market, with prices rising mildly over the past few months. That said, risks to economic growth in the United States are skewed to the downside and any deterioration in economic conditions could stall this nascent recovery. Concerns over the strength of the US economic recovery and the labour market have prompted the US Federal Reserve to announce plans to undertake further monetary stimulus by purchasing asset-backed securities.

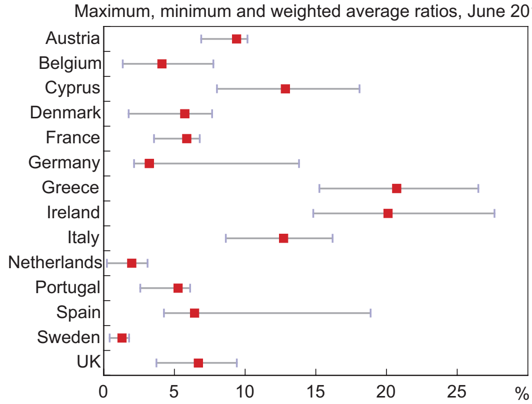
Graph 1.19
Large Banks' Non-performing Loans*
Share of loans



* Definitions of 'non-performing' differ across jurisdictions, and in some cases exclude loans that are 90+ days past due but are not impaired; includes 18 large US banks, 52 large institutions from across the euro area, 13 large other European banks, four UK banks, the six largest Canadian banks and the four largest Australian banks; latest available ratios have been used for some euro area and UK institutions where June 2012 data are unavailable

Sources: APRA; RBA; SNL Financial; banks' annual and interim reports

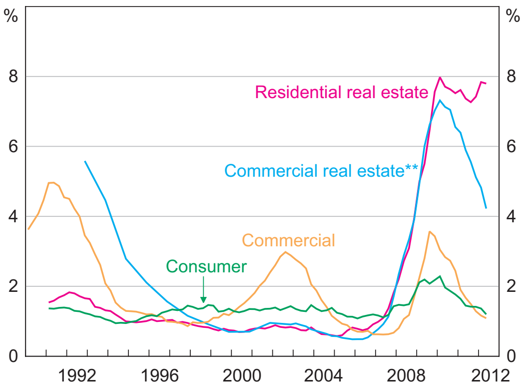
Graph 1.20
Large European Banks' Non-performing Loans*
Maximum, minimum and weighted average ratios, June 2012



* Definitions of 'non-performing' differ across jurisdictions, and in some cases exclude loans that are 90+ days past due but are not impaired; latest available ratios have been used for some institutions where June 2012 data are unavailable

Sources: SNL Financial; banks' annual and interim reports

Graph 1.21
US Non-performing Loans*
Share of loans, by loan type



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

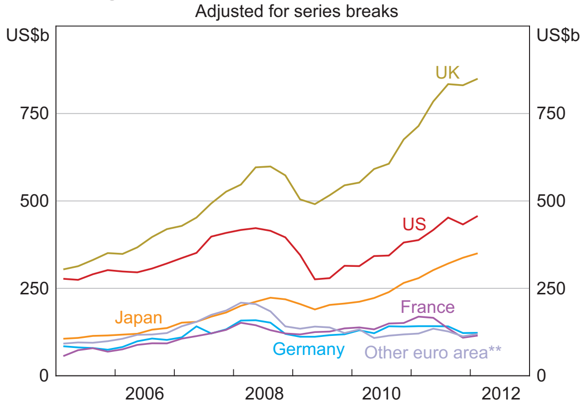
NPL ratios have also fallen for the large UK banks recently, but less so than in the United States, consistent with weaker conditions in the economies where they are most active (Graph 1.19). In response to concerns about the availability of credit and a weak domestic economy, the UK authorities introduced a 'Funding for Lending Scheme' that provides public sector supported financing for banks that expand their lending to the real economy. It is not yet clear to what extent the reduction in bank funding costs under this Scheme (in the order of 1–2 percentage points) will boost lending.

Banks in other advanced countries have experienced stronger asset quality in recent years, though in some countries they are facing a different set of challenges associated with property market expansions. In Canada, low interest rates and strong mortgage competition over the past few years have contributed to buoyant housing construction activity and strong growth in property prices and household debt. This has given rise to concerns about housing market overvaluation and the potential for a correction in prices. In response, the authorities have been progressively tightening lending standards, such as by lowering permissible loan-to-valuation ratios (LVRs) and loan terms on housing loans insured by the government mortgage insurer. Switzerland is facing some similar issues, with the authorities there recently deciding to increase risk weights on high-LVR housing loans from 2013, much as the Australian Prudential Regulation Authority did in Australia in 2004.

Banking Systems in the Asian Region

Some euro area banks have responded to balance sheet pressures by scaling back their presence in Asia. French banks, in particular, cut US dollar assets globally as US dollar funding became harder to obtain. Euro area banks' total claims on non-Japan Asia fell by more than 20 per cent over the second half of 2011 (Graph 1.22). The decline was most noticeable in the trade finance and longer-term specialised lending markets (such as aircraft, project and shipping finance), but conditions in these markets appear to have improved in 2012. More generally, euro area banks' claims on non-Japan Asia rose modestly over the March quarter 2012 (the latest available data), and bank claims data and other reports suggest that banks from elsewhere have been filling some of the gap, including large banks from emerging Asia, Australia, Japan and the United Kingdom. Some of these banks, particularly those from Japan, may have been attracted by stronger longer-term growth and profit opportunities than

Graph 1.22
Foreign Banks' Claims on Non-Japan Asia*
Adjusted for series breaks



* Consolidated claims of reporting banks on an immediate borrower basis; non-Japan Asia is comprised of China, Hong Kong SAR, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand
** Includes Belgium, Greece, Italy, Netherlands, Portugal, Spain
Sources: BIS; RBA

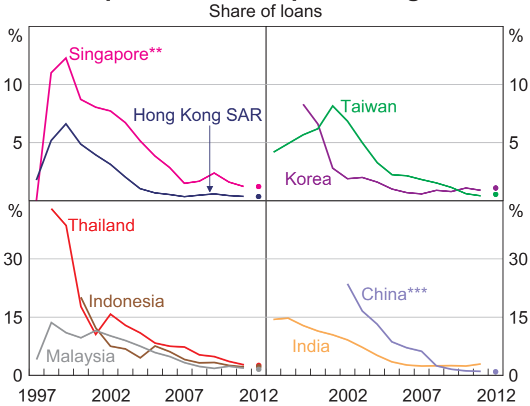
those available in their home markets. They might also have been taking advantage of higher US dollar funding as investors have cut back their lending to euro area banks. However, the diversification and other benefits from cross-border lending must be weighed against the resultant funding, credit and operational risks.

Putting these shifts in perspective, though, euro area banks account for only a small share of credit in Asia, and local Asian banks have little direct exposure to Europe. Asian banking systems have therefore been resilient to the turmoil in the euro area, and the local banks' limited usage of wholesale funding has largely insulated them from volatility in global funding markets. Their profitability has also generally been robust over recent years and NPL ratios have declined to historically low levels (Graph 1.23). The question is whether these trends have been flattered by strong growth in domestic credit and nominal incomes in the region.

Property prices have also risen significantly in a few economies, especially where exchange rate regimes have limited the scope to raise interest rates, prompting authorities to introduce a range of other measures over recent years to cool their property markets (Graph 1.24). If property prices were to unwind, or global growth – and thus export sector revenue – were to slow substantially, Asian banks could encounter some credit quality problems. That said, capital buffers have increased over recent years to fairly high levels, which should help banks cope with any slowing in economic activity and associated rise in problem loans. The authorities in most of these countries also generally have room to ease macroeconomic policies if necessary.

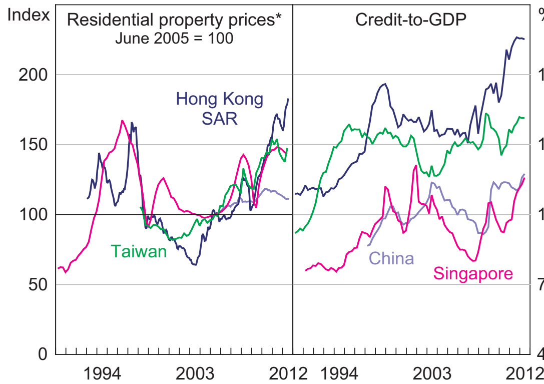
Slowing economic activity in India over the past year has contributed to an increase in banks' NPL ratios and slower profit growth, especially for some state-owned banks. There has also been a sharp increase in the share of Indian banks' loans that have been restructured to assist troubled borrowers. In China, the banks' aggregate NPL ratio remains at a low level of about 1 per cent, but there are signs that bank asset performance has begun to deteriorate this year as the pace of economic activity has moderated.[2] Some large Chinese commercial banks have reported a pick-up in their NPL ratios for specific industries or regions, while a number of smaller commercial banks have recorded increases in their overall NPL ratios. There have also been reports of repayment difficulties in parts of the

Graph 1.23
Non-Japan Asia – Non-performing Loans*
Share of loans



* Definitions of 'non-performing' differ across jurisdictions; dots are June quarter estimates with the exception of Korea where estimate is for the March quarter
** Domestic banks only
*** Data for 2002–2004 are for major commercial banks only
Sources: CEIC; RBA; banks' annual reports; national banking regulators

Graph 1.24
Asset Prices and Credit



* Adjusted for inflation; for China, data are an average of new and existing residential property prices
Sources: CEIC; RBA; central banks

2 For information on trends in Chinese banks' asset performance over the past couple of decades, see Turner G, N Tan and D Sadeghian (2012), 'The Chinese Banking System', RBA *Bulletin*, September, pp 53–63.

private (non-bank) lending sector, which mainly services relatively small and higher-risk business borrowers. While the direct links between these lenders and the banking sector are not large, there could be indirect links and their experience may signal a broader deterioration in asset quality in the Chinese financial system that a growing number of commentators are now predicting. Investor concerns over Chinese banks' asset quality are reflected in significant declines in their share prices over the past six months.

Concerns about the effects of slowing economic activity have already prompted Chinese policymakers to ease fiscal and monetary settings this year. They have also taken a number of prudential and other measures to support lending growth, including: delaying the introduction of Basel III capital standards by one year to the start of 2013, to be in line with the international timetable; and granting banks greater ability to price loans below benchmark lending rates set by the People's Bank of China.[3] Banks have also been encouraged to ensure that growth in lending to small businesses is maintained at a pace that is at, or above, total credit growth. To facilitate lending to small businesses, the China Banking Regulatory Commission has reduced the risk weighting on small business loans and allowed certain small business loans to be excluded from regulatory loan-to-deposit ratio calculations. Because lending to small businesses currently represents a relatively small share of Chinese banks' total lending, an increase in this type of lending could reduce concentrations in banks' loan portfolios, as well as support economic activity, though the risks of such loans will also need to be carefully managed.

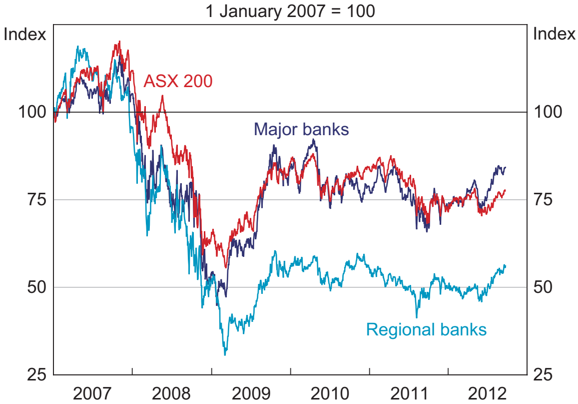
3 The larger allowable discount on Chinese banks' loan rates is part of a broader move towards greater interest rate flexibility in China; all bank deposit rates are now permitted to be set up to 10 per cent above the relevant benchmark rates.

2. The Australian Financial System

The Australian banking system remains well placed to cope with shocks from abroad, such as those that may emanate from the ongoing problems in Europe. Australian banks' direct exposures to the most troubled euro area countries are small and declining. Disruptions to wholesale funding markets and/or a deterioration in global economic activity would likely be more important contagion channels to Australian banks from any escalation of the European problems. However, the banks are better positioned to manage these risks than prior to the 2008–2009 crisis, having substantially strengthened their capital, funding and liquidity positions over recent years. Markets seem to be recognising the Australian banks' relative financial strength: their share prices are over 10 per cent higher over the past six months, compared with a broader Australian market increase of 4 per cent over the same period (Graph 2.1).

While banks' overall asset performance has improved in recent quarters, challenging conditions in a few parts of the business sector are contributing to an elevated flow of new impaired assets relative to the pre-crisis period. If macroeconomic conditions were to deteriorate, banks' asset performance would therefore be starting from a weaker position than in past years. Although the housing market has been weak, the key risk to the banks' housing loan portfolio would be a rise in unemployment large enough to damage many borrowers' capacity to meet their repayments.

Graph 2.1
Share Prices
1 January 2007 = 100



Sources: Bloomberg; RBA

The growth in banks' profits has slowed in recent reporting periods as their bad and doubtful debt charges have stopped falling, or in some cases, increased. Revenue growth has been constrained by modest credit growth and pressures on margins. Even so, aggregate profitability of the banks remains strong. Looking ahead, how banks respond to these obstacles to profit growth could be a key factor for financial stability over the medium term. While there is little evidence over the past year that they have been imprudently easing lending standards in a bid to boost their credit growth, they are seeking ways to sustain the growth in their profitability, including, in some cases, through cost cutting. Such strategies will need to be pursued carefully to ensure that risk management capabilities and controls are maintained.

The general insurance industry remains well capitalised and underwriting results have returned to more normal levels after the adverse effects of the natural disasters in late 2010 and early 2011. Lenders' mortgage insurers (LMIs) have in some cases reported reduced earnings during the past six months, as recent weakness in residential property markets has boosted the number and average size of claims on them. Were this property market weakness to be extended and coupled with higher unemployment, LMIs could experience even higher claims. The LMI sector is well positioned, though, because its capital requirements are calibrated to withstand a substantially weaker outcome than is currently in evidence.

Banks' Euro Area Risks

Australian-owned banks continue to report very limited direct exposures to the sovereign debt of euro area countries facing the greatest fiscal problems (Table 2.1). On the assets side of their balance sheets, the banks are still indirectly exposed to euro area sovereign debt problems through several channels. One is through their claims on euro area banks – such as the French, German and Dutch banks – which in turn have substantial exposures to the weaker euro area countries. Australian-owned banks' exposures to these euro area banks are quite low, however, at less than 1 per cent of their consolidated assets as at end March 2012. A more important indirect transmission channel would be if the European problems resulted in a sharp slowing in global, and consequently, Australian economic growth. Depending on the nature and size of any economic slowdown, Australian banks' asset performance could deteriorate in such a situation.

As the experience of the past few years has shown, the biggest risk from an escalation of European problems comes from the liabilities side of the Australian banks' balance sheets. In particular, tensions in Europe could trigger a renewed increase in risk aversion and disruption to global capital markets, which would likely undermine Australian banks' access to offshore wholesale funding. Compared with several years ago, however, banks are in a better position to cope with such disruptions.

Funding and Liquidity

The ongoing difficulties in Europe have been contributing to volatile funding conditions for Australian banks, but in recent quarters wholesale funding pressures have eased from the levels of late last year. Offshore investors have focused on the relatively strong position of the Australian banks compared with those in some other countries. The banks have therefore been able to take advantage of periods of more favourable market conditions to issue opportunistically.

The Australian banks issued around $50 billion of bonds in the past six months, mostly in unsecured form. This was a little less than the amount issued in

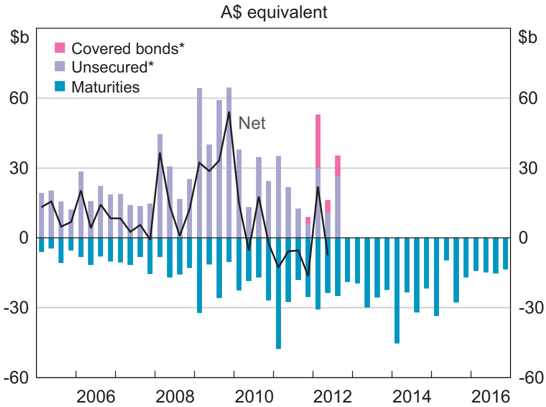
Table 2.1: Australian-owned Banks' Claims on the Euro Area
Ultimate risk basis, as at end March 2012

	Total		*of which:* Banks	Public sector	Private sector
	$ billion	Per cent of assets	Per cent of assets	Per cent of assets	Per cent of assets
Euro area	**48.1**	**1.6**	**0.7**	**0.3**	**0.5**
of which:					
Greece, Ireland, Italy, Portugal and Spain	4.7	0.2	0.0	0.0	0.1
France, Germany and the Netherlands	38.9	1.3	0.6	0.3	0.4

Source: APRA

the previous six months, and slightly exceeded their maturities over the same period (Graph 2.2). Around $15 billion of these maturities were government-guaranteed bonds, the outstanding stock of which has declined to around $85 billion in August 2012, down from a peak of $150 billion in June 2010. Of the issuance of wholesale debt over the past six months, about $14 billion was covered bonds, with about 85 per cent being issued offshore. On average, the major banks have now used around one-quarter of their covered bond issuance capacity as defined by a regulatory cap. Given covered bonds have tended to be more resilient to turbulent funding market conditions, the cap on their issuance may warrant keeping some issuance capacity in reserve in case conditions deteriorate again.

Graph 2.2
Banks' Bond Issuance and Maturities
A$ equivalent



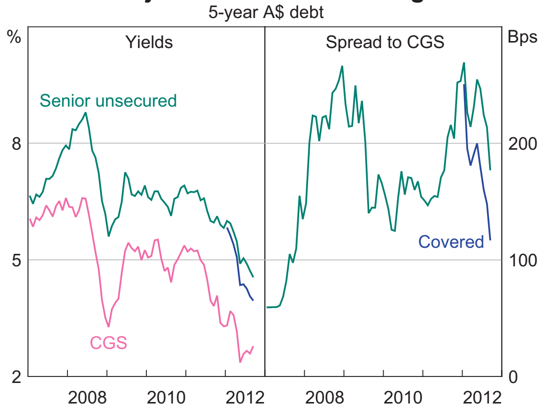
* September 2012 is quarter-to-date
Source: RBA

Conditions in residential mortgage-backed securities (RMBS) markets have also improved in the past six months, with $8 billion of these securities issued over this period, compared with the very low issuance in the March quarter. Around 75 per cent of the recent issuance by value has been by smaller institutions. The Australian Office of Financial Management continued to support some of these deals, though it was not needed in some eligible deals recently due to relatively strong private sector demand, consistent with improving market conditions. RMBS spreads in secondary markets are still generally wider than they were in 2011, though well below the 2009 peaks.

The pricing of banks' senior unsecured bonds relative to benchmark rates remains higher than in recent years but significantly less than the peaks at the end of 2011, when concerns about the euro area banking sector and sovereign debt crisis intensified. Spreads relative to Commonwealth Government Securities on 5-year unsecured bank bonds have declined by around 80 basis points in recent months and are now at similar levels to mid 2011 (Graph 2.3). Continued demand for high-quality assets and limited issuance has seen spreads on covered bonds narrow considerably since the start of the year.

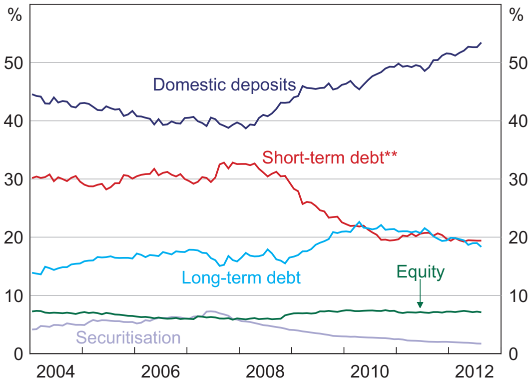
The risks Australian banks could face from their use of wholesale funding are being mitigated through the ongoing compositional change to the liabilities side of their balance sheets (see 'Box A: Funding Composition of Banks in Australia'). Deposit growth has remained strong, at around 9 per cent in annualised terms over the past six months, reducing banks' wholesale funding needs. However, the strong competition for deposits has widened their spreads relative to benchmark rates, contributing to an increase in banks' funding costs relative to the cash rate. Deposits now account for 53 per cent of banks' funding, up from about 40 per cent in 2008 (Graph 2.4). The major banks are generally aiming

Graph 2.3
Major Banks' Bond Pricing
5-year A$ debt



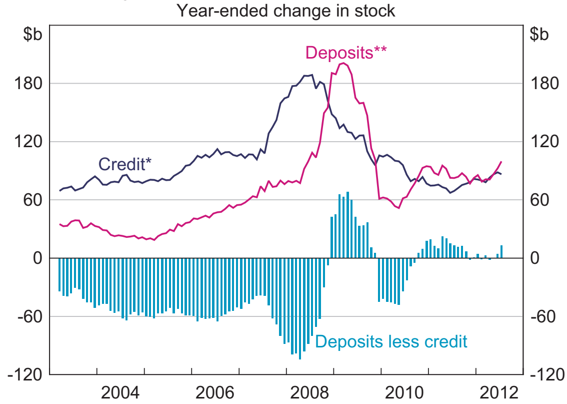
Sources: Bloomberg; RBA; UBS AG, Australia

Graph 2.4
Banks' Funding*
Share of total



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

Graph 2.5
Major Banks' Credit and Deposits
Year-ended change in stock



* Excludes securitisations
** Excludes intragroup deposits
Sources: APRA; RBA

to fund new lending with new deposits on a dollar for dollar basis; changes in their stock of lending and deposits show this has been happening for some time (Graph 2.5). This approach is likely to support a continued upward trend in the proportion of funding sourced from deposits, at least in the near term. Stronger competition for deposits would mean banks would face the prospect of their margins coming under pressure from further increases in funding costs, though the risk to their profits would be mitigated to the extent banks can reprice their loan books.

Banks have also improved their ability to manage funding stress by strengthening their liquidity positions. Liquid assets – cash and securities eligible for normal repo operations with the RBA – currently account for about 10 per cent of banks' domestic Australian dollar assets, up from around 6 per cent in early 2007 (Table 2.2). In addition, banks' holdings of self-securitised RMBS have increased, and now total around $180 billion (7 per cent of domestic Australian dollar assets), up from about $145 billion in 2011. The composition of liquid asset portfolios has also changed over recent years, with an increasing share held in government securities

Table 2.2: Banks' Liquid Assets
Domestic books, excludes interbank deposits

	March 2007		March 2009		March 2012	
	Level	Share[a]	Level	Share[a]	Level	Share[a]
	$ billion	Per cent	$ billion	Per cent	$ billion	Per cent
Liquid assets	**98**	**6**	**199**	**8**	**270**	**10**
Commonwealth Government & semi-government securities	6	6	29	15	82	30
Short-term bank paper	54	56	94	47	59	22
Long-term bank paper	9	10	42	21	79	29
Other[b]	28	29	33	17	50	18
Total bank assets	**1 640**		**2 411**		**2 636**	
Memo: Self-securitised assets	*0*		*142*		*178*	

(a) Share of total A$ assets, subcomponents are the share of liquid assets
(b) Includes notes and coins, A$ debt issued by non-residents and securitised assets (excluding self-securitised assets)
Sources: ABS; APRA; RBA

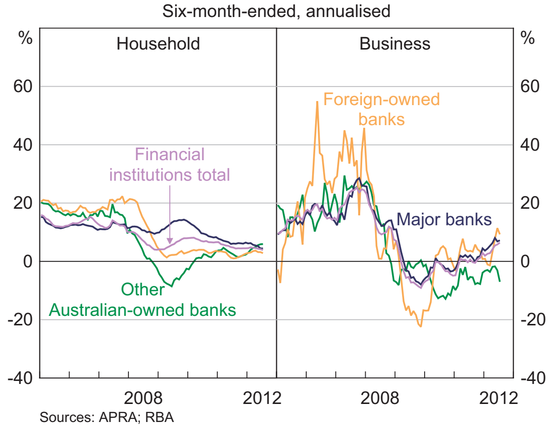
and long-term bank bonds, and less in short-term bank paper. These trends in banks' liquidity positions are partly a response to the forthcoming Basel III liquidity standards which will require banks to hold more and higher-quality liquid assets. A structural shortage of higher-quality liquid assets in Australia, stemming from the low level of government debt, means banks will also need to access the RBA's Committed Liquidity Facility to meet part of their Basel III requirements. The Australian Prudential Regulation Authority (APRA) is in the process of developing a framework for determining the extent to which banks will be able to count this facility towards meeting their Liquidity Coverage Ratio versus holding more eligible liquid assets or changing their business models to reduce their liquid asset requirements.

Credit Conditions and Lending Standards

Banks' domestic loan books have continued to grow at a relatively modest pace in recent quarters, despite a pick-up in business credit (Graph 2.6). As discussed in the 'Household and Business Balance Sheets' chapter, households' demand for credit remains restrained as they continue to consolidate their balance sheets; growth in financial institutions' lending to households slowed a little to an annualised rate of around 4 per cent in recent months compared with 4½ per cent in the second half of 2011. Following a number of years of below-system growth, the smaller Australian-owned banks have recently recorded a stronger rate of growth in household lending to now be broadly in line with the major banks. After contracting over much of the past three years, financial institutions' lending to businesses has picked up in recent months, to an annualised growth rate of around 6½ per cent, driven by the major and foreign-owned banks.

According to industry liaison, household and business credit growth is expected to remain fairly subdued for some time because of weak demand. If this proves correct, banks could struggle to achieve

Graph 2.6
Credit Growth



the rate of profit growth they were accustomed to in previous decades of rapid credit growth. In this environment, it would be undesirable if banks responded by loosening their lending standards or imprudently shifting into new products or markets in a bid to boost their balance sheet growth. While lending standards have eased somewhat since 2009, over the past year they appear to have been largely unchanged. Recently, some banks have been adjusting their assessments of borrower's repayment capabilities by shifting to a new data source on estimated living expenses, but the net effect of this on the overall availability of credit is likely to be minor (for more details, see the 'Household and Business Balance Sheets' chapter).

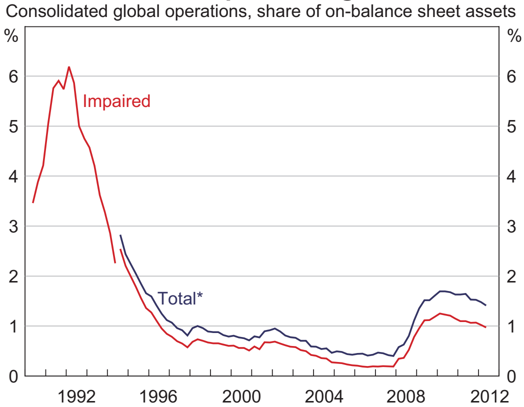
Asset Performance

Banks' asset performance has gradually improved over the past two years but remains weaker than in the years leading up to the 2008–2009 crisis. On a consolidated group basis, the ratio of non-performing assets to total on-balance sheet assets has declined from a peak of 1.7 per cent in mid 2010, to 1.4 per cent in June 2012 (Graph 2.7). The improvement over this period was mostly driven by a fall in the share of loans classified as impaired (i.e. not well secured and where repayment is doubtful), while the share of loans classified as past due (where the loan is in arrears but well secured) declined only slightly.

Graph 2.7

Banks' Non-performing Assets

Consolidated global operations, share of on-balance sheet assets



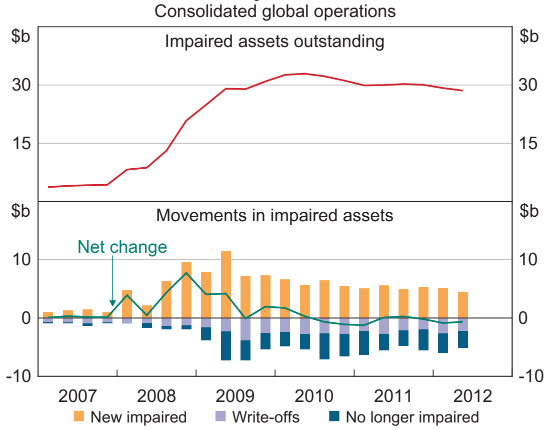
* Includes assets 90+ days past due that are well secured

Source: APRA

Graph 2.8

Banks' Impaired Assets

Consolidated global operations

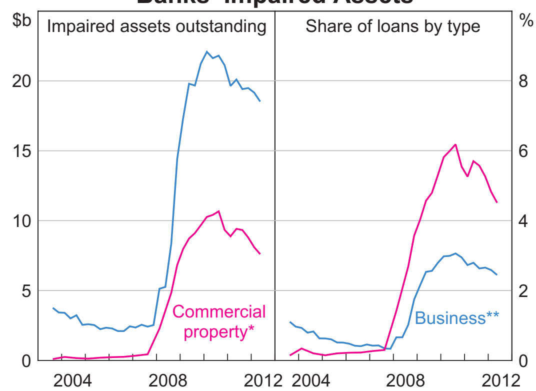


Source: APRA

In recent years, quarterly inflows of newly impaired assets have been at a higher level than prior to the crisis, which helps explain the sluggish decline in the impaired assets ratio (Graph 2.8). Liaison with banks indicates that commercial property exposures have been a key driver of this elevated flow of new impairments, though loans to other sectors have also contributed, including agriculture and retail trade. As discussed in the 'Household and Business Balance Sheets' chapter, some businesses have been facing pressures over the past few years. If these uneven business conditions continue, the flow of newly impaired assets could remain elevated for some time, though it may not return to pre-crisis levels in any case given that the years leading up to the crisis were characterised by buoyant asset valuations.

Graph 2.9

Banks' Impaired Assets



* Consolidated Australian operations; sample of 26 banks

** Domestic books; all banks; includes lending to financial businesses, bills, debt securities and other non-household loans

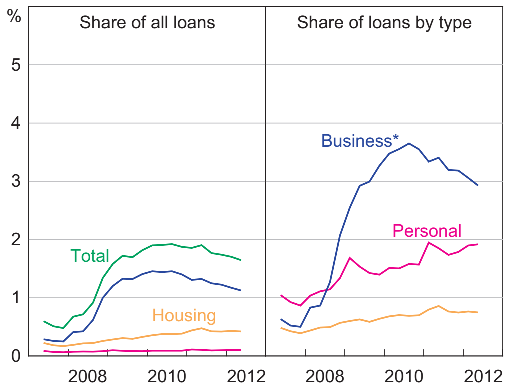
Source: APRA

Consistent with the industry liaison, commercial property exposures continue to account for a large share of the impaired assets in the banks' domestic business loan portfolios (Graph 2.9). Over the six months to June, the value of banks' impaired commercial property loans declined by about 13 per cent to $8 billion, partly due to sales of troubled exposures. Around 4½ per cent of banks' commercial property exposures are still classified as impaired, down from a peak of over 6 per cent in 2010. Looking forward, pressures on valuations, particularly in non-prime locations, could lead to further losses from banks' troubled commercial property exposures.

For banks' overall domestic business loan portfolios, the non-performing share stood at 2.9 per cent in June, down from 3.2 per cent in December 2011 (Graph 2.10). The bulk of these non-performing business loans are classified as impaired rather than past due, and may therefore generate future write-offs (Graph 2.11).

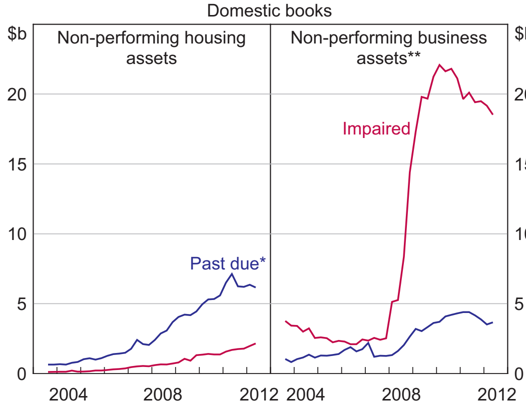
More detailed data from the major banks' Basel II Pillar 3 disclosures show that, on a consolidated group basis, business loan impairment rates

Graph 2.10
Banks' Non-performing Assets
Domestic books



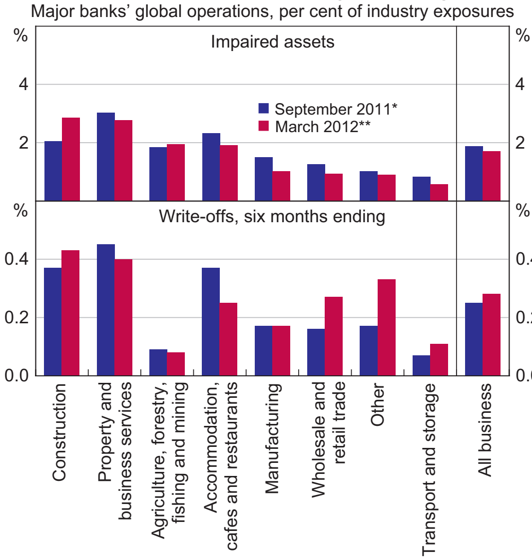
* Includes lending to financial businesses, bills, debt securities and other non-household loans
Source: APRA

Graph 2.11
Banks' Asset Performance
Domestic books



* 90+ days but well secured
** Includes lending to financial businesses, bills, debt securities and other non-household loans
Source: APRA

Graph 2.12
Asset Performance by Industry
Major banks' global operations, per cent of industry exposures



* December 2011 for CBA
** June 2012 for CBA
Source: Banks' Basel II Pillar 3 reports

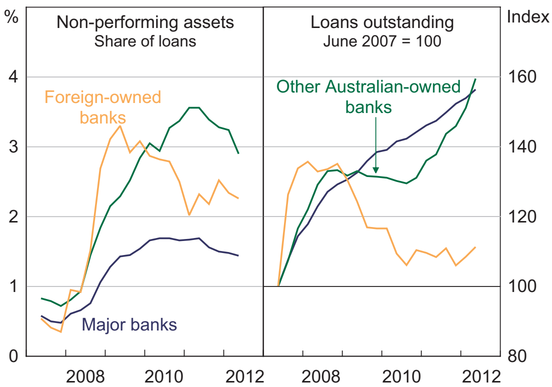
declined across most industries during the six months to March 2012 (Graph 2.12). A notable exception was loans to the construction industry, where the average impairment rate increased fairly sharply over this period. Although the construction industry now has the highest impairment rate of all industries, it accounts for only a small share, around 4 per cent, of the major banks' total business loans. Other industries with above-average impairment rates include property and business services (incorporating commercial property), agriculture, forestry, fishing and mining, and accommodation, cafes and restaurants. These data also show that the average business loan write-off rate increased slightly during the six months to March 2012, with the property and business services, and construction industries continuing to have relatively high write-off rates.

Asset performance in the banks' domestic mortgage portfolios has been fairly steady in recent quarters. The share of the banks' domestic housing loans that is non-performing remained around 0.7 per cent over the six months to June, after falling slightly in the second half of 2011 (Graph 2.10). Within this, the share of past-due loans has declined a little since its peak in mid 2011, while the share of impaired loans has continued to edge up slowly, consistent with the weakness in housing prices in some parts of Australia (Graph 2.11). Further declines in housing prices could result in more impaired housing loans, though recent indicators suggest that prices are beginning to stabilise in many regions.

The improvement in banks' domestic asset performance over the first half of 2012 was broad based across the industry (Graph 2.13).

Foreign-owned banks, along with the smaller Australian-owned banks, continue to have weaker asset performance than the major banks, in large part due to problems in their business loan portfolios. The non-performing assets ratio for credit unions and building societies (CUBS) rose a little over the six months to June but remains much lower than that for the banks. Compared with banks, CUBS make a larger share of their loans to households, so it is not surprising that their overall asset performance is better. But this also means the recent weakness in the housing market may have a bigger effect on their loan portfolios.

Graph 2.13
Banks' Asset Performance and Lending
Domestic books



Source: APRA

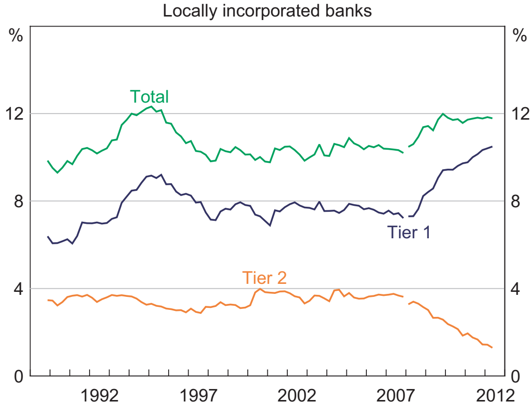
Banks' non-performing overseas assets were steady at around 0.3 per cent of their consolidated assets in the year to June, after peaking in mid 2010 at 0.4 per cent. However, the performance of the banks' overseas assets has been mixed across countries in recent quarters. For the banks' New Zealand operations, which account for about 40 per cent of their foreign exposures, asset performance has improved over recent quarters and should continue to do so if the better economic conditions in New Zealand persist. In contrast, the actual and expected asset performance of the banks' UK operations, which represent around 20 per cent of their foreign exposures, remain weaker given the fragile UK economy.

Capital and Profits

The Australian banks have continued to strengthen their capital positions over recent years, helping improve their resilience to shocks. Their aggregate Tier 1 capital ratio rose further over the first half of the year, to 10½ per cent of risk-weighted assets, up from about 8½ per cent in mid 2009 (Graph 2.14). This increase has been broad based, with most individual banks reporting increases in their Tier 1 capital ratios in the range of 1 to 3 percentage points in the past couple of years. This reflects the increased emphasis on Tier 1 capital and that some Tier 2 instruments will not qualify as capital under Basel III. The banks' aggregate Tier 2 capital ratio has continued to decline in recent quarters as banks have chosen not to replace most of their maturing subordinated debt. As a result, the total capital ratio has not risen as much as the Tier 1 ratio in recent years, but it is still relatively high at 11.8 per cent in June 2012. CUBS have maintained their higher capital ratios, consistent with their less diversified business models and different corporate structure; their aggregate Tier 1 capital ratio stood at 15.7 per cent in June 2012.

After issuing large amounts of new equity in 2008 and 2009, most of the growth in banks' Tier 1 capital in recent years has been organic, mainly through earnings retention. Banks' stock of retained earnings

Graph 2.14
Capital Ratios*
Locally incorporated banks

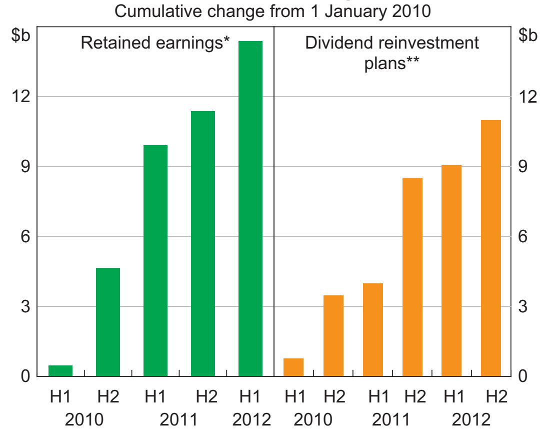


* Per cent of risk-weighted assets; break in March 2008 due to the introduction of Basel II for most banks
Source: APRA

has increased by $14 billion since early 2010, contributing close to 1 percentage point (or 70 per cent) of the increase in their Tier 1 capital ratio over this period (Graph 2.15). At the same time, banks have been adding to their stock of ordinary equity through dividend reinvestment plans (DRPs). Over the past couple of years, around $11 billion of equity has been issued to existing shareholders through these plans. Many banks have removed the caps on equity available through DRPs since early 2007 in an effort to enhance their capital raising flexibility. Over the past couple of years, most major banks have either removed or reduced the discounts on ordinary equity offered through their DRPs. Modest growth in risk-weighted assets over the past few years, mainly as a result of subdued credit growth and a gradual shift in the portfolio towards lower-risk assets, has also made it easier for banks to increase their capital ratios.

Graph 2.15
Capital Raisings

Cumulative change from 1 January 2010



* For locally incorporated banks

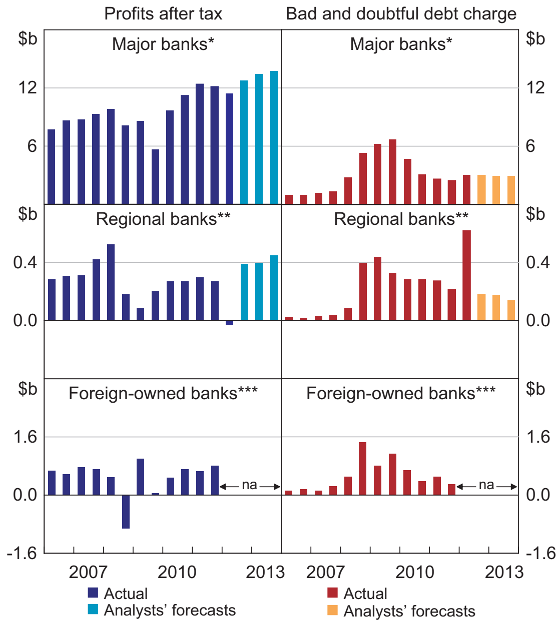
** For locally listed banks; second half 2012 is half-to-date

Sources: APRA; ASX; RBA

The upcoming Basel III capital requirements place greater emphasis on core capital than under Basel II, so banks are likely to continue building up their equity capital given the positive outlook for bank profit levels. Though the measurement of capital under Basel II is not strictly comparable to Basel III, the significant increase in the Tier 1 capital ratio over the past few years already puts the banks in a good position to meet the first stage of the Basel III requirements that are being phased in from 2013. For the larger banks, APRA expects the necessary remaining increase in capital should be able to be met through earnings retention policies.

As noted, Australian banks have generally continued to post strong profits in recent reporting periods, though the rate of growth has slowed compared with the past few years. In their latest half-year results, the four major banks recorded an aggregate headline profit after tax and minority interests of around $11 billion (Graph 2.16). This was about $0.1 billion (1 per cent) higher than in the same period a year earlier, after adjusting for the effect of a large, one-off tax benefit in 2011. Revenue growth over the year was steady at around 5 per cent. After falling over the past few years and supporting profit growth, bad and doubtful debt charges look to have troughed. They rose by about 15 per cent in the latest half-year

Graph 2.16
Bank Profits



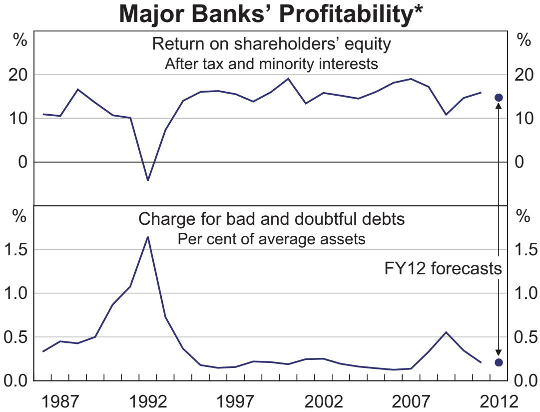
* ANZ, NAB and Westpac report half yearly to March and September, while CBA reports to June and December

** Suncorp Bank, and Bendigo and Adelaide Bank report half yearly to June and December, while Bank of Queensland reports to February and August

*** All results are half year to June and December

Sources: APRA; Credit Suisse; Deutsche Bank; Nomura Equity Research; RBA; UBS Securities Australia; banks' annual and interim reports reporting period, mostly due to higher impairments in the major banks' UK operations.

For the major banks, analysts are generally expecting bad and doubtful debt charges to level out over the next year. With revenue growth tending to match growth in operating expenses, the banks are continuing to focus on improving cost efficiency; a number of them have announced cost-cutting initiatives, including targeted staff cuts in some areas. Looking ahead, analysts are currently forecasting the major banks' aggregate profits to rise by about 12 per cent in the next half-year reporting period and their return on equity to remain around 15 per cent, similar to the past two years (Graph 2.17).



* From 2006, data are on an IFRS basis; prior years are on an AGAAP basis
Sources: Credit Suisse; Deutsche Bank; Nomura Equity Research; RBA; UBS Securities Australia; banks' annual and interim reports

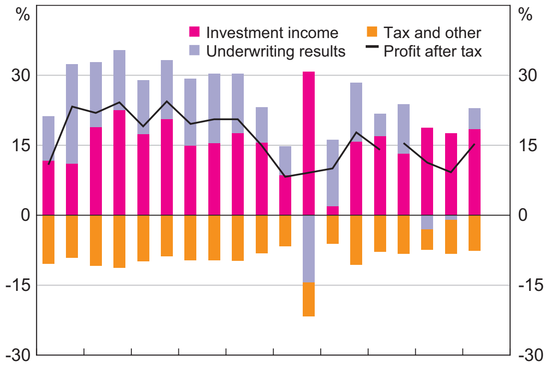
In aggregate, the regional Australian banks reported a loss after tax and minority interests of $30 million in their latest half-year results, with profits falling by around $300 million compared with the same period a year earlier. The main contributor to the loss was a sharp rise in charges for bad and doubtful debts to $600 million, up from $200 million in the previous reporting period. This was mainly due to losses on commercial property loans at a couple of the banks that are more exposed to the weaker Queensland market. Analysts expect the losses to be a once-off, with the asset performance of the regional banks forecast to stabilise in the next reporting period and charges for bad and doubtful debts to decline. Other authorised deposit-taking institutions have had relatively small changes in their profitability: the foreign-owned banks and building societies increased their aggregate profits in their latest half-year results while credit unions' profitability fell slightly.

Overall, while banks' profitability is expected to remain high, a continuation of the modest credit growth environment and higher funding costs is likely to constrain future profit growth. The challenge for the industry in this environment will be to avoid taking on unnecessary risk or cutting costs indiscriminately in a bid to sustain unrealistic profit expectations, as this could ultimately sow the seeds of future problems.

General Insurance

The general insurance industry remains well capitalised at 1.8 times the minimum capital requirement, similar to the levels of the past couple of years. Underwriting results have returned to more normal levels after the adverse effects of the natural disasters in late 2010 and early 2011. However, return on equity for the industry, at around 15 per cent annualised for the June half 2012, remains below the average over the years leading up to the global financial crisis (Graph 2.18). A challenge for the industry is operating in a low-yield environment, which is related to the ongoing difficulties in Europe and weak growth in the major countries' economies. Because insurers invest premium revenue in generally low-risk assets to cover future claim payments, the lower the investment yield, the more premium that needs to be collected to cover future claims, particularly for 'long-tail' insurance products such as liability insurance. While the insurance industry has been increasing premium rates in response to higher reinsurance costs (related to the recent natural disasters), competitive pressures may limit insurers' capacity to raise premium rates further. In this environment, it would be undesirable if insurers sought to improve their profitability by

Graph 2.18
General Insurers' Performance*
Contribution to return on equity, annualised



* Change in prudential reporting requirements from December 2010 half
Source: APRA

investing imprudently in riskier, higher-yielding investments.

The profits of lenders' mortgage insurers (LMIs) have come under some pressure from the recent weakness in the residential property market, which has boosted the number and average size of claims, although their overall profitability over the past year remains solid. A prolonged or more severe downturn in property prices combined with higher housing loan arrears (for instance, due to higher unemployment), would increase claim rates further and reduce profits. As noted earlier, though, recent indications are that the housing market is beginning to stabilise. The LMI sector holds about 1½ times a minimum capital requirement that is designed to absorb losses from a very severe housing market downturn. While the LMIs are currently rated highly by the major rating agencies, Moody's is in the process of reviewing its global methodology for rating LMIs, which could result in changes to the Australian LMIs' ratings. Prior to this review, it had flagged the Australian LMIs for a possible downgrade, noting its concern that their capital buffers would be tested in the event of a severe downturn in the Australian residential property market.

Managed Funds

Unconsolidated assets under management in the Australian funds management industry grew by 9 per cent in annualised terms over the six months to June, to $1.9 trillion, more than reversing a decline over the second half of 2011 (Table 2.3). The rise was driven by superannuation funds, whose assets under management rose by 12 per cent in annualised terms, and now represent over 70 per cent of the unconsolidated assets of managed funds.

Table 2.3: Assets of Domestic Funds Management Institutions
As at end June 2012

			Six-month-ended annualised change	
	Level	Share of total	Dec 11	Jun 12
	$ billion	Per cent	Per cent	Per cent
Superannuation funds	1 349	72	–4.6	12.1
Life insurers(a)	235	12	–5.2	5.6
Public unit trusts	260	14	–10.9	–3.6
Other managed funds(b)	38	2	–0.6	4.2
Total (unconsolidated)	**1 882**	**100**	**–5.6**	**8.8**
Of which:				
Cross investments	382	–	–10.2	5.9
Total (consolidated)	**1 500**	**–**	**–4.3**	**9.5**

(a) Includes superannuation funds held in the statutory funds of life insurers
(b) Cash management trusts, common funds and friendly societies
Source: ABS

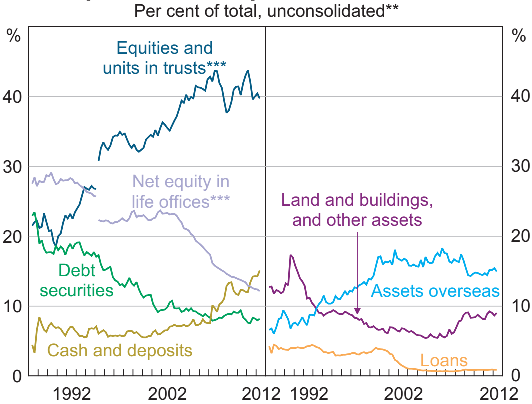
Superannuation funds' holdings of cash and deposits continued to grow, in part reflecting the heightened demand for safer assets in an uncertain investment environment (Graph 2.19). Even so, equities and units in trusts remain the largest component of superannuation investments at 40 per cent of funds under management. About 20 per cent of their equity holdings or 6 per cent of their total assets are invested in equity issued by Australian banks. Superannuation funds' holdings of domestic bank equity have increased over the past two decades, and now account for over one-quarter of the equity issued by banks. However, the share of total superannuation assets that is invested in domestic bank equity has remained steady over the past decade.

Partly because they have quite long investment horizons, superannuation funds have been willing to purchase Australian bank equity even during times of market strain; their net purchases during the height of the global financial crisis exemplifies this behaviour. Indeed, throughout the past decade or so, superannuation funds have been more often net purchasers of bank equity than net sellers during periods when bank share prices have declined. As the size of the superannuation industry grows, these funds should continue to be a valuable source of new capital, should it be required, for the banking sector in stress conditions.

Against a backdrop of relatively steady contribution inflows, superannuation funds have experienced mixed investment performance in recent years associated with the volatility in global financial markets (Graph 2.20). A recovery in share markets during the March quarter this year drove a pick-up in funds' investment returns, but this was partially offset by declining share prices in the June quarter. Over the year to June, superannuation funds in aggregate recorded little net investment income.

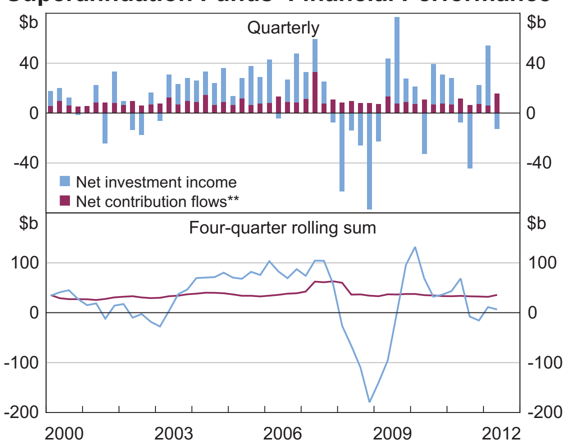
Life insurers' funds under management rose by about 6 per cent in annualised terms in the six months to June 2012. Their profitability increased over the six months to June, aided by investment returns on fixed-interest securities (Graph 2.21). The life insurance industry remained well capitalised at 1.4 times the minimum requirements as at June 2012.

Graph 2.19
Composition of Superannuation Assets*
Per cent of total, unconsolidated**



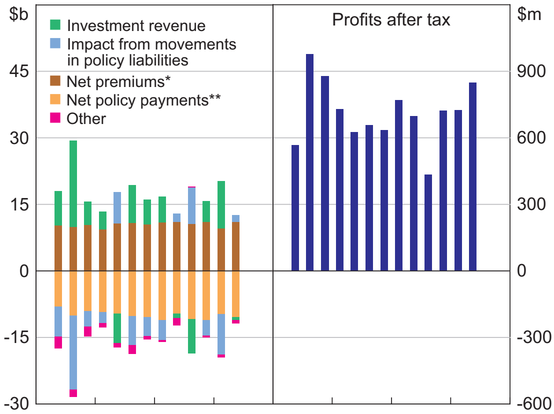
* Apart from 'assets overseas', individual asset types represent investments in Australia
** Excludes positions between superannuation funds and positions with other managed funds
*** Reclassification by ABS from June 1995
Source: ABS

Graph 2.20
Superannuation Funds' Financial Performance*



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

Graph 2.21
Life Insurers' Financial Performance

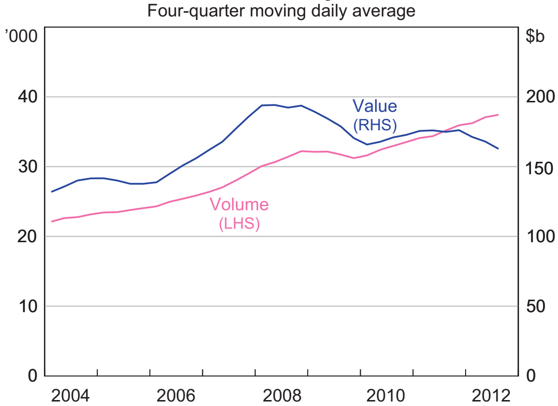


* Sum of net policy revenue, premium-related fees and net policy revenue recognised as a deposit
** Sum of net policy expenses and net policy expenses recognised as a withdrawal
Source: APRA

Financial Market Infrastructure

The Reserve Bank's high-value payments settlement system, RITS, continued to operate smoothly during the past six months, settling around 4 million payments worth $16 trillion – equivalent to around 25 times the value of GDP over the same period. The average daily volume of transactions was 5 per cent higher in the six months to September compared with the previous half year (Graph 2.22). In contrast, the value of transactions settled in RITS declined by 6 per cent over the same period to an average of $158 billion per day – the lowest level since the March quarter 2006, and about 22 per cent below the peak in the March quarter 2008.

Graph 2.22
RITS Settled Payments*
Four-quarter moving daily average



* September 2012 is quarter-to-date
Source: RBA

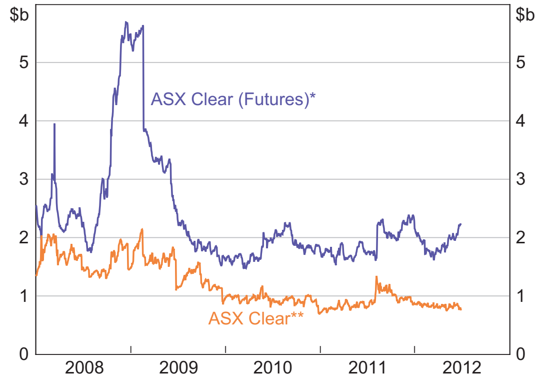
Settlement of low-value transactions, such as direct entry, consumer electronic (cards-based) payments and cheque transactions, also occurs in RITS through a daily batch, rather than on a real-time gross settlement basis. To increase the efficiency of the settlement of these transactions, the Bank recently implemented a new system, the Low Value Settlement Service (LVSS). The settlement of direct entry transactions was successfully migrated to the LVSS in May 2012, followed by the clearing system for consumer electronic transactions in August. The clearing system for cheques is expected to migrate in October. Currently, an average of about $17 billion of transactions are settled using the LVSS each day.

The two ASX central counterparties, ASX Clear and ASX Clear (Futures), use a variety of risk controls to centrally manage counterparty risk in Australia's main exchange-traded equities and derivatives markets. These include the collection of margin from participants, and pooled risk resources (i.e. 'default funds'). Variation or mark-to-market margin is collected from participants on a daily basis to cover the risk exposure resulting from actual changes in the value of their positions. Initial margin is also collected for participants' new positions, to cover the potential future risk exposure from changes in the value of a defaulting participant's positions between the last collection of variation margin and the time at which the positions can be closed out. Currently, at ASX Clear, initial margin is collected on derivatives positions only, but ASX Clear is working towards introducing routine margining of equities in the 2012/13 financial year.

Margin held at the central counterparties provides an indication of the aggregate risk of open positions held in normal market conditions. Margin held on derivatives positions cleared by ASX Clear continued to decline over the first half of 2012, as turnover decreased and margin rates were adjusted downwards to reflect the more benign market conditions (Graph 2.23). Margin rates for derivatives cleared by ASX Clear (Futures) were also lowered during the first half of 2012, but this was more than offset by increased turnover in the most commonly traded contracts, resulting in higher margin held overall.

While some margin rates have been lowered, this has been done incrementally. The central counterparties have maintained margin rates for the most commonly traded contracts above the rates recommended by their backward-looking statistical models, reflecting caution as to the possible effects on market volatility of ongoing international uncertainty, and to guard against frequent procyclical changes in margin rates.

Graph 2.23
Central Counterparty Margins



* Initial margin
** Derivatives initial and mark-to-market margin
Source: ASX

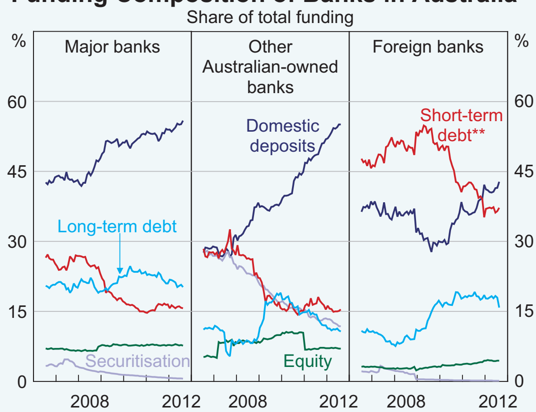
Box A

Funding Composition of Banks in Australia

Since the onset of the global financial crisis, there has been a pronounced shift in the funding composition of banks in Australia. In particular, there has been a move away from the use of wholesale debt securities, including securitisation, towards domestic deposits. The crisis spurred banks, investors and regulators globally to reassess funding risks, and the Australian banks have responded to the resulting pressures to secure more stable funding sources. An increase in the use of deposits has been evident across all types of banks in Australia, although it has been most pronounced for the regional and other smaller Australian-owned banks, which had previously used securitisation more heavily (Graph A1). These banks have increased their share of deposits broadly across most products, whereas most of the growth in the major and foreign-owned banks' deposits (and the banking sector's deposits as a whole over recent years) has been concentrated in term deposits. Reflecting greater competition, term deposits now attract higher interest rates than a number of other forms of deposits and wholesale debt securities of a similar maturity.[1]

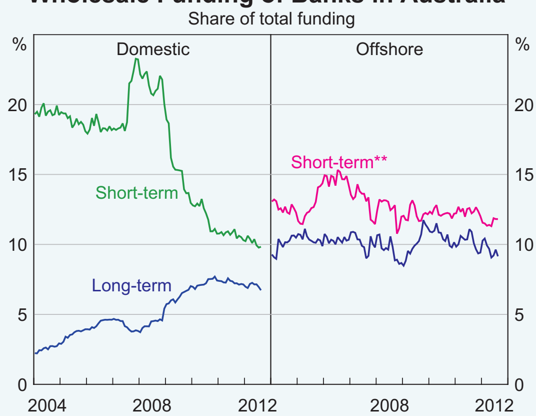
Australian banks in aggregate have also slightly increased stable funding in the form of long-term wholesale debt and this has been complemented by a sharp fall in the share of short-term wholesale debt. Most of this decline was in domestic debt; the share of domestic short-term debt in total bank funding has declined from a peak of over 20 per cent in early 2008 to around 10 per cent recently (Graph A2). The share of short-term debt issued overseas has fallen somewhat less, from a peak of 15 per cent of funding prior to the crisis to 12 per cent currently. There are a number of possible reasons why the share of domestic short-term debt has declined more than that of offshore short-term debt. Domestic investors are likely to have had more opportunity to substitute away from short-term debt securities,

Graph A1
Funding Composition of Banks in Australia*



* Adjusted for movements in foreign exchange rates; not adjusted for mergers and changes in capital structure
** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA

Graph A2
Wholesale Funding of Banks in Australia*



* Adjusted for movements in foreign exchange rates; wholesale debt is on a residual maturity basis
** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA

1 For more in-depth discussion of the role of deposits in bank funding costs, see Deans C and C Stewart (2012), 'Banks' Funding Costs and Lending Rates', RBA *Bulletin*, March, pp 37–43.

such as certificates of deposits, to term deposits offering higher interest rates. Banks are also holding less of each other's securities now than at the height of the global financial crisis. Additionally, as banks have tried to increase the average maturity of their funding, they have been relatively more inclined to reduce issuance of domestic short-term debt, which typically has shorter maturities than short-term debt issued offshore because the two investor bases have different preferences. Estimates suggest that the average residual maturity of banks' offshore short-term wholesale debt is around four months, while that of domestic debt is generally less than two months. Within banks' offshore short-term funding, around half is debt securities, mainly commercial paper, with the remainder being deposits whose maturity characteristics will often be similar to that of debt securities (Table A1).

Long-term wholesale debt currently accounts for about 16 per cent of banks' funding, up from a low of about 13 per cent in late 2007. Most of the increase has been in domestic long-term debt; the share of offshore long-term debt has been broadly unchanged since 2007. After rising initially following the onset of the crisis, the share of long-term debt has declined a little in the past year or so, as strong deposit growth and modest credit growth has reduced the banks' wholesale funding requirements. Although the term to maturity of newly issued bonds has increased, because issuance levels have not been particularly high the average residual maturity of banks' long-term wholesale debt has hardly changed in recent years, remaining at just over three years (Graph A3).

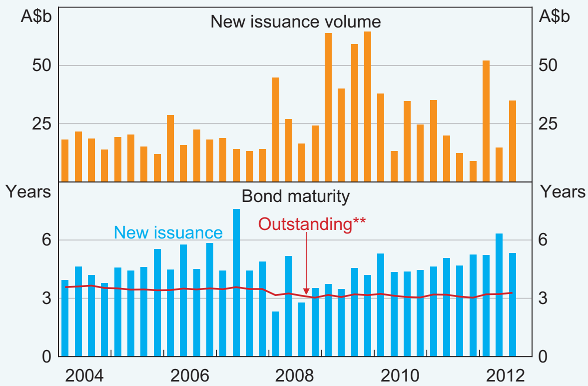
Around 15 per cent of banks' liabilities are denominated in foreign currency, with non-resident liabilities comprising around 90 per cent of this share. The foreign currency share of banks' liabilities has fallen by about 3 percentage points over the past two years. The long-standing and prudent practice of hedging foreign-currency denominated exposures back into Australian dollars ensures that

Table A1: Offshore Short-term Debt Funding of Banks in Australia[(a)]
August 2012, share of total

Debt securities	5.6
Intragroup deposits	3.7
Other deposits	2.5
Total	**11.8**

(a) Adjusted for movements in foreign exchange rates
Sources: APRA; RBA

Graph A3
Banks' Bond Issuance*



* September 2012 is quarter-to-date
** Residual maturity
Sources: Bloomberg; RBA; UBS AG, Australia

fluctuations in exchange rates have little effect on domestic banks' profits or equity.[2]

The funding composition of Australian banks can be compared with banks in other advanced countries using a number of simple metrics, such as the wholesale funding ratio, the customer deposit funding ratio, the foreign funding ratio and the loan-to-deposit ratio. Cross-country comparisons are complicated by a lack of fully consistent data, but some general observations based on estimates of these metrics for different banking systems can still be made. The Australian banking system has a wholesale funding ratio of about 34 per cent, which is similar to Sweden, but higher than a number of other countries (Table A2). Euro area banks have

2 For more information, see RBA (2010), 'Box B: Foreign Currency Exposure and Hedging Practices of Australian Banks,' *Financial Stability Review*, March, pp 38–40.

Table A2: Bank Funding Structures in Selected Countries[a]
June 2012, per cent

	Wholesale funding ratio[b]	Customer deposit funding ratio[b],[c]	Foreign funding ratio[d]	Loan-to-deposit ratio
Australia	34	49	24	135
Canada	23	67	10	103
Euro area	23	41	15	110
France	*20*	*32*	*19*	*110*
Germany	*20*	*46*	*18*	*107*
Japan	21	72	12	73
Sweden	33	40	34	129
Switzerland	21	55	27	97
United Kingdom	24	59	48	138
United States	13	73	24	77

(a) Funding ratios across banking systems are subject to definitional differences; certificates of deposits are classified as wholesale funding in all countries except Canada and the United States, where these instruments are eligible for deposit insurance
(b) Expressed as a share of funding liabilities (total liabilities including equity less derivatives and other non-debt liabilities)
(c) Customer deposits are total deposits minus deposits from banks and other monetary financial institutions
(d) Gross foreign liabilities of BIS reporting banks on a locational basis, expressed as a share of total liabilities and equity; data as at 31 March 2012
Sources: APRA; BIS; Bloomberg; FDIC; OSFI; RBA; central banks

lower wholesale funding ratios but they also make more use of interbank deposits than Australian banks; these deposits are not counted as part of wholesale funding, but arguably share similar characteristics. US and Canadian banks' certificates of deposit are not recorded as wholesale funding, even though at least some investors in these instruments may behave in a similar way. While wholesale funding is often assumed to be less stable than customer deposit funding, a higher wholesale funding ratio for the Australian banking system does not necessarily indicate higher funding risks – the maturity and diversity of wholesale funding are also important factors to consider; as noted earlier, some wholesale funding is at quite long terms. Also, because an investor's decision to lend to a bank is largely based on a credit assessment of the bank's assets, the Australian banks' fund-raising activities in global capital markets has created a strong incentive for them to maintain high credit ratings and sound asset quality, factors which improve the stability of their funding base.[3]

Australian banks' use of foreign funding is also often singled out by some observers as a potential source of vulnerability. However, the foreign funding ratio for the Australian banking system is lower than for banking systems in Europe outside the euro area, mainly because Australian banks raise little non-resident deposit funding. Non-resident deposit funding can be less stable than domestic deposits, as the recent experience of some euro area banking systems demonstrates (see 'The Global Financial Environment' chapter). Also, as noted earlier, Australian banks hedge almost all of their foreign currency denominated exposure to manage the foreign exchange risk.

3 On the importance of maintaining high-quality assets, see Debelle G (2011), 'Collateral, Funding and Liquidity', Address to Conference on Systemic Risk, Basel III, Financial Stability and Regulation, Sydney, 28 June.

The loan-to-deposit ratio for the Australian banking system is higher than those for the other large advanced banking systems in Table A2, with the exception of the United Kingdom, though it is comparable to that in Sweden. The Australian banks' ratio has declined significantly since the onset of the global financial crisis, as deposit growth has outpaced credit growth. Loan-to-deposit ratios can be misleading indicators of the vulnerability of a bank's funding profile: very different ratios can apply to banks with the same funding mix but different shares of banking and trading book assets on their balance sheets. In the Australian banks' case, the relatively high loan-to-deposit ratio partly reflects their lower share of trading book assets. A low loan-to-deposit ratio is not necessarily an indicator of stability as there are numerous instances over recent years where banks have invested their 'excess' deposits in trading securities or other assets that proved to be riskier than domestic loans.

3. Household and Business Balance Sheets

The household sector has continued to consolidate its financial position in 2012. The household saving ratio appears to have stabilised at a level significantly above that recorded in the 1990s and early to mid 2000s, and households have been actively shifting their portfolios towards more conservative assets such as deposits. Household borrowing has also slowed in recent years to a pace that is more in line with income growth and many households are choosing to repay their existing debt more quickly than required. Though there are some isolated pockets of weakness, aggregate measures of financial stress remain low. However, with aggregate indebtedness still around historically high levels, a continuation of the recent borrowing restraint would help strengthen the financial resilience of households.

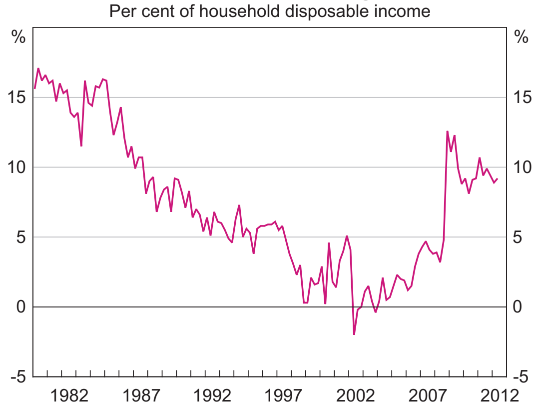
Overall, business balance sheets are in good shape, with gearing and debt-servicing ratios at relatively low levels, though profits have moderated recently. The dispersion in economic conditions across sectors has continued in recent quarters, with firms in some industries facing challenges associated with the high level of the exchange rate and the weak housing market as the Australian economy goes through a period of structural change. These pressures are evident in banks' business loan performance: inflows of newly impaired business loans remain elevated and, associated with this, the non-performance rate on banks' business loans has declined only modestly from its peak a couple of years ago.

Household Sector

The household sector's more prudent financial behaviour has continued in 2012. The saving ratio has averaged around 9½ per cent of disposable income for the past few years, well above its level of five to ten years ago (Graph 3.1). Disaggregated household-level data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey show that this increase in saving was broad based across most income and age groups, with the exception of retirees, who typically dissave and are disproportionately represented in the lowest income quintile, as well as other households with low or temporarily low incomes (Graph 3.2).

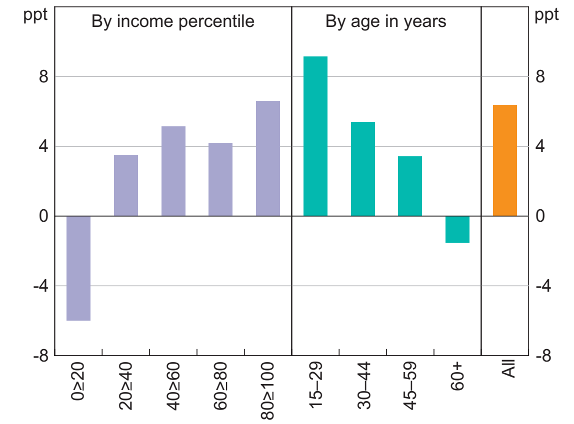
The higher rate of saving has partly been motivated by a desire to rebuild wealth following the falls in asset prices over recent years. Real net worth per household has declined by 11½ per cent from its

Graph 3.1
Household Saving*
Per cent of household disposable income



* Net of depreciation
Source: ABS

Graph 3.2
Change in Median Saving Ratios*
From 2006 to 2010

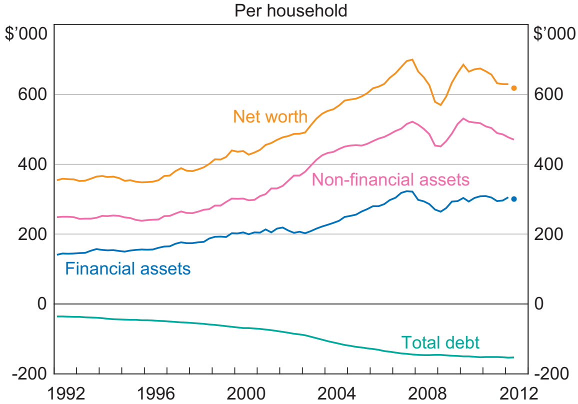


* Population weighted and using income measures equivalised across different household structures
Source: HILDA Release 10.0

2007 peak, in contrast to the strong growth in the years leading up to that point (Graph 3.3). Much of the decline has reflected weakness in housing values. Average housing prices are around 6 per cent below their 2011 peak nationally, and even further below their peaks in Melbourne and south-east Queensland, where earlier overdevelopment locally may have weighed on prices. While prices nationally have stopped falling in recent months, any future recovery is unlikely to produce housing price growth much faster than income growth, as was seen through much of the 1990s and 2000s, because that earlier period was one of adjustment to the structural decrease in nominal interest rates and liberalisation of the banking system.

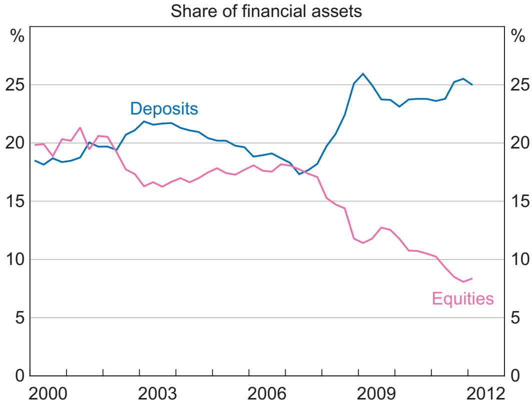
Households' more circumspect financial behaviour is also related to a decrease in their appetite for risk and riskier assets. For example, on top of the effect of declining equity prices, households have actively reduced their equity holdings. As a result, the share of households' financial assets held directly in equities (i.e. outside superannuation) has roughly halved, from 18 per cent in 2007 to 8½ per cent in March 2012 (Graph 3.4). In contrast, the share of deposits has increased from 18 to 25 per cent over that period. Disaggregated data from the latest HILDA Survey also show that between 2006 and 2010 the proportion of households owning equities directly fell slightly, to 34 per cent; the decline was seen across most age and income groups. Overall, real financial assets per household have been flat in recent years as the growth in deposits and superannuation assets has been roughly offset by the fall in the value of equity holdings. While households appear to have become more risk averse in recent years, it is not always clear that they fully account for the complexity inherent in some financial products. For example, there have recently been a number of hybrid securities issued by banks and other companies aimed at retail investors. The

Graph 3.3
Real Household Assets*
Per household



* In 2009/10 dollars; deflated using the household final consumption expenditure implicit price deflator; dots are RBA estimates for June quarter 2012
Sources: ABS; RBA

Graph 3.4
Household Assets
Share of financial assets



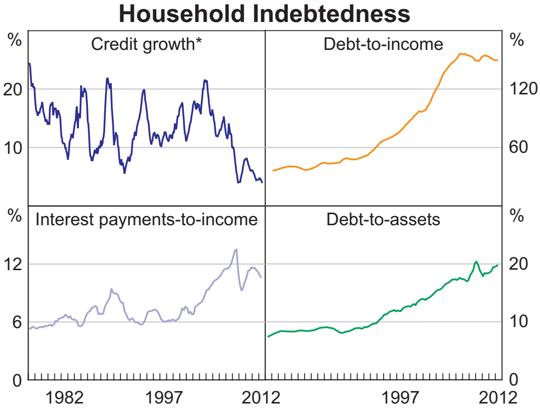
Source: ABS

Australian Securities and Investments Commission, through its MoneySmart consumer awareness website, has warned about the risks associated with these types of securities, which combine debt and equity features, relative to standard debt instruments like corporate bonds.

Household credit growth has been much slower in recent years than over the previous couple of decades, and in recent months has slowed further (Graph 3.5). It has also been more in line with income growth, such that the household debt-to-income ratio has been broadly flat at around 150 per cent since 2006. Soft demand for both owner-occupier and investor housing credit has resulted in, and reflected, lower housing prices. Data on housing loan approvals suggest that housing credit growth is likely to remain modest in the near term. Appetite for other forms of borrowing also remains low. Credit card debt was broadly steady over the year to July, while the stock of other forms of personal credit has generally been declining. Despite the easing in household credit growth in recent years, household gearing is around a historically high level, reflecting the fall in the value of housing assets.

Subdued credit growth, lower interest rates and modest income growth over the past year have led to a further fall in the ratio of household interest payments to disposable income. At 10½ per cent in the June quarter, this ratio is now at its decade average. Real household disposable income increased by around 4 per cent over the year to the June quarter 2012, underpinned by solid growth in compensation of employees. Even so, households' sentiment towards their financial position remains weak, despite the unemployment rate remaining at a relatively low level in recent months. Forward-looking indicators, such as surveys of business hiring intentions, point to modest growth in employment in the period ahead.

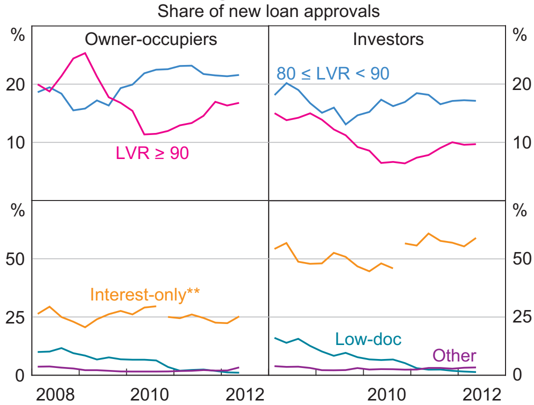
Graph 3.5
Household Indebtedness



* Six-month-ended, annualised
Sources: ABS; RBA

The risk profile of new housing loans has been lower in recent years compared with the earlier period of strong growth in household borrowing. Lending standards are tighter now than prior to the financial crisis, and liaison with the major banks indicates that they have been broadly unchanged over the past six months. The share of bank lending that is low-doc remains low, at less than 2 per cent of banks' loan approvals and around 5 per cent of outstanding housing credit (Graph 3.6). The share of new loans with loan-to-valuation ratios (LVRs) above 90 per cent is also lower than around the onset of the financial crisis, at around 14½ per cent, though it has increased noticeably over the past couple of years. Part of this can be attributed to first home buyer (FHB) incentives; for example, some demand was pulled forward ahead of the expiry of the New South

Graph 3.6
Banks' Housing Loan Characteristics*
Share of new loan approvals



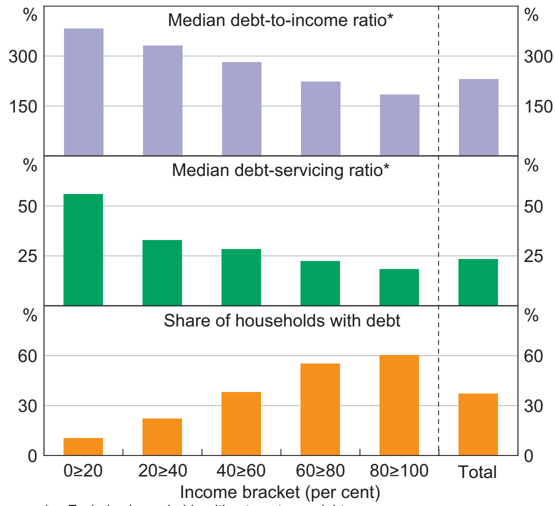
* LVR = loan-to-valuation ratio; 'Other' includes loans approved outside normal policies, and other non-standard loans; 'Interest-only' includes mortgages with 100 per cent offset accounts
** Series break due to changes in data management at one of the major banks
Source: APRA

Wales FHB stimulus at the end of 2011. Many banks have recently changed how they estimate living expenses in their debt-serviceability calculations, moving from using the Henderson Poverty Index to the Household Expenditure Measure, which is based on the ABS Household Expenditure Survey. The new measure was designed to be a more accurate estimate of households' living expenses. The impact of the change will vary for different borrowers; for couples, it will generally reduce their borrowing capacity, while for singles it will generally increase it. The available evidence suggests that using the new measure will result in only minor changes to the availability of credit overall.

Some households are using their increased saving to pay down debt more quickly than required, which has contributed to the slower aggregate pace of debt accumulation. Data from the major banks and the HILDA Survey indicate that around half of borrowers are repaying their mortgages ahead of schedule and are thereby building up buffers they could temporarily draw on to stay current on their loan if their income were to fall. The size of these buffers can be quite substantial (see 'Box B: Households' Mortgage Prepayment Buffers').

Given the large share of households with mortgage prepayment buffers, along with relatively low unemployment and moderate income growth, most households appear well placed to meet their debt obligations. According to the latest HILDA Survey, around 70 per cent of owner-occupier housing debt is held by higher-income households (those in the top 40 per cent of the income distribution) that typically have lower debt-to-income and debt-servicing ratios (DSRs) (Graph 3.7). Only a relatively small share of low-income households (in the bottom 20 per cent of the income distribution) has housing debt; those that do, however, tend to be quite indebted, with high DSRs. This is partly explained by this group containing people with temporarily low incomes, for example, because they were unemployed or between jobs when the Survey was taken.

Graph 3.7
Owner-occupier Housing Debt
2010



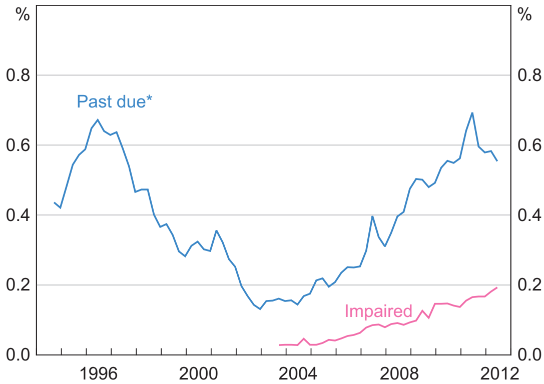
* Excludes households without mortgage debt
Source: HILDA Release 10.0

The recently released Census data show that in 2011 only a small share of indebted owner-occupiers met standard vulnerability criteria, broadly consistent with trends seen in recent years in the HILDA Survey. For instance, slightly under 10 per cent of indebted owner-occupier households had high DSRs (above 50 per cent) and 6½ per cent had both high DSRs and were in the lowest 40 per cent of income earners.

Consistent with these survey-based measures, aggregate indicators of financial stress confirm that the household sector has been coping reasonably well with its debt level. The past-due share of housing loans has eased somewhat since its peak in mid 2011, to be a little below 0.6 per cent (Graph 3.8). Although this arrears rate is low by international standards, it remains above its historical average. The non-performance rates for banks' credit card (1.3 per cent) and other personal (2.2 per cent) loans have increased slightly in recent quarters, but remain a little below recent peaks.

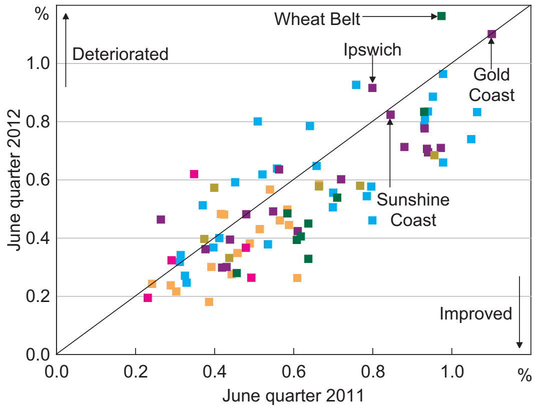
According to the 2011 Census, the geographic regions that had the highest incidence of potential mortgage vulnerability, as measured by the share of households that had high DSRs and were in

Graph 3.8
Non-performing Housing Loans
Share of outstandings



* 90+ days but well secured
Source: APRA

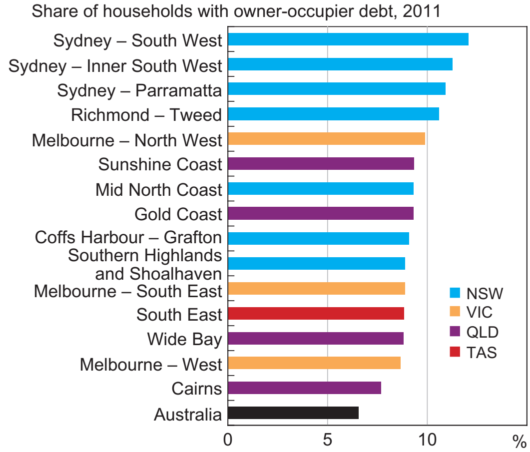
Graph 3.10
Securitised Housing Loan Arrears by Region*
90+ days in arrears, share of outstandings



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

the lowest 40 per cent of the income distribution, were western Sydney, parts of the New South Wales coast, south-east Queensland and parts of Melbourne (Graph 3.9). Partly consistent with these data, arrears on securitised loans suggest that some of the same regions have a higher-than-average share of borrowers experiencing some degree of financial stress, although even in these regions, arrears rates have generally declined over the past year (Graph 3.10). They include parts of Sydney's western suburbs, where arrears rates have been high for some time, as well as regions that rely on tourism, a sector that has been under pressure more recently from the high exchange rate. This second group of regions includes areas of Queensland, particularly around the Gold Coast and Sunshine Coast, and some coastal areas of New South Wales and Western Australia. Many of the loans in arrears in these regions were originated in the few years leading up to the crisis, when housing prices in these areas were still growing quickly and construction was relatively strong (Graph 3.11). Although arrears rates on housing loans in Victoria are currently quite low, there is some chance they could rise, due to a potential oversupply of property in some segments, particularly inner-city Melbourne apartments and houses at the south-eastern fringe. Overall, the Melbourne residential property market has been experiencing below-average auction clearance rates and a run-up in the stock of land for sale at the same time as actual sales fell; these factors could weigh on prices in the future.

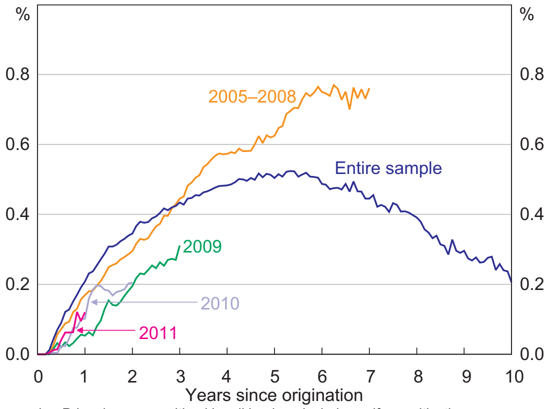
Graph 3.9
Mortgage Vulnerability by Region*
Share of households with owner-occupier debt, 2011



* Households in the lowest 40 per cent of income earners with debt-servicing ratios greater than 50 per cent
Sources: ABS; RBA

This geographic pattern in arrears rates has also been broadly consistent with court applications for lender property possession; applications have declined since their peaks in most states and the improvement has been greatest in both New South

Graph 3.11
Securitised Housing Loan Arrears by Cohort*
90+ days in arrears, share of outstandings



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

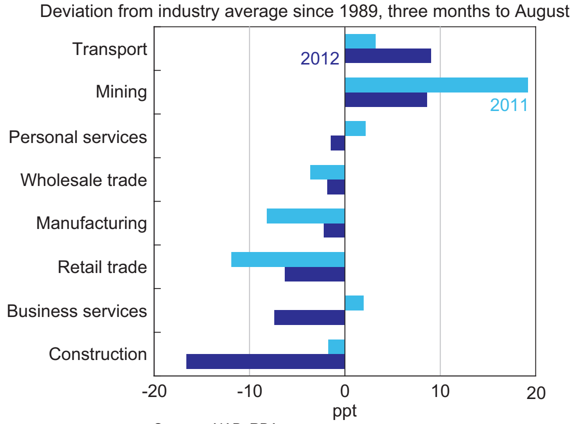
Wales and Victoria. Bankruptcy rates have generally fallen since 2009, although there was an increase in Queensland in the year to the June quarter. Overall, the number of households whose financial difficulties have deteriorated to the extremes of bankruptcy or lender property possession is very low in absolute terms; in aggregate, applications for property possession have been running at about 0.15 per cent of dwellings on an annualised basis. Moreover, although there are some regions with higher shares of borrowers in financial stress, the larger banks' residential mortgage portfolios are well diversified geographically and should be resilient to distress in particular regions. This implies that there are some limits to the potential for such an event to feed back onto the real economy via distress in the financial system.

Business Sector

Economic conditions continue to vary significantly across industries; mining and mining-related businesses, such as those in the transport industry, are experiencing quite strong conditions, while conditions are weaker in some non-mining sectors, particularly the commercial property and construction sectors, as some firms face challenges associated with the high level of the exchange rate and the weak housing market (Graph 3.12).

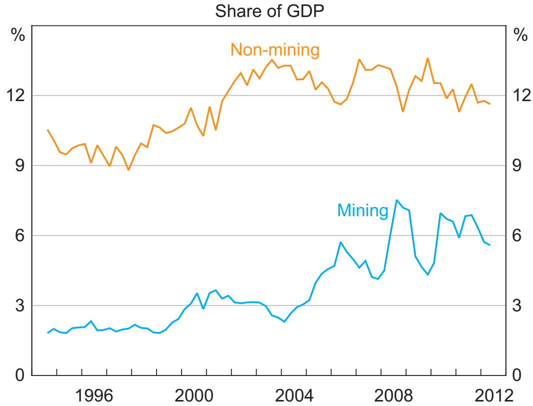
While volatile, measures of profitability are broadly consistent with this pattern. According to ABS data, average annual growth in mining profits has been about 8½ per cent over the past five years compared with 3½ per cent for the non-mining sector. Reflecting this, mining sector profits have recently been above their decade average as a share of GDP, while the GDP share of non-mining profits has been below average (Graph 3.13). However, recent falls in prices for bulk commodities have weighed on business conditions in the mining sector and could affect mining profits in the near term. The sectoral divergence over the past few years has also been evident in the performance of listed companies;

Graph 3.12
Business Conditions by Industry
Deviation from industry average since 1989, three months to August



Sources: NAB; RBA

Graph 3.13
Private Non-financial Corporates' Profits*
Share of GDP



* Gross operating profits; inventory-valuation adjusted
Sources: ABS; RBA

although mining profits have softened in the most recent reporting season, profits remain at a high level, particularly relative to other sectors. While aggregate profitability remains solid, the median return on equity of listed companies is a little below average and there appears to be a larger-than-usual segment of poorly performing firms (Graph 3.14). Of the top 100 listed companies, 8 reported a loss in 2011, compared with 4 each year on average over the past decade. Around half of these loss-making firms have little or no debt, however, limiting the potential flow-on effect to the financial system.

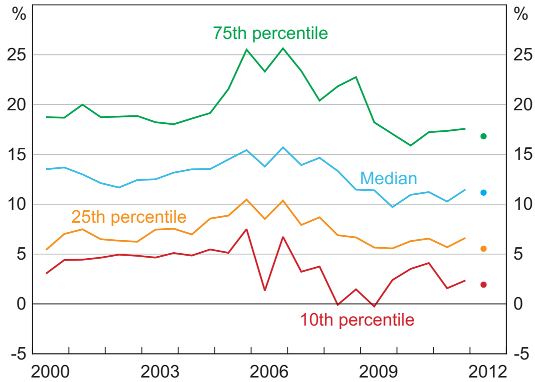
Small businesses continue to report more subdued conditions; this partly reflects that they are concentrated in industries such as construction that have been under pressure. Credit bureau data show that the share of unlisted firms making losses was broadly steady at around a quarter in 2011. Survey measures of small business profitability remain below average. National accounts measures of both unincorporated and incorporated business profits declined over the year to the June quarter 2012.

Data on bank exposures by industry indicate how much the varying business conditions might affect the financial system. Property-related lending continues to account for the largest share of banks' business loans, at around 30 per cent (though only

Graph 3.14

Return on Equity*

Top 100 listed companies by market capitalisation



* EBITDA-to-book value equity; June 2012 observations are estimates based on companies that have reported to date

Sources: Bloomberg; Morningstar; RBA

around 9 per cent of banks' assets), even though the amount outstanding has fallen in recent years. This is also true for most individual banks, including the major banks, though to a lesser extent than for some of the smaller banks (Table 3.1). Given the importance of the commercial property sector to the banking system and its tendency to be higher risk, it is discussed separately below. The remainder of banks' business exposures is relatively diversified across sectors. It is notable that banks have very little lending to the mining sector; this sector has relatively low leverage and tends to borrow more

Table 3.1: Major Banks' Business Lending

Exposures as at end March 2012[(a)]

Sector	Share of total Per cent
Property	25
Utilities, telecommunications & other	22
Wholesale & retail trade	13
Agriculture, forestry & fishing	10
Manufacturing	8
Transport & storage	7
Business services	5
Construction	4
Accommodation, cafes & restaurants	4
Mining	2

(a) June 2012 for CBA

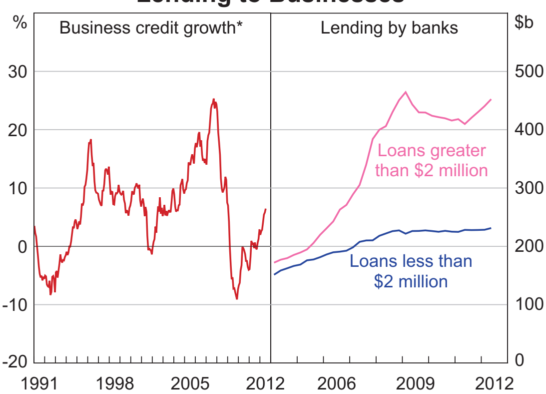
Sources: APRA; RBA; banks' Basel II Pillar 3 reports from offshore bond markets when debt funding is needed rather than from local banks. The construction and manufacturing sectors are quite cyclical, but Australian banks have relatively small exposures to them.

Following a period of significant deleveraging over recent years, there are signs that businesses' appetite for debt may be starting to recover. Business credit grew by 6½ per cent in annualised terms over the six months to July after declining for much of the previous three years (Graph 3.15). While volatile, the recent pick-up was evident across most industries, and like the previous decline, it was mostly driven by the borrowing behaviour of larger businesses, particularly listed companies. This is consistent with the pattern in banks' business lending by size of facility: the outstanding value of loans that are larger than $2 million has increased by 10½ per cent since June 2011 after declining over the previous 2½ years, while the outstanding value of loans less than $2 million each has been broadly unchanged since 2009.

The supply factors that contributed to weak credit growth in recent years appear to have eased; liaison with businesses suggests that the availability of finance has improved for many firms over 2011 and 2012. Even so, credit conditions remain tight for some firms, particularly property developers and those in the construction sector. Despite the recent pick-up in credit growth, liaison with banks suggests that demand for credit is still fairly soft. One reason for this is that businesses' internal funding remains quite strong. Solid aggregate profit levels combined with lower interest payments and below-average dividend payout ratios have resulted in internal funding of non-financial corporates averaging around 10 per cent of GDP in recent years, compared with a long-run average of about 7½ per cent (Graph 3.16). Much of this internal funding has been concentrated in the mining sector, where it is helping fund that sector's sizeable investment program, though the recent falls in prices for bulk commodities could undermine mining firms' profitability, as noted earlier.

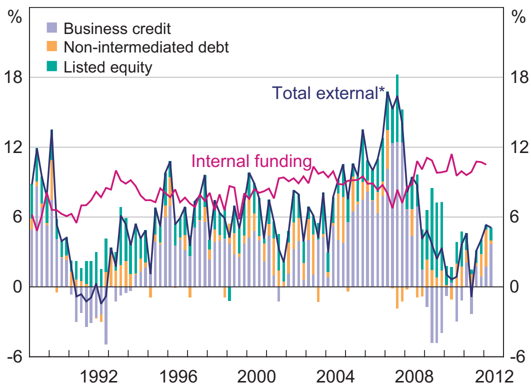
Rather than borrow from local banks, resources companies have instead contributed to solid corporate bond issuance over the first half of 2012. Demand from foreign investors remains strong, with about 80 per cent of bond issuance being offshore and denominated in foreign currency, mainly US dollars. The most recent available data from 2009 show that Australian non-financial corporates hedged around 60 per cent of their foreign currency debt through derivatives at that time; in addition, for resources companies, much of their foreign currency exposure is naturally hedged as many of

Graph 3.15
Lending to Businesses



* Six-month-ended, annualised
Sources: APRA; RBA

Graph 3.16
Business Funding
Per cent of GDP



* Does not capture loans by institutions domiciled outside Australia
Sources: ABS; APRA; ASX; Austraclear Limited; RBA

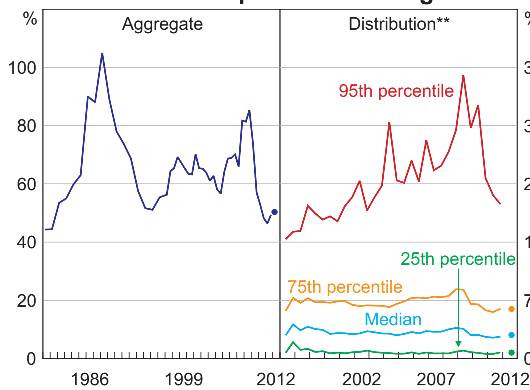
these firms are exporters or have significant foreign operations with US dollar revenues. Consistent with global market conditions, Australian corporate bond spreads remain quite wide. But with yields at relatively low levels, debt remains a comparably attractive source of funding for businesses.

Reflecting the recent pick-up in debt raising, businesses' total external funding increased over the past year, to around 5 per cent of GDP in the June quarter. This is still lower than pre-crisis levels: external funding accounted for about 20 per cent of total business funds raised over the past year, compared with an average of about 40 per cent in the years leading up to the crisis. Net equity raisings have been fairly subdued in recent quarters, partly due to increased buyback activity and businesses choosing to switch from equity to debt funding after a period of deleveraging. Consistent with this, preliminary data suggest that average book-value gearing of listed non-financial companies increased slightly over the year to June 2012, from about 46 to 50 per cent (Graph 3.17). Nonetheless, leverage remains low by historical standards. The distribution of gearing ratios also remains quite wide: leverage of the most highly geared firms is around average levels, whereas the median gearing ratio is below the level typically seen over the past decade. Among the highly geared firms, infrastructure and real estate companies are over-represented, reflecting business models that tend to rely more on debt financing.

Credit bureau data indicate that smaller businesses' median gearing also increased slightly in 2011 after decreasing over the previous few years. Smaller businesses tend to have lower leverage than larger businesses; many of them do not use any debt finance and those that do tend to be less geared than indebted larger businesses.

Business balance sheets remain more liquid than they were prior to the financial crisis, but of late there has been no tendency to shift further in this direction. Average cash holdings have declined a little recently, and growth in business deposits at banks has slowed, averaging about 6 per cent over

Graph 3.17
Listed Corporates' Gearing*

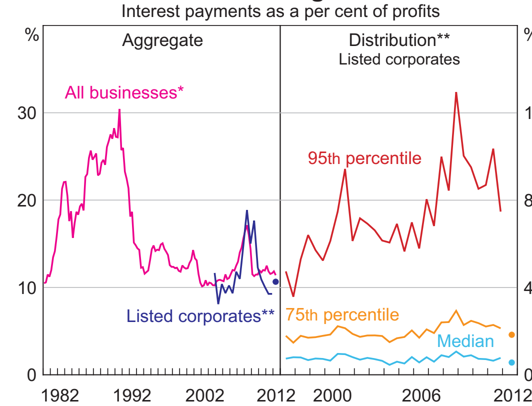


* Book value debt-to-equity; excludes foreign-domiciled companies; dots are estimates based on companies that have reported to date
** Indebted companies only; excludes companies with negative equity
Sources: Bloomberg; Morningstar; RBA; Statex

the year to July 2012, compared with 12 per cent over 2011.

Reflecting businesses' low leverage, solid profitability and below-average interest rates, aggregate DSRs remain relatively low (Graph 3.18). In addition, many firms earn interest revenue in net terms; around one-fifth of listed companies earn interest revenue in excess of their interest payments. As with leverage, although the average DSR has declined from its 2008 peak, the distribution is still relatively wide. Ratios for a number of listed

Graph 3.18
Debt-servicing Ratios
Interest payments as a per cent of profits

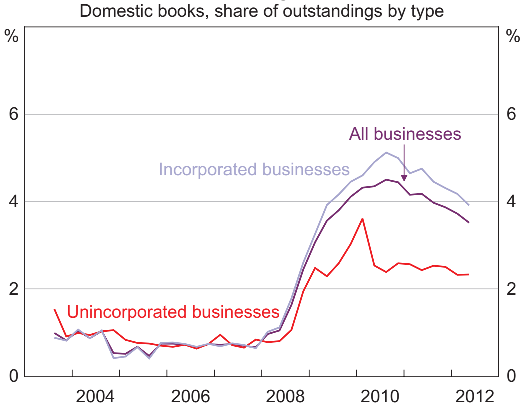


* Gross interest on intermediated debt from Australian-domiciled financial institutions
** Net interest on all debt; excludes foreign-domiciled companies; dots are estimates based on companies that have reported to date; distribution excludes companies with negative profits
Sources: ABS; Bloomberg; Morningstar; RBA

firms are high; most of these companies are in the manufacturing or property sectors, and they generally have high debt levels and are experiencing below-average earnings. Almost all of these companies have no outstanding bonds, implying that their debt is primarily sourced from banks; that said, their total debt is only a small share of business credit. Of the top 100 listed firms, 5½ per cent of those with outstanding debt recorded a loss in 2011 compared with an average of around 4 per cent over the past decade. Although some of these loss-making firms may have difficulty servicing their debts out of current cashflows, many have buffers that they are able to access and accordingly are not in arrears.

As discussed in 'The Australian Financial System' chapter, the share of banks' business loans that is non-performing decreased over the first half of 2012, but remains higher than average (Graph 3.19). Data from the major banks' Pillar 3 reports indicate that the property and business services and construction sectors have the highest non-performing assets ratios. Despite the economy growing at around trend and relatively strong overall profit levels, business failure rates have been a little above average over the year to date (Graph 3.20). This implies that the segment of poorly performing firms is currently larger than the aggregate data alone would suggest.

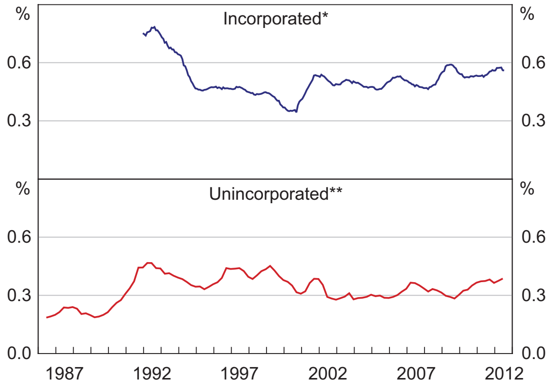
Graph 3.19
Banks' Non-performing Business Assets*
Domestic books, share of outstandings by type



* Excludes lending to financial businesses and includes bills and debt securities
Sources: APRA; RBA

Many of these firms are located in Queensland and are experiencing challenging conditions associated with the high exchange rate and the weak property market there. The business failure rate has also risen in Western Australia over the past few years, though it remains low compared with other states and is currently below its recent peak. Nationally, failures have been concentrated in the services and construction sectors, and relatively more have been attributed to economic conditions in recent years.

Graph 3.20
Business Failures
Share of businesses in each sector, annual

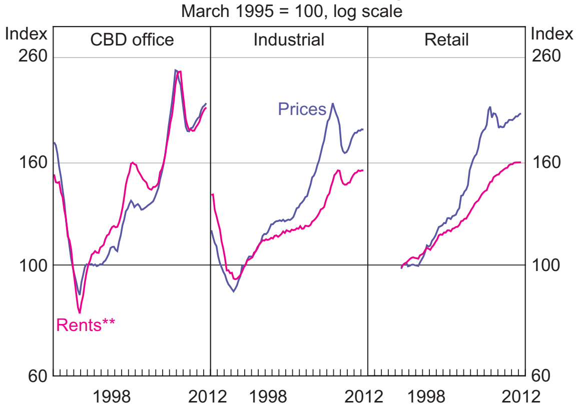


* Companies entering external administration
** Business-related personal bankruptcies
Sources: ABS; ASIC; ITSA; RBA

Commercial Property

Overall, conditions in the commercial property market continued to improve in early 2012, though they remain softer than prior to the financial crisis and building activity has also been weak by historical standards (Graph 3.21). The strength of the recovery since the crisis has varied across market segments; conditions have improved more in the prime CBD office market than in the industrial and retail sectors. This may partly reflect the more pronounced cycle in the CBD office sector, as well as the pressures that some parts of the non-mining business sector have been under. For example, rental and price growth for some retail properties, particularly in non-prime locations, have been weak recently given the patchy retail conditions.

Graph 3.21
Commercial Property*
March 1995 = 100, log scale

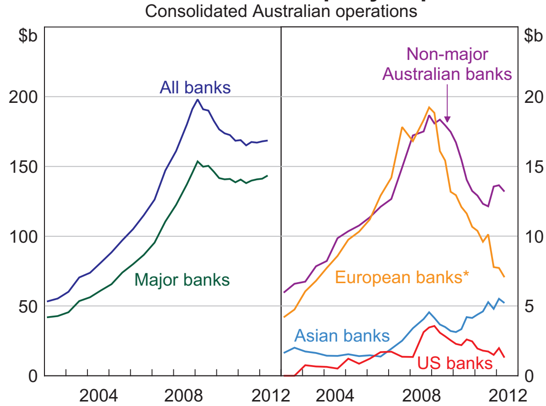


* CBD office and industrial are prime property, retail is regional (non-CBD) centres
** CBD office is effective rents, industrial and retail are face rents
Sources: ABS; Jones Lang LaSalle Research; Property Council of Australia; RBA

While liaison with construction companies and developers suggests that access to credit remains tight, large developers report that they are able to progress most projects with bank funding or the assistance of domestic or foreign investors. Smaller developers indicate that they continue to face tight credit conditions through lower LVR limits, and other stricter terms and conditions. Liaison with the banks and partial data suggest that, as for residential property, areas that are more reliant on tourism (such as the Gold Coast and Sunshine Coast in Queensland) are facing greater challenges, including oversupply and declining valuations.

As noted earlier, banks have large exposures to the commercial property market (including developers of residential property), with lending to that sector accounting for about one-third of their business loans and a disproportionate share – slightly less than half in recent years – of business loan impairments. Consistent with the improvement in conditions, the performance of banks' commercial property exposures improved slightly over the year to June 2012, but the impairment rate remains above that for banks' total business lending. In aggregate, banks' outstanding commercial property lending was broadly unchanged over the year to June (Graph 3.22). Australian-owned banks recorded a small rise in exposures, broadly offsetting a further decline in the exposures of foreign-owned banks. European-owned banks, in particular, continued to run down their commercial property exposures, which are now down about 65 per cent from their early 2009 peak. This may be because of the higher impairment rate these banks have experienced on their commercial property portfolios, as well as some of these banks being under pressure to deleverage given the difficulties their parent groups are facing in Europe. Non-bank sources of finance for commercial property remain constrained, with little issuance of commercial mortgage-backed securities in recent years.

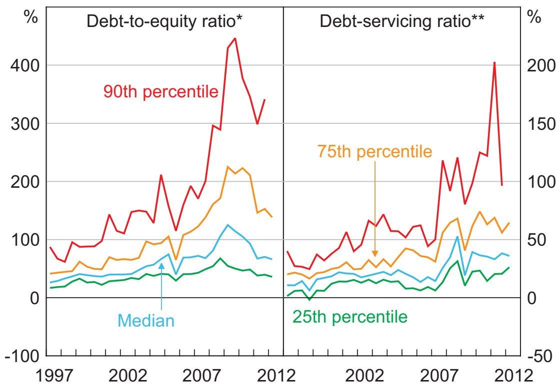
Graph 3.22
Banks' Commercial Property Exposures
Consolidated Australian operations



* Includes UK and continental European banks
Sources: APRA; RBA

The financial position of Australian listed real estate investment trusts (REITs) has continued to improve, but they are no longer deleveraging as quickly as they did immediately after the crisis (Graph 3.23). The sector's deleveraging has been concentrated in intermediated debt, with non-intermediated debt levels stable over much of the decade. After recording large losses over 2008 and 2009, mostly due to property write-downs, the sector's profitability has stabilised at levels experienced around the mid 2000s. Consequently, their aggregate debt-servicing requirements have also declined. Nonetheless, the distribution of leverage across REITs is wide and the gearing ratios of the most highly

Graph 3.23
Australian Listed REITs



* Book value, excludes REITs with negative equity
** Net interest payments-to-earnings, excludes REITs with negative earnings
Sources: Bloomberg; Morningstar; RBA

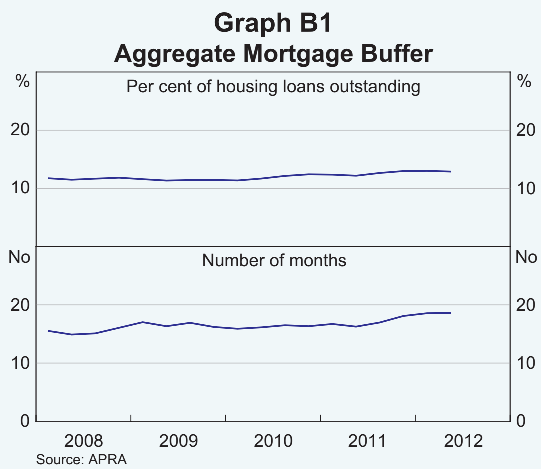
geared firms (around the 90th percentile) remain elevated, due to falls in equity valuations. Many of these highly leveraged REITs have also experienced low or negative profits recently and, accordingly, high debt-servicing requirements. Overall, loss-making REITs tend to be small and only account for a low share of business credit.

Box B

Households' Mortgage Prepayment Buffers

In Australia, households often choose to pay down their mortgage more quickly than required. Various data sources suggest that around half of borrowers are ahead of schedule on their mortgage. In this way, many households have a buffer that they could temporarily draw on to stay current on their loan repayments if their incomes were to fall. The share of Australian households paying their mortgage ahead of schedule is high compared with many other countries, though the available evidence suggests it is broadly similar to Canada.

In aggregate, the stock of Australian households' prepayment buffers is estimated to be equivalent to over 10 per cent of the outstanding stock of housing loans (Graph B1). This includes balances in mortgage offset and redraw facilities. Flows into these accounts include regular excess repayments and one-off excess repayments paid out of salary bonuses or other irregular income. The stock of prepayments has risen recently, in part because most borrowers do not change their regular repayment amounts when interest rates fall. Some borrowers have also been choosing to make very large prepayments



recently; according to the latest HILDA Survey, the share of indebted households who made substantial principal repayments on their mortgage (of $25 000 or more over the year) was significantly higher in 2010 (22 per cent) than the average between 2002 and 2007 (15 per cent).[1]

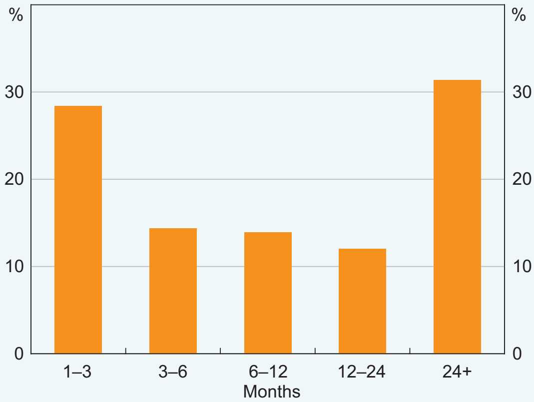
Measured a different way, in aggregate, indebted households' mortgage prepayment buffers are estimated to be equivalent to around 1½ years of scheduled repayments (principal plus interest) based on current interest rates. While this average figure is boosted by a group of borrowers that are significantly ahead of schedule – liaison with the major banks suggests that around 15 per cent of borrowers are ahead by two years or more – many borrowers still have sizeable buffers. Of those borrowers that are ahead on their mortgage: around 45 per cent are estimated to have a buffer of up to six months; 15 per cent have a buffer of between six months and a year; and over 40 per cent have a buffer greater than one year's repayments (Graph B2).

Data from the HILDA Survey suggest that households with large mortgage buffers tend to be older and have higher incomes, which is consistent with these households having had more time and/or income to accumulate such buffers (Graph B3). Borrowers that have small or no buffers tend to be younger or have more recently taken out their loan. Even among these latter groups, however, just over half of borrowers are reported to be ahead of schedule on their repayments.

The bulk of households that are not ahead of schedule on their mortgage are not in financial stress;

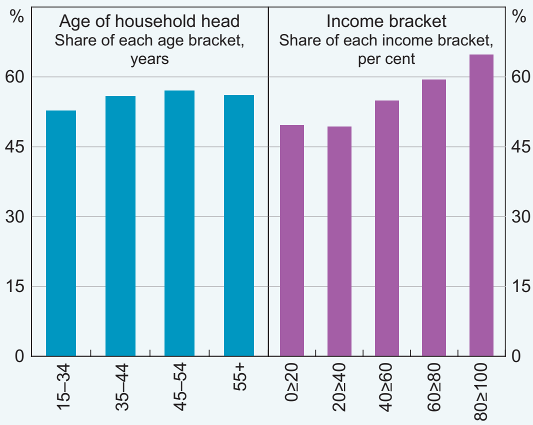
1 See RBA (2012), 'Box B: Home Mortgage Debt: Recent Insights from the HILDA Survey', *Financial Stability Review*, March, pp 53–56. Generally, the HILDA Survey interviews the same set of individuals each year, mainly between August and November, with the latest published results being for 2010. It therefore makes it possible to trace individual changes in housing debt over the past decade.

Graph B2
Mortgage Buffers*
Share of ahead-of-schedule borrowers, 2012



* Estimates from a sample of large banks
Source: RBA

Graph B3
Mortgage Borrowers Ahead of Schedule*
2010

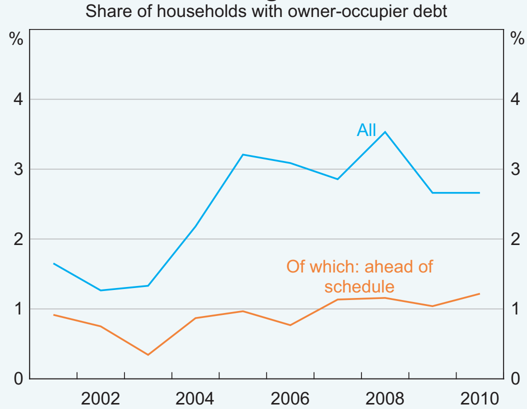


* Owner-occupier households with mortgage debt
Source: HILDA Release 10.0

roughly half of indebted households are paying their mortgages on schedule, with only a very small share of borrowers in arrears. Some borrowers may have chosen to take out loan products that discourage excess repayments but nonetheless suit the borrowers' circumstances. For example, prepayments are less common on fixed-rate loans because these loans typically involve fees on prepayments above a certain threshold. In contrast, variable-rate loans – which are the bulk of housing loans in Australia – do not generally involve prepayment penalties and therefore show higher rates of excess repayment. Decisions to prepay may also be influenced by tax incentives. Owner-occupiers have an incentive to pay down their mortgage ahead of schedule as their interest payments are not tax deductible: in effect, the post-tax return to prepaying these loans equals the mortgage rate. Investors, by contrast, do not have the same incentive to make excess repayments given they can negatively gear their property. Consistent with this, over half of owner-occupiers are estimated to be ahead on their mortgage compared with less than 40 per cent of investors, and, of those that are ahead, owner-occupiers tend to have larger buffers.

The share of owner-occupier households that could be considered to be most vulnerable, that is, with both high debt-servicing ratios (DSRs) and high loan-to-valuation ratios (LVRs), was quite low at around 2½ per cent in 2010 according to data from the latest HILDA Survey (Graph B4). The measure of debt servicing used here covers actual repayments made by households and includes excess repayments; more than one-third of these households are ahead of schedule on their mortgage. For these borrowers, this would suggest that their high DSRs are largely voluntary and that they are therefore less vulnerable to falling into stress. ✠

Graph B4
Households with High LVRs and DSRs*
Share of households with owner-occupier debt



* Households with loan-to-valuation ratios above 80 per cent and debt-servicing ratios greater than 50 per cent
Source: HILDA Release 10.0

4. Developments in the Financial System Architecture

The international regulatory bodies have continued their financial reform efforts in several areas over the past six months. Further progress has been made in implementing aspects of the framework for systemically important financial institutions (SIFIs), especially for globally systemic banks, but more recently also for other types of systemic institutions. Improving resolution regimes for SIFIs is an important element of this reform program, with countries encouraged to alter their resolution frameworks to be consistent with a new international standard for them. The Financial Stability Board (FSB) recently initiated a peer review to monitor progress in this area. In a related development, the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) released a consultation paper on recovery and resolution of financial market infrastructures (FMIs). These two bodies also released new principles for FMIs, which aim to strengthen them and their supervision. These developments have been considered by the Council of Financial Regulators (CFR) in recent discussions on changes to the domestic regulatory framework for FMIs.

Reform of over-the-counter (OTC) derivatives market regulation to meet G-20 commitments is progressing in many jurisdictions, including Australia. Standard-setting bodies released capital rules and proposed margin requirements that support one of these commitments, which is for all standardised OTC derivatives contracts to be centrally cleared. The FSB is continuing to lead work on the regulation of shadow banking; several workstreams have delivered initial reports and are scheduled to deliver policy recommendations regarding specific shadow banking entities and activities by end 2012.

The International Monetary Fund (IMF) has recently undertaken a Financial Sector Assessment Program (FSAP) update of Australia to assess the stability of the financial sector and the quality of domestic regulatory, supervisory and resolution arrangements. CFR agencies prepared background material and held extensive discussions with the IMF on these issues and on banking and financial stability issues more generally. The Australian Prudential Regulation Authority (APRA) has continued to consult with authorised deposit-taking institutions (ADIs) on the implementation of the Basel III capital and liquidity reforms in Australia, and will soon release its final capital standards, with a revised draft liquidity standard due to be released in December 2012. APRA has also engaged with financial sector stakeholders on a range of other draft prudential standards, including those relating to superannuation, conglomerate supervision and capital requirements for insurers.

International Regulatory Developments and Australia

Systemically important financial institutions (SIFIs)

As discussed in the March 2012 *Review*, the FSB, in close coordination with the Basel Committee on Banking Supervision (BCBS), developed a comprehensive policy framework to address the risks posed by SIFIs. Some specific elements of this framework focus on institutions that are systemically important in a global context (G-SIFIs), in particular global systemically important banks (G-SIBs), to reflect the greater risks these institutions pose to the global financial system. The framework comprises a new international standard for resolution regimes, more intensive and effective supervision, requirements for cross-border cooperation and recovery and resolution planning, as well as, from 2016, additional capital requirements for those banks determined to be G-SIBs.[1] In recent months, work has progressed on implementing aspects of this framework. Cross-border crisis management groups led by the relevant G-SIB home authorities have been established for most of the 29 banks identified as G-SIBs by the FSB in 2011. Work is ongoing to develop resolution strategies and cross-border cooperation agreements by the end of 2012, so these G-SIBs can be resolved more easily. As part of an annual process, the FSB plans to publish an updated list of G-SIBs in November.

The FSB and BCBS were tasked by the G-20 with extending the G-SIFI framework to banks that are systemically important in a domestic context (D-SIBs). In response, the BCBS issued a consultation paper in June that sets out a principles-based framework for dealing with D-SIBs, to complement the (more prescriptive) framework for G-SIBs. The framework covers both the methodology for identifying D-SIBs and the measures that should apply to them, including additional capital requirements (higher loss absorbency (HLA)). The Bank and APRA contributed to the development of the framework.

Under the proposed D-SIB framework, national authorities are expected to develop a methodology, and use it to regularly assess the systemic importance of banks in their jurisdictions. The assessment should reflect the potential impact of a bank's distress or failure on the domestic economy and financial system, having regard to factors such as the size, interconnectedness, substitutability and complexity of banks, and any other factors the authorities deem important. The proposal envisages that all D-SIBs will be subject to a HLA requirement in the form of additional common equity Tier 1 capital. However, authorities will have flexibility to determine how much additional capital will be required. In cases where the subsidiary of a foreign bank is assessed as being a D-SIB by a host authority, home and host authorities are expected to coordinate and cooperate on the appropriate HLA requirement to impose on the subsidiary.

National authorities will be expected to publicly disclose information about their assessment methodologies and approaches to setting HLA requirements. The BCBS also intends to introduce a peer review process to scrutinise how different jurisdictions have implemented the principles. A revised framework, updated following feedback received during the consultation, was discussed at a BCBS meeting in September. The final framework will be presented to the G-20 Ministers and Governors in November, for implementation from January 2016 (consistent with the start date of the G-SIB framework).

Unlike the G-SIB regime, which does not apply to any Australian-owned banks, the D-SIB framework will have implications for Australia. APRA will be responsible for developing the assessment methodology (likely with input from the Bank) and for deciding on any HLA requirement and other potential measures. Given the flexibility provided in the proposed framework, APRA will be able to develop an approach that is best suited to Australia's circumstances. In particular, while the consultation document focuses heavily on HLA, it does make the point that other policy tools, particularly more intensive supervision, can also play an important role in dealing with the risks posed by D-SIBs. In this context, APRA's long-established internal risk-rating process – the PAIRS/SOARS framework – is already geared towards more intensive supervisory intervention for larger banks.

1 For further information on the G-SIB framework, and the current list of banks identified as G-SIBs, see RBA (2012), 'Box C: Global Systemically Important Banks', *Financial Stability Review*, March, pp 66–68.

The flexibility provided in the D-SIB framework also accommodates the different approaches to identify domestic SIFIs that have already been adopted in several countries. As noted in the previous *Review*, some of these identification methodologies are based on a single indicator (such as size) while others use multiple indicators, similar to the G-SIB approach. An example of the latter was the approach used by the US Financial Stability Oversight Council (FSOC) to recently designate eight 'financial market utilities' (FMUs) as systemically important. These FMUs will be subject to additional prudential and reporting requirements. These are the first designations by FSOC of systemically important FMUs under the Dodd-Frank Act, and were based on factors such as the value of transactions processed by the FMU, its counterparty exposures, its interconnectedness with other FMUs and the effect its failure would have on critical markets or the broader financial system.

The G-SIFI framework is also being extended to global systemically important insurers (G-SIIs). In May, the International Association of Insurance Supervisors (IAIS) issued for consultation its proposed methodology for identifying G-SIIs. The methodology is similar to the BCBS' approach for identifying G-SIBs. It uses indicators from five broad categories: size, global activity, substitutability, interconnectedness, and non-traditional insurance and non-insurance activities, though with a higher weight on the last two categories. As noted in the previous *Review*, the greater emphasis on non-traditional insurance and non-insurance activities reflects the IAIS' view that traditional insurance business does not normally generate systemic risk. Such risk is more likely to stem from other activities such as financial guaranty (including mortgage) insurance, credit default swaps, derivatives trading and leveraging assets to enhance market returns. The IAIS tested its methodology using 2010 data collected from 48 insurers in 13 jurisdictions. No Australian-owned insurer was included in the data collection. The IAIS is currently reviewing feedback received on its proposals before finalising its methodology. An initial list of G-SIIs, if any, is expected to be published by the FSB in the first half of 2013. The IAIS has also been developing a set of policy measures for G-SIIs, which will be consulted on later in 2012. These measures are expected to be consistent with the FSB's overall SIFI policy framework.

In addition to the G-SII methodology, the IAIS is continuing its work in other areas that will have implications for a wider set of insurers. In July, it released a draft of the *Common Framework for Supervision of Internationally Active Insurance Groups*. This framework is proposed to contain qualitative and quantitative requirements for internationally active insurers, recommendations on the supervisory process aimed at achieving consistent and effective supervision, as well as requirements for greater cooperation and coordination among national authorities in supervising complex cross-border insurance groups. The IAIS expects to finalise the framework by end 2013.

Resolution regimes

A key part of the SIFI framework is the FSB's new standard, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (*Key Attributes*), which sets out the features that countries should have in their resolution frameworks. National authorities are being encouraged by the G-20 and the FSB to amend national resolution regimes to be consistent with the *Key Attributes*. To monitor, and hasten, progress in this area, the FSB recently initiated a thematic peer review of resolution regimes, to review FSB member jurisdictions' existing resolution regimes, and any planned changes, using the *Key Attributes* as a benchmark. The findings of the review will also inform the development of a methodology to assess jurisdictions' compliance with the *Key Attributes*. The review covers banks, insurers, securities firms and FMIs, though it will focus on banks because resolution regimes for them are generally the most advanced. The review is expected to conclude in early 2013.

The Australian Government released a consultation paper in September containing proposals to strengthen APRA's crisis management powers and to better align Australia's resolution framework with international standards, such as the *Key Attributes*. The proposals also seek to harmonise and enhance APRA's regulatory powers across the various Acts it administers. APRA's crisis management powers would be enhanced in several areas, including:

- the ability to appoint a statutory manager to a wider set of institutions, including non-operating holding companies (NOHCs) and subsidiaries of NOHCs and other regulated entities
- resolution powers over the Australian branches of foreign banks, and strengthened business transfer powers over Australian branches of foreign banks and insurers
- directions powers that temporarily override company disclosure requirements
- improvements to the operation of the Financial Claims Scheme
- directions powers over superannuation entities.

Numerous other changes are proposed, including: simplifying and strengthening provisions relating to obtaining information and investigation; streamlining provisions regarding auditors and actuaries; introducing independent experts into the prudential framework; and refining and expanding the legal definition of 'prudential matters', which will be applied on a broadly uniform basis across the Acts. The consultation closes on 14 December, following which the Australian Treasury, in liaison with financial regulators, will advise government of possible reforms to existing arrangements. Separately, the CFR and the Trans-Tasman Council on Banking Supervision have been continuing their work on strengthening cross-border crisis management arrangements.

Other jurisdictions have also recently proposed enhancements to their resolution frameworks and tools, consistent with elements of the *Key Attributes*. In its response to the report by the Independent Commission on Banking, the UK Government stated in June that it will introduce bail-in powers, whereby unsecured creditors could have their claims reduced or converted to shares to help recapitalise a distressed bank. The UK Financial Services Authority recently released proposals which would require foreign banks from non-European countries with national depositor preference regimes to only accept deposits in the United Kingdom through a UK-incorporated subsidiary or implement an alternative arrangement that would ensure that UK depositors would be no worse off than the depositors in the home country if the bank were to fail. Under some depositor preference regimes, domestic depositors have a priority claim on the assets of a failing bank (ahead of UK depositors in a branch of that bank). This is contrary to one element of the *Key Attributes* which states that national regulations should not discriminate against creditors (including depositors) on the basis of their nationality, the location of their claim or the jurisdiction where it is payable. In June, the European Commission (EC) proposed bank recovery and resolution rules for the European Union (EU), to strengthen national resolution powers in key areas, including in regard to bail-in powers. Intervention by the authorities would become more intrusive as the situation deteriorates. In addition, as noted in 'The Global Financial Environment' chapter, the EC recently proposed initial steps towards a European banking union involving more integrated regulation, supervision, resolution and deposit guarantee arrangements.

The CPSS and IOSCO issued a consultation paper in July, *Recovery and Resolution of Financial Market Infrastructures*. The paper calls for robust recovery and resolution arrangements for FMIs, based on the recently released *Principles for Financial Market Infrastructures* (discussed below) and the *Key Attributes*. It also outlines the issues authorities should take into account when assessing recovery plans and establishing resolution regimes in accordance with the FSB's *Key Attributes*. The paper recognises the specific characteristics of FMIs relative to other financial institutions, including that there is often only a sole FMI providing systemically important services in a particular market and hence continuity of service provision is often paramount. Intervention by the relevant authorities, potentially through the appointment of a statutory manager, may therefore be necessary for the resolution of an FMI. Following feedback received during the consultation, CPSS-IOSCO will report on how to incorporate FMI-specific issues into the methodology for assessing compliance with the *Key Attributes*. The issues raised in the consultation paper also have a bearing on proposed intervention powers for Australian regulators of FMIs (see below).

Financial market infrastructures

In April, the CPSS and IOSCO released the *Principles for Financial Market Infrastructures* (PFMIs), a comprehensive set of standards designed to apply to all systemically important payment systems, central counterparties (CCPs), securities settlement systems and trade repositories. The PFMIs, which harmonise and replace three existing sets of standards for FMIs, aim to provide greater consistency in the oversight and regulation of FMIs across jurisdictions. They recognise the critical role of FMIs, and the increasing use of centralised infrastructure, in part in response to the G-20 commitments around central clearing and centralised reporting of OTC derivatives. The PFMIs strengthen existing requirements in a number of areas, including the coverage of credit risk, the management of liquidity risk and governance. They also introduce several new principles, including on segregation and portability of client monies, general business risk and disclosure. Further, the PFMIs include resolution planning requirements, and arrangements for the orderly wind-down or recapitalisation of a failed CCP. Together with the PFMIs, CPSS-IOSCO issued two related consultation documents – an assessment methodology and a disclosure framework for PFMIs – which are due to be finalised later this year.

CPSS and IOSCO members and other relevant authorities are expected to adopt the PFMIs in their legal and regulatory frameworks by end 2012, while FMIs should observe the standards as soon as possible. In accordance with this, and as a CPSS member, the Bank is currently consulting on revisions to its *Financial Stability Standards* for clearing and settlement facilities, to ensure that they align with the PFMIs. The Bank will also apply the PFMIs in its self-assessments of RITS, Australia's real-time gross settlement system, and increase the frequency of these assessments. The PFMIs also affect the Australian Securities and Investments Commission's (ASIC's) supervisory framework. Accordingly, ASIC is also consulting on revisions to its *Regulatory Guide on Clearing and Settlement Facilities*.

OTC derivatives markets

In June, the FSB published a third progress report on jurisdictions' implementation of the G-20 commitments relating to OTC derivatives, namely, that all standardised OTC derivative contracts should be traded on exchanges or electronic platforms, where appropriate, and centrally cleared by end 2012, and that all OTC derivative contracts should be reported to trade repositories. The report noted that jurisdictions with the largest OTC derivatives markets – the EU, Japan and the United States – have made the most progress with their legislative and regulatory programs. Other jurisdictions are generally less advanced in implementing the commitments, although progress has been made by many of them, particularly with respect to central clearing and the use of trade repositories.

As foreshadowed in the previous *Review*, the CFR provided a number of recommendations to the government in March on how best to implement the G-20 commitments in Australia. The government endorsed these recommendations and issued a consultation paper in April proposing a domestic legislative framework for implementing the reforms. Under this proposal, the *Corporations Act 2001* would be amended so that mandatory obligations could be imposed requiring that certain classes of derivatives be cleared by a CCP, reported to a trade repository, or executed on a trading platform. Any mandatory obligation would be imposed via a two-stage process. First, the relevant Minister, with advice from APRA, ASIC and the Bank, would prescribe a class of derivatives as being subject to a given obligation. Second, ASIC would develop rules covering matters such as the parties subject to the obligation and the timing of its introduction. The Bank and APRA would be consulted as part of any decision to issue a mandate. Following the consultation, a Bill setting out amendments to the Act was introduced into Parliament in September. In parallel, the CFR agencies are working on an assessment report on the domestic OTC derivatives market, due to be completed towards the end of the year – similar reports will be undertaken on a regular basis. One purpose of these reports is to assess progress of the Australian market in adopting desired reforms; if progress is insufficient then this could be a factor in determining whether mandatory obligations might be imposed.

To support the G-20 OTC derivatives-related commitments, in July international standard-setting bodies released capital rules and proposed margin requirements to encourage central clearing of OTC derivative contracts by banks and other institutions.

- The BCBS issued interim rules for the capital to be held against bank exposures to CCPs. For derivatives and securities financing transactions that are centrally cleared, the counterparty credit risk for these trades will attract a risk weight of 2 per cent if the CCP is supervised in a manner consistent with the PFMIs (and is thus a 'qualifying' CCP). This risk weight is substantially lower than that applying to counterparty exposures arising out of bilateral transactions, or exposures to 'non-qualifying' CCPs, thereby creating a capital incentive for central clearing through qualified CCPs. The BCBS is to undertake further work on a finalised approach, in collaboration with other standard-setting bodies. APRA recently released proposals for implementing these requirements for Australian ADIs as part of its consultation on counterparty credit risk under Basel III.
- The G-20 commitment that OTC derivative contracts be centrally cleared relates specifically to standardised derivative contracts, since only these are likely to be suitable for central clearing. Non-standardised contracts, which account for a substantial share of the derivatives market, will therefore most likely remain subject to bilateral arrangements. To mitigate some of the risks associated with this segment of the market, and to ensure appropriate incentives to centrally clear trades, the BCBS and IOSCO released for consultation draft margining requirements for non-centrally cleared OTC derivatives. The proposals would require the bilateral exchange of both 'variation' margin and 'initial' margin between all financial institutions, as well as systemically important non-financial institutions. Variation margin provides for the regular exchange of cash between counterparties to meet mark-to-market profits and losses. Initial margin is collateral calibrated to cover, with a high probability, any losses arising should market prices move adversely between the last payment of variation margin and the close-out of exposure to a defaulting counterparty. Variation margin is already typically exchanged for non-centrally cleared trades, but initial margin has been less frequently applied. The BCBS and IOSCO are conducting a quantitative impact study to assess the effect of these proposals, including the likely demand on collateral, and will consider the results when finalising the proposal by end 2012.

In June, IOSCO published *International Standards for Derivatives Market Intermediary Regulation*, which provides international standards for the regulation of market participants in the business of dealing, making a market or intermediating transactions in OTC derivatives ('derivatives market intermediaries' or DMIs). Historically, these entities have, in many cases, not been subject to the same level of regulation as participants in the traditional securities market. The report makes recommendations in several areas, including registration/licensing standards, capital standards or other financial resource requirements for non-prudentially regulated DMIs and business conduct and supervision standards. The recommendations seek to reduce risks to financial stability by helping to manage counterparty risk in OTC derivatives markets. They also aim to protect participants in OTC derivatives markets from unfair, improper or fraudulent practices. The report emphasises the importance of cross-border consistency in the regulation of DMIs given that many operate in multiple jurisdictions.

Assessing implementation of Basel III capital reforms

The BCBS continues to monitor implementation of the Basel capital framework (that is, Basel II, Basel 2.5 and Basel III), to encourage its full, timely and consistent implementation by countries. In a June report to the G-20, the BCBS stated that significant progress had been made, with most of its 27 members having already implemented Basel II and 2.5 (the July 2009 enhancements on market risk and securitisations) and released draft or final rules for the implementation of Basel III in their jurisdictions. However, the BCBS also noted that, based on current plans, some jurisdictions may not implement Basel III according to the agreed time lines. The BCBS will present an updated progress report on Basel III implementation to the G-20 Ministers and Governors in November.

As noted in the previous *Review*, the BCBS is also conducting peer reviews of its members' implementation of all components of the Basel capital framework, to ensure they are consistent with the minimum standards agreed under Basel III. The results of the initial reviews (for the EU, Japan and the United States) are due to be published around the end of September.

Shadow banking

Led by the FSB, work is progressing on strengthening the oversight and regulation of shadow banking systems. The five workstreams noted in the March 2012 *Review* are continuing their work to develop policies to manage the risks posed by: banks' interactions with shadow banking entities; money market funds (MMFs); other shadow banking entities such as finance companies; securitisation; and securities lending and repos. These workstreams are scheduled to provide their policy recommendations by end 2012. IOSCO is leading the workstreams on MMFs and securitisation and released initial reports on these two areas in April and June. The report on MMFs provides a preliminary analysis of the risks that MMFs could pose to financial stability and seeks views on a range of policy options to address those risks, such as imposing capital and liquidity requirements. The report on securitisation includes draft policy recommendations covering risk retention, improvements in transparency and measures to standardise disclosure of securitisation structures. The workstream on securities lending and repos released an interim report in April that provides an overview of these markets and how they are currently regulated. It also discusses how these activities might pose risks to financial stability, for example by contributing to the procyclicality of leverage and interconnectedness (such as through collateral re-use), or possibly sparking a fire sale of collateral assets.

The FSB has also been examining the results of its latest annual monitoring exercise on shadow banking, which was extended this year to cover all of its 24 member jurisdictions. The Bank again contributed information on Australia's relatively small shadow banking system for this exercise, drawing on its own regular monitoring of developments in the sector. In addition to enforcing disclosure, licensing and conduct requirements on shadow banking entities, ASIC also monitors industry trends, with a focus on identifying emerging risks to financial stability. In late March, ASIC released a report on the Australian exchange-traded fund (ETF) market, including details of how the market is regulated. The report concluded that Australia's current regulatory framework is consistent with IOSCO's proposed international principles for the regulation of ETFs, which are due to be finalised soon.

FSB and IOSCO peer reviews

The FSB has continued with its program of 'thematic' and country peer reviews, as part of its efforts to monitor and strengthen adherence to international standards. As discussed earlier, a peer review on resolution regimes is currently under way. The recommendations of past thematic peer reviews have often led to follow-up activities by the FSB and/or national authorities. For example:

- In response to recommendations from an earlier review of mortgage origination and underwriting practices, the FSB released a report in April, *Principles for Sound Residential Mortgage Underwriting Practices*, which is a principles-based framework to promote sound lending practices. The Bank was represented on the expert team that developed these principles. These principles are already having an effect on national regulatory frameworks: in June, the Canadian banking and insurance regulator issued a guideline that sets out expectations for prudent residential mortgage underwriting, based in part on the FSB principles.
- Following a 2011 review on risk disclosure practices, the FSB recently sponsored the formation of a private sector task force to develop principles for improved disclosures by financial institutions of their risk exposures and risk-management practices. The principles are expected to be published in October. In a related step, the FSB is currently undertaking a thematic review of financial institutions' risk governance.

Earlier this year, IOSCO established a committee, currently chaired by ASIC, to conduct thematic and member country reviews. Similar to the FSB peer review process, the aim is to encourage full and consistent implementation of IOSCO principles and standards across jurisdictions. The first review will cover the implementation of principles related to systemic risk in securities markets.

Other Work of the Council of Financial Regulators (CFR)

Regulation of financial market infrastructures and payments infrastructure

As reported in the previous *Review*, the CFR undertook a public consultation in late 2011 on measures to enhance the regulation of FMIs. Following feedback from industry, the CFR recommended to the government a program of legislative reforms largely in line with its original proposals. The government subsequently released the CFR's recommendations for final consultation in late March 2012. Among its key recommendations the CFR proposed resolution measures for FMIs and powers to ensure adequate regulatory influence over cross-border FMIs.

The resolution measures recognise that the disorderly failure of an FMI could result in financial markets ceasing to operate effectively, severely disrupting the financial system. A key concern of regulators, therefore, is to ensure the continuity of critical services when an FMI is in financial distress, especially given, as noted earlier, there is often only a single FMI providing services in a particular market. If an FMI is unable to recover through its own efforts, regulators may need to intervene to maintain continuity of services while organising a recapitalisation or orderly wind-down of the FMI. The CFR recommendations would give the regulators power to appoint a statutory manager to a distressed FMI. A similar power is available to APRA for ADIs under the *Banking Act 1959*. Under the proposed reforms, the regulators would also have enhanced powers to give directions to, and impose sanctions on, FMIs.

To be able to carry out their oversight responsibilities effectively for overseas FMIs operating in Australia or domestic FMIs that are seeking to outsource their operations, ASIC and the Bank must have sufficient influence over the FMI's activities and risk-management practices. Accordingly, the CFR recommended giving the regulators explicit powers under the Corporations Act to support a proportional and graduated 'location policy' that could require certain elements of a licensed FMI's operations to be located in Australia. To provide further clarity in this area, the CFR issued a paper in July, *Ensuring Appropriate Influence for Australian Regulators over Cross-border Clearing and Settlement Facilities*. This paper sets out a framework within which ASIC and the Bank could impose additional requirements on clearing and settlement facilities with cross-border operations. The framework considers how requirements might be escalated according to the nature and scope of a facility's operations in Australia. ASIC and the Bank are seeking feedback on specific measures within the framework as part of a broader consultation on implementation of the *Principles for Financial Market Infrastructures* discussed earlier.

CFR agencies have continued their work with the Australian Competition and Consumer Commission (ACCC) on the competition aspects of clearing and settlement. In June, the CFR published a consultation paper, *Competition in the Clearing and Settlement of the Australian Cash Equity Market*. The paper takes openness to competition and foreign participation in clearing and settlement services as a starting point. However, it acknowledges that competition can change the operating environment for banks, securities dealers, issuers and investors in ways that could have implications for financial stability and the effective functioning of markets; additional policy measures might therefore be needed. The CFR and the ACCC are currently reviewing feedback from the consultation before advising the government of their conclusions.

In July 2012, as part of the CFR's work on FMI regulation, the Bank amended its Exchange Settlement Account (ESA) policy. Recognising that settlement across central bank accounts and CCP access to central bank liquidity can contribute to financial stability, the new policy clarifies that any Australian-licensed CCP with payment arrangements giving rise to Australian dollar settlements may hold an ESA. Moreover, the policy states that any Australian-licensed CCP of systemic importance in Australia must settle any Australian dollar margin-related, or derivatives-related payments across an ESA in its own name, or that of a related body corporate. The Bank will take into account a number of factors in determining the systemic importance of a CCP, including: the size of the facility in Australia; the availability of substitutes for the facility's services in Australia; the nature and complexity of the products cleared or settled by the facility; and the degree of interconnectedness with other parts of the Australian financial system. Both of the ASX CCPs currently settle Australian dollar obligations arising from their activities via RITS across an ESA held by their parent, ASX Clearing Corporation.

Following the Bank's decision earlier this year to formalise the requirements for reporting significant retail payment system incidents, new reporting standards were released in April. Significant incidents must now be advised to the Bank within one hour, and followed up with a post-incident report. The Bank also intends to gather regular statistics on retail payment system incidents, and will be consulting with the industry on the modalities for doing this.

Financial Sector Assessment Program (FSAP) review of Australia

As noted in the March 2012 *Review*, Australia has this year undergone an IMF FSAP review. This is a follow-up to Australia's first FSAP conducted in 2005/06 and is consistent with a recent commitment of FSB members to undergo an FSAP approximately every five years. The focus of FSAP reviews is to assess the stability of a country's financial sector, the quality of its financial supervisory and crisis management arrangements, and to review progress in addressing recommendations from previous FSAPs. CFR agencies prepared background material for the IMF on aspects of Australia's financial stability and supervisory frameworks. The Bank and APRA published one of these background papers, on the financial stability policy framework, in early September.

Overall, the FSAP found that Australia's financial system was sound and resilient due to several factors: good economic management, prudent and proactive supervision, and effective systemic oversight. Stress testing indicated that the banking sector was likely to withstand even severe macroeconomic shocks. Discussions during the FSAP focused on a number of themes, including issues posed by a concentrated and interconnected banking system, high household debt and elevated house prices, and the banks' use of offshore funding. A combination of low public debt, a flexible exchange rate, positive domestic interest rates and a well-capitalised banking system was seen as providing ample policy space to respond to any stress event. The IMF is in the process of finalising a report containing its detailed assessment and policy recommendations, which is due to be published in late 2012.

Other Domestic Regulatory Developments

Implementation of Basel III capital and liquidity reforms

In late March, APRA released its 'response paper' on feedback received during consultations with the ADI industry on its proposals for implementing the Basel III capital reforms in Australia. While the paper provided detailed further guidance on the application of the new standards, APRA indicated that it does not intend to substantively alter its planned approach from that proposed in its earlier consultation (outlined in the September 2011 *Review*). Australian ADIs will be required to meet the Basel III minimum capital requirements, including regulatory adjustments, in full from 1 January 2013 and the Basel III capital conservation buffer requirement from 1 January 2016. Alongside the response paper, APRA released for consultation draft prudential standards which, together with additional proposals released in August on counterparty credit risk and other limited changes, will give effect to the full implementation of the Basel III capital reforms in Australia. Following industry feedback on these proposals, APRA is expecting to release its final capital standards soon. It is also looking to release a further draft revised liquidity standard in December 2012.

Other prudential standards

As foreshadowed in the previous *Review*, APRA has recently consulted on a draft set of prudential standards for the superannuation industry. These prudential standards would be the first for the superannuation funds regulated by APRA (following the recent passage of legislation giving APRA standards-making powers for this sector) and are aimed at strengthening the regulation of these funds, as well as putting their regulatory framework on a similar footing to ADIs and insurers. The standards cover areas such as: risk management, outsourcing, business continuity management, audit and governance. APRA is currently reviewing submissions to the consultation and intends to finalise the prudential standards by end 2012, with most of them to take effect from July 2013. To support these new prudential standards and implement the transparency and accountability recommendations of the government's Stronger Super reforms, APRA proposed in September substantially expanded data reporting requirements for APRA-regulated superannuation funds, including on investment allocation, costs and returns.

As part of a long-running review which is nearing completion, APRA published final versions of its capital standards for life and general insurers in May. The revised standards aim to increase the loss-absorbing capacity of insurers by improving the risk-sensitivity of the capital framework applying to them. For example, the reforms will require insurers to better account for the risk of incurring multiple or unusually large losses in a year, such as from multiple natural disasters, a pandemic, or higher-than-expected volatility in credit spreads as was experienced internationally during the global financial crisis. The reforms will also continue APRA's practice of aligning capital standards across APRA-regulated industries where appropriate; in particular, they will maintain the consistency of insurers' capital standards with APRA's proposed Basel III capital standards for ADIs. This in turn should help simplify the supervision of conglomerate groups that include banking and insurance entities. APRA also released draft prudential standards covering some remaining capital matters as well as audit, actuarial and risk management issues. The overall framework will come into effect on 1 January 2013.

APRA announced in May that its implementation of a proposed prudential framework for the supervision of financial conglomerates, outlined in an earlier discussion paper, will be deferred to January 2014. The additional time will allow APRA to refine the framework through a consultation on draft prudential standards planned for later in the year, and to ensure consistency with ongoing domestic and international regulatory developments, as well as allowing time for ADIs and insurers to adapt to the new Basel III and insurance capital standards. In a related development, as discussed earlier, the government recently proposed enhanced crisis management powers for APRA, including for the resolution of financial conglomerates.

APRA's new prudential standard for covered bonds took effect from 1 August 2012 and applies to all Australian ADI covered bond programs involving Australian assets. A key requirement of the standard is that ADIs identify on registers the assets transferred to a covered bond special purpose vehicle and those that form part of a cover pool. APRA views this asset identification as a key safeguard to ensure that there is clarity about which assets support depositors and which support covered bondholders.

Credit reporting

In May, the government introduced legislation to amend the *Privacy Act 1988* to, among other things, allow more comprehensive credit reporting. The changes are in response to an earlier Australian Law Reform Commission inquiry into the application of the Act. As discussed in the September 2007 *Review*, credit reporting is the practice of providing information about an individual's creditworthiness to banks and other credit providers through credit reporting agencies (CRAs). The Act governs the information that CRAs are permitted to keep on individuals' credit files and regulates the storage and provision of this information. Currently, an individual's credit file is limited to basic personal and employment details, a record of credit applications made and 'negative' information regarding any defaults, dishonoured cheques, bankruptcy orders or relevant court judgments in the past five years. The proposed changes to the Act would allow CRAs to record additional 'positive' information such as current credit accounts held, available limits, account types and repayment histories. The reforms aim to allow credit providers to build a fuller picture of an individual's financial circumstances when determining their eligibility for credit, thereby enabling more accurate assessments of creditworthiness. The reforms also improve consumer protection under the Act, by making it easier for individuals to dispute and correct any errors on their credit file. The Bill is currently being considered by Parliament.

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Disclaimer

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