2. The Australian Financial System

The Australian banking system remains in a relatively strong position. Banks' asset performance has been steadily improving despite subdued conditions in parts of the business sector. Banks have also continued to strengthen their capital positions and funding structures, thereby bolstering their ability to deal with future shocks or funding market disruptions. The build-up of common equity capital over recent years has also meant that banks were well placed to meet the Basel III capital requirements that the Australian Prudential Regulation Authority (APRA) began phasing in from the start of this year. Given this, the major banks moderately reduced the pace at which they accumulated common equity in the past year by increasing their dividends.

Despite the more constrained operating environment, the major banks' profitability remains strong, supported by cost-cutting initiatives and lower bad and doubtful debt charges. A focus for the industry in the period ahead will be implementing the new Basel III liquidity standard, as well as dealing with the strategic challenges arising from relatively modest credit growth. Of particular importance is that banks maintain prudent risk appetite and lending standards, especially in the current low interest rate environment.

The general insurance industry remains well capitalised and its profitability has been strong in recent periods, partly reflecting a favourable claims experience. Lenders mortgage insurers have seen higher-than-average claims recently, and thus lower profits, but insured loans originated in the past few years have been performing quite well. Even though lenders mortgage insurers are a small part

of the general insurance industry, they can influence financial stability through their involvement in the credit creation process and linkages with the banking system.

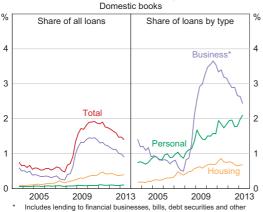
International regulatory reforms are also affecting financial market infrastructures in Australia. In particular, the transition of standardised derivatives to central clearing has gathered pace over the past six months and is expected to continue to do so as the provision of these services expands. At the same time, the Reserve Bank has been strengthening risk management standards for central counterparties operating in Australia given the increased importance of these entities to financial system efficiency and stability.

Asset Performance

Credit risk is one of the main sources of risk facing the banking system given that most Australian banks' business models are heavily focused on lending. The asset performance of Australian banks deteriorated during the 2008–09 crisis period and associated economic slowdown, although it remained much better than that of most other advanced economy banking systems. Over the past six months, the asset performance of Australian banks continued its steady improvement of recent years.

In the banks' domestic portfolio, the ratio of non-performing loans (NPLs) to total loans was 1.4 per cent at June 2013, down from a peak of 1.9 per cent in mid 2010 (Graph 2.1). This improvement has been gradual, primarily due to a sluggish decline in non-performing business loans,

Graph 2.1 Banks' Non-performing Assets



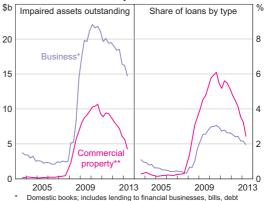
non-household loans Source: APRA

which drove much of the earlier increase. This partly reflects that banks have generally dealt with their stock of impaired business loans (those loans that are not well secured and where repayment is doubtful) at a measured pace in order to maximise recoveries. They have also experienced an above-average inflow of newly impaired assets over this period, in association with difficult conditions in the commercial property market and some parts of the business sector.

Commercial property exposures accounted for a disproportionate share of the impaired assets in banks' business loan portfolios in recent years (Graph 2.2). On a positive note, there has been a further noticeable reduction in commercial property impairments over the past six months, as conditions in parts of the commercial property market have improved and some banks have sold troubled exposures. As a result, around 2½ per cent of banks' domestic commercial property exposures were classified as impaired at June 2013, down from a peak of about 6 per cent in mid 2010. The performance of banks' domestic business exposures outside of the commercial property sector was little changed over the six months to June 2013.

The performance of banks' domestic housing loans has also been fairly steady over recent quarters. The share of those loans that were non-performing

Graph 2.2 **Banks' Impaired Assets**



- securities and other non-household loans
- Consolidated Australian operations

remained around 0.7 per cent over the six months to June 2013, after falling modestly over the previous year and a half. Banks' housing loan portfolios have benefited over the past couple of years from low interest rates and the tightening in mortgage lending standards after 2008; loans originated after this time have performed better than those originated in the preceding few years. Although the share of banks' housing loans classified as past due (in arrears but well secured) has declined, weakness in housing prices in parts of Australia over recent years has seen the share of impaired loans drift higher, to around one-quarter of banks' total non-performing housing loans. However, the pick-up in housing prices in some areas over the past year could help borrowers in arrears to sell their property or refinance with other lenders. It may also allow banks to more easily dispose of their troubled housing assets.

In contrast to banks' housing loan portfolios, the performance of banks' personal loans, including credit cards and other personal loans, has continued to deteriorate. As at June 2013, banks' non-performing personal loan ratio stood at 2.1 per cent, more than double the rate recorded in the years prior to 2008-09. While the upward trend in this ratio likely reflects a combination of compositional factors, an underlying deterioration in credit quality cannot be ruled out. Regardless,

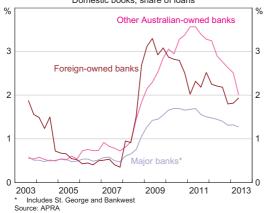
personal loans represent less than 5 per cent of banks' total domestic loans, and therefore have had little influence on banks' overall domestic asset performance and losses.

Within banks' total domestic NPL ratio, both the major banks and the smaller Australian banks recorded better loan performance over the first half of 2013, whereas the foreign-owned banks' NPL ratio rose slightly (Graph 2.3). The significant reduction in the smaller Australian-owned banks' ratio was driven by the sale of a large portfolio of troubled commercial property and large corporate exposures by Suncorp. Despite this, the loan performance of the smaller Australian-owned banks continues to be weaker than the major banks; this is also the case for the foreign-owned banks.

Graph 2.3

Banks' Non-performing Assets

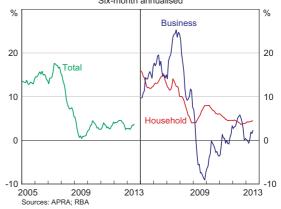
Domestic books, share of loans



Credit Conditions

Banks' domestic loan books have continued to grow at a modest pace. Household credit grew at an annualised rate of 4½ per cent over the six months to July 2013, due to moderate new borrowing and strong prepayment activity (Graph 2.4). Growth in business credit also remains low, consistent with below-average business conditions. Another factor weighing on business credit over the past couple of years is that some large companies have raised a higher share of their debt from global bond markets, given relatively favourable pricing.

Graph 2.4 Credit Growth Six-month annualised



According to liaison, banks are generally expecting demand for credit to remain modest in the coming year. Although credit growth will strengthen at some point, a return to the high growth rates seen for much of the 1990s and 2000s seems highly unlikely, as this largely represented a transition by borrowers and lenders to structurally lower inflation and interest rates. Banks are therefore having to adapt to an environment where their balance sheets grow more in line with borrowers' incomes and the broader economy. It is important that they do not respond to pressures to boost revenue by imprudently loosening their lending standards, or by making ill-considered moves into new markets or products. Based on the available evidence, these responses do not appear to be occurring at this stage. Arguably, pressures to alter practices may be more pronounced for banks with less diversified business models, or if a bank were to have internal incentive structures overly related to revenue growth.

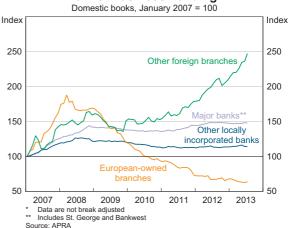
In the residential mortgage market, competition for new borrowers in the past six months has seen some lenders reduce interest rates, increase upfront commissions for brokers and waive application fees. Non-price loan standards, however, appear to have remained fairly steady over recent quarters. Even so, lending practices in the residential mortgage market will be an important area to watch in the period

ahead, as a sustained period of below-average interest rates could increase speculative activity in the housing market and encourage marginal borrowers to increase debt. During the past year, some banks have increased the size of the interest rate add-on they apply to their lending rate when assessing borrowers' loan-servicing capacity, although not always to the same extent as the decline in interest rates.¹

A number of mid-tier banks and smaller lenders have recently expanded into new distribution channels or geographical markets, while a range of banks have been growing their residential property lending to self-managed superannuation funds rather strongly (albeit off a small base). Because they can expose lenders to different risks, including reputational risks, these sorts of expansions into less familiar markets or products require sufficient due diligence before they are undertaken.

According to industry liaison, conditions in the business loan market remain broadly steady. The exception is in the 'wholesale' market (i.e. large-value loans), where competitive pressures have narrowed loan margins and, in some cases, have led to an easing of loan covenants. Some foreign bank branches (mostly those headquartered outside of Europe) have reportedly been competing actively for new business lending, and over the past couple of years they have been able to grow their lending at a relatively fast pace despite overall modest business credit growth (Graph 2.5). Foreign branches' business lending accounts for only a relatively small share of the industry total (about 10 per cent), but monitoring developments in this area is nonetheless an important part of regular financial stability analysis. Over the past decade, this lending has proved to be quite procyclical and has arguably influenced some asset prices (such as commercial property prices) in instances where it has been provided to more marginal borrowers.

Graph 2.5
Banks' Business Lending*



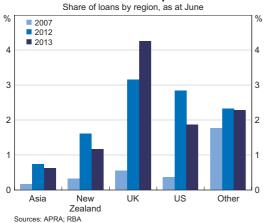
International Exposures

While the Australian-owned banks are primarily domestically focused, their international activities are a significant part of their business; their aggregate foreign claims (i.e. exposures) represent over one-fifth of their global consolidated assets. The bulk of these claims are on New Zealand (about 35 per cent of the total), where the major banks each have large local operations, and the United Kingdom (about 20 per cent). Claims on the Asian region have grown strongly over recent years and now account for more than 15 per cent of the total.

Australian-owned banks' overseas NPLs declined over the past year, although performance across the banks' main overseas markets remains quite diverse. The NPL ratio in the United Kingdom has been high and worsened further over the year to June 2013 (Graph 2.6). Economic and property market conditions have been difficult there for some time; although a modest economic recovery appears to be underway in the United Kingdom, there tends to be a delay before better economic conditions flow through to banks' loan performance. In contrast, loan performance has continued to improve in New Zealand as rural and housing market conditions have strengthened.

¹ For a detailed discussion of banks' serviceability practices, see APRA (2013), 'Loan Serviceability Standards in Housing Lending', APRA Insight, Issue 2, pp 40–54.

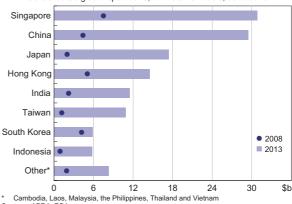
Graph 2.6 Non-performing Assets of Australian-owned **Banks' Overseas Operations**



As discussed in 'The Global Financial Environment' chapter, growth in residential property prices in New Zealand has been associated with historically low interest rates and strong competition for mortgage lending, including in the higher loan-to-valuation ratio (LVR) segment of the market. The Reserve Bank of New Zealand (RBNZ) has responded by modestly increasing capital requirements on residential mortgages and restricting banks' new mortgage lending at higher LVRs. Even though the housing loan portfolios of the Australian major banks' New Zealand subsidiaries are currently performing well, these measures should reduce remaining risks in this part of their business. However, actions to circumvent the RBNZ's lending restrictions or to relax lending standards for other borrowers could pose problems once interest rates eventually rise, or in the event of a downturn in economic and property market conditions there.

The large Australian banks have significantly increased their claims on a number of Asian economies over recent years, including China and India (Graph 2.7). While these expansions could help increase and diversify banks' earnings over the longer term, such moves pose a range of risks that need to be carefully managed. One such risk is that economic and market conditions differ

Graph 2.7 Australian-owned Banks' Claims on Asia Consolidated global operations, ultimate risk basis, as at June



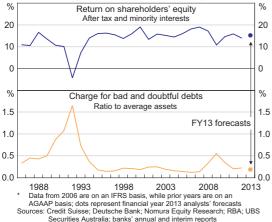
Sources: APRA; RBA

significantly in some of these economies compared with the advanced economies where the Australian banks have tended to be most exposed in the past. Conditions in Asian banking systems have generally been favourable over recent years, but as discussed in 'The Global Financial Environment' chapter, concerns about debt-related vulnerabilities in some Asian economies have recently increased. Even though a significant portion of the Australian banks' exposures in Asia have a relatively low credit risk profile, an unwinding of imbalances in some Asian economies could still present a challenging environment for these banks' local operations.

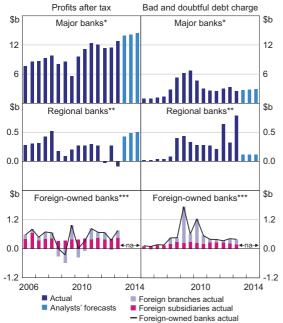
Profitability

Despite slower credit growth and somewhat higher funding costs over recent years, the major Australian banks' profitability has remained robust; their annual return on equity averaged around 15 per cent over 2010-12 (Graph 2.8). Aggregate profit of these banks was \$13 billion in their latest half-yearly results, around 10 per cent higher than the previous half year, but broadly similar to the peak in 2011 (Graph 2.9). At 4 per cent, revenue growth was slightly lower than in recent years, reflecting slower growth in net interest income. However, profitability was supported by a decline in the major banks' bad and doubtful debt charges.

Graph 2.8 Major Banks' Profitability*



Graph 2.9 Banks' Profit



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

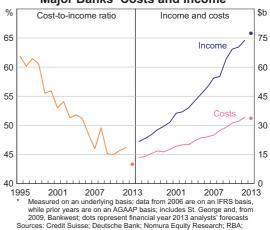
 Suncorp Bank and Bendigo and Adelaide Bank report half year to June
- Suncorp Bank and Bendigo and Adelaide Bank report half year to June and December, while Bank of Queensland reports to February and August
 All results are half year to March and September

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

To counteract the effect of slower credit growth on their profitability, the major banks have focused on fee generation from non-retail customers and cross-selling opportunities, both of which are less dependent on expanding their balance sheet. They have also undertaken a range of initiatives to reduce costs, including restructuring operations, reducing staff in some areas and outsourcing certain support functions or moving them to lower-cost locations offshore. Equity analysts are forecasting that the major banks' operating expenses will fall by 2 per cent in the current financial year, helping to increase their return on equity to a little over 15 per cent.

The major banks' cost-to-income ratio – a common measure of bank efficiency – has been on a downward trend over the past couple of decades, driven by efficiencies related to technological advances (Graph 2.10). At around 40–45 per cent, the major banks' ratios are currently at the bottom end of the range of their peers globally. While there is little sign at this stage that the banks' cost containment has strained their risk management capabilities or controls, there is a question as to how much further they can improve this measure of efficiency without doing so.

Graph 2.10
Major Banks' Costs and Income*



In aggregate, the three regional banks (Suncorp, Bank of Queensland and Bendigo and Adelaide Bank) recorded a small loss of about \$80 million in their latest half-yearly results, reversing the \$270 million profit recorded in the previous half. The main contributor to this result was a \$470 million

UBS Securities Australia: banks' annual and interim reports

increase in the charge for bad and doubtful debts at Suncorp, reflecting the partial sale of a portfolio of non-performing commercial property and corporate loans that had been in run-off since 2009. Equity analysts expect the regional banks' aggregate profits to broadly recover to pre-crisis levels in the next year, due to an improvement in their bad debt charges.

Foreign-owned banks' profits picked up in their latest half-yearly results. After posting a loss in the previous half year, there was a rebound in profits at the foreign branches, while a decrease in the charge for bad and doubtful debts contributed to higher profits at foreign subsidiaries.

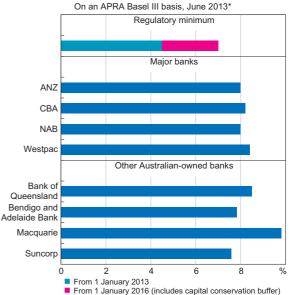
Capital

The introduction of Basel III capital requirements in Australia has been foreshadowed in a number of Reviews since the Basel Committee on Banking Supervision finalised its international framework in 2011. This Review presents the first results for Australian banks under APRA's Basel III capital standard, which it began phasing in from the start of this year. The new requirements raise the level and quality of regulatory capital, and therefore leave the Australian banking system better placed to absorb adverse shocks. As part of this reform, the role of common equity – the highest-quality form of capital - is more prominent, with the introduction of a common equity Tier 1 (CET1) minimum requirement in the capital adequacy framework (for further explanation of the new capital framework, see 'Box B: The Basel III Capital Reforms in Australia'). Australian banks were well placed to meet APRA's new Basel III capital requirements; their robust profitability assisted them to increase their common equity capital significantly over recent years.

Banks' aggregate CET1 was 8.5 per cent of risk-weighted assets (RWAs) at June 2013. Individual public disclosures by the Australian banks indicate that their CET1 capital ratios are all currently 7 per cent or greater, well above the 4½ per cent CET1 minimum that is now required by APRA (Graph 2.11). These ratios also exceed the 7 per cent requirement

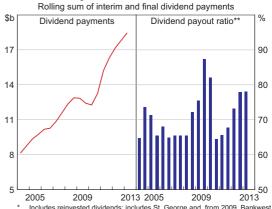
(including the capital conservation buffer) that banks are required to meet by 2016. The major banks have moderately reduced the pace at which they accumulate common equity capital during the past year by increasing dividends – their average dividend payout ratio was 5–10 percentage points higher than in the previous year or so (Graph 2.12). In addition, they have fully or partially neutralised

Graph 2.11
Banks' Common Equity Tier 1 Capital Ratios



* May 2013 for Bank of Queensland Source: banks' financial disclosures

Graph 2.12 Major Banks' Dividends*

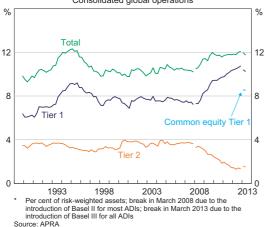


* Includes reinvested dividends; includes St. George and, from 2009, Bankwest *Dividend payment to net profit after income tax Source: APRA

the boost to common equity arising from their dividend reinvestment plans by purchasing shares in the market. There could be shareholder pressure for further capital distributions given that the Australian banks' capital positions already exceed Basel III minimums ahead of APRA's required time lines. In considering potential actions, banks need to ensure that their internal capital buffers are sufficient to cope with stressed situations, as well as any capital add-ons that APRA may impose because of their risk profile or domestic systemic importance.²

The introduction of Basel III complicates the comparison of 2013 with pre-2013 banking system capital ratios due to the definitional differences. That said, the total capital ratio is the least affected and this declined slightly over the six months to June 2013, to 11.7 per cent (Graph 2.13). Within the total, the Tier 1 capital ratio fell and the Tier 2 capital ratio increased, largely because of a reclassification of deductions from capital, which reduced banks' Tier 1 capital but had the reverse effect on Tier 2 capital. The total capital ratio for credit unions and building societies (CUBS) was broadly unchanged at 16.7 per cent over the first half of 2013, having been little affected by the Basel III changes; their CET1

> Graph 2.13 **Banks' Capital Ratios*** Consolidated global operations

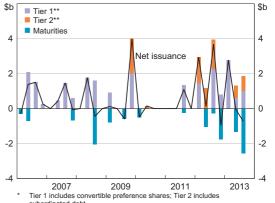


² For further explanation of appropriate capital buffers for banks, see APRA (2013), 'ADI Industry Risks', APRA Insight, Issue 2, pp 4-39.

capital ratio was 15.7 per cent at June 2013. The high capital ratios of CUBS relative to that of banks are appropriate given their less diversified business models and different corporate structures.

Banks' issuance of non-common equity capital (often referred to as 'hybrids') has been strong recently, as banks replace maturing instruments with Basel III compliant instruments. Since October 2012, banks have issued almost \$7 billion of Tier 1 and Tier 2 non-common equity instruments, equivalent to 0.4 per cent of their RWAs (Graph 2.14). To be counted as capital under Basel III, any of these instruments issued after 1 January 2013 are required to have a regulatory trigger, whereby they convert to common equity or are written off if APRA deems the bank would become non-viable without it (and, in some cases, also if the bank's CET1 ratio falls below 5.125 per cent). Despite their complex nature, take-up of these instruments has been almost entirely from retail investors, particularly self-managed superannuation funds. A number of recent bank non-common equity offerings have been upsized, with retail investors currently attracted to their higher yields. The Australian Securities and Investments Commission (ASIC) has been reviewing product disclosure statements to ensure risks are adequately communicated to retail investors and

Graph 2.14 Banks' Non-common Equity Capital Issuance and Maturities*



subordinated debt

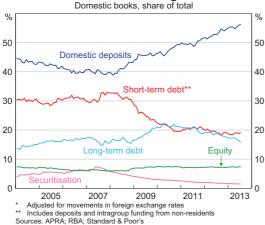
September 2013 is quarter-to-date Sources: RBA; company announcements

has issued public warnings about the risks associated with holding these instruments. In August 2013, it released a report to generate further awareness about these issues and to highlight current market practices, including the sale process for these products.³

Funding and Liquidity

Banks have continued to improve their resilience to funding market disruptions by adjusting the composition of funding. The banks' share of short-term wholesale funding – which is typically perceived by markets to be a less stable source of funding – has declined, while domestic deposit funding has risen further and now accounts for 56 per cent of the total (Graph 2.15).

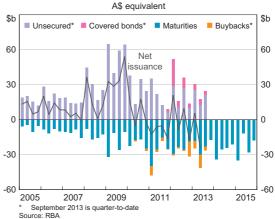
Graph 2.15
Banks' Funding*



Banks' funding strategies in recent years have generally been to roll over their existing term wholesale debt and fund new loans with new deposits. Over the past year, banks' net deposit flows have significantly exceeded their net credit flows: banks' deposits are currently growing at an annual rate of about 7 per cent, well above credit growth of around 3 per cent. This recent funding pattern has allowed banks to reduce the share of their balance sheets funded by wholesale debt.

Australian banks issued around \$40 billion of bonds in the six months to September: almost no long-term debt was issued during the mid 2013 period of global debt market volatility arising from speculation about the future course of US monetary policy (Graph 2.16). Over the past six months, bond issuance was about 40 per cent below the total of bond maturities and buybacks of government guaranteed bonds. The buybacks had the effect of moderately increasing the weighted average maturity of the Australian banks' outstanding wholesale debt, because those bonds were mostly maturing in 2014. The depreciation of the Australian dollar against the US dollar this year should slightly reduce the need for banks to use global funding markets, as less foreign currency issuance is required to fund the same amount of Australian dollar lending.

Graph 2.16
Banks' Bond Issuance and Maturities



Conditions in the residential mortgage-backed securities (RMBS) market remain stronger than in previous years; spreads are currently around their lowest level since the beginning of the financial crisis in 2007. Australian financial institutions issued over \$10 billion in RMBS in the six months to September 2013. Smaller institutions have accounted for a disproportionate share of issuance in this period (over two-thirds), consistent with their less ready access to bond markets than the major banks.

³ For further details, see ASIC (2013), 'Hybrid Securities', Report 365, August.

The banks' shift towards deposit funding over recent years has been accompanied by strong competition in the deposit market, and high average spreads on retail deposits to benchmark rates (Graph 2.17). Over the past year, deposit flows have shifted away from term deposits towards at-call savings accounts, consistent with more attractive pricing on at-call savings accounts, especially bonus savings accounts'.

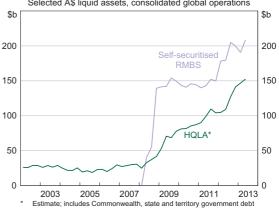
Graph 2.17 Major Banks' Deposit Rates



Looking ahead, banks' deposit strategies will be influenced by the Basel III liquidity standard that will be introduced in Australia from 2015. Under this standard, banks will be required to demonstrate to APRA that they have taken 'all reasonable steps' to meet the Liquidity Coverage Ratio (LCR) requirement through their own balance sheet management, before using the Reserve Bank's Committed Liquidity Facility (CLF) for this purpose. To prepare for the implementation of the LCR requirement, APRA is undertaking a trial exercise in the second half of 2013 that includes pro forma CLF applications by banks.4 A number of banks have already introduced accounts that require depositors to give a certain period of notice before withdrawing funds, while some banks have indicated that they are seeking to refine the pricing of their deposits (as well as their undrawn credit facilities) to take better account of the associated liquidity costs. More generally, banks can also lower their liquidity requirements through continuing to increase the proportion of their assets funded by retail deposits, as well as the term of their wholesale funding.

Banks' holdings of liquid assets have continued to rise ahead of the introduction of the LCR, thereby improving their ability to deal with any future funding stress. Banks' Australian dollar high-quality liquid assets (HQLA) - comprising mostly Commonwealth and state government debt securities – have increased significantly over the past year and are estimated to be around 6 per cent of their Australian dollar domestic assets (Graph 2.18). The Reserve Bank's assessment is that the banking system's current total holdings of Australian dollar HOLA debt securities, while insufficient to meet the LCR fully, is broadly appropriate, given the low overall supply of these HQLA assets and the need for the continued smooth functioning of debt markets. A further factor boosting the banks' liquid assets (including those in foreign currency) has been the depreciation of the Australian dollar this year; banks have received significant collateral inflows from counterparties to their derivative transactions for hedging foreign currency-denominated debt.

Graph 2.18
Australian Banks' Liquid Assets
Selected A\$ liquid assets, consolidated global operations



Estimate; includes Commonwealth, state and territory government debi securities, cash and exchange settlement account balances
 Sources: APRA; RBA

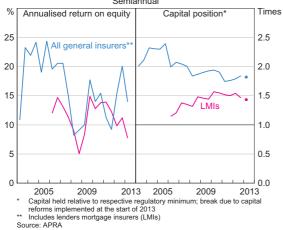
⁴ For further details, see APRA (2013), 'Implementation of the Basel III Liquidity Framework in Australia: Committed Liquidity Facility', Letter to Authorised Deposit-taking Institutions, 8 August.

Banks have also been increasing their overall holdings of securities eligible as collateral for the CLF, including self-securitised assets. Banks' holdings of self-securitised RMBS have risen substantially in recent years, and now total over \$200 billion (8 per cent of their Australian dollar domestic assets). APRA, in consultation with the Reserve Bank, is currently considering the appropriate composition of banks' portfolios of CLF-eligible securities, including the amount of self-securitised RMBS and securities issued by other banks.

General Insurance

As foreshadowed in the previous *Review*, APRA implemented new, more risk-sensitive capital standards for the general insurance industry at the start of 2013. Similar to the new capital standards for ADIs, this complicates comparison with pre-2013 capital ratios. Regardless, under the new framework, the general insurance industry remains well capitalised at about 1.8 times the minimum regulatory requirement (Graph 2.19).

Graph 2.19
Financial Performance of General Insurers
Semiannual



The aggregate profitability of general insurers remains robust; their annualised return on equity was close to 15 per cent in the first half of 2013. General insurers continued to post strong underwriting profits in the past six months, reflecting a generally

favourable claims experience and previous increases in premium rates in the property business lines. There was, however, a moderate fall in their investment income, in part because of lower average yields on their fixed interest investments.

The previous Review highlighted the potential challenges that a prolonged period of low interest rates pose to insurers' profitability. Because insurers invest premium revenue to meet future claim payments, lower returns on their investments can mean that they need to collect more premium revenue to cover future payments. In terms of business activities, the largest effect of lower interest rates is on 'long-tail' insurance lines (e.g. liability insurance), as claims for these products are often finalised many years after the contract has been written. Long-tail insurance lines account for a little under one-third of insurers' premium revenue in Australia (Graph 2.20). General insurers do not appear to be responding to the low-yield environment with significant premium rate increases, given competitive pressures in commercial insurance lines. However, there has recently been a small shift in the composition of some insurers' portfolios into riskier, higher-yielding investments.

The large Australian-owned general insurers have sizeable international operations. QBE, in particular, is focused on foreign markets: according

Graph 2.20
General Insurers' Gross Written Premium*
Share of total, year to June 2013



^{*} Excludes premium from inwards reinsurance

^{**} Fire and industrial special risks insurance Source: APRA

to its latest financial results, around three-quarters of its premium revenue was sourced offshore, compared with about 20 per cent for IAG and 10 per cent for Suncorp. These offshore operations diversify insurance risks, but may also expose the insurers to some different (and potentially less familiar) insurance and investment risks, as well as higher operational risk and risks associated with acquisitions. In recent years, some large insurers have discontinued parts of their offshore operations that had been performing poorly. APRA's consolidated group supervision of insurers oversees risks from both domestic and offshore operations.

Lenders mortgage insurers (LMIs) are specialist general insurers that offer protection to banks and other lenders against losses on defaulted mortgages, in return for an insurance premium that is usually passed onto the borrower. Because of their higher risk profile, mortgages originated with LVRs of 80 per cent or greater are typically fully insured in Australia. LMIs are a small part of the general insurance industry – their gross premium revenue in the year to June 2013 was about 3 per cent of the industry total. Even so, LMIs can influence financial stability through their involvement in the credit creation process and linkages with the banking system (for further discussion, see 'Box C: Lenders Mortgage Insurance').

In contrast to the overall general insurance industry, the profitability of the LMI segment has been softer recently. In the first half of 2013, LMIs' returns on equity slowed to around 8 per cent, owing to weaker investment income and a modest rise in claims expenses. In the past couple of years, LMIs' loss ratio – claims expense as a share of premium revenue – has averaged just under 40 per cent, well above the average of about 25 per cent recorded over 2003–07. Whereas insured mortgages originated in the past few years have been performing well, LMIs have been experiencing above-average claims for loans written during 2007–08, loans to the self-employed and loans for properties in coastal Queensland. The weaker profitability of LMIs in recent years, a

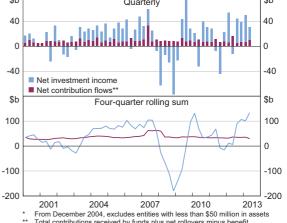
period when some parts of the housing market and economy have been soft, suggests that LMIs' capacity to generate capital internally could be constrained in the event of a severe downturn in the housing and labour markets. APRA sets minimum capital requirements at conservative levels for LMIs to provide an adequate buffer against this risk.

Managed Funds

Assets held by domestic funds management institutions continued to grow at a solid rate over the six months to June 2013, to stand at \$1.7 trillion on a consolidated basis (Table 2.1). Superannuation funds recorded strong investment performance over this period, supported by higher share prices and valuation effects on overseas assets due to the depreciation of the Australian dollar (Graph 2.21). In conjunction with a relatively steady inflow of contributions, superannuation funds under management experienced their strongest annual growth since the share market recovery immediately following the global financial crisis.

Graph 2.21
Superannuation Funds' Financial Performance*

\$b Quarterly \$b \$b\$



** Total contributions received by funds plus net rollovers minus benefit payments Source: APRA

The structure of the managed funds sector has changed markedly over recent decades, driven by the growth of superannuation, which now accounts for nearly three-quarters of all managed fund assets.

Table 2.1: Assets of Domestic Funds Management Institutions

As at June 2013

		Six-month		
		annualised change Share of total		of total
	Level \$ billion	Per cent	Jun 2013 Per cent	Jun 1993 Per cent
Superannuation funds	1 562	15	73	50
Life insurers ^(a)	255	8	12	35
Public unit trusts	271	5	13	9
Other managed funds(b)	39	-13	2	6
Total (unconsolidated)	2 128	12	100	100
Cross investments	429	13		
Total (consolidated)	1 699	11		

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

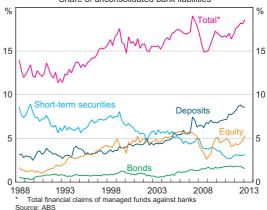
Within the superannuation system, the share of assets in both self-managed superannuation funds (SMSFs) and industry funds has increased noticeably over recent decades, while the share of retail, public sector and corporate funds have all declined. These structural changes affect the banking sector because the two sectors are interconnected. For example, a number of retail superannuation funds are owned by, or related to, banking groups and the managed fund sector is also a source of funding for banks. In the case of SMSFs, the banking sector provides loans to SMSFs, which have grown strongly in recent times, although they still account for a very small share of banks' loan portfolios and hence pose little risk for the financial system at this point. More recently, certain financial institutions (including some banks) are also responding to the growth in SMSFs by becoming more active in the provision of advice on how to set up and manage SMSFs (for a discussion of SMSFs, see the 'Business and Household Finances' chapter).

Regarding the funding linkage, managed funds' holding of deposits, debt securities issued by banks and bank equity is currently equivalent to a little under 20 per cent of banks' liabilities (Graph 2.22). The importance of superannuation funds' deposits

for banks' funding has increased over the past two decades. In part, this is due to the growth of SMSFs and the significantly higher share of funds they allocate to deposits. If these structural changes continue, and as the population ages, superannuants could potentially seek to invest a higher share of their superannuation assets in lower-risk assets such as deposits. While such a development could be beneficial for both them and the banking sector, it could become a concentrated exposure between two parts of the financial system.

Graph 2.22

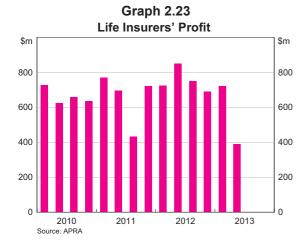
Managed Funds' Claims on Banks
Share of unconsolidated bank liabilities



The life insurance sector is another part of the managed funds sector. Life insurers' business includes investment-linked operations and traditional risk-based operations, such as term life insurance or disability insurance. In recent years, the profitability of some risk-based businesses has been weak, owing to the poor claims experience. In some cases, this has contributed to sharp increases in premium rates.

Another challenge in the life insurance sector has been the number of customers surrendering ('lapsing') their policies. The greater number of lapses has been attributed to several factors, including: a softer economic environment that has led to life insurance policies being discontinued; the compensation structure for financial advisors that encouraged them to switch their clients between policies; and competition for business that has led to more switching between insurers.

Despite these challenges, the life insurance sector has remained profitable in recent years, supported by better investment returns on their own capital. However, profits declined in the first half of 2013, partly due to higher claims on policies (Graph 2.23). Like general insurers, life insurers moved to APRA's more risk-sensitive capital framework at the start of 2013. As at June 2013, life insurers held capital equivalent to almost twice APRA's minimum requirement.



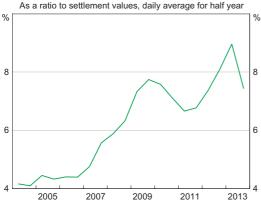
Financial Market Infrastructure

Financial market infrastructures (FMIs), such as payment systems, central counterparties (CCPs) and securities settlement systems, facilitate most financial transactions and trading activity in the economy. In recent years, the G20 has been active in supporting reforms to FMIs, including that all standardised over-the-counter (OTC) derivatives be cleared through a CCP. As a result, the number of FMIs operating in Australia (and elsewhere) is increasing and the types of services provided is expanding – a trend that will likely continue over coming years. The increased use of such infrastructures by banks and other market participants is of itself relevant for financial stability, as are the stability of, and risk management practices adopted by, the FMIs.

Reserve Bank Information and Transfer System

The Reserve Bank Information and Transfer System (RITS) is the system through which most domestic interbank payments in Australian dollars are settled. RITS continued to operate smoothly over the past six months, settling around five million payments worth \$18 trillion. To ensure they have sufficient liquidity to settle their payment obligations, RITS participants are able to supplement the funds held overnight in their exchange settlement accounts (ESAs) at the Reserve Bank by entering into intraday repurchase agreements with the Reserve Bank. As a ratio to settlement values, intraday liquidity declined significantly in the six months to September 2013, although it remains well above that prior to the 2008-09 crisis period (Graph 2.24). Increased liquidity over recent years has enabled a larger share of transactions to settle earlier in the day, helping to reduce potential operational and liquidity risks that may emerge late in the settlement day. In the past six months, 50 per cent of the value of real-time gross payments settled just before 1 pm, compared with around 2.30 pm over 2005-07.

Graph 2.24 RITS Liquidity Ratio*



 RITS liquidity is measured as opening exchange settlement account balances with the RBA and average intraday repurchase agreements with the RBA; September 2013 is six-months-to-date
 Source: RBA

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 basis. Currently, an average of \$18 billion in payments are settled this way each day. The Reserve Bank is working with the industry to implement, from November this year, settlement of direct entry transactions at regular intervals on the same day. In addition to providing benefits to customers, this reform will reduce the credit exposure that can arise when payments are posted to customer accounts ahead of interbank settlement. Because some of the regular settlement batches will be outside normal banking hours, and because the size of transactions that need to be settled late in the day will not be known, the Reserve Bank has announced an arrangement to facilitate substantially higher ESA balances in future.5

Use of CCPs for clearing OTC derivatives

The move to central clearing for standardised OTC derivatives has been detailed in *Reviews* over the past couple of years (see also the 'Developments in

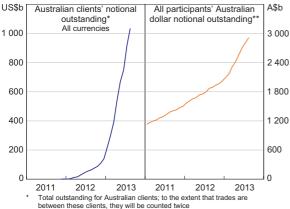
the Financial System Architecture' chapter). In brief, CCPs are designed to protect market participants from the risk that a trade they have executed fails to settle, and in the meantime the price of the asset has moved unfavourably. This is known as replacement cost risk. CCPs protect market participants against this risk by acting as the buyer to every seller and the seller to every buyer in the products that they clear, and honouring related obligations, even if a market participant defaults. This process simplifies the network of interconnections between financial institutions, and, by substituting the numerous bilateral exposures of a market participant for a single net exposure to a CCP, can reduce total counterparty credit exposures. By acting as a hub for market participants, a CCP can improve the effectiveness of default management, coordinate operational improvements and efficiencies across the system and reduce information asymmetries. Accordingly, central clearing can enhance the efficiency, integrity and stability of the financial system.

In Australia, the evidence to date is that the transition to central clearing of interest rate derivatives is accelerating. Over the past 18 months the large Australian banks have established client clearing arrangements, which allow them to clear trades through global CCPs via foreign banks that are participants of these CCPs. The notional value of interest rate derivatives across all currencies submitted under these arrangements by Australian banks to the London-based CCP, LCH.Clearnet Limited (LCH.C), has accelerated sharply in recent months, to around US\$1 trillion by August 2013 (Graph 2.25, left panel). While this remains less than 15 per cent of Australian banks' total notional principal outstanding in interest rate derivatives, the proportion of new transactions submitted to clearing is much higher. At the same time, central clearing of Australian dollar-denominated interest rate derivatives at LCH.C by foreign banks that are direct participants of LCH.C has more than doubled over the past two years (Graph 2.25, right panel); at least some of this activity would have been on

⁵ For further details on the effect of payments reforms on ESA balances, see Debelle (2013), 'The Impact of Payments System and Prudential Reforms on the RBA's Provision of Liquidity', Address to the Australian Financial Markets Association (AFMA) and Reserve Bank of Australia (RBA) Briefing, Sydney, 16 August.

behalf of Australian bank clients. This growth takes the centrally cleared proportion of the Australian dollar-denominated interest rate derivatives market to around one-third.

Graph 2.25
Notional Principal Outstanding of Interest Rate Derivatives at LCH.C



** CCP figures halved to adjust for the double counting that occurs when a trade is novated

Sources: LCH.Clearnet / SwapClear; RBA

This transition to central clearing is expected to accelerate now that two CCPs - LCH.C and ASX Clear (Futures) – have been granted regulatory approval to offer OTC derivatives clearing services directly to Australian participants. LCH.C has been licensed to offer its overseas-based multi-currency interest rate derivatives clearing service in Australia. At the end of June, ASX Clear (Futures) received regulatory approval to launch a dealer-to-dealer service for Australian dollar-denominated interest rate derivatives. The first Australian banks have joined these services, and others are in the process of joining and establishing operational connections. ASX has also signalled its plan to provide for client clearing and expand its service to clear New Zealand dollar-denominated interest rate derivatives by the end of 2013

Risk management by CCPs

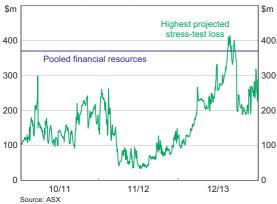
Given the increased importance of FMIs to the financial system, the international regulatory community has also been working in recent years

to strengthen risk management standards for CCPs. The *Principles for Financial Market Infrastructures* were published in April 2012; in Australia, those principles that relate to financial stability have been implemented in the Financial Stability Standards (FSS) determined by the Reserve Bank, complemented by regulatory guidance set by ASIC. The Reserve Bank's FSS came into force on 29 March 2013 and the first assessment of the ASX facilities was published in September 2013.

CCPs manage their financial risks in three key ways: using risk-based participation requirements; collecting initial margin (calibrated according to individual participants' actual exposures); and maintaining pooled financial resources (from the CCP and participants). The pooled financial resources would be drawn upon if a failed participant's initial margin was exhausted: this could occur in periods of abnormal volatility. The FSS require that a CCP run stress tests on a daily basis to determine whether its pooled financial resources are sufficient to withstand the default of the participant, and its affiliates, to which it has the largest exposure in extreme but plausible circumstances. Where a CCP clears complex products or is systemically important in multiple jurisdictions, the pooled financial resources must be sufficient to cover stressed exposures in the event of the simultaneous default of the largest two participants and their affiliates.

In 2012/13, ASX Clear (Futures) tested for a single default; its maximum projected stress-test loss exceeded its pooled financial resources for 17 days in early 2013, with the largest projected shortfall being \$44 million (Graph 2.26). When this occurs, the rules of ASX Clear (Futures) require additional margin to be posted by the participant sufficient to cover at least the shortfall. Frequent and widely dispersed stress-test losses may trigger a decision to increase pooled risk resources. Since these projected losses were due to temporary trading activity by a small number of participants, ASX Clear (Futures) determined that the additional margin was the most appropriate risk control to address this.

Graph 2.26
ASX Clear (Futures) – Stress-test Losses



In August, the Reserve Bank clarified that ASX Clear (Futures) will be held to the higher standard that it cover stressed exposures to its largest two participants (and their affiliates), given it is considered to be systemically important in multiple jurisdictions. ASX Clear (Futures) has also announced an intention to increase its financial resources to support its newly launched OTC derivatives clearing service. By the end of August, ASX Clear (Futures) had increased its financial resources from \$370 million to \$550 million, funded by equity injected from an ASX capital raising. An additional \$100 million is to be contributed as more participants join the OTC derivatives clearing service.