

Financial Stability Review

MARCH 2013

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Reserve Bank

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Overview

Global financial conditions have improved significantly since the previous *Financial Stability Review*, despite the new uncertainty created by the proposed sovereign bailout for Cyprus in the past few weeks. Some earlier European policy initiatives had been seen as demonstrating a strong commitment to deal with the region's sovereign debt and banking sector problems while maintaining the monetary union, and this boosted confidence over much of the past six months. Confidence was also enhanced by further signs of recovery in some of the major economies, notably the United States, supported by continued monetary stimulus. The improvement in global financial market sentiment has contributed to a rally in risk assets across a range of markets, consistent with increased risk appetite.

The improvement in market confidence has helped ease sovereign financing pressures for a number of euro area countries that had been subject to the greatest concerns about debt sustainability. Given the links between sovereign and bank balance sheets, this had positive spillovers to bank funding markets in the region. The euro area nonetheless still faces significant challenges to its stability. Many banks, particularly in the periphery, are still experiencing elevated funding costs, deteriorating asset performance and weak profitability amid subdued economic and property market conditions. This has contributed to tight credit conditions in the region as banks continue to deleverage and reduce their balance sheet risks.

Given the unresolved vulnerabilities, it is too early to say whether the improved market sentiment over

the past six months is the beginning of a sustained recovery, or merely a temporary upswing. Much will depend on the European authorities' ability to implement the policy actions needed to restore confidence in debt sustainability and repair banking sectors, while also fostering a recovery in economic activity. In this context, the renewed market tension associated with the handling of the sovereign and banking crisis in Cyprus in recent weeks has provided a reminder of the political, economic and social challenges of resolving the pervasive fiscal and banking sector problems.

Outside the euro area, confidence in the major banking systems has also generally improved from six months ago, as evidenced by strong gains in bank share prices that have often exceeded the rise in broader share market indices. Even so, these banking systems are still at varying stages of their recoveries from the global financial crisis; subdued profitability and elevated non-performing loan ratios associated with slow economic activity and property markets continue to feature in many banking systems. Issues around loan forbearance and banks' asset valuations are also areas of concern in some countries.

Elsewhere, in countries that have been more resilient to the crisis, such as many in Asia, banking systems remain in a relatively strong position. Some of these countries, however, are beginning to confront a different set of challenges associated with property market and credit expansions. It is normal for the effects of low interest rates to be evident in asset prices and credit before they can be seen in economic growth and inflation, and

hence a prolonged period of low rates can result in a build-up of credit risk long before inflation starts to rise. In some countries, particularly those with limited exchange rate flexibility and strong capital inflows, the authorities have sought to contain these risks through macroprudential measures. These policy measures have had to be progressively tightened in a few cases in response to continuing credit and property market exuberance, illustrating some of the challenges involved in calibrating and targeting these policies.

The Australian banking system also remains in a relatively strong position. The improvement in global market sentiment since the middle of 2012 has, at the margin, eased wholesale funding costs for the large Australian banks, with bank bond spreads declining to around their lowest levels since the start of the crisis. The banks have been continuing to limit their use of wholesale funding in any case, and deposit growth has been outpacing growth in credit. Continued strong competition for deposits has seen spreads on retail deposits remain around historically high levels even as spreads on long-term wholesale debt have narrowed significantly over recent months.

The banks have collectively continued to record strong profits in recent periods, helping them to strengthen their capital positions further and putting them in a good position to meet the Basel III capital requirements that began to be introduced in Australia this year. The banking sector's asset performance has also been improving, though at a gradual pace due to the challenging conditions being experienced in some parts of the Australian and UK business sectors. With domestic demand for credit likely to remain moderate in coming years, banks are increasingly pursuing other strategies to underpin their profit growth over the medium term, such as efficiency improvements and expansion in the Asian region. While this remains an area to watch, there is little sign at this stage that banks have been motivated to take on excessive risk or strain their risk management capabilities.

Profitability in the general insurance industry was strong in the past year and the industry remains well capitalised. Underwriting results improved in a more benign claims environment following the sequence of catastrophe-related claims events in 2011. The natural disasters in Australia early this year are not expected to have a major financial effect on insurers.

A period of balance sheet consolidation has helped mitigate potential risks to financial stability emanating from the non-financial sectors in Australia. Even though the economy has been expanding at around trend rates, some firms have been facing challenges from the high exchange rate and a return to more traditional saving and borrowing behaviour by households. Consequently, business failure rates have been above average, which has contributed to the slow pace of recovery in banks' non-performing business loans over recent years; that said, the vast majority of firms are still meeting their debt commitments. Overall, gearing ratios are low and deleveraging is continuing in some parts of the business sector, which is helping to limit the effects of subdued activity and profitability in some industries.

Households' net wealth has been rising recently due to the recovery in housing and other asset markets as well as continued higher saving and borrowing restraint. Many households still prefer to repay existing debt rather than take on new debt, which has contributed to the slower pace of household credit growth and an increase in mortgage prepayment buffers. Debt-servicing capacity has also been boosted by lower interest rates. Despite the unemployment rate having drifted up a bit over the past year, housing loan arrears and other aggregate measures of financial stress in the household sector remain low. Household indebtedness and gearing are nonetheless still at historically high levels, and hence continuation of the household sector's more prudent approach to borrowing would assist in strengthening the sector's financial resilience.

After the fast pace of international regulatory reforms in the past few years, there has been more focus recently on implementation of the agreed reforms at the national level (particularly the Basel III capital standards) and monitoring the consistency of implementation internationally through various assessments and peer reviews. In Australia, the Australian Prudential Regulation Authority (APRA) finalised its implementation of the Basel III capital framework, which it began phasing in from the beginning of this year. APRA will shortly resume consultation on the Australian implementation of the Basel III liquidity reforms after a number of changes were made to the international standard earlier this year. Legislation was recently passed that will help Australia meet its G20 commitment to move toward greater central clearing and reporting of over-the-counter derivatives transactions. The members of the Council of Financial Regulators (CFR) have been continuing their work on strengthening Australia's financial sector crisis resolution arrangements, building on international best practice, with a particular focus recently on financial market infrastructures.

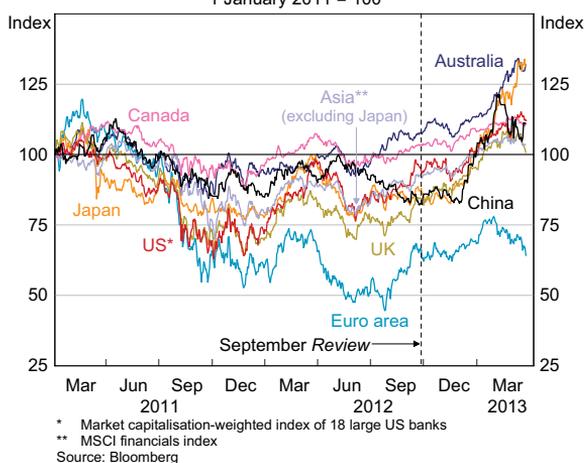
At the international level, policy development work has been progressing on a number of fronts, including addressing the risks posed by systemically important financial institutions and strengthening the oversight of shadow banking systems. As foreshadowed in the previous *Review*, the International Monetary Fund released its Financial Sector Assessment Program report on Australia in late 2012, which contained a positive overall assessment of financial system stability and supervisory standards in Australia. This report made a number of recommendations that are being considered by the relevant CFR agencies. ✎

1. The Global Financial Environment

Despite the recent uncertainty associated with the handling of the sovereign bailout of Cyprus, global financial conditions have improved overall since the *September Review*. In large part, this reflects various policy developments in Europe that had generally strengthened market perceptions of the ability of the euro area to deal with its sovereign debt and banking sector problems while keeping the monetary union intact. Prices of peripheral euro area sovereign bonds and euro area bank shares have risen since the middle of 2012, despite falls in recent weeks. More broadly, prices for a wide range of other risk assets globally have risen, including bank share prices in a number of other countries, implying that risk appetite has increased (Graph 1.1). Together with the improved sentiment towards Europe, the partial resolution of the US ‘fiscal cliff’ around the turn of the year and further signs of recovery in some of the major economies have boosted confidence in recent months.

Even though sentiment has improved, the euro area still faces significant challenges to its stability from fiscal and banking sector problems. Political and policy implementation risks also cloud the outlook for economic growth and financial stability in the region. The negotiations over the rescue package for Cyprus in recent weeks highlight the problems some euro area countries are still facing and the challenges of resolving them. Accordingly, it is too early to tell whether the improvement in market sentiment is the beginning of a sustained recovery, or merely a temporary upswing; since the onset of the global financial crisis, there have been a number of periods of optimism which ultimately turned out to be short-lived as financial markets refocused on unresolved underlying problems.

Graph 1.1
Banks' Share Prices
1 January 2011 = 100



The Euro Area Crisis and Sovereign Debt Markets

There were a number of developments over the past few quarters that helped boost confidence towards the euro area, with positive spillovers for global market sentiment. The European Central Bank's (ECB's) announcement of its Outright Monetary Transactions (OMT) program in September, even though it has yet to be activated, was pivotal in reassuring markets that the ECB would do all that it can to preserve the euro. Under this program, the ECB would purchase sovereign debt of euro area countries that are meeting the terms of their European Union (EU) assistance programs but still facing significant financing pressures, with the aim of bringing down sovereign borrowing costs for these countries and safeguarding the monetary

transmission mechanism in the euro area. When it was announced, it was widely expected that Spain would request a full EU assistance program in order to qualify for OMT. However, the implicit support provided by OMT has brought down Spanish sovereign bond yields and so far avoided the need for the country to go down this route. More recently, Ireland and Portugal – which are already on EU assistance programs – have successfully auctioned sovereign bonds, thereby moving closer to ‘full market access’ which is another precondition for OMT purchases.

After protracted negotiations, the EU, ECB and International Monetary Fund (IMF) agreed to adjust Greece’s aid program and debt position in late November. The interest rate charged on loans extended by other euro area nations was lowered, the maturity of existing loans was extended and a buyback of Greek bonds held by private sector investors was carried out. These adjustments, along with agreed fiscal and structural reforms, were designed to put Greece’s sovereign debt position on a more sustainable path. However, there is still considerable doubt about whether Greece can meet its new fiscal targets, particularly given the country’s weak economic performance.

In Spain, an independent stress test of the banking system completed in late September provided greater clarity about the size of capital shortfalls, estimating the public cost of bank recapitalisation at around €40 billion (considerably lower than the €100 billion that was potentially available from the EU). The recapitalisation of troubled banks commenced in December, together with the transfer of problem loans to a newly created ‘bad bank’. Though these measures appear to have restored some confidence and improved funding conditions, Spain’s weak economy and property market conditions are still creating a challenging environment for many of its banks.

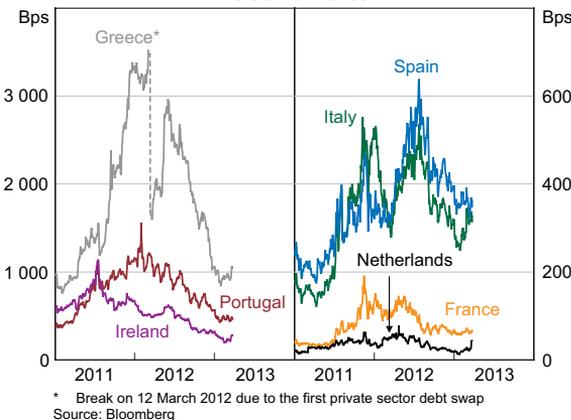
At the European level, broad agreement has been reached on the implementation of a single bank supervisory mechanism, expected to come into

effect in about a year. The ECB will have ultimate responsibility for supervising all euro area banks, although it will directly supervise only the largest banks in each country, delegating supervision of the others to national supervisors. Under this new supervisory framework, it is expected that the European Stability Mechanism (ESM), the euro area’s permanent bailout fund, will be able to directly recapitalise banks that experience losses in the future. However, there has been opposition from some countries to allowing the ESM alone to recapitalise euro area banks that have had to write down legacy assets, with the suggestion that national governments be required to boost these banks’ capital before they receive any funds from the ESM. If the ESM were to be limited in this way, it could make the single supervisory mechanism less effective at reducing the destabilising link between sovereign and bank balance sheets.

More recently, there has been an increase in market uncertainty associated with the handling of an EU/IMF rescue package for Cyprus, which will be the fourth euro area country to receive such a package since the sovereign debt crisis began. To prevent Cyprus’ sovereign debt burden rising to an unsustainable level, the EU and IMF had insisted that the country mobilise around €6 billion of internal resources to go with their €10 billion loan. Initially, there was a proposal to do this via a one-off ‘tax’ on deposits in Cypriot banks, including on deposits under €100 000 that were covered by a deposit guarantee scheme, though this was met with widespread opposition. Following further negotiations, an alternative approach was agreed in recent days in which insured depositors would be protected but uninsured depositors and other bank creditors would face large losses as part of a significant restructuring and downsizing of the country’s banking system. Even though it did not go ahead, the unusual step of proposing a haircut on insured deposits could in the future raise concerns about the credibility of other EU deposit guarantees.

Even though the euro area economy remains weak, the ECB's commitments and other policy developments have generally bolstered investor confidence in euro area periphery government bonds, allowing spreads on these bonds to narrow (Graph 1.2). While spreads have widened again somewhat in response to recent events such as the inconclusive Italian election and the Cyprus bailout, the reaction has so far been limited, with peripheral bond yields still significantly lower than they were in the middle of 2012.

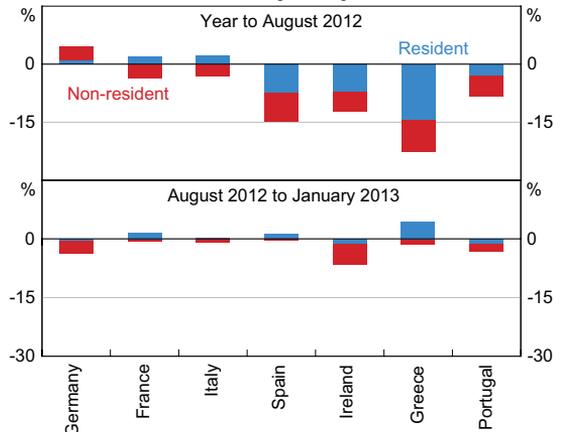
Graph 1.2
Euro Area Government 10-year Bond Spreads
 To German Bunds



The easing of concerns about a possible break-up of the euro area since the middle of last year has also helped staunch some of the capital outflows from the troubled euro area economies that had been evident over the previous year or so, though financial fragmentation in the region is still greater than before. Since the September *Review*, safe-haven deposit flows from peripheral economies into Germany have slowed considerably and some countries, Greece in particular, have experienced a notable repatriation of domestic deposits (Graph 1.3). Foreign holdings of sovereign bonds issued by some troubled countries, such as Spain, have increased in recent quarters, after declining over the previous year.

Outside of the euro area, government bond yields in most advanced economies have been relatively steady, or up a little at the long end of the yield

Graph 1.3
Change in Private Sector Deposits*
 Percentage change



* Includes deposits from monetary financial institutions
 Source: central banks

curve, over the past six months. Although yields remain low and other indicators of demand for safer sovereign assets strong, some of these governments have nonetheless tightened fiscal policy to address their high debt levels. If the fiscal adjustment is front-loaded, it could stymie the economic recoveries in those countries, which would make the task of repairing bank balance sheets more difficult. In this respect, the partial resolution of the 'fiscal cliff' in the United States was a positive development in that it averted a significant near-term tightening. While some automatic spending cuts did commence in March, they are not anticipated to be severe enough to derail the emerging recovery.

In the United Kingdom, however, fiscal tightening has been quite extensive and this might have had a greater effect on economic growth. Given that the profitability of UK banks has been lower than at banks in some other non-euro area advanced economies (see below), the implications of weaker growth for the financial system could also be greater. Although Moody's downgrade of the United Kingdom's sovereign credit rating in February had little lasting effect on UK bond yields, sovereign yields more generally remain sensitive to political or other shocks. Since many financial institutions are highly exposed to the debt of their sovereign,

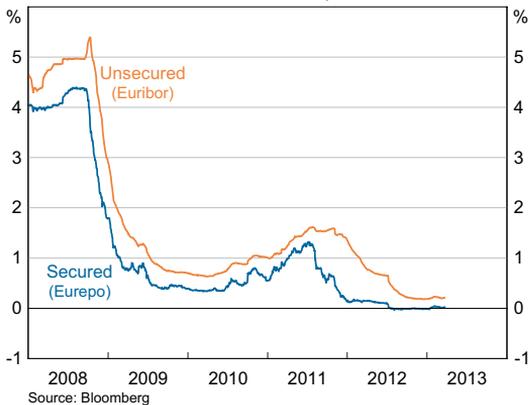
a sudden large increase in yields would impose significant losses on banks, insurance companies and pension funds.

Bank Funding Conditions and Markets

The improvement in global market sentiment over recent quarters has been reflected in easier funding conditions for many euro area banks. Spreads on short-term unsecured interbank loans are now around their lowest levels since mid 2007, and differentiation in spreads across banks has narrowed as perceptions of relative credit quality have converged somewhat (Graph 1.4). Secured (repo) lending rates have drifted above zero in recent months, after being slightly negative for most of the second half of last year. The volume of interbank lending remains low, however, partly because many banks are still flush with central bank funding, despite repayments by some. Around €240 billion out of a total of around €1 trillion in three-year funding provided by the ECB in late 2011 and early 2012 was repaid early by euro area banks. Data on ECB lending by country indicate that banks from France, Germany and Spain accounted for a significant share of the early repayments.

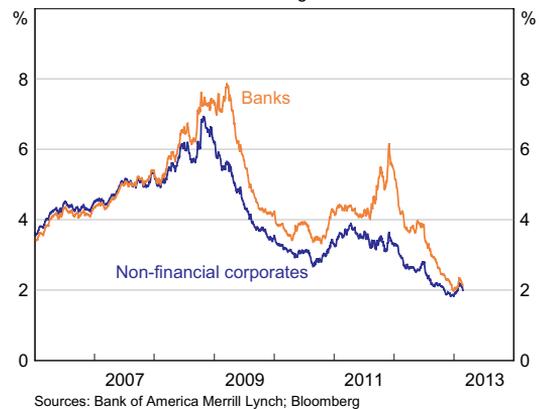
Euro area banks' access to term funding markets has also improved since the middle of 2012. Yields on

Graph 1.4
Euro Interbank Interest Rates
3-month maturity



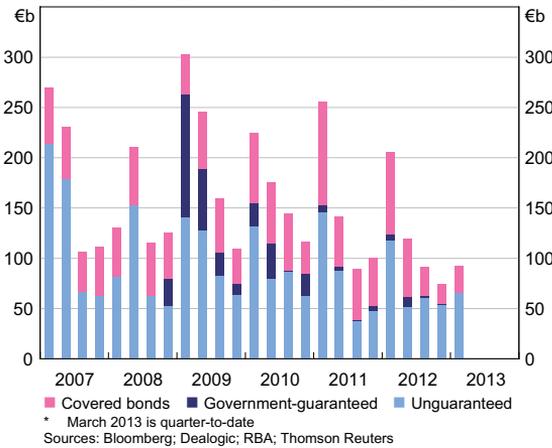
bonds issued by euro area banks have declined over this period and differences in the borrowing rates faced by individual banks have narrowed, though peripheral banks continue to face a sizeable premium compared with banks from the core countries. Euro area bank bond yields are now around the same levels as bond yields for similarly rated non-financial corporates, after having been above them for the past few years, which is consistent with the perceptions of reduced default risk among banks (Graph 1.5).

Graph 1.5
Euro Area Corporate Bond Yields
Investment grade



Despite the reduction in yields, euro area bank bond issuance has remained subdued in recent months, partly because weak asset growth has limited banks' financing needs. Euro area banks have issued around €165 billion in bonds since October last year (Graph 1.6). This is well down on the issuance levels seen in the first half of 2012, though a large part of that earlier issuance was retained within the banking sector to provide it with additional collateral for central bank funding; there has been less of this collateral-driven issuance recently as banks have been reducing their reliance on central bank financing. Covered bonds have accounted for a smaller share of recent bank bond issuance than was the case in early 2012, consistent with improved market appetite for unsecured debt. In line with weak economic activity, euro area banks' aggregate

Graph 1.6
Euro Area Banks' Bond Issuance*



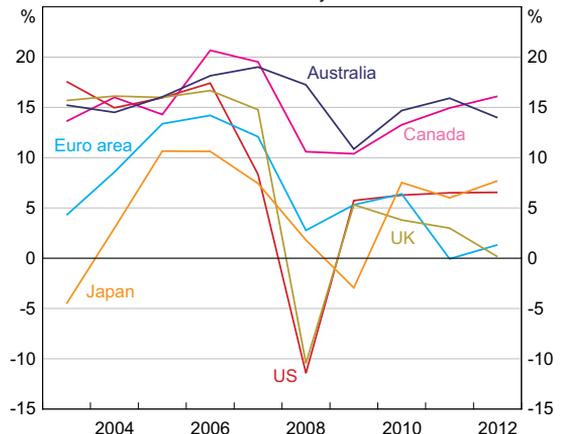
outstanding deposits have been contracting in recent quarters, despite the recent increases in deposits in some of the region's most troubled economies (discussed above).

Bank funding conditions in the major banking systems outside the euro area have continued to improve, with bank bond yields falling further over the past six months. Nonetheless, bond issuance by banks is still generally subdued by historical standards. Partly this reflects slow credit growth in these economies, but many banks have also been continuing to increase the share of their funding from customer deposits. Some banks have been trying to reduce their reliance on market-based sources of funding that are perceived to be less stable. The shift towards deposit funding is also likely to have been partly demand driven, as investors have been attracted to the safety of deposit insurance in a more uncertain and volatile global financial environment. In the United States, for example, temporary unlimited coverage of non-interest bearing deposits had been in place between October 2008 and end 2012, coinciding with a period in which banks' non-interest bearing deposits increased substantially; a combined cap of US\$250 000 per depositor was reinstated from the beginning of this year.

Banks' Profitability and Capital

Profits of the large banks in most of the major advanced economies increased last year, though returns on equity generally remain well below pre-crisis averages (Graph 1.7). In the euro area, aggregate return on equity for the largest banks increased to around 1¼ per cent in 2012 after being slightly negative in 2011. Much of this increase came from improved trading income in the latter part of the year, and the absence of special factors that had affected performance in 2011, such as goodwill charges at large Italian banks and writedowns on holdings of Greek debt. Underlying profitability in the euro area is still being weighed down, though, by weak asset performance, balance sheet contraction and narrow net interest margins. In the United Kingdom, weak net interest income and significant legal costs arising from earlier inappropriate business practices, notably the mis-selling of payment protection insurance, have continued to weigh on the large banks' profits; aggregate return on equity for the five largest UK banks was close to zero in 2012, down from 3 per cent in 2011.

Graph 1.7
Large Banks' Return on Equity*
After tax and minority interests



* Includes 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; reporting periods vary across jurisdictions
 Sources: Bloomberg; RBA; banks' annual and interim reports

While the profitability of US banks has improved over recent years, profit growth has been limited by the slow recovery of the US economy and, in a number of cases, ongoing legal expenses associated with the resolution of previous poor mortgage practices. Muted credit growth and narrower net interest margins associated with the prolonged low interest rate environment have also weighed on banks' net interest income. Loan-loss provisions have now broadly stabilised after falling over the previous few years. Across all institutions insured by the Federal Deposit Insurance Corporation (FDIC) in the United States, the share of loss-making institutions declined to 14 per cent in the December quarter of 2012, down from 20 per cent the year before, but above the pre-crisis average of about 6 per cent.

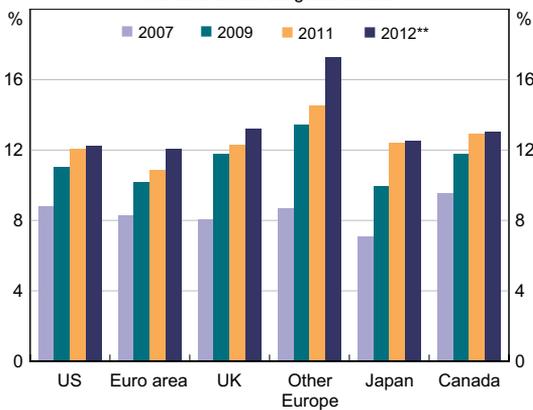
Most large banks in the major banking systems have continued to strengthen their capital positions over the past year in response to market and regulatory pressures (Graph 1.8). On a pre-Basel III basis, aggregate Tier 1 capital ratios of large banks are now at least 12 per cent in all of the major banking systems, a significant increase from the levels of around 8 per cent that were common before the crisis. The large Swiss and Nordic banks have been

subjected to capital requirements that are notably higher than those in some other jurisdictions.

In the euro area, the large banks increased their aggregate Tier 1 capital ratio by a little over 1 percentage point over the year to December, to 12 per cent, mainly by reducing their risk-weighted assets. There remains a large degree of dispersion, though, as some euro area banks are still struggling to accumulate capital due to their low profitability and equity valuations. Accordingly, a number of them have needed to be recapitalised in recent months, especially in the troubled peripheral economies. As noted, the Spanish banking sector is undergoing considerable restructuring, with the four state-controlled banks receiving public capital injections in December and recapitalisations of a number of other Spanish banks having occurred in March. In accordance with Greece's EU/IMF aid program, the four major Greek banks are expected to be recapitalised soon, while the Italian bank Monte dei Paschi di Siena recently received its second injection of government capital. Public interventions have also occurred in a number of other countries: SNS Reaal (the fourth-largest bank in the Netherlands) was nationalised in early February and Dexia received its second capital injection from the Belgian and French governments in December.

As their profitability is still generally subdued, banks have sought to bolster their retained earnings and therefore capital by limiting their dividend payouts. For example, many banks in Europe (including the United Kingdom) are still paying little or no dividends to common shareholders, as their profitability remains weak and some are yet to fully repay public capital received during the crisis (Graph 1.9). By contrast, dividends paid by large banks in the United States have been increasing for the past couple of years as their profitability has recovered, though they remain well below pre-crisis levels and the resulting payout ratios are below average. Some large US banks have recently announced plans to further increase their capital distributions (through higher dividends and/or share buybacks) following

Graph 1.8
Large Banks' Basel I/II Tier 1 Capital*
 Per cent of risk-weighted assets



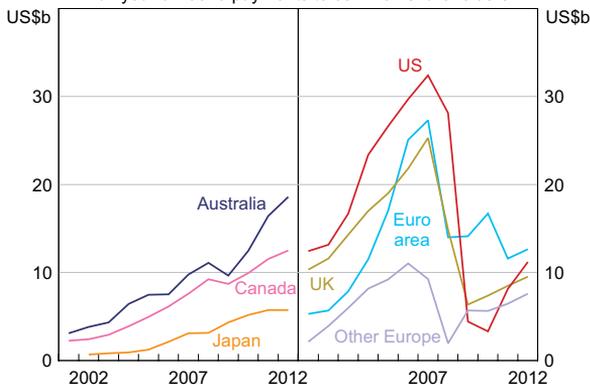
* Tier 1 capital ratios across banking systems are subject to definitional differences; reporting periods vary across jurisdictions; includes the weighted average of 18 large US banks, 52 large institutions from across the euro area, the four largest UK banks, 13 large other European banks, the three largest Japanese banks and the six largest Canadian banks

** Latest available data used where banks have not reported their 2012 full-year results

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

the latest round of supervisory stress tests. The US Federal Reserve approved most large US banks' capital plans, though JP Morgan and Goldman Sachs received conditional approval owing to apparent weaknesses in their capital planning processes; these two institutions will be required to resubmit their plans by the end of September.

Graph 1.9
Large Banks' Dividend Payments*
 Full-year dividend payments to common shareholders



* Reporting periods vary across jurisdictions; includes the six largest US banks, eight largest listed euro area banks, four largest UK banks, 12 large other European banks, the three largest Japanese banks, six largest Canadian banks and four largest Australian banks
 Sources: APRA; Bloomberg; RBA; SNL Financial; banks' annual and interim reports

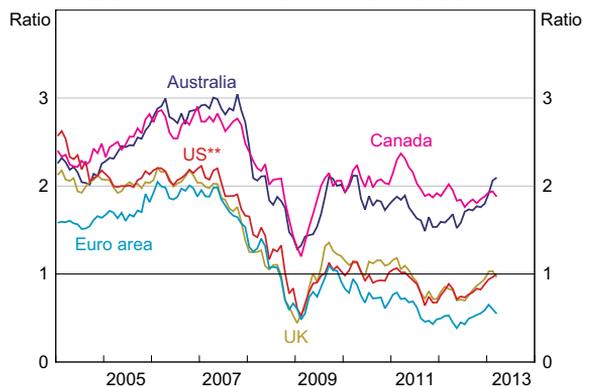
Another way banks have been able to increase their regulatory capital ratios is by reducing their risk-weighted assets, such as by allowing asset portfolios to run off or by selling them completely. This kind of deleveraging has been particularly notable among euro area banks over the past year given the greater difficulties these banks have had increasing their capital. Across the major banking systems, reductions in risk-weighted assets over the past few years have coincided with a steady fall in average risk weights. In repairing their balance sheets, banks have tended to shed non-core assets with above-average risk weights, and have increased their holdings of lower-risk securities, such as government bonds, which will help them meet forthcoming liquidity requirements under Basel III. There have been concerns, however, that some banks may be overstating their reported capital positions by using overly optimistic assumptions in their internal risk

models. This has prompted a number of global and country-level initiatives to improve the reliability and consistency of banks' risk-weight calculations (see the 'Developments in the Financial System Architecture' chapter). As discussed further below, a few European jurisdictions are also concerned that their banks may be forbearing on problem loans and that these banks' capital positions may weaken if economic conditions do not recover as anticipated.

Investor scepticism over banks' asset valuations may be one factor explaining the persistently low equity valuations of euro area banks. The price-to-book ratio – the market valuation of equity compared with the book valuation – remains well below 1 for euro area banks, despite increasing since the first half of 2012 (Graph 1.10). Low equity valuations may also reflect investors' expectations that banks' profitability will remain subdued and/or an additional risk premium to compensate for heightened uncertainty. While the price-to-book ratios for US and UK banks had also been below 1 for much of the past two years, they have recently been much closer to 1, consistent with the improved investor sentiment towards these banks.

Looking ahead, banks' capital positions will also come under pressure as the new Basel III bank capital standards come into full effect. Implementation of the new standards, which was due to begin this year,

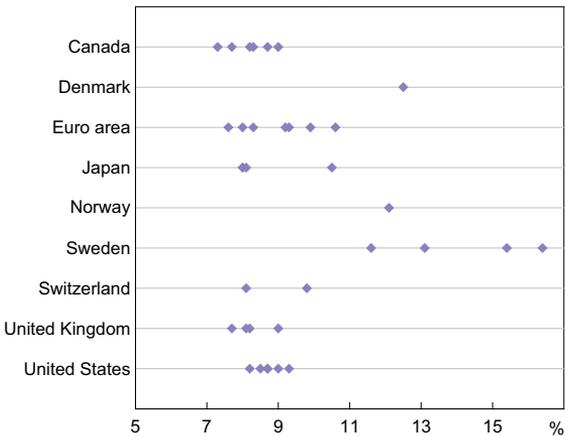
Graph 1.10
Banks' Price-to-book-value Ratios*



* Monthly; March 2013 observation is the latest available
 ** Diversified financials
 Source: Bloomberg

was recently delayed in Europe (including the United Kingdom) and the United States. Even so, most of the large global banks have started reporting their capital ratios on a Basel III basis. The Basel III common equity Tier 1 capital ratio, which includes stricter definitions of common equity and higher risk weights, is about 2½ percentage points lower for these banks on average compared with current definitions. They all have a ratio above 7 per cent though, according to their most recent reports, and therefore are above the minimum that will eventually be required under the Basel III framework (Graph 1.11). However, many of these banks will need to improve their common equity positions further, partly to meet the extra capital buffers that will be required of them for being systemically important.

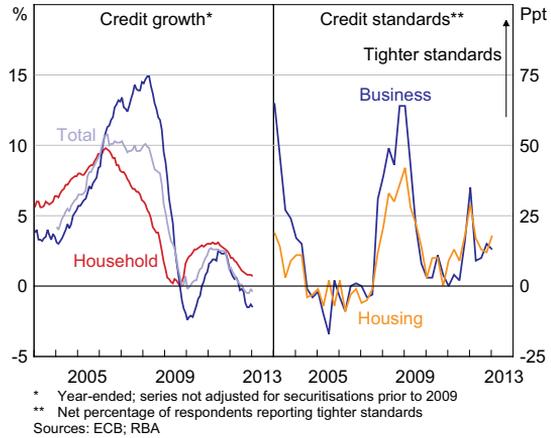
Graph 1.11
Basel III Common Equity Tier 1 Capital Ratios*
 December 2012



* Banks' estimates; latest available data used where banks have not reported for December 2012; largest banks by location of head office which have reported their capital ratio assuming full implementation of Basel III
 Source: banks' financial disclosures

in the September and December quarters last year (Graph 1.12). The survey also showed that credit demand had fallen further, though this was partly because some larger businesses were substituting towards (relatively inexpensive) non-intermediated debt financing. Aggregate euro area credit contracted slightly over the year to January, as modest (and declining) growth in household credit was more than offset by a fall in business credit. The contraction in credit has been particularly pronounced in the more troubled economies in the region, particularly in Greece, Portugal and Spain. The pick-up in corporate bond issuance in the euro area since 2011 has been notable, particularly given that the euro area has traditionally been more reliant on intermediated finance. That said, smaller businesses generally do not have access to alternative sources of finance and so a continuation of tight lending conditions could impede economic activity.

Graph 1.12
Euro Area Credit Conditions



* Year-ended; series not adjusted for securitisations prior to 2009
 ** Net percentage of respondents reporting tighter standards
 Sources: ECB; RBA

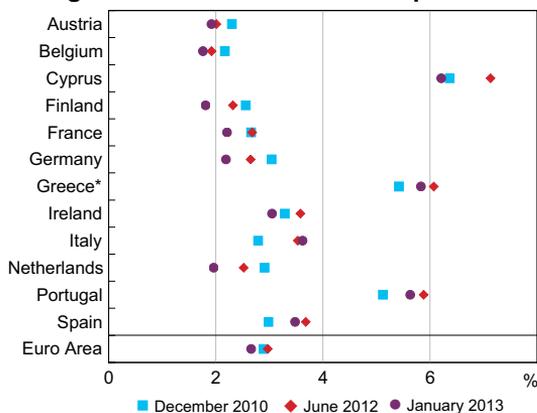
Credit Conditions and Asset Quality

Reflecting weak economic activity and market pressures on banks, credit conditions have remained tight in the euro area in recent quarters. Despite banks reporting some improvement in their access to funding, the ECB's bank lending survey showed that a net balance of euro area banks continued to tighten their business and household loan standards

Despite there being no change in the ECB policy rate since July, there was a further reduction in interest rates on new housing and business loans in the second half of 2012, including in the troubled peripheral economies (Graph 1.13). The reduction in rates has unwound some of the divergence in lending rates between the core and peripheral economies that had opened up over the past few years. Even so, businesses in France and Germany

Graph 1.13

Average Interest Rates on New Corporate Loans



* Average interest rate on outstanding corporate loans
Source: ECB

continue to face lending rates around 1 percentage point less than those in Ireland, Italy and Spain and about 3 percentage points less than in Greece and Portugal. With the exception of Spain, mortgage rates in the southern periphery are also still considerably above those in Germany.

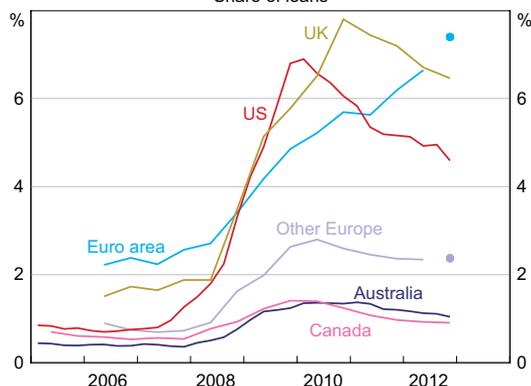
A further deterioration in euro area banks' asset performance over 2012, associated with weakening economic activity, is one factor that has been contributing to the tight credit conditions in that region. The aggregate non-performing loan (NPL) ratio of the large euro area banks is estimated to have risen to about 7½ per cent at the end of 2012, up from about 2¼ per cent in mid 2007, driven by banks in the most troubled countries, as well as those with significant exposure to the Spanish property market (Graph 1.14). Particularly large increases of more than 2 percentage points over the year were recorded in the NPL ratios for a number of banks based in Cyprus, Ireland, Italy and Spain (information about NPL developments at Greek banks is limited). The two largest Spanish banks, which are more geographically diversified than their smaller counterparts, reported only modest increases in their NPL ratios over 2012.

Outside the euro area, credit has also contracted in the United Kingdom over the past year. To improve the availability of credit, the UK authorities introduced a 'Funding for Lending Scheme' in

July last year which provides access to lower-cost funding for banks that expand their lending to the real economy. Although nearly £14 billion was borrowed under the scheme during the December quarter 2012, lending by scheme participants still contracted by £2½ billion over the same period. However, a fall in borrowing costs and an increase in credit over January suggests that the scheme may have gained more traction this year. Credit growth in the United States remains subdued, as an ongoing contraction in housing credit has partly offset faster growth in business and consumer credit.

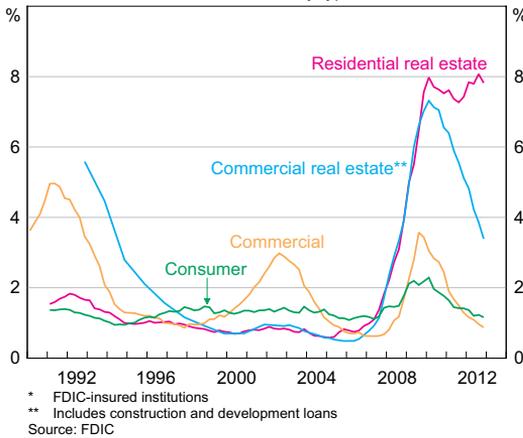
Asset performance in the major banking systems outside the euro area has continued to improve but is still weaker than the pre-crisis period in most advanced economies, consistent with generally subdued macroeconomic conditions. In the United States, the aggregate NPL ratio for the largest banks declined to 4½ per cent in December 2012, down from a peak of 7 per cent in early 2010 (Graph 1.14). The NPL ratio for residential real estate loans remains high, however, and rose further over 2012, partly as a result of new regulatory guidance requiring banks to reclassify loans to individuals that have filed for bankruptcy as non-performing (Graph 1.15). While conditions in the US housing market remain

Graph 1.14
Large Banks' Non-performing Loans*
Share of loans

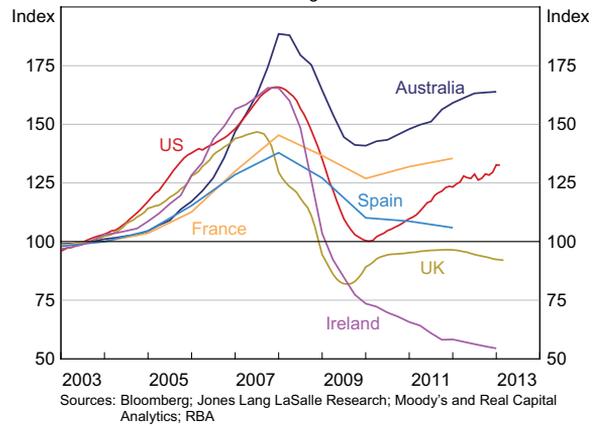


* Definitions of 'non-performing' differ across jurisdictions, and in some cases exclude loans that are 90+ days past due but well secured; includes 18 large US banks, 52 large institutions from across the euro area, 13 large other European banks, four largest UK banks, the six largest Canadian banks and the four largest Australian banks; latest available data used where banks have not reported for December 2012; reporting periods vary across jurisdictions
Sources: APRA; RBA; SNL Financial; banks' annual and interim reports

Graph 1.15
United States – Non-performing Loans*
 Share of loans by type



Graph 1.16
Commercial Property Prices
 2003 average = 100



challenging, indicators such as construction activity and house prices have started to pick up. There are still a large number of borrowers in the United States facing repayment strain that have been reluctant to sell because they have been in negative equity. The recent pick-up in house prices could therefore encourage them to sell their homes, potentially tempering the overall recovery in house prices. Asset performance in other parts of the US banks' portfolios has continued to improve in recent quarters; NPL ratios for the commercial and consumer portfolios are now at levels usually seen during sustained economic expansions, while the ratio for the commercial real estate portfolio has also declined sharply from its peak, consistent with the partial recovery in commercial property prices (Graph 1.16).

While the large banks' aggregate NPL ratio has also been declining in the United Kingdom, it remains elevated at around 6½ per cent and the authorities there have raised concerns similar to those in the euro area about the adequacy of banks' provisioning for problem loans. Around one-third of UK banks' commercial property exposures are believed to be subject to forbearance, in that banks have restructured or otherwise modified the terms of loans to help struggling borrowers cope with the repayments and thereby avoiding having to

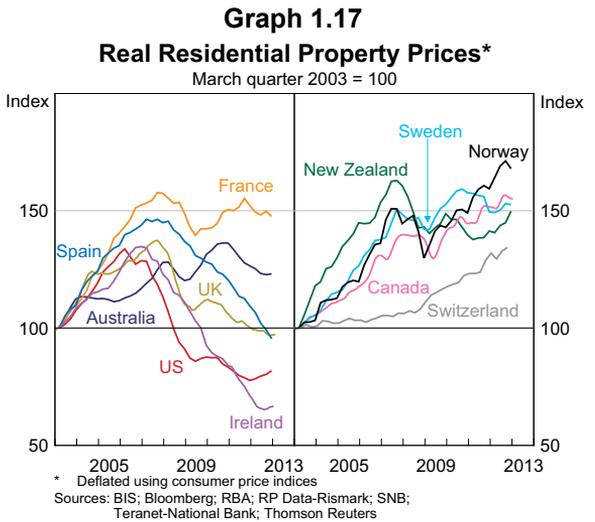
classify the loan as non-performing. The low level of corporate insolvencies in the United Kingdom, despite the run-up in debt during the boom, is thought to be linked to forbearance; 8 per cent of UK businesses report that they can only meet interest payments on their debt and are unable to pay down principal. It is also estimated that between 5 and 8 per cent of UK mortgages have been subject to forbearance, such as conversion to interest-only terms. Helping viable borrowers recover from temporary repayment difficulties can be prudent, but if banks are overly optimistic about the potential for borrowers to sustainably recover, it could result in large increases in their loan losses.

The European authorities have also highlighted forbearance of commercial property loans as a potential risk to banks' asset performance in some euro area countries. Commercial property prices remain depressed in many euro area countries, which has resulted in commercial real estate exposures generating concern for several euro area banks (Graph 1.16). For example, the problems of the recently nationalised Dutch bank SNS Reaal stemmed mainly from its domestic and Spanish commercial property portfolios.

Outside the United States, the United Kingdom and the euro area, banks in some other advanced economies have been experiencing more

favourable asset performance in recent years, amid stronger economic activity and rapid house price appreciation (Graph 1.17). Several smaller open economies, including Canada, New Zealand, Norway, Sweden and Switzerland, have experienced faster credit growth and buoyant housing market conditions fostered by low interest rates and strong competition for mortgages. In some of these countries, monetary policy may have been constrained by exchange rate regimes and related considerations. Because a prolonged period of low interest rates can result in a build-up of credit risk long before inflation starts to rise, the authorities have instead sought to restrain mortgage lending through prudential measures, such as higher capital requirements and tighter lending standards. The authorities in Sweden and Norway, for example, have proposed increased capital requirements for residential mortgages through higher risk weights and capital add-ons, to address their concerns that banks' own models do not fully capture the systemic risks from their lending. Similar concerns prompted the Swiss authorities to recently activate their Basel III countercyclical capital buffer: Swiss banks will be required to hold additional common equity Tier 1 capital of 1 per cent of risk-weighted assets by September 2013 against their Swiss residential property exposures. In Canada, the government has tightened the criteria for government-guaranteed mortgage insurance in response to concerns about rising household indebtedness, since the government – rather than lenders – would bear the initial losses from any future downturn.

The strong pick-up in residential property prices in New Zealand recently, particularly in Auckland and Christchurch, has been accompanied by an increase in high loan-to-valuation ratio (LVR) lending. The Reserve Bank of New Zealand (the bank supervisor) has been investigating the possible role for prudential tools, such as sectoral capital requirements and restrictions on high-LVR mortgages, to constrain credit growth and reduce any overheating in housing markets. Any deployment of these kinds of tools would have implications for the major



Australian banks as their subsidiaries account for the bulk of the New Zealand banking system.

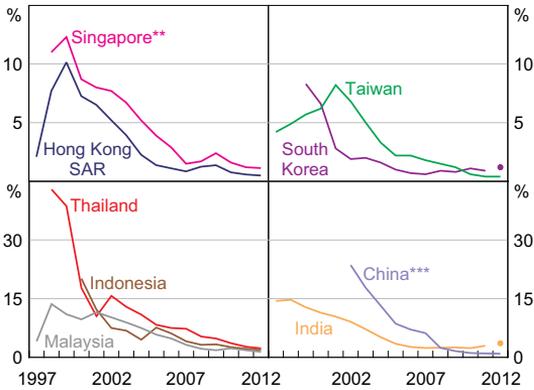
Banking Systems in the Asian Region

Banking systems in Asia remain solidly profitable. Despite the headwinds from the euro area financial crisis and the recent slowing in regional economic growth, NPL ratios in most banking systems in Asia are near cyclical lows (Graph 1.18). A number of larger banks in the region, particularly the Japanese banks, have been actively seeking to expand within Asia, which has helped offset the pullback by some euro area banks, particularly in areas such as trade and project finance on which Asian growth is quite dependent. Aggregate capital ratios across Asian banking systems have generally increased over 2012 and remain relatively high. This has put them in a good position to meet the Basel III capital rules that most banking supervisors in the region have begun to implement from the beginning of this year, consistent with the internationally agreed timetable.

Despite solid asset performance overall, a long period of strong credit expansion within a relatively low interest rate environment has raised a general concern about a build-up in credit risk. There has been a particular focus recently on loans made

Graph 1.18

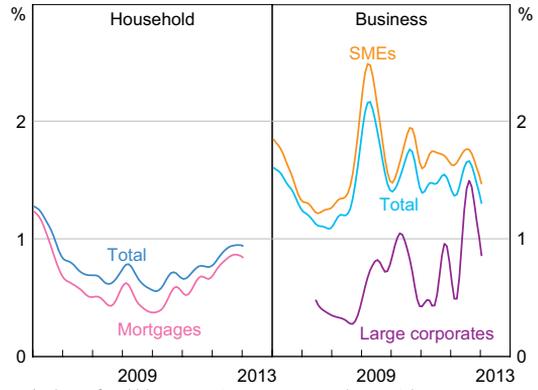
Asia – Non-performing Loans*
Share of loans



* Definitions of 'non-performing' differ across jurisdictions; latest available data used where December 2012 data are not available
 ** Singaporean-owned banks only
 *** Data for 2002–2004 are for major commercial banks only
 Sources: CEIC; RBA; banks' annual reports; national banking regulators

Graph 1.19

South Korea – Loans in Arrears*
Share of loans



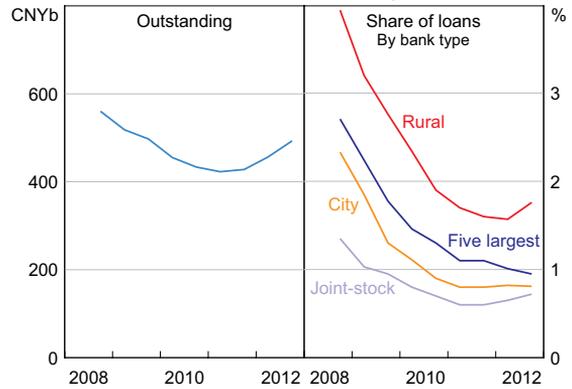
* Loans for which repayments are one or more days past due; won-denominated loans only; 13-period Henderson trend
 Sources: Bank of Korea; Korean Financial Supervisory Service

to trade-exposed companies with slowing profit growth (particularly in Korea, China and Indonesia). In Korea, the share of loans in arrears has increased over the past year driven by loans to large companies and low-income and self-employed households, particularly those in older age groups (Graph 1.19). Korean authorities have focused their supervisory oversight on loans for housing-related construction, shipbuilding and shipping, as a housing market downturn in the Seoul metropolitan area and soft external conditions are expected to weigh on these industries in particular. In India, the banks' NPL ratio has also started to rise from a low base. This is largely related to loans to 'priority sectors', such as agriculture and small business, to which domestic banks have been required to target 40 per cent of their total lending. Further deterioration in export performance and weakening property markets could raise NPL ratios in a number of countries in the region.

In China, the stock of NPLs on banks' balance sheets has continued to increase steadily since its trough in the September quarter 2011 (Graph 1.20). However, solid growth in lending has kept the aggregate NPL ratio on a downward trend and saw it reach a new low of just under 1 per cent in December 2012. This decrease was driven by

Graph 1.20

China – Non-performing Loans*



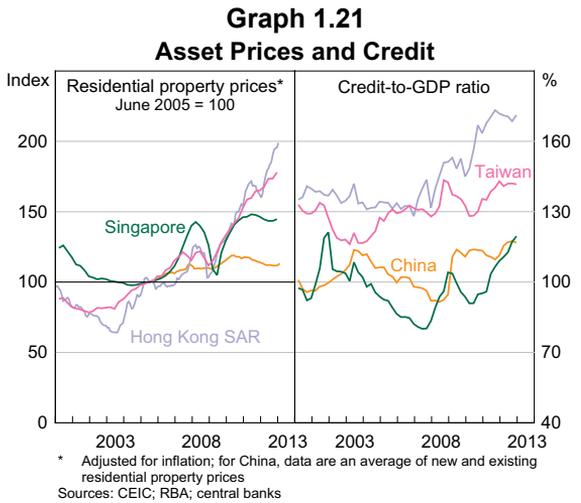
* Commercial banks only
 Sources: CBRC; banks' annual and interim reports

the five largest commercial banks, which account for about half of Chinese banking system assets. The aggregate NPL ratio of smaller banks, such as joint-stock and rural banks, rose slightly over 2012. Concerns remain over the quality of infrastructure-related loans made to local governments during the 2009–2010 countercyclical credit surge and banks are commonly thought to be forbearing on some of these loans, which could result in higher loan losses in the future.

The strong issuance of wealth management products (WMPs) in recent years has also garnered attention and could present additional risks to the

Chinese banking system. These products are lightly regulated, higher-yielding alternatives to deposits typically offered to high-wealth individuals. Despite their short-term nature, the funds raised through these off-balance sheet vehicles are often invested in longer-term assets to generate higher returns; the resulting maturity mismatch exposes WMPs to refinancing risk. In addition, while the WMPs disclose little information about their credit risks, their underlying asset quality is likely to be poorer relative to banks' on-balance sheet exposures. These risks were highlighted by the default of a WMP marketed by a small bank in late 2012. Further defaults could put pressure on sponsoring banks and on the Chinese authorities to regulate the sector more tightly. There has been some media speculation that the Chinese authorities are looking at ways to increase transparency about banks' involvement in and risk exposure to WMPs.

Some countries in the Asian region have fixed or managed exchange rate regimes and have therefore effectively imported the exceptionally low interest rates prevailing in the large advanced economies. This has contributed to rapid property price increases in Hong Kong, as well as strong credit growth in both Hong Kong and Singapore (Graph 1.21). Regulators in these countries have responded by implementing further rounds of macroprudential measures in an attempt to restrict lending activity and growth in prices. In Hong Kong, regulators have sought to reduce speculative demand by increasing stamp duty on residential properties sold within three years of their purchase and imposing stamp duty on non-residents' purchases. Banks have also been instructed to lower their maximum LVRs for mortgages, apply a minimum 15 per cent risk weight to their mortgage portfolios and undertake stricter debt-serviceability testing of mortgage applicants. Similarly, the Singaporean authorities have sought to reduce investor and foreign demand by capping loan terms at 35 years for residential properties, decreasing maximum LVRs and increasing stamp duty on purchases of properties by non-citizens



and on purchases of second properties by citizens. Elsewhere, recent rates of credit growth seem to have broadly matched the pace of growth in incomes. The repeated steps some Asian countries have taken to tighten macroprudential policy settings over recent years in response to continued credit and property market expansion illustrates some of the challenges associated with calibrating and targeting these kinds of policies.

In China, earlier steps to ease monetary and fiscal policy settings have contributed to a recovery in property prices since the middle of last year. This pick-up in property prices has more recently led the Chinese authorities to implement a fresh round of measures aimed at curbing speculative demand. Measures implemented include the stricter enforcement of capital gains tax on property sales and increased minimum down payments and mortgage rates for second-home purchases in cities where property price growth has been judged as being excessive. Given conservative mortgage lending standards and low household indebtedness in China, these measures do not appear to be motivated by concern about excessive growth in household credit. Rather, earlier statements by the Chinese authorities suggest that the main objective has been to improve housing affordability and to reduce the Chinese economy's reliance on the property sector.

Banks have also been instructed to restrict lending to the property development sector in recent years, other than to developers of affordable housing. These credit restrictions have reinforced the effect of earlier property market measures in dampening activity in some segments of the property market, but they have also encouraged developers to seek alternative sources of funding. For example, bond issuance by Chinese property developers has surged in recent years, particularly by issuers with low or no credit ratings. There has been strong demand for such bonds, allowing them to be issued at quite low yields, indicating high risk appetite and perhaps some complacency by investors about the business models of such firms. ❖

2. The Australian Financial System

The Australian banking system remains in a relatively strong position. Wholesale funding cost pressures have diminished in recent months as global market sentiment has improved. The banks have continued to strengthen their capital, funding and liquidity positions, thereby improving their resilience to future shocks or periods of market turbulence. As a result of the strengthening of their capital positions over recent years, the banks are well placed to meet the Basel III minimum capital requirements that the Australian Prudential Regulation Authority (APRA) began phasing in from the start of this year.

Banks' asset performance has continued to improve gradually over recent quarters, even though challenging conditions in parts of the business sector have been contributing to a relatively high inflow of newly impaired loans. While overall asset performance remains weaker than in the years leading up to the global financial crisis, the tightening in banks' lending standards since this time has improved the underlying resilience of their loan books to adverse macroeconomic conditions.

Growth in banks' profits has slowed in recent reporting periods, although aggregate profitability has been strong and is expected to remain so in the period ahead. The slow credit growth environment is likely to encourage banks to implement new strategies to underpin their profit growth over the medium term. To some extent, signs of this are already evident in the greater focus banks have recently given to cost control and in the Asian expansion strategies that some have been pursuing to varying degrees. Of themselves, these strategies need not be detrimental to financial stability –

indeed some income diversification among the banks may be beneficial in that respect. However, indiscriminate cost cutting, laxer lending standards or aggressive expansion into unfamiliar markets or products would heighten risks to the banks themselves and potentially also to financial stability.

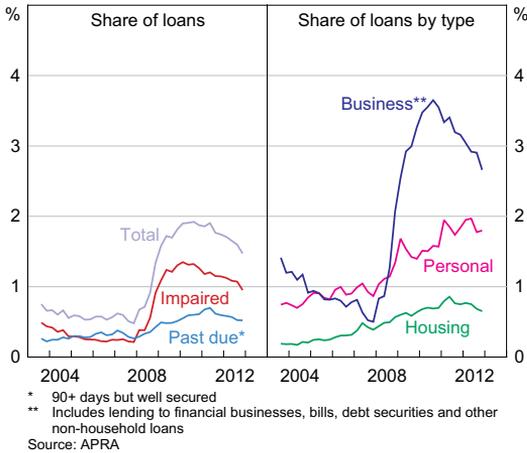
The general insurance industry remains well capitalised and its profitability has strengthened in recent reporting periods, partly because of a more benign catastrophe claims experience. The natural disasters in early 2013 are expected to have only a minor financial impact on insurers.

Domestic Asset Performance

The business models of most Australian banks are heavily focused on lending, particularly in the domestic market. Credit risk is therefore one of the main sources of risk facing the banking system and a key focus of financial stability analysis. The asset performance of the Australian banks deteriorated during the 2008–2009 crisis period and associated economic slowdown, but has been gradually recovering over the past few years.

In the banks' domestic portfolio, the ratio of non-performing loans to total loans was 1.5 per cent at December 2012, down from a peak of 1.9 per cent in 2010 (Graph 2.1). The improvement since the peak has been driven by a fall in the share of loans classified as impaired (not well secured and where repayment is doubtful), which also accounted for most of the earlier increase. The share of loans classified as past due (in arrears but well secured) has declined modestly since its peak in 2011, and is currently about half the impaired assets ratio.

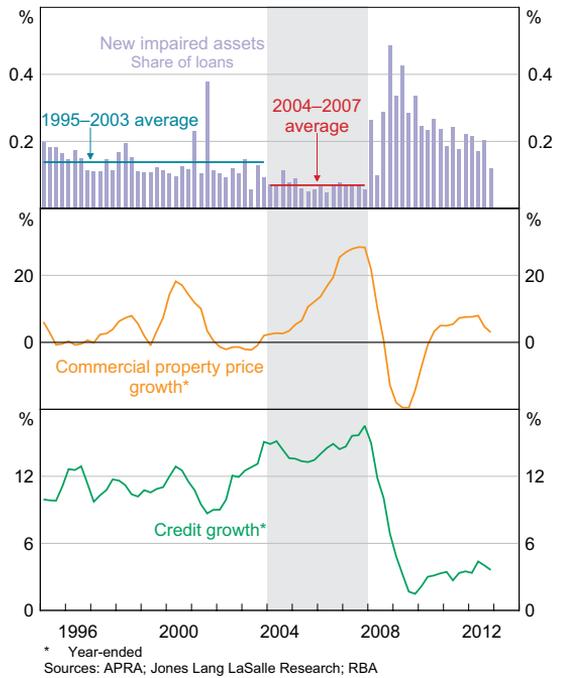
Graph 2.1
Banks' Non-performing Assets
 Domestic books



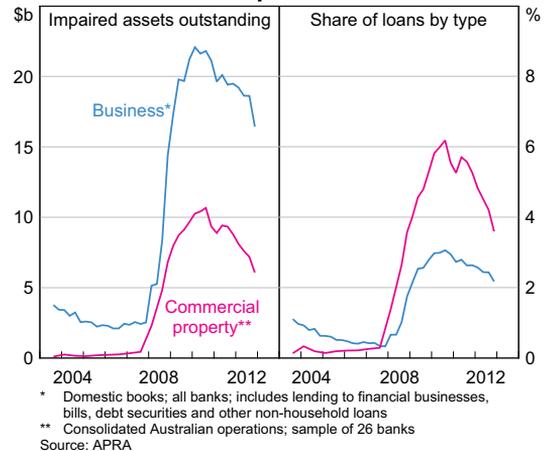
The decline in the banks' impaired assets ratio over the past few years has been sluggish for a number of reasons. These include that banks have generally been dealing with their impaired business loans at a measured pace in order to maximise recoveries as economic and market conditions improve. Accordingly, loan write-offs have been fairly gradual, especially compared with the quick pace that followed the early 1990s recession (when banks' asset quality was also much weaker than today). Another factor is that the inflow of newly impaired loans has been at a relatively high level over recent years (Graph 2.2). While inflows of newly impaired assets were at unusually low levels during the 2004–2007 period, associated with the buoyant asset valuations and credit growth prevailing at that time, average inflows over the past few years have also been above those recorded prior to 2004.

Banks' commercial property exposures have been a key driver of the above-average flow of new impairments over the past few years. Consistent with this, they continue to account for a sizeable share of the impaired assets in banks' domestic business loan portfolios (Graph 2.3). Around 3½ per cent of banks' domestic commercial property exposures were classified as impaired in December 2012, down from a peak of about 6 per cent in mid 2010. The decline

Graph 2.2
New Impaired Assets and Financial Conditions
 Domestic books



Graph 2.3
Banks' Impaired Assets



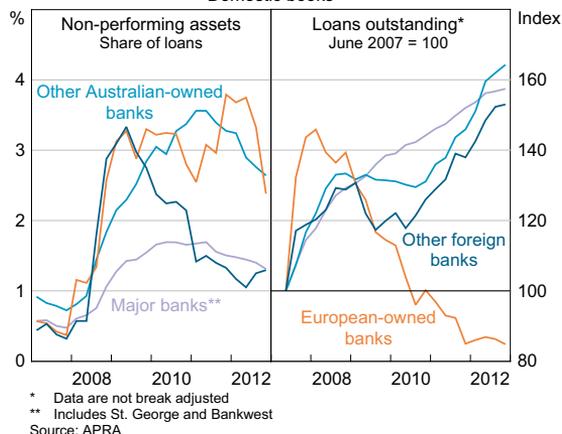
in this ratio reflected improved conditions in parts of the commercial property market, but also the disposal of troubled exposures by banks, including some European-owned banks that have been pulling back from the Australian market.

Soft business conditions and profitability in some other industries, as discussed in the 'Business and Household Balance Sheets' chapter, have also contributed to the elevated rate of new loan impairments over recent years, although the performance of banks' domestic non-property business exposures improved modestly over the second half of 2012. Overall, the share of banks' domestic business loans that is impaired has drifted lower, to 2.2 per cent, about 90 basis points below its 2010 peak.

In comparison with banks' business loans, the deterioration in the performance of their housing loans following the 2008–2009 crisis period was fairly mild. The non-performing share of banks' domestic housing loans peaked at 0.9 per cent in mid 2011, and has since declined to 0.7 per cent at December 2012. The recent improvement can be partly explained by lower interest rates and a tightening in mortgage lending standards after 2008; loans originated after this time have performed better than those originated in the preceding few years. Some banks have also strengthened their collections processes in recent years, reducing the time that loans stay in arrears before they are resolved.

The improvement in banks' domestic asset performance over recent quarters has been broad based across the industry (Graph 2.4). Some European-owned banks and smaller Australian-owned banks have recently recorded significant declines in their non-performing business loan ratios, partly due to sales of troubled exposures. Even so, these banks' asset performance remains weaker than that of the major Australian banks. The non-performing share of credit unions and building societies' (CUBS) assets rose slightly over the six months to December 2012, but at 0.5 per cent it remains well below the ratio for banks. While the CUBS' better overall asset performance is partly explained by their higher share of housing loans, the non-performing share of their housing loans is also below that of the banks; former CUBS that have recently converted to mutual banks have similarly low non-performing asset ratios.

Graph 2.4
Banks' Asset Performance and Lending
Domestic books



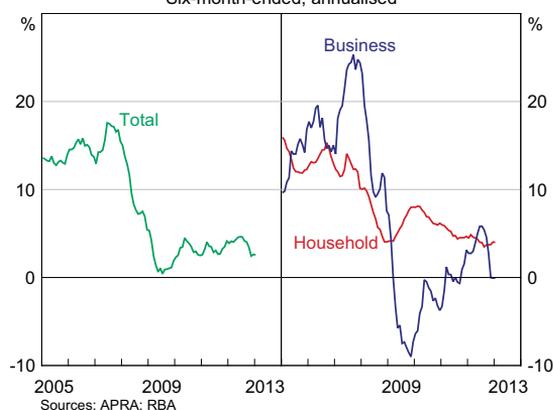
According to industry liaison, the continued run-off of troubled exposures that were originated some years ago should exert further downward pressure on banks' non-performing loans. Specific provisions and available security currently cover over 95 per cent of the stock of domestic impaired assets, so (all else equal) these exposures are unlikely to generate further losses for banks unless the underlying asset valuations prove to be unrealistic. In the immediate period ahead, the performance of banks' loans is likely to continue to benefit from below-average interest rates. There is always a risk, though, that economic and financial conditions could deteriorate significantly, which would worsen banks' asset performance. The banks should be less affected by such a scenario than they were in 2008–2009 because the tightening in lending standards has improved the underlying quality of their loan books. Consistent with this, average risk weights on most banks' mortgage and business loan portfolios have declined over the past couple of years.

Credit Conditions and Lending Standards

Growth in banks' domestic loan books remained relatively modest over the past six months (Graph 2.5). Household credit grew at an annualised rate of about 4 per cent over the six months to

Graph 2.5**Credit Growth**

Six-month-ended, annualised



January 2013, as many households have preferred to pay down existing debt rather than take on new debt (see the ‘Business and Household Balance Sheets’ chapter). Businesses’ demand for intermediated debt has also been subdued, with business credit remaining broadly unchanged over the past six months. In addition to deleveraging by some firms, another factor weighing on business credit recently is that some large businesses have raised a greater share of their debt from bond markets, given relatively favourable pricing. While this has reduced banks’ lending opportunities, some banks have been looking to shift to fee-paying advisory roles with their corporate clients instead.

Slow credit growth can pressure banks to compete harder to maintain their overall revenue growth.

From a risk management perspective, it is important that banks do not respond by imprudently loosening their lending standards. The available evidence suggests this is not occurring at this stage. According to industry liaison, business loan conditions were broadly unchanged over recent quarters. The exception is the ‘wholesale’ market (i.e. large-value loans), where strong competition amid weak borrower demand has compressed loan margins and, in some instances, eased loan covenants. Some Asian-owned banks seeking to expand their business in Australia are reportedly competing aggressively for syndicated loans, increasing their share of this market noticeably over the past year (Table 2.1). At the same time, a number of European-owned banks have continued to pull back from business lending in Australia, especially syndicated and commercial property lending. This is related to their earlier loan quality problems and difficulties in their home jurisdictions.

In the residential mortgage market, competition for new borrowers has seen some lenders increase interest rate discounts modestly and offer to reimburse refinancing costs or waive application fees. Non-price loan standards, however, appear to have been broadly unchanged over the past six months. As interest rates have fallen below average, a number of banks have recently increased the size of the interest rate buffers they add to their lending rate when assessing borrowers’ loan-servicing capacity. This is a prudent approach to ensuring that

Table 2.1: Banks’ Business Lending Activity^(a)

By ownership, as at December, per cent

	Share of business loans ^(b)			Share of syndicated loans ^(c)		
	2007	2011	2012	2007	2011	2012
Australian	80	87	87	40	44	42
Asian	3	5	5	13	18	23
European	14	7	6	36	28	24
Other	2	2	2	11	10	11

(a) Shares might not sum to 100 per cent due to rounding

(b) Bank loans in Australia; non-seasonally and non-break adjusted; excludes securitisations; the purchase of Bankwest by CBA in 2008 contributed to a decline for European banks

(c) RBA estimates; includes offshore banks; mostly loans to non-financial corporations

Sources: APRA; RBA; Thomson Reuters

new borrowers are better able to cope with higher mortgage repayments in a future period of higher interest rates.

Foreign Exposures

While the Australian-owned banks are still predominantly domestically focused, they also have foreign exposures stemming from their overseas operations, as well as the direct cross-border activities of their Australian operations. These foreign activities provide income diversification and other benefits to banks, but they also expose them to various risks and could be a source of strain to the parent bank if conditions deteriorate offshore.

Australian-owned banks' aggregate foreign claims (i.e. exposures) represent a bit over one-fifth of their global consolidated assets, which is a smaller share than for many other large banking systems. These claims are geographically concentrated, with the bulk of them on New Zealand, where the major banks each have large local operations, and the United Kingdom, where NAB also has a large operation (Table 2.2). Claims on the Asian region are smaller, but have grown strongly over recent years. Unlike for New Zealand and the United Kingdom, a significant share of the Australian-owned banks' claims on Asia are cross-border rather than via local operations. This is because their motivation for expanding into Asia has partly been to support their domestic clients' activities in the region and to expand their provision

of trade finance there (see 'Box A: Australian Bank Activity in Asia').

The performance of Australian-owned banks' overseas loans has been somewhat weaker than that of their domestic loans in recent years. Banks' overseas non-performing loans were steady over the year to December 2012, although there was a significant divergence in performance across their main overseas markets (Graph 2.6). Loan performance in New Zealand has strengthened as economic conditions there have improved, whereas in the United Kingdom loan performance has been persistently weaker and worsened further over the second half of 2012. This mostly reflects the ongoing difficult economic and property market conditions in the northern part of the United Kingdom where most of NAB's UK exposures are located. By comparison, Australian-owned banks' loan performance in the Asian region has been better, in part because economic conditions in Asia have been reasonably strong, and because a significant portion of their exposures there have a lower credit-risk profile.

As discussed in 'The Global Financial Environment' chapter, there has recently been rapid growth in residential property prices in a couple of the largest cities in New Zealand. This has been associated with strong competition for new borrowers, particularly in the higher loan-to-valuation ratio segment of the mortgage market. While housing loan portfolios of the Australian banks' subsidiaries in New Zealand are

Table 2.2: Australian-owned Banks' Foreign Claims
Consolidated global operations, immediate borrower basis, per cent

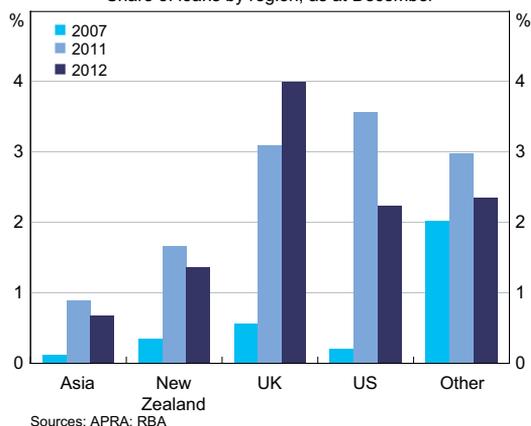
	Share of consolidated assets		Share of foreign claims ^(a)
	Dec 2007	Dec 2012	Dec 2012
New Zealand	10.2	8.2	37
United Kingdom	6.6	4.8	22
Asian region	1.2	3.6	16
United States	2.4	3.1	14
Other countries	2.9	2.6	12
Total	23.3	22.2	100

(a) Shares do not sum to 100 per cent due to rounding
Sources: APRA; RBA

Graph 2.6

Non-performing Assets of Australian-owned Banks' Overseas Operations

Share of loans by region, as at December



currently performing well, a significant relaxation of their lending standards in pursuit of market share could pose problems once interest rates in New Zealand eventually rise, or in the event of a downturn in economic and property market conditions there.

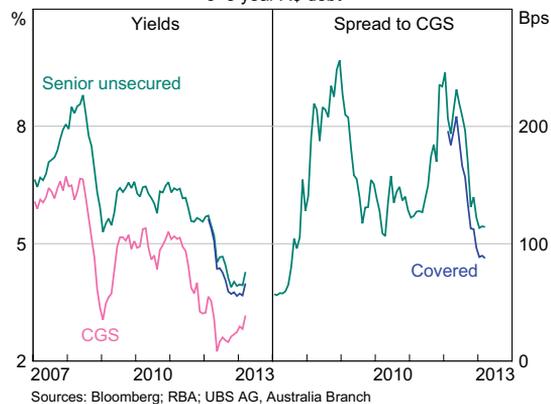
As discussed in the previous *Review*, the Australian-owned banks have limited direct exposures to the most troubled euro area countries. They are indirectly exposed to these countries via their claims on euro area banks that have substantial direct exposures to the weaker countries, but these claims amount to less than 1 per cent of their consolidated assets.

Funding and Liquidity

International financial and economic conditions can also pose challenges for the liability side of Australian banks' balance sheets, as demonstrated by the periodic bouts of turbulence in global capital markets over recent years and the wholesale funding pressures they created for Australian banks. Wholesale funding conditions have improved for Australian banks since around the middle of 2012 as global market sentiment has recovered (see 'The Global Financial Environment' chapter). Spreads between banks' senior unsecured bonds and Commonwealth Government securities (CGS) have

declined by more than 100 basis points over this period, and are now around their lowest levels since the start of the global financial crisis (Graph 2.7). Covered bond spreads have also narrowed sharply since the banks started issuing these types of debt securities in November 2011.

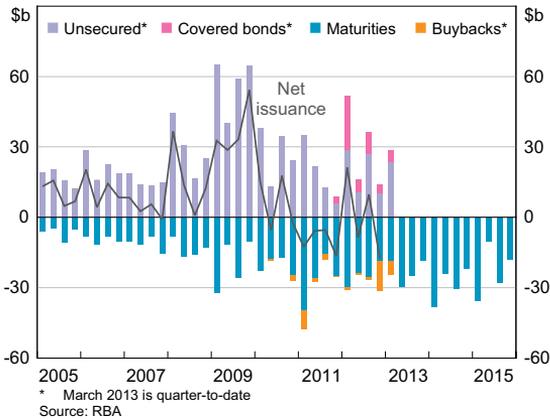
Graph 2.7
Major Banks' Bond Pricing
3–5 year A\$ debt



The Australian banks issued around \$40 billion of bonds in the past six months. Over three-quarters of this was in unsecured form, a higher share than in the preceding few quarters when banks issued larger amounts of covered bonds (Graph 2.8). Given that covered bond markets have tended to be more resilient during times of financial market stress, the major banks appear to be spreading out their covered bond issues in a desire to keep some issuance capacity in reserve in case conditions deteriorate again; the banks have currently issued between 20 and 40 per cent of their regulatory capacity for covered bonds. Banks have also taken advantage of the more favourable funding climate by buying back a significant amount of their outstanding government-guaranteed debt, as the cost of new unsecured issuance has become cheaper once the guarantee fee is factored in.¹

¹ For more information, see RBA (2013), 'Box D: Buybacks of Government Guaranteed Securities', *Statement on Monetary Policy*, February, pp 54–55.

Graph 2.8
Banks' Bond Issuance and Maturities
 A\$ equivalent



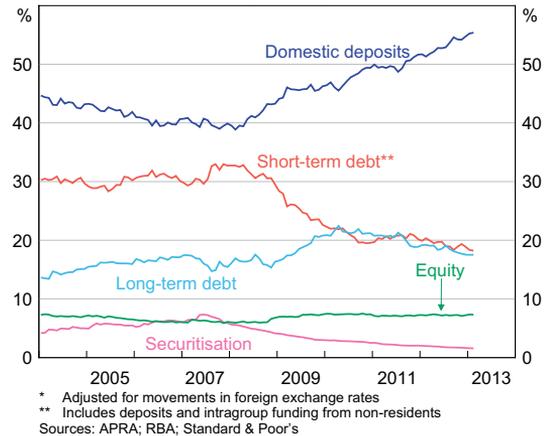
Conditions in the residential mortgage-backed securities (RMBS) market have also improved over the past six months, with the tightening of spreads for other debt securities helping to entice investors back into the market. Australian financial institutions have issued over \$10 billion in RMBS since October 2012; a number of these transactions were priced at spreads around 60 basis points narrower than in early 2012. As a result of strong demand from private sector investors, the Australian Office of Financial Management has not invested in any deals over the past six months. Further momentum in securitisation markets will be relatively beneficial for smaller banks' funding, given that they have less ready access to bond markets than the major banks.

Changes in the composition of the Australian banks' funding over the past few years have left them in a better position to cope with disruptions to funding markets. The share of banks' funding from domestic deposits has increased from about 40 per cent in 2008 to 55 per cent currently; this shift was largely at the expense of short-term wholesale funding, which is typically perceived by markets to be a less stable source of funding (Graph 2.9). The major banks' current funding strategies generally involve rolling over existing term wholesale funding (with zero net issuance) and funding new loans with new deposits on a dollar-for-dollar basis. Banks have been able

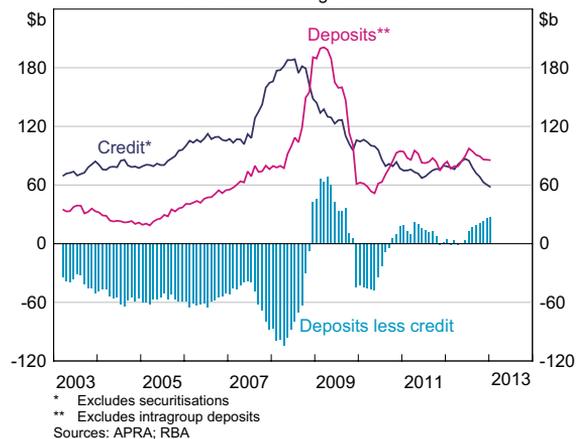
to achieve this for a couple of years now, with net deposit flows generally exceeding their net credit flows, especially over recent months (Graph 2.10). Currently, banks' deposits are growing at an annual rate of around 9 per cent, well above credit growth of 4 per cent.

The corollary of the banks' desire to limit their use of wholesale funding is ongoing strong competition for deposits, which has resulted in average spreads on retail deposits remaining around historical highs over the past six months (Graph 2.11). While average spreads on term deposits have declined recently,

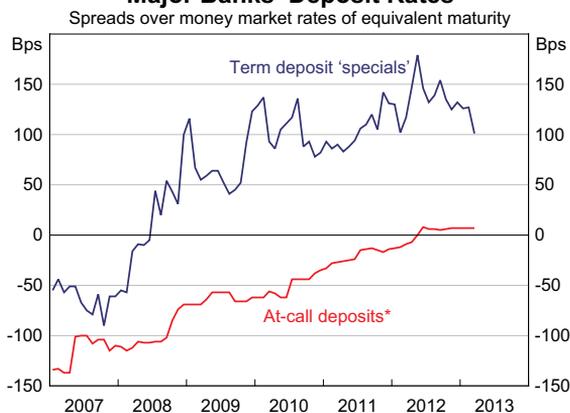
Graph 2.9
Banks' Funding*
 Share of total



Graph 2.10
Major Banks' Credit and Deposits
 Year-ended change in stock



Graph 2.11
Major Banks' Deposit Rates



* Spread to cash rate; existing customers only; excludes temporary bonus rates

Sources: Bloomberg; RBA

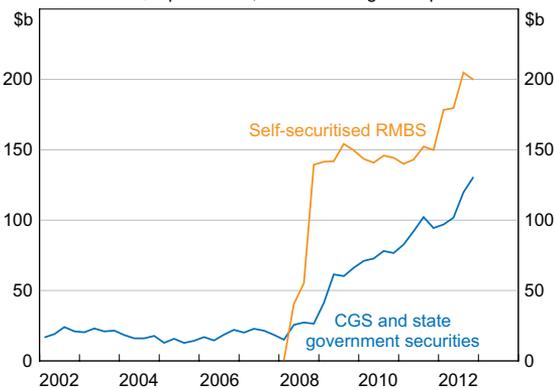
there has been a marked shift in competition towards some at-call deposit products, such as 'bonus saver accounts'.² The major banks generally do not expect overall competition in the retail deposit market to ease materially, at least in the near term, but they are seeking to become more targeted in their deposit strategies ahead of the implementation of the Basel III liquidity standard, such as by adjusting deposit pricing and introducing new products. Indeed, a number of banks have recently begun offering deposit products that require a notice of withdrawal of at least 31 days in advance, as these will receive a more favourable liquidity treatment under the standard.

Banks have also improved their ability to deal with funding stress by increasing their holdings of liquid assets in recent years. These changes are partly a response to the Basel III liquidity standard that will require banks to hold more and higher-quality liquid assets. For Australian dollar-denominated liquid assets, CGS and state government debt will account for the bulk of banks' high-quality liquid assets under the standard. Australian banks currently hold around \$130 billion of these securities (equivalent to about 5 per cent of their Australian dollar domestic

assets), up from less than \$25 billion prior to the global financial crisis (1 per cent of Australian dollar domestic assets) (Graph 2.12). However, given the low amount of government debt in Australia, APRA has adopted elements of the Basel rules that allow banks to count a committed liquidity facility (CLF) provided by the central bank as part of their Basel III liquidity requirements. APRA is in the process of finalising a framework that will ensure banks take all reasonable steps to minimise the CLF's contribution to their liquidity requirements – for example, by lengthening their funding maturities. The banks will be charged an access fee for the CLF, whether or not it is drawn, and it will be secured against assets that are eligible for the Reserve Bank's normal market operations. Self-securitised RMBS will also be able to form part of the collateral for the CLF. Banks' holdings of self-securitised RMBS have increased markedly in recent years, and now total about \$200 billion (8 per cent of their Australian dollar domestic assets).

Graph 2.12
Australian Banks' Liquid Assets

Selected A\$ liquid assets, consolidated global operations



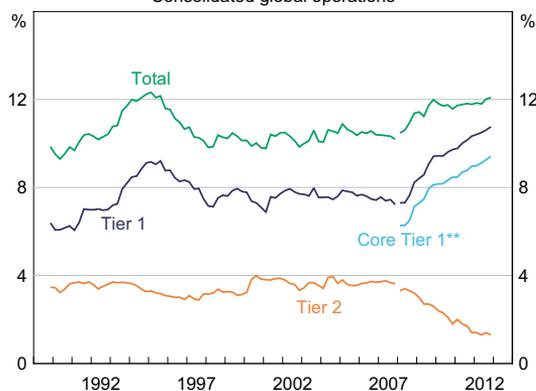
Sources: APRA; RBA

Capital and Profits

The Australian banks have continued to strengthen their capital positions over recent quarters. Their aggregate Tier 1 capital ratio (on a Basel II basis) rose further over the second half of 2012, to 10.8 per cent of risk-weighted assets, up from about 8 per cent in late 2008 (Graph 2.13). Most of the increase in Tier 1 capital over recent years has been through

² For further details, see Robertson B and A Rush (2013), 'Developments in Banks' Funding Costs and Lending Rates', RBA *Bulletin*, March, pp 63–70.

Graph 2.13
Banks' Capital Ratios*
 Consolidated global operations

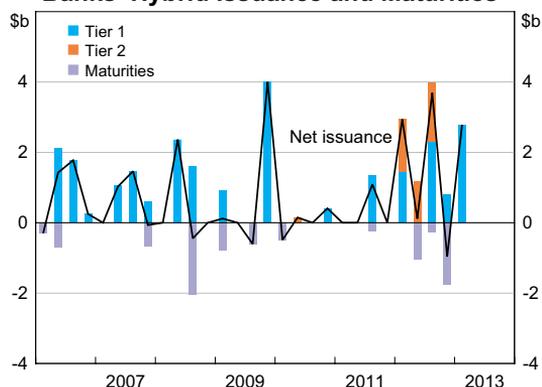


* Per cent of risk-weighted assets; break in March 2008 due to the introduction of Basel II for most banks
 ** Largely comprises ordinary share capital, reserves and retained earnings
 Source: APRA

earnings retention, given robust profitability over the period, as well as dividend reinvestment programs. CUBS have maintained their higher capital ratios, consistent with their less diversified business models and different corporate structures; their aggregate Tier 1 capital ratio was 15.8 per cent at the end of 2012.

The greater market and regulatory focus on higher-quality Tier 1 capital and the maturity of some Tier 2 capital instruments ineligible under Basel III had seen the banks' aggregate Tier 2 capital ratio decline over the past couple of years, to around 1.3 per cent of risk-weighted assets in December 2012. However, this ratio stabilised over the second half of 2012 due to an increase in Tier 2 hybrid issuance. Since APRA released guidance in May 2012 on what would qualify as non-common equity capital under its Basel III capital standards, banks have issued about \$7 billion of Tier 1 and Tier 2 eligible hybrids, equivalent to 0.5 per cent of their risk-weighted assets (Graph 2.14). There has been strong retail participation in these issues, with their relatively high yields in the current low-yield environment attracting investor demand. Hybrids are structured products and some are designed to absorb losses before a bank's common equity has been exhausted; the Australian Securities and Investments Commission has issued warnings to retail investors about the risks associated with

Graph 2.14
Banks' Hybrid Issuance and Maturities*



* Tier 1 hybrids include convertible preference shares; Tier 2 hybrids include subordinated debt
 Sources: RBA; company announcements

holding these instruments and has been reviewing product disclosure statements to ensure the risks are adequately communicated to investors. Overall, the banks' total capital ratio rose by 0.3 percentage points over the second half of 2012, to 12.1 per cent of risk-weighted assets.

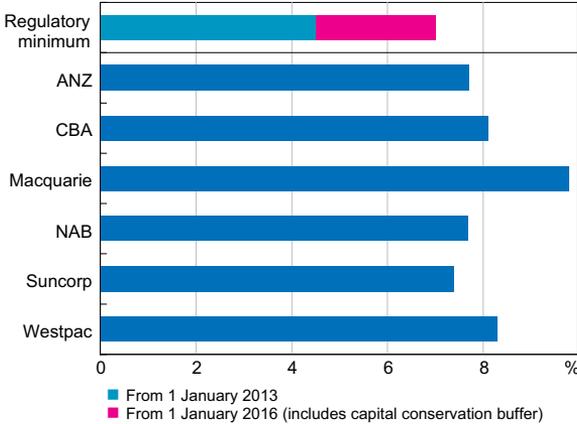
The significant increase in Tier 1 capital over recent years has increased banks' resilience to adverse shocks; recent APRA and International Monetary Fund (IMF) stress tests of the largest banks confirmed that their Tier 1 capital positions (on a Basel II basis) would be sufficient to continue meeting their minimum requirements even in a severe recession that significantly weakened their asset performance.³ The strengthening of the capital position over recent years has also left the Australian banking system well placed to meet the minimum Basel III capital requirements being phased in from the start of this year. Large banks' public disclosures indicate that their common equity Tier 1 capital ratios on a Basel III basis are currently around 7½ per cent or greater, above the 4½ per cent Basel III minimum that is now required in Australia (Graph 2.15). These ratios also exceed the 7 per cent minimum (including the

³ For information on APRA's stress-test scenario, methodology and results, see Laker J (2012), 'The Australian Banking System Under Stress – Again?', speech to the AB+F Randstad Leaders Lecture 2012, Brisbane, 8 November. Discussion of the IMF stress tests can be found in International Monetary Fund (2012), 'Australia: Financial Stability Assessment', IMF Country Report No 12/308, November.

Graph 2.15

Banks' Common Equity Tier 1 Capital Ratios*

Six largest banks, on an APRA Basel III basis, as at December 2012**



* Banks' estimates; regulatory returns for banks' capital positions under Basel III will commence from the March quarter 2013

** As at September 2012 for Macquarie

Source: banks' financial disclosures

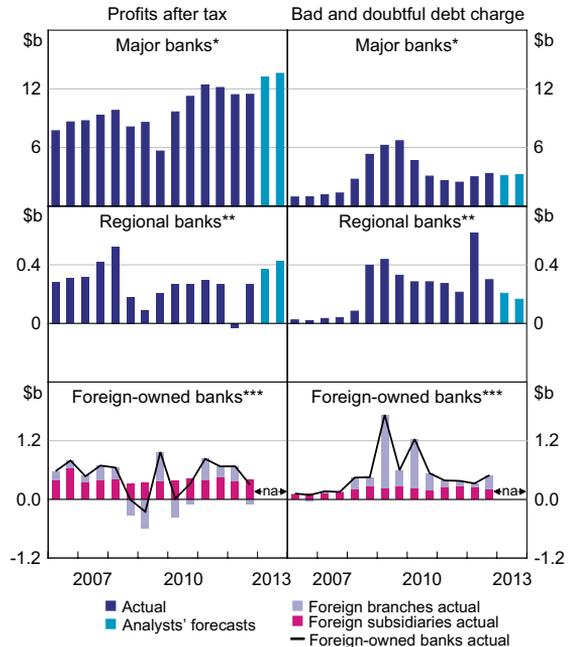
2½ per cent capital conservation buffer) that the banks are required to meet by 2016. The banks are likely to need to increase their capital ratios further than this, though, in order to provide adequate buffers above minimum regulatory requirements, including for any Pillar 2 or other capital surcharges that APRA may impose due to the risk profile or systemic importance of the banks.⁴ Banks should be able to achieve this mainly through earnings retention if current profitability continues in the future.

As noted above, the improvement in the Australian banks' capital positions over recent years has been underpinned by robust profitability; annual return on equity of the four major banks averaged around 15 per cent over 2010–2012. Aggregate profit of these banks was \$11 billion in their latest half-yearly results, broadly unchanged from the previous half year, and a little below the peak in 2011 (Graph 2.16). At 5 per cent, income growth over the year was at a similar pace to the previous two years, but higher bad and doubtful debt charges weighed on profits. The performance of NAB's UK loans and, to a lesser

4 For further discussion on banks' capital requirements, see Laker J (2013), 'Financial Regulation and Financial Sector Evolution: Looking Ahead', speech to the Australian Centre for Financial Studies/Finsia Leadership Luncheon Series, Melbourne, 22 March.

Graph 2.16

Banks' Profit



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

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

*** All results are half year to March and September

Sources: APRA; Credit Suisse; Deutsche Bank; Nomura Equity Research; RBA; UBS Securities Australia; banks' annual and interim reports

extent, each of the major banks' domestic business loans drove the increase in the bad debt charge. To help offset the effect of slow credit growth on their profitability, the banks have been focused on fee-generating and cross-selling opportunities that are less dependent on their balance sheet, as well as improving productivity and reducing costs. Cost-related initiatives announced by the banks include restructuring operations, reducing staff in some areas, and outsourcing certain support functions or moving them to lower-cost locations offshore. It is important that banks ensure that these types of cost-cutting initiatives do not compromise their risk management capabilities and controls.

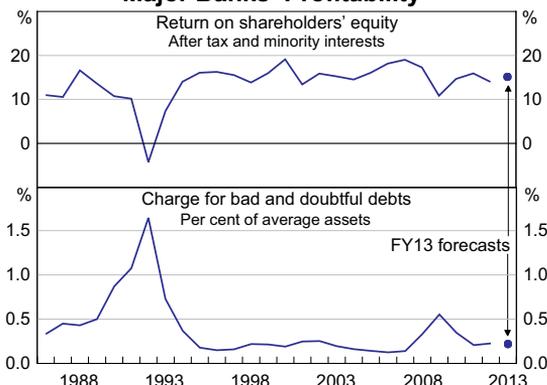
Looking forward, equity analysts are currently expecting the major banks' profits to rise strongly during the current financial year. With costs expected to continue growing at a slower pace than before the financial crisis and bad and doubtful debt charges

expected to level out, analysts are forecasting aggregate annual return on equity to rise to about 15 per cent in the major banks' 2013 financial year (Graph 2.17).

The three regional banks (Suncorp, Bank of Queensland and Bendigo and Adelaide Bank) recorded an aggregate profit of around \$270 million in their latest half-yearly results, a recovery from the \$30 million loss in the previous half year. This turnaround was driven by an improvement in asset performance which allowed some of these banks to reduce their bad and doubtful debt charges. Asset performance at the regional banks has been poorer than for the major Australian banks, partly because some of them have greater concentrations in Queensland where property market conditions have been weaker. Equity analysts are expecting the regional banks' profits to increase again in the coming year, supported by further declines in bad and doubtful debt charges.

Equity market investors seem to be viewing the Australian-owned banks' financial position and earnings prospects favourably, as banks' share prices have risen by about 25 per cent over the past six months (Graph 2.18). The banks' relatively high dividend yields appear to have been attractive to many investors in the current low interest rate environment.

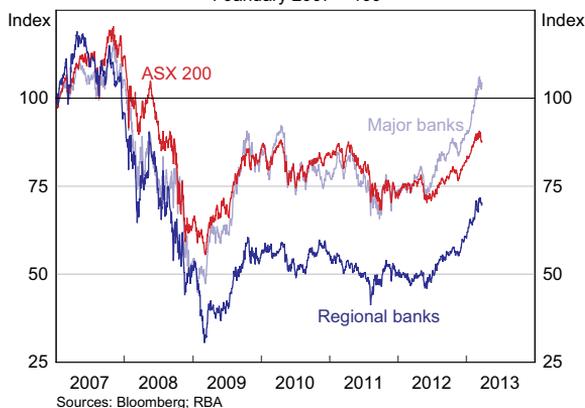
Graph 2.17
Major Banks' Profitability*



* 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

Graph 2.18
Share Prices

1 January 2007 = 100



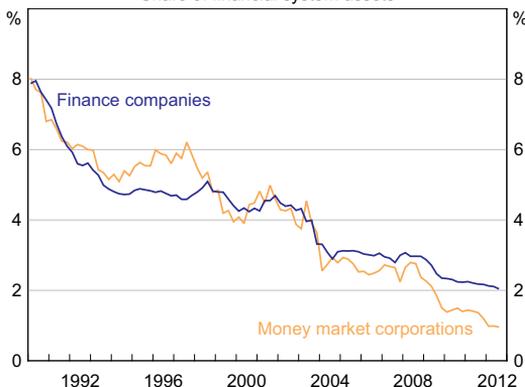
Foreign-owned banks' profits were mixed in their latest half-yearly results. Foreign branches posted an aggregate loss for the half-year, largely owing to an increase in charges for bad and doubtful debts, whereas foreign subsidiaries reported lower charges for bad and doubtful debts and higher profits. Profits of the foreign branches have been volatile over recent years because of losses in their corporate loan portfolios and turbulence in capital markets; foreign subsidiaries' profits have been far more stable given their focus on retail banking.

Registered Financial Corporations

Since the beginning of the global financial crisis, there has been increased interest internationally in assessing the risks posed by the so-called shadow banking system, which can be broadly defined as credit intermediation involving entities and activities outside the prudentially regulated banking system. The Reserve Bank monitors developments in this sector in Australia and provides regular updates to the Council of Financial Regulators. Registered Financial Corporations (RFCs) (comprising money market corporations and finance companies) are the financial institutions most readily considered shadow banking entities in Australia: they are not prudentially regulated by APRA, but they intermediate between lenders and borrowers like banks, and some of them

engage in investment bank-like activities. There are currently over 300 RFCs, but, in aggregate, their share of total domestic financial system assets is small and has been declining over time (Graph 2.19). The significant reduction in this share over recent years can partly be attributed to the more difficult funding conditions RFCs have faced since the 2008–2009 crisis period.

Graph 2.19
Assets of Registered Financial Corporations*
Share of financial system assets



* Excludes entities with less than \$50 million in assets
Sources: ABS; APRA

Recently there has been a greater focus on the activities and financial position of finance companies that issue unlisted retail debentures. This follows the collapse of a Victorian retail debenture issuer and property lender Banksia Securities Limited (BSL) in late 2012. BSL was small in size, being only the 28th largest finance company with reported assets of about \$690 million. Its failure (and other similar failures of smaller finance companies in recent years) has had no adverse effect on financial system stability, although it has raised investor protection concerns given that many of its investors reportedly had low risk appetites that seem inconsistent with BSL's relatively risky property-related loan portfolio and its thin capital position (see 'Developments in the Financial System Architecture' chapter for more discussion on the regulatory response to this development). More broadly, the RFC sector in Australia poses limited risks to financial stability because of its small size, heterogeneity and minimal

credit and funding links to the regulated banking system. For example, RFCs' overall borrowing from, and lending to, banks are each equivalent to less than 1 per cent of banking system assets.

General Insurance

The general insurance industry remains well capitalised at 1.8 times the minimum regulatory capital requirement; the industry's capital position rose modestly over the year to December 2012. APRA introduced revised, more risk-sensitive, capital standards for the general insurance industry at the start of 2013, which are also better aligned with the capital standards for other APRA-regulated industries. The first formal reporting on the level of general insurers' capital under the new standards will be for the March quarter 2013.

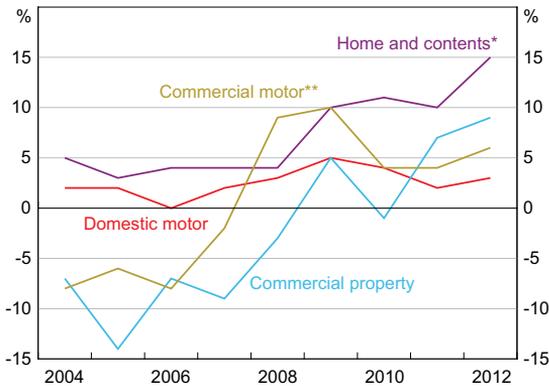
The profitability of general insurers has been strong: annualised return on equity for the industry exceeded 20 per cent in the second half of 2012, up from about 10 per cent in 2011 (Graph 2.20). Strong growth in underwriting profits was driven by rising premium rates for 'short-tail' classes of business, in particular home and contents and commercial property insurance (Graph 2.21). Insurers also benefited from a more favourable catastrophe claims experience in 2012 compared with the previous two years. Although claims are still being assessed, indications

Graph 2.20
General Insurers' Profitability*
Contribution to return on equity, annualised



* Break in 2010 due to change in prudential reporting requirements
Source: APRA

Graph 2.21
Insurers' Short-tail Premium Rates
 Year-ended change to June



* Includes cover for various household risks
 ** Includes Commercial Fire and Industrial Special Risk insurance
 Sources: JP Morgan Deloitte General Insurance Industry Survey; JP Morgan Taylor Fry General Insurance Barometer

are that the January 2013 floods and bushfires in parts of Australia will not be severe claims events. The Insurance Council of Australia's current estimate of claims from these disasters is about \$1 billion (before reinsurance), well below the \$2.4 billion claims arising from the 2011 Queensland floods.

Also boosting insurers' income recently were valuation gains as yields on their holdings of highly rated debt securities declined. However, a prolonged period of low investment yields could present challenges for insurers' profitability. Lower investment returns mean insurers would need to generate more premium revenue to cover future claim payments, particularly for 'long-tail' insurance products such as liability insurance. Competitive pressures and statutory limits appear to be constraining insurers' ability to increase premium rates for most long-tail business lines, although as noted above, premium rates have been rising strongly for some short-tail classes of business. It would be undesirable if insurers responded to premium constraints by shifting the composition of their portfolios towards riskier, higher-yielding assets, although there does not appear to have been a material change in the overall risk profile of investment portfolios at this point. Another concern would be if the insurance industry sought to support short-term profitability

through inappropriate releases from reserves; in this regard, APRA has been reviewing reserve practices and adequacy within the industry. No material concerns regarding industry reserving practices have been identified, but it is an area that APRA is continuing to monitor.

Lenders' mortgage insurers (LMIs) offer protection to banks and other lenders against losses on defaulted residential mortgages, in return for an insurance premium that is usually paid by the borrower. Mortgages originated with loan-to-valuation ratios of 80 per cent or greater are typically fully insured in Australia, which is less common internationally. By insuring banks against losses on their higher-risk mortgages, the LMI industry can support financial stability, but the concentration of LMIs' business in correlated risks necessitates strong capitalisation and prudential supervision. The industry is also quite concentrated, with two firms accounting for about three-quarters of industry assets. The LMI industry currently holds about 1½ times the minimum capital requirement which is, in turn, designed to absorb losses from a very severe housing market downturn. While the LMIs are generally highly rated by the major rating agencies, Moody's recently reviewed its global methodology for rating LMIs, which resulted in downgrades in the credit ratings of the two largest LMIs in Australia to low single-A ranges. This reflected Moody's assessment that the LMIs' capital buffers would be tested in the event of a severe economic and property market downturn in Australia (akin to that experienced in the United States over 2007–2011). The downgrades have contributed to some downgrades of ratings on RMBS tranches, given the credit enhancement LMIs provide to these securities, but have not directly affected the LMIs' operations.

The LMI industry's profitability was relatively subdued in 2012. Consistent with the pattern of mortgage arrears for banks, insured mortgages originated in the past few years are performing relatively well, but the LMIs have experienced elevated claims from: loans written in 2007 and 2008; loans to the

self-employed; and loans for properties in coastal Queensland. Reflecting this, LMI's loss ratio – claims expense as a share of premium revenue – was a bit above its long-run average in 2012.

Managed Funds

Over the past two decades, banking groups in Australia have acquired a number of life insurers and other funds management businesses, such as those that manage superannuation funds. A number of large life insurers and retail superannuation funds are now owned by or related to banking groups. The wealth management operations of the major banks currently generate about 7–10 per cent of their group profits, and have been a fairly stable source of earnings.

The strong growth in the managed funds sector in Australia over recent decades has been one of the motivations for the banks to diversify into wealth management operations. The managed funds sector currently has about \$1.6 trillion in funds under management on a consolidated basis, equivalent to almost 110 per cent of GDP, up from about 55 per cent of GDP two decades ago (Table 2.3). Over

the six months to December 2012, assets under management grew by 14 per cent in annualised terms, driven by higher equity prices. Superannuation funds – which account for nearly three-quarters of the managed funds sector – experienced growth of 17 per cent in annualised terms, the strongest rate of growth since the equity market recovery in 2009 (Graph 2.22).

Graph 2.22
Superannuation Funds' Financial Performance*

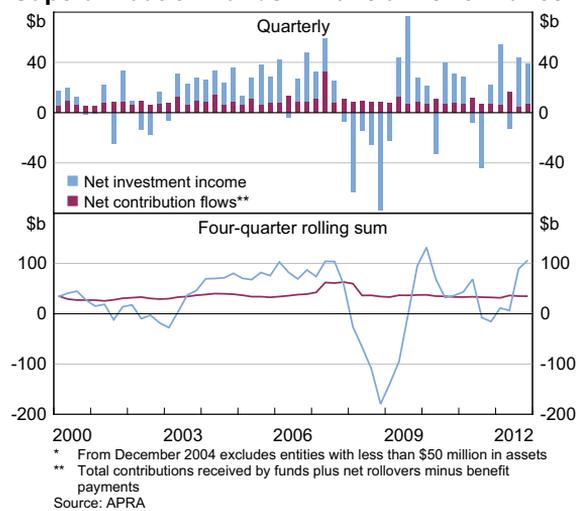


Table 2.3: Assets of Domestic Funds Management Institutions
As at December 2012

	Level \$ billion	Share of total Per cent	Six-month-ended annualised change	
			Jun 12 Per cent	Dec 12 Per cent
Superannuation funds	1 457	73	12.7	17.0
Life insurers ^(a)	246	12	5.9	9.3
Public unit trusts	264	13	-3.2	2.7
Other managed funds ^(b)	42	2	6.5	1.1
Total (unconsolidated)	2 010	100	9.3	13.6
<i>of which:</i>				
Cross investments	406	–	6.6	11.5
Total (consolidated)	1 604	–	10.0	14.2

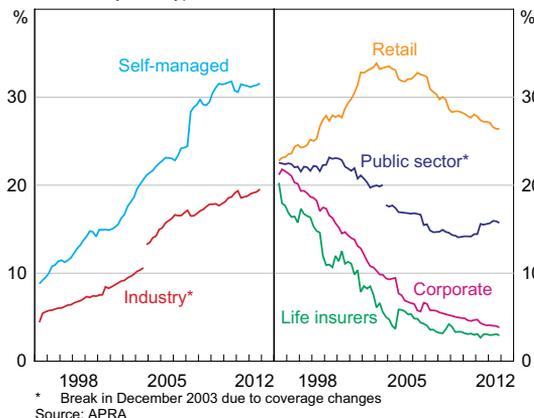
(a) Includes superannuation assets held in statutory funds of life insurers

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

Source: ABS

Self-managed superannuation funds (SMSFs) have become a significant part of the superannuation industry, with around \$470 billion of assets under management as at December 2012. This represents close to one-third of all superannuation assets, a share that has increased by more than 10 percentage points over the past decade (Graph 2.23). Part of the appeal of SMSFs is that they allow people to control their own superannuation investments, although SMSFs are not subject to prudential regulation by APRA and therefore do not benefit from the same protections as APRA-regulated superannuation funds. While borrowing by superannuation funds is generally prohibited, SMSFs are permitted limited use of gearing through non-recourse borrowing. APRA requires banks to take into account the different (and potentially higher) risks posed by SMSF loans when calculating their regulatory capital requirements.

Graph 2.23
Superannuation Assets
By fund type, share of total, unconsolidated

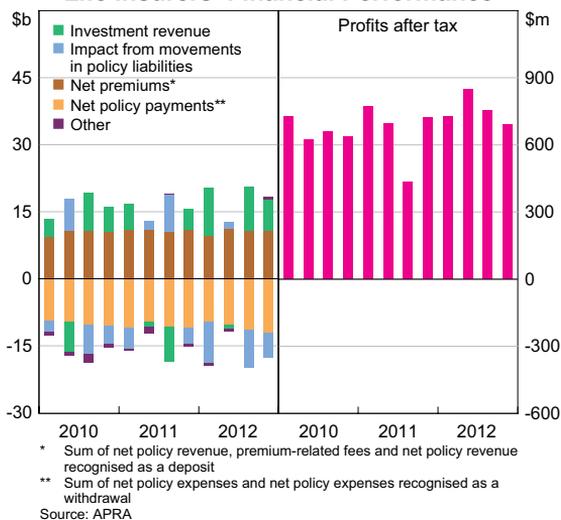


Loans to the superannuation sector have grown strongly in percentage terms over the past several years, but they still account for well under 1 per cent of banks' loan portfolios. Given the limited borrowing from the banking sector at this point, these activities pose limited risks to banks' asset performance. However, there are other important links between the banking and superannuation sectors: superannuation funds have around one-quarter of

their funds invested in bank equity and liabilities, and the superannuation operations of banks make a notable contribution to bank profits.

Life insurers' funds under management rose by about 9 per cent in annualised terms over the second half of 2012, driven by strong investment returns from equities and debt securities. Life insurers reported aggregate profits of \$1.4 billion in the six months to December, around two-thirds of which was derived from their superannuation business and the remainder from their ordinary life insurance business (Graph 2.24). Profits from their superannuation business were a little above average due to strong investment returns, while profits from their ordinary life insurance business were close to their recent average level.

Graph 2.24
Life Insurers' Financial Performance



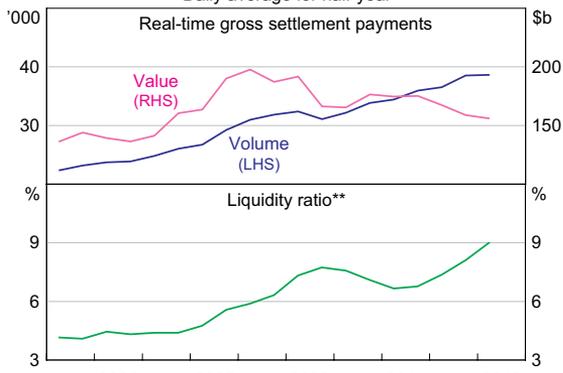
The profitability of the life insurance sector has contributed to its strong capital position over recent years, with the industry holding capital equivalent to 1½ times its capital adequacy requirement as at December 2012. Like general insurers, life insurers are also subject to the revised insurance capital standards that APRA introduced this year; the first data indicating the effect of these standards on life insurers' capital will also be for the March quarter 2013.

Financial Market Infrastructure

Financial market infrastructures (FMIs), such as payment, clearing and settlement systems, are the systems that facilitate most financial transactions and trading activity in the economy. Given the critical services they provide to participants in the financial system, the smooth operation of FMIs is crucial for financial stability.

The Reserve Bank operates Australia's high-value payments settlement system, the Reserve Bank Information and Transfer System (RITS), through which most interbank payments are settled. RITS continued to function smoothly during the past six months, settling around 5 million payments worth \$19 trillion. The average daily volume of transactions settled in RITS was steady over the six months to March 2013 (Graph 2.25). In contrast, the average daily value of transactions declined by 4 per cent to \$156 billion, around 21 per cent below its peak in the March quarter 2008.

Graph 2.25
RITS Payments and Liquidity*
Daily average for half-year



* March 2013 is six-months-to-date

** Measured as total daily average liquidity over real-time gross settlement payments value as a percentage; RITS liquidity is measured as opening exchange settlement account balances with the RBA and average intraday repurchase agreements with the RBA

Source: RBA

The availability of sufficient liquidity is essential for the smooth operation of RITS. Intraday liquidity in RITS increased substantially over the past year, owing to higher intraday repurchase agreements with the RBA. This increased liquidity has enabled a larger share of transactions to settle earlier in the day

relative to the pre-crisis period, helping to reduce potential operational and liquidity risks that could emerge late in the settlement day.

Low-value payments, such as direct entry, consumer electronic (card-based) payments and cheque transactions, are multilaterally netted and settled in RITS in a single batch at 9 am the following day, rather than on a real-time gross settlement basis. In 2010, the Reserve Bank introduced a new system, the Low Value Settlement Service (LVSS), to increase the efficiency of low-value payments settlement. All low-value payment types were successfully migrated to the LVSS by October 2012. The Reserve Bank is working with the industry to implement, for direct entry payments, multilateral settlement at regular intervals on the same day by the end of 2013. This will reduce the credit exposure that can arise when payments are posted to customer accounts ahead of interbank settlement.

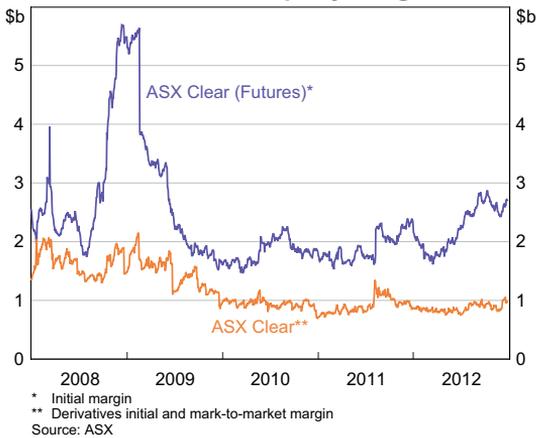
To ensure the safety and stability of the payments system, the Reserve Bank periodically conducts self-assessments of RITS against relevant international principles, which are reviewed by the Payments System Board. The next such review is planned to take place in late 2013.

The two Australian Securities Exchange (ASX) central counterparties, ASX Clear and ASX Clear (Futures), provide centralised management of counterparty risk in the ASX and ASX 24 equities and derivatives markets. From 29 March 2013, the Reserve Bank's revised *Financial Stability Standards* will apply to the two ASX central counterparties (see the 'Developments in the Financial System Architecture' chapter). One important aim of the new standards is to ensure that central counterparties control the risks they pose to the Australian financial system in accordance with international best practice. This includes more granular requirements for the calling of margin from participants and the sufficiency of pooled risk resources held by central counterparties (also known as 'default funds').⁵

⁵ For details of the enhanced requirements of the new *Financial Stability Standards*, see Reserve Bank of Australia (2012), *New Financial Stability Standards: Final Standards and Regulation Impact Statement*, December.

Margin held at the central counterparties provides an indication of the aggregate risk of open positions held in normal market conditions. Despite a decrease in the volume of derivatives contracts traded over the second half of 2012, margin held on derivatives positions cleared by ASX Clear increased slightly due to an increase in margin rates (Graph 2.26). The increased margin rates reflect a change to ASX Clear's margining system in December, as well as an increase in price volatility for underlying stocks in the resources and financial sectors. Both upward and downward margin rate adjustments were made for derivatives cleared by ASX Clear (Futures) during the second half of 2012. However, increased position-taking by participants coupled with an increase in the margin rate on one actively traded contract resulted in higher margin held overall.

Graph 2.26
Central Counterparty Margins



Box A

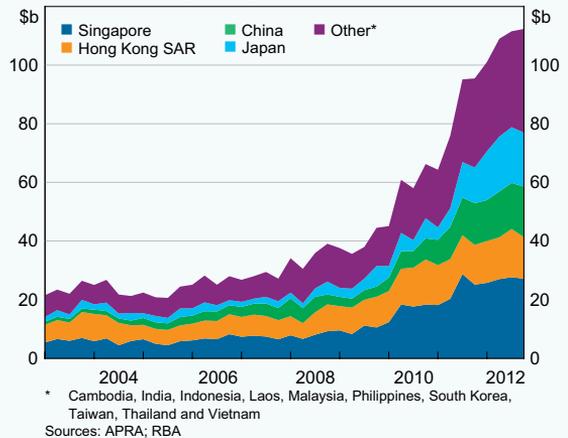
Australian Bank Activity in Asia

The large Australian-owned banks have significantly increased their activity in Asia over recent years. One indicator of this is the consolidated data in the International Banking Statistics, which show that the aggregate claims (i.e. exposures) of all Australian-owned banks on the Asian region were \$112 billion at December 2012, up from \$27 billion five years earlier (Graph A1).¹ Almost all of these claims are due to the four major banks. As a share of their global consolidated assets, Australian-owned banks' claims on Asia rose from 1.2 per cent to 3.6 per cent over this period. While their non-Asian foreign claims are still a much higher share of their global consolidated assets, at around 19 per cent, this share has been declining (see 'The Australian Financial System' chapter). The Australian banks have recorded strong growth in their exposures to a range of Asian countries over recent years, although the bulk of their exposures are to the financial centres of Singapore and Hong Kong, as well as China and Japan, the two largest economies in the region.

A key motivation for the Australian major banks' expansion into Asia is to facilitate the large and growing trade and investment flows between Australia and the Asian region. Accordingly, the banks have been focusing on providing cross-border banking services (such as trade finance and foreign exchange) to their corporate clients engaged in trade and other business in Asia, as well as to Asian

¹ Banks' consolidated on-balance sheet foreign claims in this box are measured on an 'immediate risk' basis – that is, claims are based on the country in which the immediate counterparty resides. Foreign claims can also be measured on an 'ultimate risk' basis, which are immediate risk claims adjusted (via guarantees and other risk transfers) to reflect the country where the counterparty risk ultimately resides. Data on Australian-owned banks' foreign claims are collected by the Australian Prudential Regulation Authority as an input to the Bank for International Settlements' International Banking Statistics. They are available on the RBA website in Statistical Tables B11.2, and B13.1 to B13.2.1.

Graph A1
Australian-owned Banks' Claims on Asia
Consolidated global operations, immediate risk basis



companies with activity in Australia. Some of them have also been targeting foreign companies doing business in Asia, aiming to capitalise on the large and fast-growing intra-Asian trade and investment flows. A similar trend has been observed in the other direction, with many Asian-owned banks looking to increase their involvement in parts of the Australian banking market.² The increased linkages between the Australian and Asian banking systems can partly be seen as a natural consequence of greater regional economic integration.

Consistent with the Australian major banks' focus on trade and other cross-border banking services, the majority of their claims on Asia are recorded as 'international claims', which comprise 'cross-border' claims (those where the counterparty resides in a

² As discussed in 'The Australian Financial System' chapter, Asian-owned banks' share of business lending and syndicated lending in Australia has increased noticeably over recent years. There are currently 16 Asian-owned banks with on-the-ground operations in Australia; six of these established their operations since 2010, while others have a longer-standing presence in the local market.

different country to the banking entity that booked the claim) and local claims of the Australian banks' Asian operations that are denominated in foreign (i.e. non-local) currency (Table A1). This is in contrast to the major banks' main overseas markets, New Zealand and the United Kingdom, where most of their claims are booked through local operations and are claims on local residents denominated in the local currency.

The bulk of the Australian banks' international claims on Asia have less than 12 months to maturity; this is likely to partly reflect their provision of trade facilities, which typically have short maturities of up to 180 days. Some trade facilities, such as letters of credit, are off-balance sheet exposures though, and are therefore not included in these claims data. Short-dated trade facilities typically pose smaller funding and credit risks to banks than long-term lending, and margins on these facilities therefore also tend to be relatively low. The escalation of the euro area debt crisis and the associated pullback of some euro area banks from the Asian region in 2011 and early 2012 created opportunities for Australian banks to expand their trade financing business in the Asian region. More recently, the improvement in global market sentiment and increased competition

from other banks in the region have reportedly contributed to a tightening of margins in these markets. Australian banks are also involved in the provision of long-term corporate loans in Asia, such as through their participation in syndicated lending, although to a lesser extent than some large Asian banks that are expanding in the Asian region.

While increasing their institutional and corporate business in Asia has been the primary focus of the major Australian banks, some of them have also been expanding into retail banking in a number of Asian jurisdictions, including Hong Kong, Indonesia, Singapore, Taiwan and Vietnam. In doing so, the banks have generally targeted certain segments of the retail market, such as more affluent customers or those with links to Australia, partly because of the difficulties competing with the larger incumbent banks in the broader retail market.

While all of the major Australian banks have increased their activity in the Asian region over recent years, ANZ has accounted for a large part of the growth and its overall exposure to Asia is much bigger than those of the other banks. Building a larger presence in Asia is a key component of ANZ's 'super regional' strategy that it adopted in 2007. The other major

Table A1: Australian-owned Banks' Claims on Asia
Consolidated global operations, immediate risk basis, \$ billion

	December 2007	December 2012
Claims by type		
International claims ^(a)	21	65
<i>of which:</i> ^(b)		
0–3 months	10	35
3–12 months	3	11
Greater than 12 months	8	19
Local claims in local currency	6	47
Total claims	27	112

(a) Cross-border claims plus local claims denominated in foreign currency; cross-border claims are those where the counterparty resides in a different country to the banking entity where the claim is booked

(b) Residual maturity basis

Sources: APRA; RBA

Australian banks are also looking to grow their businesses in Asia, but their expansion strategies tend to be more focused on providing cross-border banking services and less on opening Asian retail and corporate banking operations.

Australian banks have used a variety of business structures to expand into Asia. Banks' initial moves into Asian markets have tended to involve opening representative offices or taking minority stakes in existing banks, with the aim of acquiring knowledge about local banking conditions and customs before embarking on more extensive expansions. Over recent years, the banks have increasingly established local branch and subsidiary operations in Asia: the large Australian banks now hold branch banking licences in a range of jurisdictions (most commonly China, Hong Kong, India, Japan and Singapore), while ANZ has subsidiary banking licences in Cambodia, China, Indonesia, Laos and Vietnam (CBA also has a subsidiary in Indonesia). Some of these local operations were the result of acquisitions, most notably ANZ's purchase of parts of Royal Bank of Scotland's operations in Asia in 2009–2010.

A notable feature of the Australian banks' operations in Asia is that local deposits account for a large share of their funding. Banks' deposit funding exceeds their lending in many of their Asian operations; surplus funding appears to be mainly placed in cash and liquid assets. These balance sheet patterns are reasonably common among banks operating in Asia given the high saving rates in many of the Asian economies, reinforced by prudential caps on loan-to-deposit ratios in a few cases.

Australian bank activity in Asia is likely to continue to expand over the longer term as trade and investment between Australia and Asia grow, and banks look to capitalise on growth opportunities in Asian banking systems. If expansion into Asia helps increase and diversify the Australian banks' earnings then this could be beneficial for them and, potentially, for financial stability. However, moving into any new market poses a range of risks that banks need to manage carefully. These risks would probably be heightened if expansion were overly rapid and not backed by a deliberate and well-founded strategy. ✎

3. Business and Household Balance Sheets

Overall, financial stability risks emanating from the domestic business and household sectors remain limited by the generally good condition of these sectors' balance sheets. This follows a period of softer demand for debt by both sectors since the global financial crisis.

Low gearing in the business sector has helped to mitigate some of the risks associated with the softening in business conditions and profitability over the past six months. Weaker conditions have been evident across a number of industries, but particularly the mining sector, following large falls in commodity prices last year. This has flowed through to parts of the non-mining sector, while some industries are also facing ongoing pressures from a persistently high exchange rate and softer consumer demand. This sometimes challenging environment has contributed to higher business failure rates, but despite this, the recovery in banks' business loan performance has continued, supported by the generally solid financial position of the business sector.

The household sector has continued to display a more prudent approach to its finances than in the period prior to the global financial crisis, characterised by a return to more normal saving patterns and reduced appetite for borrowing and investment risk. Many households have been taking advantage of the lower interest-rate environment to repay existing debt more quickly than required and to build mortgage buffers. Consistent with this, housing loan arrears rates have continued to improve across most parts of the country and other indicators of household financial stress remain low. Nonetheless, household

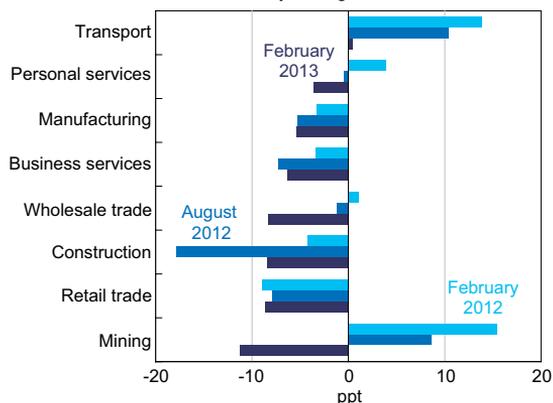
indebtedness and gearing remain around historically high levels. It would therefore be undesirable from a financial stability perspective if households were to exhibit less prudent behaviour than they have over the past few years.

Business Sector

Business conditions and profitability

Overall conditions in the business sector have softened over the past six months. Survey measures imply that conditions are now a bit below average in most industries; reported conditions deteriorated sharply in the mining sector following falls in bulk commodity prices through much of 2012, although prices have subsequently recovered somewhat (Graph 3.1). The softening of conditions in the mining sector is also likely to have weighed on conditions

Graph 3.1
Business Conditions by Industry
 Deviation from industry average since 1989*



* Three-month moving average
 Sources: NAB; RBA

in related industries, such as business services (see also 'Box B: The Financial Condition of Companies Servicing the Mining Sector'). At the same time, the ongoing challenges of a high exchange rate and a return to more traditional borrowing and saving behaviour by households have weighed on the manufacturing, retail and wholesale trade industries.

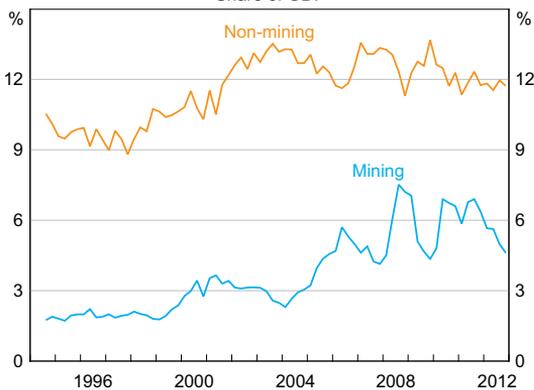
This softening in conditions is consistent with business profitability moderating over the past year. The national accounts measure of non-financial corporate profits declined by 9 per cent over the year to the December quarter 2012. This was driven by mining firms, for which aggregate profits fell by about 25 per cent, to be slightly below their average share of GDP over the past decade (Graph 3.2). Profits of the non-mining sector rose by 2 per cent over this period, although there was considerable divergence across industries: profits fell sharply for manufacturing and wholesale firms, but grew solidly for transport companies. The share of large listed companies reporting losses remains somewhat elevated, but below its peak in the crisis period. Market analysts continue to downgrade their earnings expectations for the coming financial year, with these downgrades having been particularly sharp for the mining sector.

In contrast to larger businesses, surveys indicate that conditions experienced by small businesses

improved slightly towards the end of 2012. National accounts data suggest that unincorporated businesses' profits declined by less than for corporates over the year to the December quarter 2012, which partly reflects the lower share of mining companies in the unincorporated sector. Data for unlisted companies from credit bureau Dun & Bradstreet suggest that profitability for construction firms declined the most over the past year and has trended down since 2007. The share of unlisted firms making losses declined by 1 percentage point in the 2011/12 financial year, but at 21 per cent it remained slightly above its decade average.

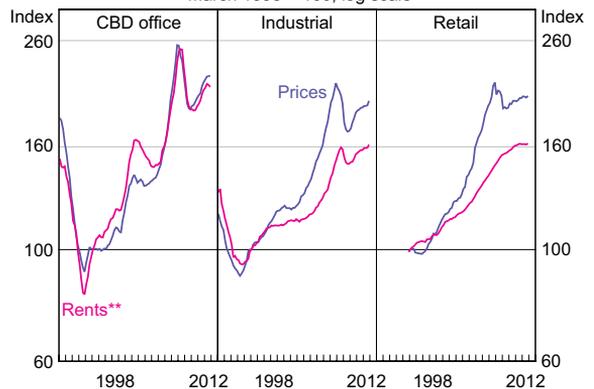
The difficult operating environment being faced by some businesses is also evident in the commercial property sector, a sector to which the banking system has sizeable exposures. The pace of the recovery in commercial property rents and prices slowed in 2012, and conditions generally remain weaker than prior to the crisis across the main market segments (Graph 3.3). In the CBD office market, where conditions had improved the most over the past few years, rents have fallen in recent quarters and vacancy rates have begun to increase again. The increase in office vacancy rates over the second half of 2012 was driven by weaker tenant demand across most capital cities, and followed large supply additions in the first half, particularly in Perth and

Graph 3.2
Private Non-financial Corporates' Profits*
Share of GDP



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

Graph 3.3
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; RBA

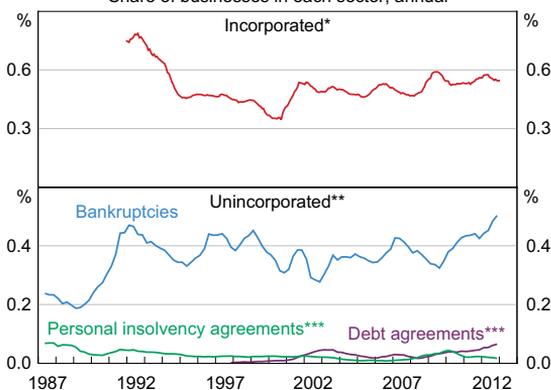
Brisbane. While there is some new supply in the pipeline, private non-residential building activity has been fairly weak compared with the run-up prior to the financial crisis, and the outlook for construction in the near term is subdued: non-residential building approvals in the second half of 2012 were below their average level since the early 1990s as a per cent of GDP, and survey measures of investment intentions are weak.

In line with the general softening in business conditions and profitability, business failure rates have been above average recently. The bankruptcy rate among unincorporated businesses has drifted up over the past three years (Graph 3.4). This reflects both an increase in the number of bankruptcies and a decline in the number of unincorporated businesses, particularly self-employed construction workers. Other kinds of business-related personal administrations, as a share of unincorporated businesses, have collectively also drifted up over the same period. The insolvency rate for incorporated businesses is also elevated, though it is below recent peaks and still well below the level observed in the early 1990s. Incorporated business failures have been concentrated in the construction and services sectors, and by state have been highest in Queensland and New South Wales, and have been

Graph 3.4

Business Failures

Share of businesses in each sector, annual



* Companies entering external administration
 ** Business-related personal bankruptcies and other administrations
 *** Data are backcast before March 2003 to exclude non-business related administrations
 Sources: ABS; ASIC; ITSA; RBA

climbing in Western Australia. For both incorporated and unincorporated businesses, the share of failures attributed to economic conditions has increased in recent years, though most incorporated business failures are still attributed to other factors, such as weakness in business management.

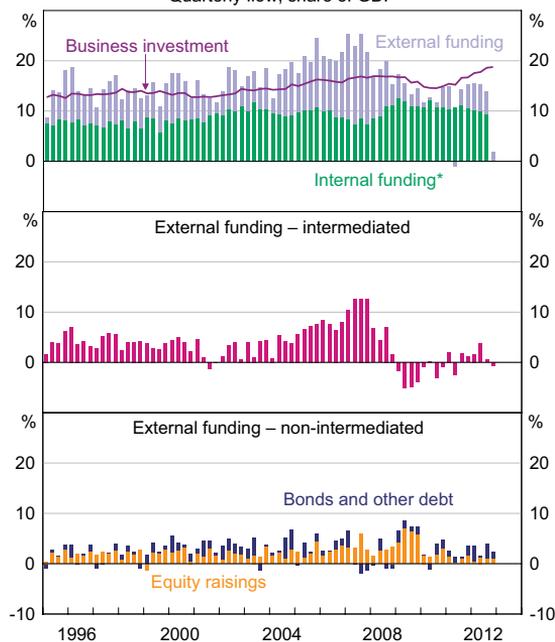
Financing and balance sheet position

Firms' internal funding available to finance investment has declined alongside the decline in profitability. The quarterly flow of internal funding has slowed since the September quarter 2011, but it remains above its long-run average as a share of GDP (Graph 3.5). Among listed corporates, the mining sector drove most of the fall in internal funding (given the sector's sharp fall in profits), although retained earnings continue to be an important source of funding for that sector (Graph 3.6). The mining sector has also been able to access bond markets to help fund its large investment pipeline: mining firms accounted for more than half of all bond issuance

Graph 3.5

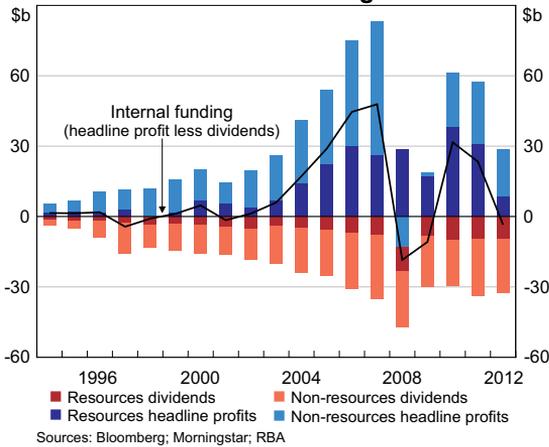
Business Funding

Quarterly flow, share of GDP



* Last observation is September 2012
 Sources: ABS; APRA; ASX; Austraclear; RBA

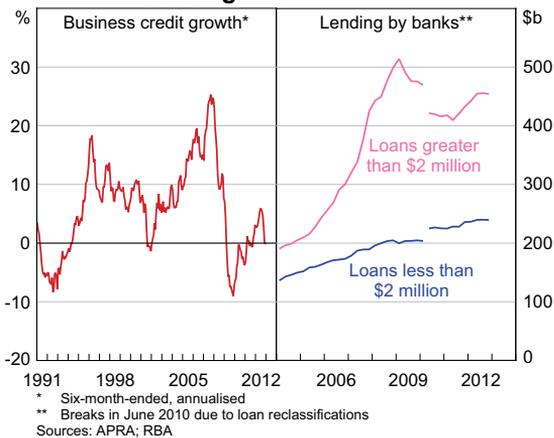
Graph 3.6
Listed Non-financial Corporates' Internal Funding



by Australian non-financial corporates in 2012. Total issuance was quite strong in the year, at about 2 per cent of GDP, as firms took advantage of ongoing foreign appetite for corporate debt, yields at decade lows and the narrowest spreads over government bonds in several years.

In contrast to non-intermediated debt, growth in intermediated business credit has been subdued. After rising by about 3 per cent over the first half of 2012, business credit has been broadly flat since then (Graph 3.7). The recent weakness was evident across a range of industries, and for both small and

Graph 3.7
Lending to Businesses



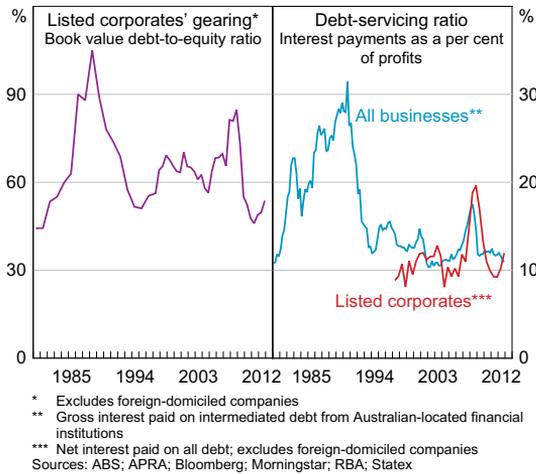
large loans; a split by (typically larger) incorporated businesses and smaller, unincorporated businesses suggests it was driven by a decline in incorporated business lending.

The overall weakness in business credit in recent quarters seems to be mainly due to weak demand rather than supply constraints. As noted, some larger businesses have been tapping bond markets instead of borrowing from banks, with businesses taking advantage of the more favourable terms they can obtain in bond markets than from financial intermediaries such as banks. In addition, liaison with firms indicates that many businesses are still seeking to pay down debt rather than increase borrowings. There are, however, reports that banks have tightened their lending standards to certain segments of the business sector in response to weaker outlooks, such as some parts of the mining sector. This may have resulted in unmet demand for intermediated credit in some sectors: smaller firms in more risky segments that traditionally do not have access to bond markets tend to be those that are reporting difficulty in obtaining finance.

Unlike in previous years, the continued deleveraging by some businesses in response to weak conditions has not been accompanied by strong equity raisings. Both IPOs and issuance of new equity by existing firms remained subdued in the second half of 2012, while buybacks continued to pick up and broadened beyond resources companies.

Deleveraging by many businesses in recent years has resulted in stronger balance sheets and has enhanced the resilience of the business sector to the current weaker conditions. In line with limited growth in business credit, business sector gearing has remained at relatively low levels (Graph 3.8). Among listed non-financial corporates, the aggregate gearing (book value debt-to-equity) ratio is estimated to have increased by 5 percentage points over the year to December 2012, to 54 per cent. The increase was mainly due to the bond-funded expansions of a few mining

Graph 3.8
Business Indebtedness



companies; gearing was steady or fell for around half of listed firms. Infrastructure companies remain highly geared relative to the overall listed sector, reflecting business models that tend to rely more on debt financing. Aggregate leverage for listed real estate investment trusts (REITs) has declined from a peak of 113 per cent in the second half of 2008, to around 50 per cent in December 2012. Dun & Bradstreet data suggest that gearing in the unlisted business sector declined over the year to June 2012: the median gearing ratio for that sector fell to 31 per cent among the 2012 sample of firms, down from 39 per cent in 2011, and well below the pre-crisis average of 57 per cent.

Consistent with low leverage and the recent falls in interest rates, the debt-servicing ratio (DSR) for the business sector overall remains below its long-run average level. However, the DSR for listed companies increased a little over the second half of 2012. This was driven by the increased debt and lower profitability of resources companies, with that sector's DSR rising to around 7 per cent, slightly above its average since the late 1990s. The DSR remains highest for infrastructure companies, reflecting their higher gearing, though at around 40 per cent this ratio remains well below its 2008 peak. The aggregate DSR for REITs has been relatively

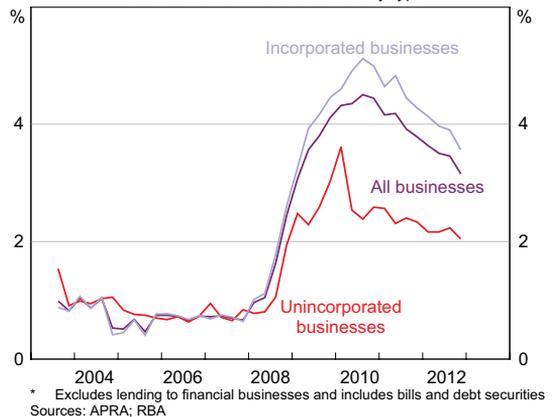
stable for the past 18 months at around 33 per cent, as the effect of declining indebtedness has offset a moderation in profits.

Loan performance

Although overall business conditions and profitability have weakened recently, banks' business loan performance has continued to improve over recent quarters, supported by the healthy condition of businesses' balance sheets (discussed above). As discussed in 'The Australian Financial System' chapter, the non-performing share of banks' business loans has continued to decline from its peak in 2010 (Graph 3.9). The recent decline was driven by loans to incorporated businesses, which had also accounted for much of the earlier increase. Data for the six months to September 2012 from the major banks' Pillar 3 reports show that performance improved most noticeably for loans to the construction, and property and business services sectors, partially offset by weaker performance of loans to the manufacturing sector. Despite the recent improvement, the share of non-performing loans is still above pre-crisis levels, and if the rate of business failures were to remain elevated it may limit further improvement in loan performance.

Much of the improvement in banks' business loan performance was accounted for by commercial

Graph 3.9
Banks' Non-performing Business Assets*
Domestic books, share of loans by type

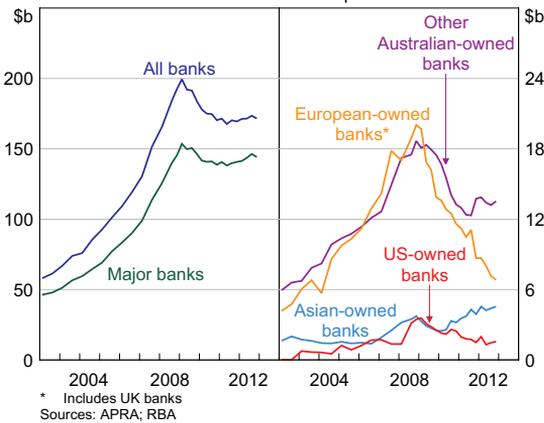


property loans, which make up around one-third of banks' total business lending. The performance of these loans has improved at a faster pace than that of other business loans, partly reversing their earlier disproportionate deterioration; the impairment rate on banks' commercial property exposures was around 3½ per cent in December 2012, down from a peak of about 6 per cent in September 2010. This decline in impairments was driven by a steep fall in the impairment rate for loans to retail property, partly reflecting the 2011 restructuring of the former Centro Property Group.

Following the sharp fall from their 2009 peak, banks' total outstanding commercial property exposures have been broadly unchanged since late 2010 (Graph 3.10). The major banks have, however, increased their exposures over the past 18 months: their outstanding loans are now just 6 per cent below their peak. This has been mostly offset by a continued reduction in commercial property exposures of European banks. Foreign banks have reportedly sold much of their distressed commercial property loan portfolios to hedge funds and other distressed debt investors. Domestic banks appear to have taken a measured approach to resolving some of their troubled exposures in order to avoid putting additional pressure on market valuations.

Graph 3.10

Banks' Commercial Property Exposures
Consolidated Australian operations



Household Sector

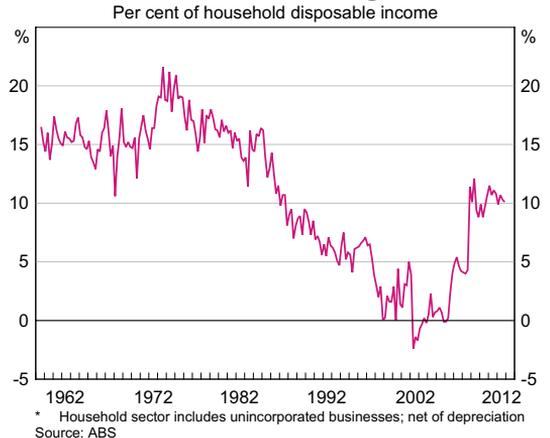
Saving and borrowing behaviour

In recent quarters the household sector has maintained the more prudent approach to its finances that has been evident over the past few years. One indicator of this is the household saving ratio, which has stabilised at around 10 per cent, well above the average for the past 20 years (Graph 3.11). This could be characterised as a return to more normal saving behaviour after the previous two decades of adjustment to disinflation, lower interest rates and financial deregulation. It is unlikely that the saving ratio will return to the higher rates of the 1960s and 1970s, partly because unincorporated enterprises – which tend to save more than employee households – were a bigger share of the economy at that time. Part of this shift in saving behaviour may reflect the changes in households' attitudes towards their finances that have been persistent since the financial crisis.

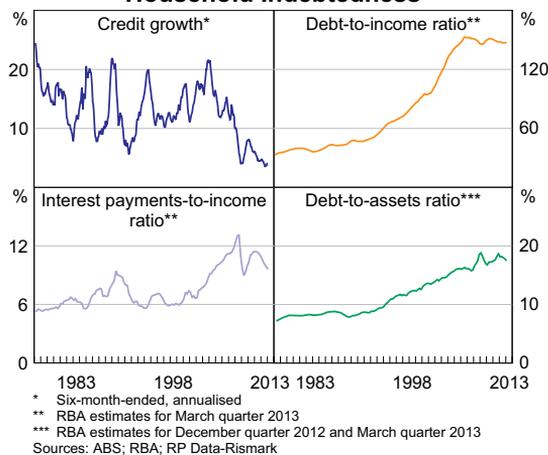
The more prudent approach to finances can also be seen in households' reduced appetite for taking on additional debt since the financial crisis (Graph 3.12). Household credit growth has been slower in the past five years – at an average annual rate of around 5½ per cent – than in the 20 years prior, when it averaged around 13½ per cent. Within household

Graph 3.11

Household Saving*



Graph 3.12
Household Indebtedness

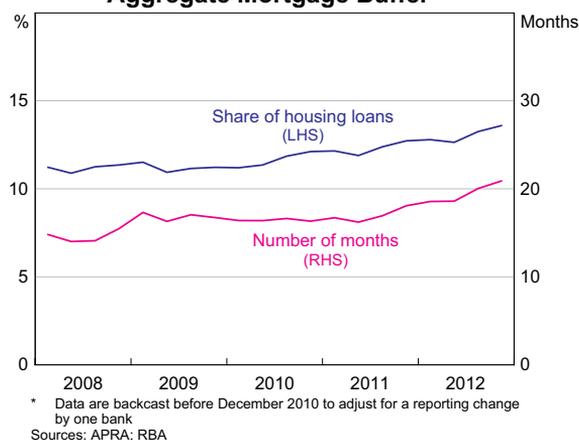


credit, personal credit has declined over the past five years, with a large fall in margin loans partially offset by modest growth in credit card debt. Growth in housing credit has also slowed over this period, to a current annual rate of around 4½ per cent despite a moderate pick-up in the value of housing loan approvals in the past few years. The slower pace of credit growth has been outpaced by income growth in the past couple of years, resulting in the household debt-to-income ratio falling slightly, to 148 per cent, after peaking at 153 per cent in late 2006. Real household disposable income growth has recently slowed a little, however, to 2 per cent over the year to the December quarter 2012. This modest growth in income, combined with the decline in interest rates and slower credit growth, has reduced the share of disposable income used to make interest payments to an estimated 9½ per cent in the March quarter 2013. Household indebtedness and gearing are still around historically high levels though, so from the perspective of their financial resilience it would be preferable if households maintained this more prudent behaviour.

Contributing to the slower pace of credit growth is the fact that many households have been taking advantage of the lower interest rate environment to pay down their debt faster than required. Mortgage buffers – balances in mortgage offset and redraw

facilities – are now estimated to be equivalent to around 14 per cent of the outstanding stock of housing loans (Graph 3.13). When interest rates fall, not all borrowers reduce their mortgage payments, resulting in an increase in prepayment rates. The increase in the rate of prepayment as a result of the decline in mortgage lending rates since late 2011 is estimated to have reduced the growth rate of housing credit by around ½ percentage point over 2012.

Graph 3.13
Aggregate Mortgage Buffer*



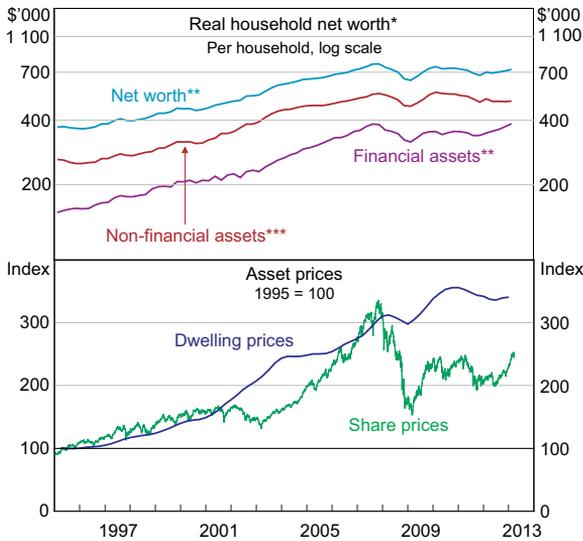
Measured a different way, in aggregate, households' mortgage buffers are equivalent to around 20 months of scheduled repayments (principal plus interest) at current interest rates. This provides considerable scope for many borrowers to continue to meet their loan repayments even during a temporary spell of unemployment or reduced income. As with housing loans, households have also been paying off credit card debt; net repayments on personal credit and charge cards have been above average in recent years and balances on personal credit cards have also slightly declined since mid 2012.

Wealth and investment preferences

The higher household saving ratio has contributed to the rebuilding of household wealth in recent quarters following the falls in asset prices over the few years prior (Graph 3.14). Real net worth per

Graph 3.14

Real Household Net Worth and Asset Prices



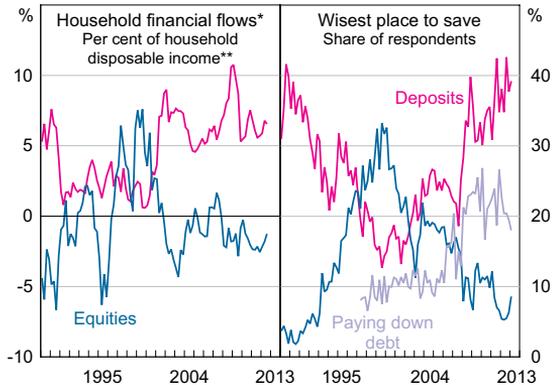
* In 2010/11 dollars; deflated using the household final consumption expenditure implicit price deflator
 ** RBA estimates for December quarter 2012 and March quarter 2013
 *** RBA estimate for March quarter 2013
 Sources: ABS; Bloomberg; RBA; REIA; RP Data-Rismark

household rose by an estimated 3½ per cent over the year to March 2013, to be about 6½ per cent below its 2007 peak. Most of the rise was in the financial assets component; continued net inflows into deposits and superannuation were accompanied by positive valuation effects associated with the recovery in share prices, particularly since the middle of 2012. There has also been a recent pick-up in the value of housing assets, with the average dwelling price rising by around 4 per cent since its trough in May 2012. After the weakness of the past few years, there are some signs that a recovery in housing markets now seems to be underway in most capital cities, with auction clearance rates and rental yields increasing throughout 2012 and in 2013 to date. Assuming household credit growth remains subdued, the recovery in dwelling and share prices is likely to reduce the household debt-to-assets ratio. As yet there is little sign that the recent recovery in asset prices has encouraged households to shift away from their more cautious financial behaviour of recent years or to make less conservative investment choices. Data for the September

quarter 2012 (the latest data available at the time of publication) showed a further net outflow from households' direct equity holdings over the past year, albeit less than in recent years, while flows into deposits remained close to their decade average (Graph 3.15). More recent survey data show most households continue to favour deposits as the 'wisest place' for their savings. Regardless of their financial preferences, from an investor protection perspective, it is always important for households to understand and appropriately manage the risks they take. The recent failure of a number of small finance companies that issued unlisted debentures to retail investors highlights some of the challenges in this area (see the chapter on 'The Australian Financial System' for more detail).

Graph 3.15

Households' Financial Preferences

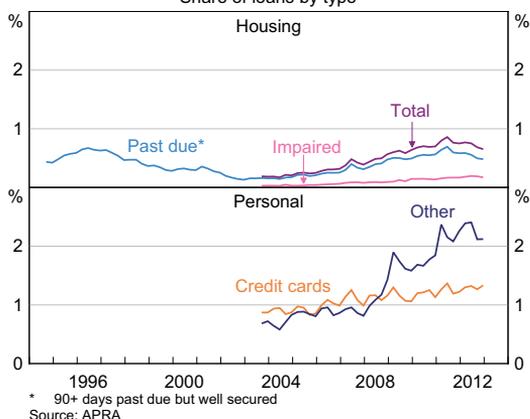


* Four-quarter moving average
 ** Includes income of unincorporated businesses; income is after interest, tax and depreciation
 Sources: ABS; Melbourne Institute and Westpac

Loan performance and other indicators of financial stress

Despite a modest increase in the unemployment rate over 2012, the household sector continues to cope reasonably well with meeting its debt obligations. The non-performing share of housing loans – loans that are past due or impaired – has continued to fall since peaking in June 2011 (Graph 3.16). This decline has been driven by the continued fall in the past-due share of loans, to 0.5 per cent in December 2012. Some financial institutions have indicated that they

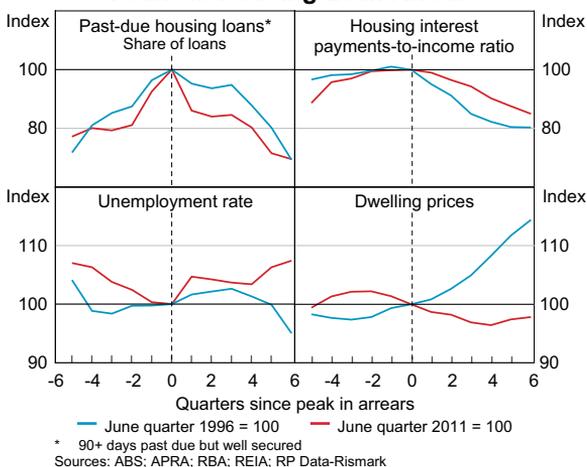
Graph 3.16
Banks' Non-performing Assets
 Share of loans by type



do not anticipate much, if any, further improvement in housing loan performance over the coming year, because the effect of lower interest rates is expected to be offset by that of ongoing softness in the labour market: forward-looking indicators point to only modest employment growth in the coming months. The non-performance rate for banks' credit card lending has drifted up a little in the past couple of years, while the rate for other personal loans has been broadly unchanged at a level that is higher than its average over the early to mid 2000s. While both these loan types are inherently riskier and less likely to be secured than housing loans, they only account for a small (and declining) share of total household credit. A sharp increase in these non-performance rates could, however, provide an early signal of borrower stress.

The fall in housing arrears since its 2011 peak is comparable to the fall seen after the previous peak in 1996, despite less favourable movements recently in some factors that can influence housing loan performance (Graph 3.17). In the current episode, since the peak in arrears dwelling prices have fallen, the unemployment rate has increased and the decline in the housing interest-servicing ratio has been slower and from a higher level than in 1996. Following the peak in arrears in 1996, dwelling prices rose strongly, the unemployment rate eventually

Graph 3.17
Peaks in Housing Loan Arrears



declined, albeit from a higher level than in 2011, and the interest-servicing ratio of households fell sharply.

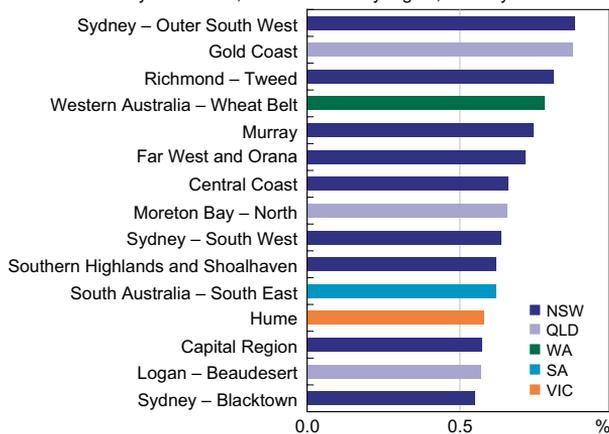
At least part of the recent decline in arrears is a reversal of flood-related payment difficulties for some borrowers, but there is also reason to believe that some households might have become more resilient to economic shocks. For example, products such as home equity loans, redraw facilities and offset accounts are more popular than in the 1990s. These types of loan products make it easier for households to build mortgage buffers, enhancing their ability to cope with income shocks. Survey data also suggest that those households that are financially constrained (unable to make payments for essential goods or services, or having to borrow money from family or friends) are currently holding a smaller share of total owner-occupier housing debt than in the late 1990s. As noted above, the changed sentiment of households towards their finances since the financial crisis has also contributed to a shift in their behaviour towards repaying debt.

At a regional level, data on securitised housing loans suggest that arrears rates have declined in all mainland states since mid 2011. However, there are pockets of weakness, with some regions – such as parts of Sydney's western suburbs – having had high arrears rates for a number of years (Graph 3.18).

Graph 3.18

Regions with the Highest Securitised Housing Loan Arrears Rates*

90+ days in arrears, share of loans by region, January 2013



* Prime loans securitised by all lenders; includes self-securitisations; regions with at least 2 500 loans outstanding
Sources: ABS; Perpetual; RBA

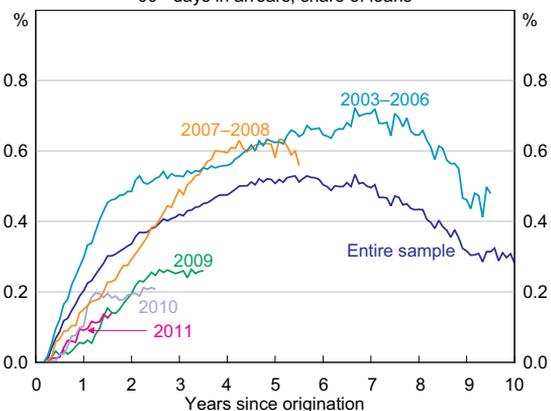
Other regions with relatively high arrears rates include those that have had large dwelling price falls and/or that rely on tourism, a sector that has been under pressure recently from the persistently high exchange rate. Even in some of these regions, though, arrears rates have stabilised or started to fall in recent months; this has been particularly evident in parts of Sydney’s western suburbs and south-east Queensland (including the Gold Coast). The arrears rate in Hobart increased sharply in late 2011 and early 2012, and although it has since improved, it remains relatively high. The increase was likely to have been driven by the increase in the unemployment rate in Tasmania at around the same time. While the January floods in Queensland and northern New South Wales may put some upward pressure on mortgage arrears rates in those areas, the effect on the aggregate arrears rate is expected to be even smaller than in the 2011 floods; in both flooding episodes, hardship relief packages (including ‘payment holidays’) were put in place by banks to help affected borrowers. These packages prevented short-term flood-related difficulties from becoming more ongoing problems, even if in some cases they temporarily boosted reported non-performance rates.

A large share of the housing loans currently in arrears nationally was originated during earlier periods of rapid dwelling price growth and above-average construction activity (Graph 3.19). These periods differed by state: the worst-performing loans tend to have been originated between 2003 and 2006 in New South Wales and between 2007 and 2008 in Queensland and Western Australia. Encouragingly, arrears rates on more recent loan cohorts are lower on average than for the overall loan pool. Even the 2009 cohort has performed well despite it including a high proportion of first home buyers (FHBs), whose typically higher loan-to-valuation ratios (LVRs) might be thought to increase their riskiness.

Graph 3.19

Securitised Housing Loan Arrears by Cohort*

90+ days in arrears, share of loans

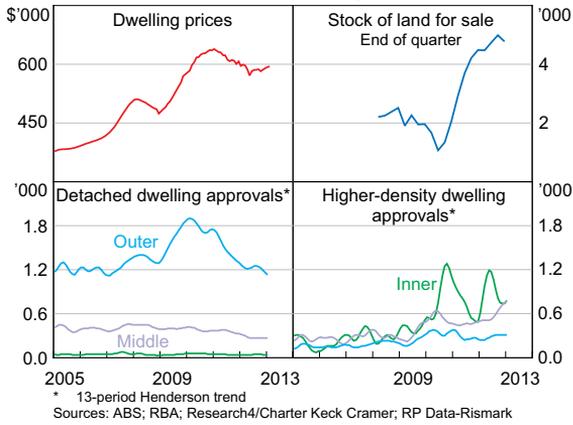


* Prime loans securitised by all lenders; includes self-securitisations
Sources: Perpetual; RBA

Although housing loan arrears rates are currently low across most parts of Victoria, the outlook for the Melbourne property market appears to be softer than for other large cities and some banks have signalled that they will be alert to any signs of deterioration in asset performance. The current stock of land for sale is at a high level and building approvals data point to increases in the stock of housing, and potential oversupply, in some parts of Melbourne, particularly the inner-city apartment market (Graph 3.20). This is on top of previous strong supply of detached housing in the outer suburbs. The increase in the stock of housing is

Graph 3.20

Melbourne Property Market



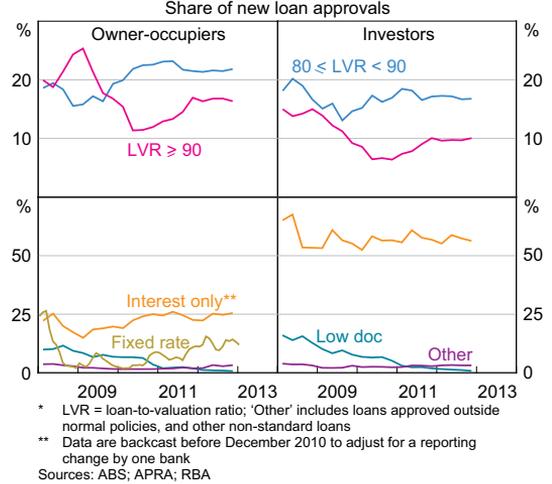
consistent with Melbourne dwelling prices declining further and recovering less of their earlier decline than prices in most other capital cities have done.

Available information suggests that the quality of new housing loans being written should support future loan performance. As noted in the chapter 'The Australian Financial System', a number of banks have recently responded to the decline in mortgage interest rates to below-average levels by increasing the interest rate buffers they use in assessing the capacity of households to service their mortgage. For example, it is now reportedly common for banks to test loan serviceability using interest rates around 1¼ to 2 percentage points higher than their discounted standard variable rates, whereas buffers around ¼ to ½ percentage point less than this were more common a year ago. Increasing these buffers limits the increase in borrowing capacity as interest rates fall, which implies that borrowers would be better able to manage the increase in repayments if interest rates were to rise.

Aside from this change in interest rate buffers, data on the characteristics of new housing loan approvals suggest that banks have broadly maintained the risk profile of their mortgage lending in recent quarters. By value, the share of new housing loan approvals with LVRs above 90 per cent has remained fairly steady at around 14 per cent since late 2011 (Graph 3.21). This is despite a fall in loan approvals

Graph 3.21

Banks' Housing Loan Characteristics*



to FHBs – which typically have higher LVRs – associated with changes in FHB incentives. The share of owner-occupier housing loan approvals at fixed interest rates has been a little above its long-run average in the past six months, at around 13 per cent; the average interest rate on new three-year fixed-rate mortgages is currently at its lowest level since the series began in the early 1990s, at around 20 basis points below the average discounted package rate on new variable-rate mortgages. Low-doc loans continue to decline as a share of the overall market, accounting for just 1 per cent of new loan approvals in the December quarter 2012. The decrease in low-doc lending over the past few years partly reflects the introduction of, and subsequent amendments to, the *National Consumer Credit Protection Act 2009*, which has strengthened the responsible lending obligations on lenders, such as those on verifying that borrowers can reasonably meet their debt commitments. The interest-only share of total housing loan approvals has been broadly steady in recent years, at around 35 per cent; many of these loans include features that encourage the building of mortgage buffers, such as redraw and offset facilities.

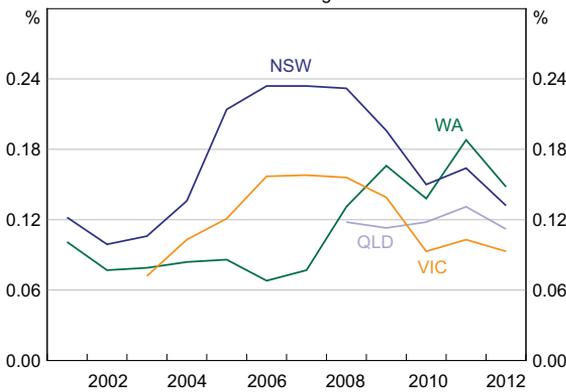
The increasing financial resilience of the household sector is evident across a range of other indicators,

consistent with the overall improving trend in housing loan arrears. In 2012, applications for lender property possession – which typically occur after borrowers have failed to service their debt for a number of months – declined as a share of the dwelling stock, and are now below recent peaks in all the states for which data are available (Graph 3.22). Non-business related personal administrations – which include bankruptcies, debt agreements and personal insolvency agreements – as a share of the adult population also remain below recent peaks in all states and territories.

Consistent with these aggregate indicators, household-level data from the latest Household, Income and Labour Dynamics in Australia (HILDA) Survey (for 2011) continue to show that there is

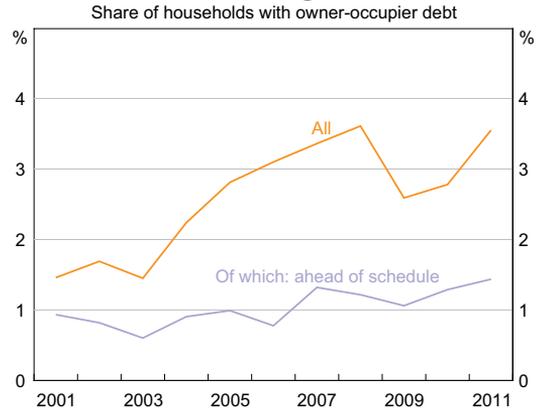
only a small share of highly geared borrowers and that most households are well placed to meet their debt obligations. For example, around 15 per cent of indebted owner-occupier households had a housing gearing ratio greater than 80 per cent in 2011, a share that has been broadly steady over the past few years. The subset of highly geared households that also have high DSRs – and are thus more vulnerable to interest rate increases and income shocks – was around 3½ per cent in 2011 and has likely fallen along with interest rates in 2012 (Graph 3.23). Of these households, around 40 per cent report that they have built up some buffer by being ahead of schedule on their mortgage repayments, suggesting that the share of households that are most vulnerable is even lower at around 2 per cent.

Graph 3.22
Applications for Property Possession*
 Share of dwelling stock



* Includes applications for some commercial properties
 Sources: ABS; RBA; state supreme courts

Graph 3.23
Households with High Gearing and Debt-servicing Ratios*
 Share of households with owner-occupier debt



* Households with housing gearing above 80 per cent and a housing debt-servicing ratio greater than 50 per cent
 Source: HILDA Release 11.0

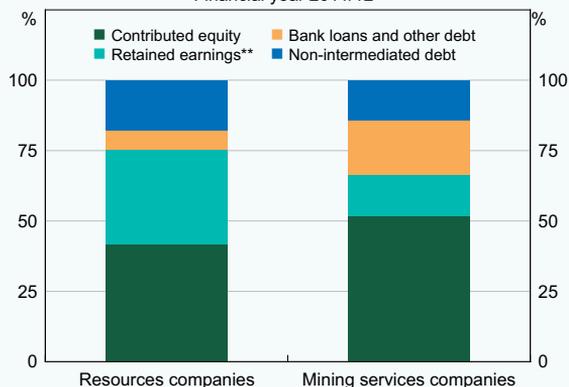
Box B

The Financial Condition of Companies Servicing the Mining Sector

Falls in commodity prices during 2012 led to a reassessment of the conditions and outlook for the mining sector. As a result, mining companies have scaled back their investment plans, with the peak in mining investment as a share of GDP now expected to be lower and to occur earlier than had previously been forecast.

While this highlights a degree of downside risk to mining revenue, which could have important flow-on implications for macroeconomic activity, the direct implications of the revised mining sector outlook for the financial system are likely to be limited; mining companies are typically not highly geared and make little use of intermediated debt (Graph B1).¹ However, there could in principle be indirect implications via companies that service the mining industry, given that these companies have tended to rely more on intermediated debt to fund their investment and are somewhat more highly geared, on average, than mining companies. A significant reduction in demand for mining-related services may therefore mean that some mining services companies could face greater difficulties in repaying their debt; this could lead to loan losses for financial intermediaries even though their overall exposure to mining services companies is small. This box reviews the financial condition of mining services companies in Australia, including their links to the banking sector. Overall, the mining services sector looks reasonably well placed to weather weaker demand for a period and it is therefore unlikely to pose a significant financial stability risk.

Graph B1
Composition of Funding*
Financial year 2011/12



* Listed companies; excludes foreign-domiciled companies; book value of outstanding stock
** Includes reserves
Sources: Morningstar; RBA; company reports

Mining services companies are defined broadly in this box as those providing products or services to the mining sector. These include construction and contract mining, and other mining services, such as equipment, transport, and consulting and scientific services.²

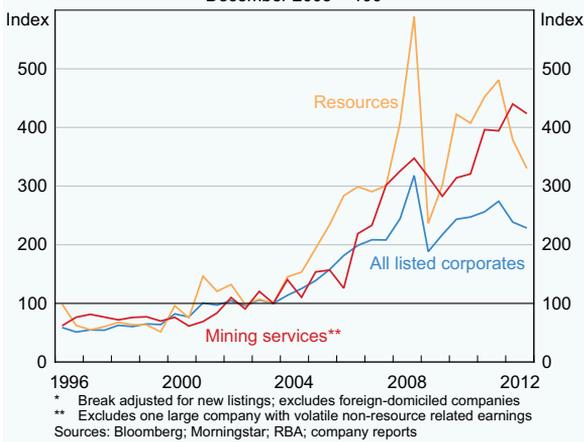
Consistent with the expansion in mining activity and investment, the mining services sector has grown strongly over the past decade. To meet the demand from mining companies, the mining services sector has accumulated assets at a considerable pace, particularly in the form of plant and equipment recently. In line with this, data from company financial reports indicate that earnings growth in

¹ For a more detailed discussion on the funding of investment by the resources sector, see Arsov I, B Shanahan and T Williams (2013), 'Funding the Australian Resources Investment Boom', RBA *Bulletin*, March, pp 51–61.

² The data cover 64 listed companies that have been identified as meeting this definition and are in the industrials, materials and energy sectors of the Global Industry Classification Standard. These companies account for around 6 per cent of the total market capitalisation of listed non-financial corporations. The data include some large and quite diversified companies, although exposure to the mining sector for these companies is still sizeable – at least around 20 per cent of their revenue.

the listed mining services industry kept pace with the strong earnings growth of the listed mining industry between the December half 2003 and the December half 2011, at an average annual growth rate of around 20 per cent (compared with 13 per cent for the broader listed sector) (Graph B2). More recently though, earnings of the listed mining sector have declined sharply, and the scaling back of planned investment expenditure and cost cutting by the sector has reduced actual and expected earnings of listed mining services companies. One implication is that some of the newly acquired capital assets of mining services companies might not be fully utilised, which could affect the sector's profits and its ability to repay debt.

Graph B2
Listed Corporates' Earnings*
 December 2003 = 100

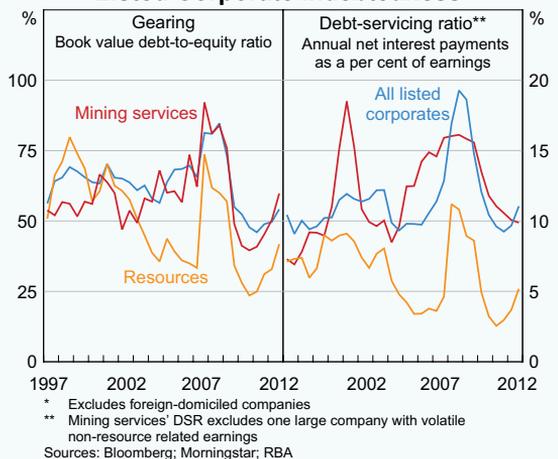


Because the earnings of the defined group of mining services companies are not solely determined by mining-related activities, the effect of any downturn in mining investment should be partially mitigated by demand from other sectors. Indeed, for the larger mining services firms, almost half of their revenue is estimated to be sourced from non-mining activities. The limited available data for smaller mining services companies suggest that several have diversified revenue streams, though they tend to be more

reliant on mining-related activities than larger firms. Even within the mining-related component, revenue is derived from a range of activities. As more investment projects are completed in the years ahead and additional mining production comes on stream, some mining services firms will see rising production-related revenue offset declining construction-related revenue.

The financial resilience of the mining services sector, as well as the linkages to the financial system, is influenced by the composition of these companies' funding. In the early to mid 2000s, mining services companies tended to rely on a fairly stable mix of debt and equity to fund their growth. But their funding became increasingly concentrated in debt in the lead-up to the crisis, resulting in an increase in aggregate gearing (Graph B3). After a period of deleveraging in the aftermath of the crisis, which was also evident in the broader listed non-financial sector, the mining services sector has begun to rely on debt funding again in the past few years. That said, at around 60 per cent, the aggregate gearing ratio of mining services firms is still only around its historical average. It is notably higher than the aggregate gearing ratio among mining companies, but only slightly higher than for the broader listed

Graph B3
Listed Corporate Indebtedness*



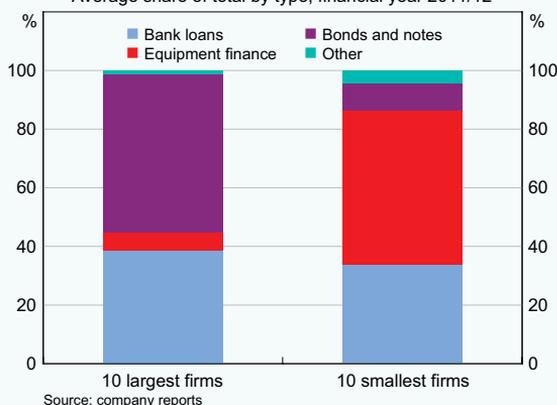
non-financial sector. Despite increased debt, because of low interest rates and strong earnings the proportion of earnings used to service debt is currently quite low, at around 10 per cent.

Within debt funding, the portion that is intermediated is the principal channel through which weakness in the mining services sector could have an effect on the banking sector. Even for the 10 largest mining services companies that have access to bond markets, bank loans account for about 40 per cent of their total debt, on average, and equipment finance arrangements (sourced largely through banks) account for a further 6 per cent. Much of this borrowing is in the form of syndicated loans, however, meaning that the credit risk is spread across a number of financial institutions. By contrast, smaller mining services companies generally do not have access to bond markets. They are therefore more reliant on intermediated credit; bank loans and equipment finance arrangements account for most of their debt (Graph B4).

Overall, despite the recent increase in debt, its low gearing and debt-servicing ratios suggest that the mining services sector is fairly well placed to cope with a period of weaker demand. Additionally, diversification in sources of revenue should shield the sector somewhat from any deterioration in mining-related investment demand. Given this, and combined with the small overall exposure of financial intermediaries to both the mining and mining services sectors, a slowing in mining investment is unlikely to have substantial near-term implications from a financial stability perspective, either directly or through the more indirect channel described here. As always though, lenders will need to appropriately provision for any doubtful exposures, allowing for any deterioration in the outlook for the industry. ↘

Graph B4

Mining Services Companies' Debt
Average share of total by type, financial year 2011/12



4. Developments in the Financial System Architecture

At the international level, financial regulatory reform has been progressing on a number of fronts, including: developing a policy framework to deal with the risks posed by shadow banking systems; modifying aspects of the Basel III liquidity standard; addressing the 'too big to fail' problem posed by systemically important financial institutions (SIFIs); and reforming over-the-counter (OTC) derivatives markets. There has also been more focus recently on the implementation of agreed reforms at the national level and monitoring the consistency of implementation internationally. In Australia, this has been evident in the finalisation of prudential standards to implement the Basel III capital requirements, which took effect from the beginning of this year, and the passage of legislation that will help meet Australia's commitment to move towards greater central clearing and reporting of OTC derivative transactions. In late 2012, the International Monetary Fund (IMF) released its Financial Sector Assessment Program (FSAP) report on Australia, which contained a positive overall assessment of the stability of Australia's financial sector and the quality of domestic financial supervisory and crisis management arrangements.

International Regulatory Developments and Australia

Shadow banking

The Financial Stability Board (FSB) and the international standard-setting bodies have been continuing their work to develop a policy framework to address the risks posed by shadow banking

systems. Preliminary policy recommendations have been developed to strengthen the oversight and regulation of such systems covering five main areas.

- Reducing the risks posed by banks' interactions with shadow banking entities. Steps include: developing better guidance on the scope of consolidation for prudential purposes; introducing a revised large exposures regime for banks to limit interconnectedness with shadow banking entities; and developing a more risk-sensitive capital treatment for banks' equity investments in managed funds. Work in this area is being handled by the Basel Committee on Banking Supervision (BCBS) and detailed policy recommendations are to be developed by mid 2013.
- Introducing common standards for the regulation of money market funds (MMFs), including for these funds' valuation methods, liquidity management and disclosures. The standards also address the issue of MMFs that offer a stable net asset value (NAV), as is common in the United States, which exposes them to the risk of investor 'runs' of the kind seen during the crisis. The International Organization of Securities Commissions (IOSCO) released its final policy recommendations on MMFs in October 2012, including that stable NAV funds convert to a floating NAV (which is the main type of MMF in Australia), where workable. Where conversion is not possible, IOSCO recommended that stable NAV funds be subject to additional safeguards to enhance their resilience to significant redemptions and to internalise the costs arising from any associated risks.

- Introducing risk-retention and enhanced disclosure requirements (including standardised templates for asset-level disclosure) for securitisation products. This work was also led by IOSCO, which released final policy recommendations in November 2012.
- Developing a policy framework for shadow banking entities other than MMFs. The FSB's proposed framework has three parts: an assessment by authorities of shadow banking entities based on the economic functions they perform (rather than legal names or forms); a menu of policy tools, tailored to those economic functions, to address the risks posed by these entities; and an information-sharing process to ensure a degree of international consistency in applying the proposed framework. The proposed policy tools cover a range of measures. For example, loan providers (such as finance companies) could face capital and liquidity requirements and, where they take deposits, could be subject to even tighter bank-like regulation. There is expected to be enough flexibility in the framework that tools would only be applied when deemed necessary by authorities.
- A series of recommendations for securities lending and repurchase agreements ('repos'). These include: improved regulatory reporting, market transparency and corporate disclosures; introduction of minimum standards for haircut practices (including possible numerical floors); and evaluation by national authorities of the costs and benefits of introducing central counterparties (CCPs) in securities lending and repo markets.

The policy recommendations for the latter two areas, which are overseen by the FSB, are currently being refined following a public consultation process. The FSB expects to present final recommendations in all five areas to the G20 Leaders' Summit in September 2013.

The shadow banking recommendations will allow for discretion in how countries adopt them. Once

they are finalised, regulators in Australia will need to assess the relevance of the recommendations in the context of Australia's relatively small and declining shadow banking sector (see 'The Australian Financial System' chapter). The failure of an Australian retail debenture issuer and property lender in late 2012, and others like it in recent years, prompted a review of the regulatory framework for these types of finance companies, which are one of the main types of intermediaries considered to be shadow banking entities in Australia. Given that retail debenture issuers are a very small segment of the Australian financial system, they are mainly relevant from an investor protection, rather than financial stability, standpoint. The government asked the Australian Securities and Investments Commission (ASIC) and the Australian Prudential Regulation Authority (APRA) to consult on proposals to strengthen the regulation of finance companies that issue debentures to retail investors and on-lend the invested funds. ASIC recently released its specific proposals, which include mandatory minimum capital and liquidity requirements for issuers, improved ongoing disclosure to investors and measures to enhance the ability of trustees to monitor the financial performance of issuers and compliance with their legal obligations. ASIC's proposals do not involve prudential supervision of debenture issuers, thus maintaining a clear distinction between the regulatory framework applicable to these entities and the more intensive prudential regime which APRA applies to authorised deposit-taking institutions (ADIs). This distinction will be reinforced by APRA's forthcoming proposals to amend the exemption conditions in the *Banking Act 1959* to restrict retail debenture issuers offering 'at-call' investments and using 'bank-like' terms to describe their products.

Basel III liquidity reforms

The Liquidity Coverage Ratio (LCR) is part of the package of reforms to banks' capital and liquidity requirements, known as Basel III, released by the BCBS in 2010. Since then, a number of elements

of the LCR have been subject to review in light of further consideration of the potential implications of the LCR for financial markets, credit extension and economic growth. As a result of this process, the BCBS' oversight body, the Group of Governors and Heads of Supervision (GHOS), agreed a number of changes to the LCR standard in January this year. Overall, the changes represent a relaxation of some aspects of the LCR, which should allow banks globally to more readily meet the requirements.

The main changes to the LCR standard are that:

- the range of assets potentially eligible as high quality liquid assets (HQLA) was expanded and assumed net outflow rates for a range of deposits and liquidity facilities were reduced. The additional assets include highly rated corporate debt securities, certain equities and residential mortgage-backed securities, all with substantial haircuts, and only if these asset classes can meet the fundamental qualifying test of demonstrable liquidity in a crisis. The aggregate of these extra assets, after haircuts, will be subject to a limit of 15 per cent of HQLA;
- the LCR can be subject to a phase-in period. While the LCR will still commence on 1 January 2015, the minimum requirement will now begin at 60 per cent, rising in equal annual steps of 10 percentage points to reach 100 per cent on 1 January 2019. This graduated approach aligns in part with the timetable for the Basel III capital reforms. GHOS noted that introducing the LCR this way should also minimise potential disruptions to recovering banking systems or the financing of economic activity; and
- banks' access to their stock of HQLA in periods of stress was clarified.

In addition, the BCBS is to undertake further work on the interaction between the LCR and the provision of central bank facilities, given that these facilities are the most reliable form of liquidity. A separate BCBS task force has been established to look at this issue, which is being co-chaired by the Reserve Bank's Assistant Governor (Financial System). The

task force is also examining whether the option of using a central bank facility (such as the Committed Liquidity Facility in Australia) should be available to all jurisdictions or continue to be limited to those with insufficient HQLA.

In Australia, APRA had deferred the release of its final Basel III liquidity standard until the outcome of the BCBS' deliberations on changes to the LCR was known. It is currently considering the implications of the recent LCR changes for its own liquidity standard and is expected to publish a revised standard for consultation in April.

Systemically important financial institutions (SIFIs)

The FSB, along with other international bodies and domestic authorities, has continued implementing aspects of the policy framework released in 2010 to address the risks posed by SIFIs. In late 2012, the FSB released an updated list of global systemically important banks (G-SIBs), in keeping with its commitment to update the list each year based on more current data. The list is largely unchanged from that in 2011, with the number of G-SIBs reduced by one to 28 and no Australian-owned bank appearing on the list. The new list also showed, for the first time, the allocation of the G-SIBs to 'buckets' corresponding to the level of additional common equity loss absorbency (ranging from 1 to 2½ per cent of risk-weighted assets) that they will eventually be required to hold if they remain G-SIBs. As noted in previous *Reviews*, these requirements will be phased in from 2016, initially for those banks identified as G-SIBs in 2014.

Progress has been made in implementing several other G-SIB measures. For example, cross-border crisis management groups (CMGs), comprising the home and key host authorities, have now been established for nearly all the G-SIBs designated by the FSB in 2011, and recovery and resolution plans for these firms are also being developed. Under the FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions* (the *Key Attributes*), firms

are responsible for developing recovery plans to restore their financial viability in the event of distress, while resolution plans are developed by the firms' home and key host authorities and reviewed within CMGs. To allow more time for necessary changes to be made to legal frameworks, the time line for completion of resolution plans for G-SIBs has been extended by six months until June 2013 and the start date of the FSB's resolvability assessment process has been delayed until the second half of 2013. The latter involves a peer review of the feasibility and credibility of putting the resolution plans into operation, which is to be undertaken by officials in the home and key host authorities of each G-SIB.

The FSB and the international standard-setting bodies have continued their work on extending the SIFI framework to non-bank financial institutions. The International Association of Insurance Supervisors (IAIS) issued for consultation policy measures to be applied to global systemically important insurers (G-SIIs). The proposals are broadly consistent with the policy framework for G-SIBs, including enhanced supervision, more effective resolution regimes and higher loss absorption capacity. The IAIS has developed a methodology to identify G-SIIs and the FSB is planning to publish an initial list of G-SIIs, if any, in April 2013. In consultation with IOSCO, the FSB is developing an assessment methodology for identifying globally systemic non-bank, non-insurance firms which is expected to be finalised in late 2013, after a consultation in the second half of this year.

Financial conglomerates and mortgage insurers

The Joint Forum (comprising the BCBS, the IAIS and IOSCO) released revised *Principles for the Supervision of Financial Conglomerates* (the *Principles*) in September 2012. The *Principles* update those issued in 1999 and aim to support consistent supervision of conglomerates, particularly those operating across borders, while capturing a broader range of activities and entities that form part of conglomerate groups.

Several areas in the revised *Principles* are of note. For example, the *Principles* emphasise the importance of a group-level supervisor being assigned, which would be responsible for facilitating coordination between various entity-specific supervisors. A number of principles have been added in the area of corporate governance, for example group governance frameworks are expected to include policies for avoiding conflicts of interest and ensuring that remuneration policies are consistent with the group's risk profile. The risk management principles have also been updated to place greater emphasis on a group's ability to measure, manage and report on all material risks, including those from unregulated entities and activities.

APRA participated in the Joint Forum's review of the *Principles*. Key aspects of APRA's framework for the supervision of conglomerates (referred to as 'Level 3 groups'), which are intended to meet these principles, were issued for consultation in December 2012. APRA's proposals focus on the requirements for group governance and measurement of, and limits on, aggregate risk exposures, including intragroup transactions and exposures. The proposals aim to ensure that APRA's supervision adequately captures the risks to which APRA-regulated institutions within Level 3 groups are exposed and which, because of the operations or structures of the group, might not be adequately captured by existing prudential rules. Underpinning the standards is the view that governance and risk management practices should be consistent across all entities of Level 3 groups that could have a material financial or operational impact on the group, and adequate systems must be in place to monitor intragroup transactions and exposures. APRA anticipates consulting on the other elements of its framework for the supervision of conglomerate groups (i.e. risk management and capital adequacy standards) and on reporting requirements throughout 2013, with the full prudential framework for Level 3 groups to be implemented from 2014.

In February, the Joint Forum released a consultative paper on *Mortgage Insurance: Market Structure*,

Underwriting Cycle and Policy Implications. The paper examines the interaction of mortgage insurers with lenders, particularly in light of the experience since the global financial crisis, which highlighted how mortgage insurance can be subject to concentrated stress in certain extreme events. One of the key recommendations is that policymakers should consider requiring that lenders and insurers align their interests by both sharing in the consequences of a loan not performing. In this way, both parties will have incentives to strengthen lending standards. Other recommendations are directed at supervisors, including that they ensure that both lenders and insurers maintain strong underwriting standards, and that they be alert to and respond to any decline in lending standards. In line with this, it was further recommended that supervisors apply the FSB's *Principles for Sound Residential Mortgage Underwriting Practices* to mortgage insurers. In Australia, mortgage insurers are supervised by APRA and most of the Joint Forum's recommendations are already part of APRA's supervision.

OTC derivatives reform

As noted in previous *Reviews*, the G20 committed to achieving the reforms to OTC derivatives markets (including moving to central clearing of standardised OTC derivatives contracts) by the end of 2012. However, implementation is ongoing in a large number of jurisdictions, with global regulators mindful of the need to minimise unintended consequences that could arise from rapid and significant changes to the functioning of these markets. To better understand the impact of these reforms, it was recently decided that an international macroeconomic impact assessment of the OTC derivatives regulatory reforms would be undertaken by the Bank for International Settlements; a senior Reserve Bank official is on the assessment team.

Policymakers in smaller markets such as Australia have been taking into account the direction of the largest jurisdictions when progressing their domestic reforms. Given the cross-border nature

of many OTC derivatives markets, resolving the remaining cross-border issues has become a priority for many jurisdictions and standard-setting bodies. As international standards and guidance has been finalised, individual jurisdictions have continued to press ahead with implementing these reforms. In many cases, this has involved legislative change so that mandatory clearing, reporting and trading requirements can be imposed on market participants.

Further to the extensive consultation and policy development work undertaken by the Council of Financial Regulators (CFR) over the past two years, several steps have been taken in recent months to progress OTC derivatives reforms in Australia.

- Legislation was passed in December that will allow the government (in consultation with the regulators) to apply mandatory reporting, clearing or platform-based trading requirements to specific classes of OTC derivatives contracts. These requirements would be implemented by supporting rules, which are to be developed and administered by ASIC.
- The new framework will require enhanced consultation and sharing of data among Australian financial sector agencies, so the legislation also included provisions to enhance the Reserve Bank's information-sharing powers. These enhancements will apply to any protected (i.e. institution-specific) information received by the Bank.
- In order to inform any recommendations to the government, the relevant regulators (APRA, ASIC and the Bank) will periodically assess the need for regulatory intervention in the Australian OTC derivatives market. As part of this process, a *Report on the Australian OTC Derivatives Market*, was published in October 2012. It reviewed the risk management practices of market participants in the domestic OTC derivatives market, with a particular focus on how participants are using centralised infrastructure and what scope there might be to increase usage of it. The report

concluded that industry-led uptake of central clearing and trade execution arrangements remains appropriate in the short term. It acknowledged that, although currently there are no licensed entities in Australia offering central clearing of the major OTC derivatives contract classes to Australian-based participants, there are indications that both international and domestic providers may soon begin offering such services. In December, Treasury published for consultation a set of proposals to implement Australia's G20 commitments in line with the conclusions in the assessment report, particularly on mandatory trade reporting.

- To support mandatory trade reporting, ASIC is developing two sets of rules. The first set are Derivative Transaction Rules that will cover the institutional and product scope of mandatory trade reporting obligations, as well as details of how these obligations can be met. ASIC recently initiated a consultation on the second set, Derivative Trade Repository Rules, which relate to the requirements to be met by trade repositories licensed under the new framework in the *Corporations Act 2001*. In developing this licensing regime, ASIC has taken into account elements of the Committee on Payment and Settlement Systems (CPSS)-IOSCO *Principles for Financial Market Infrastructures* that are relevant to trade repositories.

Not all OTC derivatives are sufficiently standardised to be centrally cleared, but their use still requires robust risk management practices. For this reason, international principles are being developed requiring that OTC derivatives that are not centrally cleared be collateralised. As discussed in the previous *Review*, a BCBS-IOSCO working group proposed that non-centrally cleared derivative transactions involve exchanging both variation and initial margin if the parties are financial institutions or systemically important non-financial institutions. Following feedback received during the consultation and the completion of a quantitative impact study to assess the liquidity costs of the proposal, the BCBS

and IOSCO recently consulted on a 'near final' set of principles. The Bank is continuing to monitor the development of these principles and, when they are finalised, will engage with other regulators and market participants on their implementation in Australia.

Supervision and resolution of financial market infrastructures (FMIs)

Adoption of the CPSS-IOSCO *Principles for Financial Market Infrastructures* (the *Principles*) into Australia's legal and regulatory framework proceeded over the past six months. Following consultation in the second half of 2012, the Bank determined revised *Financial Stability Standards* for CCPs and securities settlement facilities that are in line with the *Principles*. ASIC also updated its regulatory guide. The revised *Financial Stability Standards* come into force on 29 March 2013, and the Bank will assess licensed clearing and settlement facilities against them for the first time later this year. The Bank also intends to assess Australia's systemically important payments system, RITS, against the *Principles* in 2013.

As discussed in the previous *Review*, the CPSS and IOSCO released a consultative report, *Recovery and Resolution of Financial Market Infrastructures*, in 2012. This report considered the essential features of recovery and resolution regimes for FMIs and sought views on how the FSB's *Key Attributes* should apply to FMIs. A number of jurisdictions are in the process of developing resolution regimes for FMIs, drawing on this work. In Australia, the CFR recommended to the government in February 2012 that ASIC and the Bank be given the power to appoint a statutory manager to a troubled FMI (also referred to as 'step-in' powers). Work is underway within the CFR to develop legislative proposals that would give effect to this power as part of a comprehensive resolution regime for FMIs, designed in accordance with the *Key Attributes* and along the lines of that in place for ADIs. The results of this work will likely have implications for ASIC's and the Bank's powers and responsibilities in this area.

Credit rating agencies

In the past six months, the FSB has increased its focus again on the use of credit ratings. Credit rating agencies (CRAs), while not a direct cause of the financial crisis, did not adequately alert investors to the risks posed by certain financial products, particularly structured finance products. While the *Principles for Reducing Reliance on CRA Ratings* (the *Principles*) that were released by the FSB in 2010 were intended to reduce the potential for ratings to be relied on in a mechanistic way, progress among FSB members in implementing them has been slow. In response, the FSB developed a 'road map' for accelerating implementation of the *Principles*, which the G20 endorsed in November 2012. The road map consists of two streams of work. The first is to reduce the mechanistic reliance on CRA ratings in regulatory frameworks. Standard-setting bodies and national authorities are to identify and reduce references to credit ratings in standards, laws and regulations. The second is work by authorities to promote and, where needed, require that financial institutions strengthen and disclose information on their own credit risk assessment approaches as a replacement for mechanistic reliance on CRA ratings. In addition to the road map, the FSB recently started a peer review of its members' progress in implementing the *Principles*.

IOSCO is also undertaking work to address weaknesses in CRA business models. In December 2012 it released two reports: one looking at the internal controls designed to ensure the integrity of the credit rating process as well as detailing procedures for CRAs to manage conflicts of interest; and a second that proposed the establishment of supervisory colleges for internationally active CRAs. In addition, IOSCO is currently reviewing its *Code of Conduct Fundamentals for Credit Rating Agencies* that, among other things, seeks to address conflicts of interest.

Peer reviews and implementation monitoring

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. A peer review of resolution regimes is expected to be completed soon and, as noted above, a review has recently started on the use of CRA ratings. In February, the FSB published a thematic peer review on risk governance, which took stock of risk governance arrangements in financial institutions as well as national authorities' oversight of these arrangements. The report highlighted the importance of effective risk governance practices in financial institutions, involving boards of directors, the firm-wide risk management function and the independent assessment of risk governance. The recent crisis revealed that without the appropriate checks and balances provided by the board and these functions, a culture of excessive risk-taking and leverage was allowed to permeate in many institutions. The report lists sound risk governance practices and provides several recommendations aimed at helping institutions improve their risk governance and national authorities to assess its effectiveness. Complementing this FSB review (which focused mainly on banks), in February the IAIS launched a peer review of the corporate and risk governance practices of its members. This will assess observance and understanding of the *Insurance Core Principles* related to licensing, suitability of persons, corporate governance, and risk management and internal controls.

In contrast to the cross-country focus of thematic peer reviews, the FSB's country peer reviews focus on the implementation and effectiveness of regulatory, supervisory or other financial sector standards and policies within individual FSB member jurisdictions. A senior Bank official is participating in a team conducting a country peer review of the United Kingdom this year.

The BCBS is continuing to expand its monitoring of implementation of the Basel III reforms, which is built around three levels of assessment.

1. A semiannual review of members' progress in transposing the Basel III minimum requirements into domestic regulations. As at mid February 2013, 11 BCBS member jurisdictions (including Australia) had issued final regulations and the remaining 16 jurisdictions had tabled draft regulations.
2. Peer reviews of members' domestic regulations to ascertain their consistency with the Basel III minimum requirements. All BCBS members will be assessed over time, with priority being given to home jurisdictions of G-SIBs. Reviews of Japan, the European Union and the United States were published in October 2012 and Singapore in March 2013. Australia is scheduled to be assessed in the second half of 2013.
3. Reviews of supervisory implementation of the Basel III minimum requirements to ensure that the outcomes of the BCBS rules are consistent in practice across banks and jurisdictions. The purpose is to investigate whether there are unintended variations in capital ratios and to formulate policy actions, if applicable. The initial focus of this work is on banks' calculation of risk-weighted assets (RWAs, or the denominator of the capital adequacy ratio), distinguishing between differences that reflect actual differences in risk or supervisory discretion, and those that reflect differences in bank practices and modelling.

Over the past year, the BCBS has monitored the impact on banks of the Basel III framework in order to gather evidence on its dynamics. The analysis was based on data provided by 210 banks globally, split between those that have Tier 1 capital in excess of €3 billion (101 'Group 1' banks) and the remainder ('Group 2' banks). While the Basel III framework sets out transitional arrangements to implement the new standards, the latest monitoring exercise assumed full implementation of the final

Basel III package as of 30 June 2012. The results indicated that, applying the Basel III changes to the definition of capital and RWAs, the average Common Equity Tier 1 capital ratio (CET1) of Group 1 banks was 8.5 per cent, compared with the Basel III minimum requirement of 4.5 per cent. However, some banks had a CET1 ratio below 4.5 per cent; in order for *all* Group 1 banks to exceed this minimum, an aggregate increase of €3.7 billion in CET1 would be required. This latter figure rises to €208 billion for all Group 1 banks to meet a CET1 target ratio of 7.0 per cent (which will eventually be the Basel III requirement including the capital conservation buffer) plus any G-SIB surcharge. These capital shortage estimates are significantly less than the results of the previous exercise six months ago, indicating the progress many banks have made in strengthening their capital positions.

Financial Sector Assessment Program (FSAP) review of Australia

As foreshadowed in the previous *Review*, the IMF published the results of its second FSAP review of Australia in November 2012. Overall, the FSAP contained a positive assessment of the stability of Australia's financial system and the quality of domestic financial supervisory and crisis management arrangements. The IMF provided a number of recommendations that the Australian authorities have under consideration. Among these was the recommendation that the Reserve Bank develop a 'top-down' (macro model-based) stress-testing framework to complement the stress testing already performed by APRA. A program of work to investigate the feasibility of developing such a framework for Australia has now been initiated.

The IMF also made a recommendation to increase the transparency of the CFR's work. While many of the issues discussed by the CFR are reported in the *Financial Stability Review*, a dedicated website for the CFR has recently been launched (www.cfr.gov.au) to improve public understanding of the CFR's work. It includes information on how

the CFR operates and highlights some of the key policy initiatives progressed by the CFR in recent years. It is intended that the website would also be a central platform for information during a financial distress event, complementing that provided by the individual member agencies.

Other Domestic Regulatory Developments

Prudential reforms

In addition to finalising the Basel III capital standards for ADIs, APRA recently completed its review of the capital requirements applicable to life and general insurers, which also came into effect on 1 January 2013. As discussed in the previous *Review*, the new requirements aim to improve the risk sensitivity of the loss-absorbing capacity of insurers and better align the capital standards for insurers with those for other APRA-regulated industries. Following public consultation, APRA also finalised its prudential requirements for superannuation funds late last year and has now released prudential standards relating to governance, risk management, 'fit and proper' requirements, conflicts of interest and investments, among others. Most of the requirements in these new prudential standards will take effect from 1 July 2013.

In January this year, APRA released a discussion paper and an amended draft prudential standard as part of its implementation of the payment, reporting and communications requirements of the Financial Claims Scheme (FCS). The discussion paper examines different payment options and the proposed requirements for ADIs to pre-position themselves so that depositors will have timely access to their guaranteed deposits in the event that the FCS is triggered. ADIs will be required to establish systems necessary to 'operationalise' the FCS should it be activated in the future, including the capacity to quickly generate necessary data and payment instructions for ADI customers. APRA

intends to finalise the amended prudential standard by July 2013. ADIs are already required to have in place by 1 January 2014 the 'single customer view' (SCV) measures. (A SCV is a customer profile that aggregates the balances of all FCS-eligible deposit accounts held by each customer of an ADI for the purposes of calculating FCS payouts.) The full pre-position requirements are to be met by ADIs from 1 July 2014.

Regulation of market and payments infrastructure

The CFR, together with the Australian Competition and Consumer Commission, recently completed a review of competition issues in the clearing and settlement of the Australian cash equity market and the CFR's conclusions were released and endorsed by the government in February. While the CFR remains open to competition and would expect competition to deliver efficient outcomes, one of the key conclusions of the review was that changing current arrangements now would raise industry's costs, particularly in the short term, since system changes would be needed to allow participants to access multiple providers. The government accepted the CFR's recommendation that a decision on any clearing and settlement facility licence application from a CCP seeking to compete in the Australian cash equity market be deferred for two years. In the meantime, in accordance with the CFR's recommendations, the government has called upon the Australian Securities Exchange to work with industry stakeholders to develop a code of practice for clearing and settlement of cash equities in Australia, based on a set of principles relating to user input to governance, transparent and non-discriminatory pricing, and access. At the end of the two years, it is proposed that the CFR carry out a public review of the implementation and effectiveness of the code of practice. At the same time, the CFR would review the prospect of granting a licence to a competing CCP, or of pursuing other regulatory options aimed at ensuring

an efficient market. If competition were to be ruled out indefinitely, the CFR considers that a regulatory response might be appropriate.

ASIC released new competition market integrity rules to address issues arising from the operation of multiple exchanges. These rules form part of ASIC's response to a trend towards more frequent, smaller trades away from public markets. Among other things, they are designed to address the impact of 'dark pools' and trading algorithms on market competition. Under the new rules, market operators are required to establish and maintain systems to identify and prevent anomalous orders entering the market by setting minimum and maximum price thresholds for each product quoted on their market. The new rules also seek to address concerns that dark trading undermines transparency and efficient pricing, as well as to encourage trading on exchanges. The package also includes additional data

reporting requirements to assist ASIC in performing market surveillance. Following work by two task forces on the implications for market quality of dark liquidity and high-frequency trading, ASIC released a consultation paper in March, which proposes amended market integrity rules for these activities and seeks input on the likely impacts on costs and competition from the proposals. In a related development, the government recently announced a review of Australia's financial market licensing regime. The review will examine the licensing of dark pools, and whether the market licensing regime is generally 'fit for purpose'. As part of the review, the Treasury released a paper which considers the adequacy of current licensing arrangements and raises possible options for reform. It also reviews the regulation of non-market participant high-frequency traders. ✎

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HILDA

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