2. The Australian Financial System

Australian banks have increased their resilience to adverse shocks by strengthening their capital positions and funding structures since the global financial crisis. These changes have been beneficial for financial stability, and are being reinforced by the full implementation of Basel III capital and liquidity reforms over the next few years. The four major banks will also be subject to a 'higher loss absorbency' (HLA) capital requirement from 2016, as part of the framework for domestic systemically important banks (D-SIBs) released recently by the Australian Prudential Regulation Authority (APRA). The major banks appear well placed to meet this requirement through internal capital accumulation.

Banks' asset performance has been gradually improving. Accordingly, banks' profits have been supported by further declines in their bad and doubtful debt charges, as well as a range of cost-cutting initiatives. However, with banks' bad and doubtful debt charges now at relatively low levels, and in an environment of moderate credit growth, the sources of profit growth may be more limited in the period ahead. It will be important for financial stability that the banks do not respond by unduly increasing their risk appetite or relaxing their lending standards. One area that warrants particular attention is banks' housing lending practices, given that low interest rates and rising housing prices have the potential to contribute to speculative activity in the housing market.

Profitability remains strong in the domestic general insurance industry, reflecting a favourable claims experience and increases in premium

rates. Profitability for lenders mortgage insurers has been softer than the remainder of the general insurance industry, but there has been a moderate improvement in their claims expense and profits recently, consistent with the strengthening housing market and earlier improvements in underwriting standards. Operating conditions are more difficult in the life insurance industry, with ongoing competitive pressures and higher claims contributing to a reduction in profits in 2013.

Asset Performance

Given that most Australian banks' business models are heavily focused on lending, asset performance is a key indicator of Australian banks' soundness. Following a period of deterioration in 2008-09, Australian banks' asset performance has improved gradually over recent years. In domestic portfolios, the ratio of non-performing loans (NPLs) to total loans was 1.2 per cent at December 2013, down from 1.4 per cent at June 2013 and a peak of 1.9 per cent in mid 2010 (Graph 2.1). This improvement has been primarily due to a fall in the share of loans classified as impaired (those not well secured and where repayment is doubtful), which accounted for much 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.

The decline in banks' domestic impaired assets ratio over the past couple of years has been driven by a steady reduction in the inflow of newly impaired loans (Graph 2.2); in recent quarters the ratio of new impaired assets to total loans has returned to around





long-run average levels, reflecting broad-based improvement across the banking industry. The reduction in part reflects changes in banks' lending standards since 2008 as well as an improvement in the commercial property market.

Banks' commercial property exposures were one of the main drivers of the rapid increase in banks' impaired assets during the 2008–09 crisis period. The share of banks' domestic commercial property exposures classified as impaired reached a peak of 6 per cent in mid 2010, but this has declined gradually since and, at 1.5 per cent, is now at the same level as the impaired ratio for total business lending (Graph 2.3). Banks' impaired commercial property exposures continued to fall markedly over the second half of 2013; as discussed in the chapter on 'Household and Business Finances', some commercial property prices have strengthened recently, while a number of smaller Australian and foreign-owned banks have sold or written off troubled exposures. The performance of banks' domestic business exposures outside of the commercial property sector improved moderately over the second half of 2013.



The non-performing share of banks' domestic housing loan portfolios edged lower over the six months to December 2013, to 0.6 per cent. This ratio has declined from its peak of 0.9 per cent in mid 2011, aided by low interest rates and generally tighter mortgage lending standards in the period since 2008. The ratio of impaired housing loans has fallen slightly over recent quarters; the rise in housing prices appears to have helped banks deal with their troubled housing assets, with a number of banks reporting a reduction in mortgages-in-possession. NPL ratios for both the owner-occupier and investor loan segments have tracked each other closely over the past decade (Graph 2.4).

The share of banks' non-performing personal loans also declined slightly over the second half of 2013,



although at around 2 per cent it remains higher than a few years ago. As noted in the September 2013 *Review*, deterioration in the performance of banks' personal loan portfolios, including credit cards and other personal loans, likely reflects a combination of compositional factors, although 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.

Credit Conditions and Lending Standards

Banks' domestic lending expanded at a moderate pace over the past six months. Housing credit grew at an annualised rate of about 6½ per cent over the six months to January 2014; this is a slightly faster pace than in recent years, largely due to an upswing in investor housing credit growth, which is now growing at about 8½ per cent (Graph 2.5). As discussed in the chapter on 'Household and Business Finances', growth in loan approvals for investor housing has been rapid over the past six months, but total household credit growth has been moderated by ongoing strong prepayment activity. In contrast to household credit, growth in business credit remains slow, consistent with subdued investment intentions in most industries.



In association with strong growth in housing loan approvals, competition for new borrowers has strengthened in the housing loan market. Some banks have increased the discounts on their headline interest rates, waived application fees or raised upfront commissions to mortgage brokers. However, the available evidence suggests that non-price loan standards, such as loan serviceability and deposit criteria, have remained broadly steady in aggregate over recent guarters. For example, low-doc lending continues to represent less than 1 per cent of loan approvals, while the share of loan approvals with loan-to-valuation ratios (LVRs) greater than or equal to 90 per cent has been fairly steady since 2011, at about 13 per cent. It is important for banks' risk management that they are vigilant in maintaining prudent lending standards, given that a combination of historically low interest rates and rising housing prices could encourage speculative activity in the housing market and encourage marginal borrowers to increase debt. APRA's forthcoming Prudential Practice Guide, which will outline its expectations for prudent housing lending practices, should assist banks in this regard.

Although aggregate bank lending to these higher-risk segments has not increased, it is noteworthy that a number of banks are currently expanding their new housing lending at a relatively fast pace in certain borrower, loan and geographic

segments. There are also indications that some lenders are using less conservative serviceability assessments when determining the amount they will lend to selected borrowers. In addition to the general risks associated with rapid loan growth, banks should be mindful that faster-growing loan segments may pose higher risks than average, especially if they are increasing their lending to marginal borrowers or building up concentrated exposures to borrowers posing correlated risks. As noted above, the investor segment is one area where some banks are growing their lending at a relatively strong pace. Even though banks' lending to investors has historically performed broadly in line with their lending to owner-occupiers, it cannot be assumed that this will always be the case. Furthermore, strong investor lending may contribute to a build-up in risk in banks' mortgage portfolios by funding additional speculative demand that increases the chance of a sharp housing market downturn in the future (see 'Household and Business Finances' chapter).

According to industry liaison, lending conditions within the business loan market have continued to ease. In the 'wholesale' market (i.e. large value loans), competition among lenders amid subdued demand for credit has further compressed margins and lengthened loan maturities. In some cases, there has been an easing in loan covenants, including serviceability criteria such as minimum interest coverage ratios. The strengthening in parts of the commercial property market has also resulted in more relaxed loan terms on some commercial property loans. In contrast, there have been some reports of tightening loan conditions for the mining and mining services industries (as well as for households in mining-specific locations), given falling commodity prices.

International Exposures

Australian-owned banks' international exposures arise from the activities of their overseas operations, as well as the direct cross-border activities of their Australian-based operations. In aggregate, Australian-owned banks' international claims (i.e. exposures) represent a little less than one-quarter of their global consolidated assets, which is a smaller share than those of many other advanced banking systems. These international activities can provide income diversification and other benefits to banks, but they also expose them to various risks and could be a source of strain if conditions deteriorate offshore.

Australian-owned banks' claims on New Zealand are larger than those on other jurisdictions because all four major banks have large banking operations there (Table 2.1). The bulk of these exposures are to the private sector, in particular housing and agriculture. Concerns over the effect of strong housing price growth and mortgage market competition on financial stability prompted the Reserve Bank of New Zealand to restrict the proportion of banks' new housing lending at higher LVRs (see 'The Global Financial Environment' chapter). New lending at higher LVRs has declined significantly since the measures were introduced in the latter part of 2013, although there are reports that banks are now competing more aggressively for lower LVR loans. It is unclear what effect the regulatory measures will have on the housing market and banks' credit portfolios over the medium term. The major banks' residential mortgage portfolios in New Zealand had already been performing better and the share of non-performing loans continued its downward trend in the December guarter 2013.

In aggregate, Australian-owned banks also have significant claims on the United Kingdom. The asset performance of these exposures has been relatively weak over recent years because of the difficult economic and property market conditions in the United Kingdom. Despite a modest recovery in the UK economy over recent quarters, bad and doubtful debt charges are still at elevated levels and the NPL ratio remains high at around 4 per cent.

Australian-owned banks' loan performance has been much better in Asia, in part because economic conditions there have generally been favourable. In

Table 2.1: Australian-owned Banks' International Claims

Ultimate risk basis, a	s at end September 2013
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		Total	Of which:		
			Banks	Public sector	Private sector
	\$ billion	Per cent of assets	Per cent of assets	Per cent of assets	Per cent of assets
New Zealand	297.1	9.0	0.5	0.4	8.1
United Kingdom	127.3	3.9	0.7	0.9	2.2
United States	91.0	2.8	0.6	1.1	1.1
Asia ^(a)	140.4	4.3	0.9	1.4	2.0
Emerging Asia	73.6	2.2	0.7	0.4	1.1
Europe	52.7	1.6	0.9	0.2	0.5
Emerging Europe	1.3	0.0	0.0	0.0	0.0
Other	47.4	1.4	0.3	0.4	0.7
Other emerging	12.1	0.4	0.0	0.1	0.2
Total	755.9	22.9	3.8	4.4	14.6

(a) Includes offshore centres Hong Kong and Singapore Sources: APRA; RBA

addition, a significant portion of banks' exposures to Asia have a relatively low credit risk profile.¹ Exposures to the Asian region have grown strongly over recent years, and now account for almost 20 per cent of Australian-owned banks' total international claims. Claims on China, in particular, have increased significantly of late, mainly due to growth in claims on the bank and non-bank private sectors (Graph 2.6). Exposures to Chinese banks account for around one-half of Australian-owned banks' total exposures to China, which is a higher share than for most other jurisdictions.

As discussed in the 'The Global Financial Environment' chapter, there has been renewed focus on debt-related vulnerabilities in emerging markets over recent months amid a reassessment of growth prospects and shifting expectations for US monetary policy. Australian-owned banks' exposures to emerging market economies are relatively small: they represent about 12 per cent of their total international claims and 3 per cent of their global consolidated assets. Most of these exposures are

Graph 2.6 Australian-owned Banks' Claims on Asia Consolidated global operations, ultimate risk basis, as at September



to Asia; exposures to other emerging economies, including those in Europe, are very small. Because their overall exposures are not large, emerging market vulnerabilities do not present a significant direct risk for the Australian-owned banks. However, in the event of slower growth in some Asian jurisdictions, this could still present a challenging environment for banks' operations in those markets. In addition, Australian-owned banks' funding costs

¹ For further details, see RBA (2013), 'Box A: Australian Bank Activity in Asia', *Financial Stability Review*, March, pp 36–38.

could increase if emerging market concerns result in a period of generalised turbulence in global debt markets.

Another channel by which international shocks can, in principle, be transmitted to Australia is through the operations of foreign-owned banks located here and the connections with their offshore parent bank. That said, foreign-owned banks that are headquartered in emerging market economies represent a small share of Australian banking system assets, at 1 per cent, compared with 12 per cent for foreign banks in total. Moreover, as at September 2013, Australian-located foreign-owned banks' claims on emerging Asia were small (around \$16 billion or less than 1 per cent of their total assets), and claims on other emerging economies were negligible.

Profitability

Aggregate profit of the major banks was \$14 billion in their latest half-yearly results, around 23 per cent higher than the corresponding period a year earlier (Graph 2.7). The major banks' profitability was supported by a decline in their bad and doubtful debt charges. In addition, operating expenses declined slightly over the year to the latest half, compared with average annual growth of 7 per cent over the previous decade, as the major banks undertook a range of cost-cutting initiatives. Revenue growth was 61/2 per cent over the year to the latest half, supported by a modest pick-up in credit growth. However, there was a slight contraction in the net interest margin, which banks attributed to several factors including the effects of the low interest rate environment, asset pricing pressures and higher deposit costs. The major banks' annual return on equity was 15 per cent in 2013, similar to that in recent years and well above the returns currently being recorded in many other advanced economy banking systems (see 'The Global Financial Environment' chapter).

A greater focus on cost containment over the past year resulted in a decline in the major banks' cost-toincome ratio – a common measure of bank efficiency.



*** 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

At about 43 per cent, this ratio is currently at the bottom end of the range of the major banks' peers internationally (Graph 2.8). However, cross-country differences in cost-to-income ratios are likely to be partly explained by differences in large banks' business models. Banks with a greater focus on traditional lending activity (as proxied by the share of earnings derived from net interest income) tend to have lower ratios than those that focus on other activities, such as investment banking or wealth management. The major banks' cost-to-income ratio may also be relatively low because their loan books are more weighted towards housing loans; as housing loans are more homogenous than business loans, the cost of distributing them is likely to have benefited more from technological advances.

Looking ahead, equity analysts are expecting the major banks' average return on equity to increase slightly in 2014 (Graph 2.9). Revenue growth is



Includes four Australian banks, six Canadian banks, three French banks, four German banks, three Hong Kong banks, three Italian banks, three Japanese banks, two Spanish banks, four Swedish banks, two Swiss banks, four United Kingdom banks, and 10 United States banks ^{**} Dot represents 2013 value Sources: RBA, SNL Financial



forecast to pick up, partly due to stronger credit growth, while the bad and doubtful debt charge is expected to be fairly steady at its current low level. The major banks' cost-to-income ratio is expected to decline a little.

Aggregate profit for the three regional banks (Suncorp, Bank of Queensland and Bendigo and Adelaide Bank) rebounded to \$370 million in their latest half-yearly results. The small aggregate loss in the previous half year resulted from large bad and doubtful debt charges arising from Suncorp's sale of a portfolio of non-performing commercial property and corporate loans that had been in run-off. Equity analysts are forecasting the regional banks' aggregate bad debt charge to remain steady in 2014 and profit to return to its pre-crisis level. Foreign-owned banks' profit increased in their latest half-yearly results, reflecting large declines in bad and doubtful debt charges and operating expenses.

Capital

The Australian banking system has strengthened its capital position in recent years. Banks' aggregate Common Equity Tier 1 (CET1) capital ratio (on an APRA Basel III basis) stood at 8.6 per cent of risk-weighted assets (RWAs) at December 2013, while the total capital ratio was around 12 per cent (Graph 2.10). The CET1 capital ratio for credit unions and building societies (CUBS) increased over the second half of 2013, to 15.9 per cent. The high capital ratios of CUBS relative to that of the banks are partly explained by their less diversified business models and different corporate structures.

Banks' issuance of non-common equity capital instruments (sometimes referred to as 'hybrids') has remained strong, as banks replace their maturing instruments. Banks have issued about \$6.6 billion of Tier 1 and Tier 2 non-common equity securities since June 2013, equivalent to 0.4 per cent of their RWAs. Take-up of these instruments has been largely from retail investors (particularly self-managed superannuation funds), who have been attracted to their relatively high yields. There were also reports that demand from institutional investors was limited by the difficulty in pricing the risk that the issuing bank will be deemed 'non-viable' by APRA, at which point the instrument converts to common equity; mandates of some fixed-income portfolios also prohibit convertible instruments. However, over recent months a couple of banks have successfully issued Tier 2 hybrid securities marketed to institutional investors only.

In December 2013, APRA released its framework for D-SIBs in Australia, which draws on the Basel Committee on Banking Supervision's



principles-based D-SIB framework. Under its framework, APRA identified the four major banks as D-SIBs. As a result, the major banks will be subject to a HLA capital requirement that is intended to reduce their probability of failure relative to non-systemic institutions, reflecting the greater adverse impact their failure would be expected to have on the domestic financial system and economy.²

In determining the major banks as D-SIBs, APRA examined four broad indicators of systemic importance – size, interconnectedness, complexity and substitutability – and found a clear distinction between the four majors and other banks (both Australian and foreign-owned), consistent with the conclusions of the International Monetary Fund.³

Under APRA's D-SIB framework, the major banks will be required to meet an additional CET1 capital requirement equivalent to 1 per cent of their RWAs (Graph 2.11). This will be implemented through an extension of the capital conservation buffer for D-SIBs, which becomes effective from 1 January 2016. The major banks' public disclosures indicate that their capital ratios are already close to, or above, the regulatory minimum CET1 ratio of 8 per



 The capital conservation buffer and D-SIB add-on will take effect on 1 January 2016; minimum excludes Pillar 2 add-ons
Sources: APRA: banks' inancial disclosures

cent that they will be required to meet from 2016 (this incorporates the CET1 minimum of 4½ per cent of RWAs, the capital conservation buffer of 2½ per cent of RWAs and the D-SIB add-on of 1 per cent of RWAs). That said, the major banks' capital targets will need to be somewhat higher than 8 per cent to take account of any capital add-ons that APRA may impose because of their risk profile, and to ensure that they have sufficient 'management capital buffers' to withstand stress conditions without breaching their minimum regulatory requirements.

Based on their current profit outlook, the major banks appear to have scope to increase their CET1 capital ratios through earnings retention. The major banks could also accumulate more common equity capital by reducing their dividend payout ratios and scaling back their purchase of shares in the market to offset dividend reinvestment plans (DRPs); this follows a period in which the banks have been increasing their dividend payout ratios and purchasing shares in the market to either partially or fully offset the boost to their common equity arising from their DRPs. Recently, the Commonwealth Bank of Australia announced that it will not neutralise the CET1 boost that it will receive from reinvestments of dividends to be paid in the June quarter 2014.

² For further details, see APRA (2013), 'Domestic Systemically Important Banks in Australia', Information Paper, 23 December.

³ See International Monetary Fund (2012), 'Australia: Addressing Systemic Risk Through Higher Loss Absorbency – Technical Note', IMF Country Report No 12/311.

Funding and Liquidity

Banks' resilience to funding market shocks has improved over recent years due to changes in the composition of their funding (Graph 2.12). The key changes, some of which have been discussed in previous *Financial Stability Reviews*, follow.

- The share of banks' funding sourced from domestic deposits has increased from about 40 per cent in 2008 to around 57 per cent currently; this shift has been at the expense of wholesale funding.
- Short-term wholesale funding, which is typically perceived to be less stable than other forms of funding, has declined significantly. Moreover, liaison suggests that Australian banks have increased the average maturity of their short-term debt, particularly for the offshore component.
- The maturity profile of banks' bond issuance has lengthened and there are indications that the diversity of their bond investor base has also increased. This partly reflects the introduction of covered bonds in 2011, which has allowed the large banks to issue at much longer tenors than is typically the case for unsecured debt, as well as attract new investors that have AAA mandates.⁴ Liaison with the major banks indicates that their recent unsecured bond issues have involved a wider range of investors than a few years ago.

Over the past six months, banks' net deposit flows have continued to significantly exceed their net credit flows: banks' deposits are currently growing at an annualised rate of about 9 per cent, well above credit growth of around 4½ per cent. Growth in deposits over the past six months has been entirely due to growth in at-call account balances, consistent with the more attractive pricing of some at-call savings accounts relative to term deposit accounts. Liaison with banks suggests that the shift towards at-call savings accounts partly reflects customers' desire to avoid locking in low deposit rates.



With growth in deposits outpacing credit, banks have been able to further reduce the share of their balance sheets that are funded by wholesale debt. Banks' total bond issuance was below their total bond maturities and buybacks of government guaranteed bonds in the past year (Graph 2.13). This has been despite a narrowing in bank bond spreads during this period: spreads between Commonwealth Government securities (CGS) and the major banks' unsecured bonds are currently around their lowest level since the onset of the financial crisis, while for covered bonds, spreads to CGS are at their lowest level since Australian banks started issuing these securities in late 2011.

Spreads for banks' residential mortgage-backed securities (RMBS) are also currently around their lowest level since late 2007 (Graph 2.14). Australian banks have taken advantage of the more favourable conditions over the past year by modestly increasing their issuance. In November 2013, APRA announced that it was working on changes to its prudential framework for securitisation.⁵ APRA will consult on its proposals which are based on simple, low-risk structures to enable ADIs to use securitisation as a funding tool and for capital relief.

⁴ For further details on covered bond issuance, see Aylmer (2013), 'Developments in Secured Issuance and RBA Reporting Initiatives', Address to the Australian Securitisation Forum, Sydney, 11 November.

⁵ For more details, see Littrell (2013), 'Prudential Reform in Securitisation', Speech to the Australian Securitisation Forum, Sydney, 11 November.





The shift in Australian banks' funding composition over recent years is part of a broader reappraisal of funding risks by banks and markets globally, in light of experiences in the financial crisis. New liquidity rules, to apply in Australia from 2015, have reinforced the need for banks to hold a prudent buffer of liquid assets and will help ensure that banks continue to manage their liquidity risks prudently when market pressures to do so inevitably wane.

Under APRA's liquidity standard, banks will be required to demonstrate to APRA that they have taken 'all reasonable steps' to meet the Liquidity Coverage Ratio (LCR) through their own balance sheet management, before relying on the Reserve Bank's Committed Liquidity Facility (CLF) for this purpose. Banks are putting in place a range of initiatives to help manage their regulatory liquidity requirements – that is, reducing their expected net cash outflows within a 30-day window. For example, a number of banks have introduced or are planning to introduce accounts that require depositors to give a certain period of notice before withdrawing funds, while some banks have indicated that they are refining the terms and pricing of their deposits accounts and undrawn credit facilities.

To prepare for the introduction of the LCR, APRA conducted a trial exercise in 2013 that assessed banks' pro forma funding plans and applications for the CLF. Based on this exercise, APRA indicated that some banks need to strengthen their liquidity risk management framework, such as by altering remuneration arrangements for staff with responsibility for managing liquidity risk or improving their approach to liquidity transfer pricing (to ensure that liquidity costs are effectively reflected across the bank's business units).6 APRA notionally granted banks a total CLF amount of \$282 billion following the trial exercise; this figure will be refined later this year based on a formal process. Individual banks' actual CLF will need to be secured against assets that are eligible for the Reserve Bank's normal market operations, including securities issued by other banks. Self-securitised assets will also be eligible collateral for the CLF. Against this background, banks' holdings of self-securitised RMBS have increased substantially in recent years, and currently total around \$220 billion (8 per cent of their Australian dollar domestic assets).

Insurance

The profitability of the general insurance industry remains strong: annualised return on equity was 18 per cent in the second half of 2013 (Graph 2.15). General

⁶ For further details, see APRA (2014), 'Implementation of the Basel III Liquidity Framework in Australia: Committed Liquidity Facility', Letter to Authorised Deposit-taking Institutions, 30 January.



insurers' domestic profits have been underpinned by premium rate increases following the natural catastrophes in 2011 and 2012, and catastrophe claims were relatively low in 2013. The industry is expecting slower premium rate growth in the period ahead due to stronger competition, particularly in those business lines that have experienced strong premium rate growth recently, such as home insurance. These competitive pressures increase the risk that insurers respond by relaxing pricing and reserving policies to maintain market share.

Over the past couple of decades the largest Australian general insurers have sought to expand their overseas operations by acquiring foreign insurers. As discussed in the September 2013 *Review*, overseas expansion can increase an insurer's diversification but also introduce an insurer to a range of different risks. To protect the operation of the local insurance industry, APRA supervises insurers on a globally consolidated basis and requires insurance groups to hold capital at both the individual entity and consolidated group level. As an example of these risks, in February 2014, QBE reported a large loss in its international operations for 2013, entirely due to its North American division. Although QBE's share price fell by 22 per cent on the day it provided a warning of this result in December 2013, it has since recovered somewhat (Graph 2.16).



The profitability of lenders mortgage insurers (LMIs) improved in the second half of 2013, although it remains much lower than the remainder of the general insurance industry. LMIs' claims expense declined in the most recent period, consistent with the strengthening housing market and earlier improvements to underwriting standards. Given LMIs face risk that is concentrated in a severe housing market downturn, APRA sets LMIs' capital requirements on this basis; as at December 2013, LMIs' capital exceeded this requirement.

The life insurance industry is currently facing a difficult operating environment. Life insurers' profit – both in levels and as a share of net policy revenue - has declined substantially, reflecting a number of structural and cyclical issues (Graph 2.17). Strong competition for superannuation 'group' life insurance policies led to an under-pricing of risk over recent years, partly because insurers did not allow enough for their reduced knowledge of the health of individuals insured in a group (which is more limited than that for individual policies). There has also been an increase in disability insurance claims since 2010, particularly relating to stress and mental illness. Policy lapse rates have also been increasing, which may be due to households cutting back on discretionary expenses, or incentives for financial advisors being tilted towards obtaining



new business rather than focusing on long-term customer retention. APRA has introduced measures to improve the collection of insurance information by superannuation funds, and is monitoring life insurers' efforts to adjust their group insurance business practices.

Managed Funds

The consolidated assets held by Australian funds management institutions grew at an annualised rate of 15 per cent over the six months to December 2013, to \$1.8 trillion (Table 2.2). Growth was driven by more favourable conditions in financial markets, including equity and corporate debt markets. Superannuation funds, which account for around three-quarters of assets, recorded the strongest growth in assets under management.

Within superannuation assets, equities and units in trusts represented around 40 per cent of the total at December 2013, with overseas assets and cash and deposits each about another 15 per cent (Graph 2.18). Although the share of cash and deposits has been broadly steady over the past year, it is notable that it has roughly doubled over the past decade. Factors contributing to the higher allocation to cash and deposits include the ageing profile of beneficiaries and an increase in the relative rates of return on deposits since the global financial crisis. In



addition, self-managed superannuation funds have a greater preference for cash and deposits, and the proportion of superannuation fund assets held by these funds has increased over this period.

The higher allocation of superannuation fund assets in cash and deposits is mirrored in the rising share of funding that banks receive from superannuation deposits (Graph 2.19). The higher allocation to cash and deposits (among other claims on banks) means that banks and superannuation funds are now more interconnected than they were a decade ago. Moreover, as the population ages there is the potential for a further increase in superannuation



	Share of total		Six-month-ended annualised change	
	Level \$ billion	Per cent	Jun 2013 Per cent	Dec 13 Per cent
Superannuation funds	1 702	74	15.4	18.9
Life insurers ^(a)	274	12	7.6	14.9
Public unit trusts	278	12	4.4	2.3
Other managed funds ^(b)	37	2	-12.6	-13.5
Total (unconsolidated)	2 290	100	12.3	15.5
of which:				
Cross investments	469	_	13.6	18.1
Total (consolidated)	1 821	_	12.0	14.9

Table 2.2: Assets of Domestic Funds Management Institutions

As at December 2013

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

deposits; while such a development could be favourable for banks and beneficiaries, it could give rise to concentration risk in superannuation portfolios and banks' funding.

Financial Market Infrastructure

Financial market infrastructures (FMIs), such as payments systems, central counterparties (CCPs) and securities settlement systems, facilitate most financial transactions and trading activity in the economy. By their nature, FMIs are highly interconnected with other parts of the financial system, especially the banking system. The stability of FMIs, and the risk management practices they adopt, are therefore of particular importance to financial stability.

Reserve Bank Information and Transfer System

The Reserve Bank Information and Transfer System (RITS) settles obligations arising from the exchange of domestic interbank payments and securities transactions in Australian dollars. RITS continued to function smoothly over the past six months, settling around five million payments worth \$19 trillion. Obligations arising from the clearing of low-value payments (cheques, direct entry and retail card transactions) are settled in RITS on a multilateral net basis. Over the past six months, the average daily gross value of these payments was \$17 billion, or 10 per cent of total daily payments settled in RITS. Until recently, all low-value payments were settled on a deferred net basis as a part of the single, low-value payments batch at 9.00 am on the business day after the exchange of payments. From 25 November 2013, five multilateral net batches were added for direct entry obligations only, at 10.45 am, 1.45 pm, 4.45 pm, 7.15 pm and 9.15 pm. These new arrangements allow direct entry payments to be settled in a more timely fashion, on a same-day basis, and also reduce the credit exposure that can arise when payments are posted to customer accounts ahead of interbank settlement. The introduction of same-day settlement has proceeded smoothly, with all 13 banks that participate directly in the settlement of direct entry obligations using the new arrangements successfully from the first day of operation.

To accommodate the same-day settlement of direct entry obligations, the Reserve Bank has made changes to the provision of liquidity for RITS

participants. Two of the five new multilateral batches (at 7.15 pm and 9.15 pm) settle outside of normal banking hours and generate settlement obligations unknown prior to the closure of the interbank cash market. To allow participants to meet these funding requirements with minimal disruption to their existing practices, the Reserve Bank introduced a new liquidity solution whereby it makes Exchange Settlement Account (ESA) funds available to participants via repurchase agreements (repos) with an open-ended repurchase date that is contracted at the cash rate target.7 To the extent that ESA holders retain matching funds in their ESA against their open repo position, those ESA balances are compensated at the Reserve Bank's cash rate target. Any surplus ESA funds earn a rate 25 basis points below the cash rate target, while any shortfall incurs a 25 basis point penalty. In this way, the incentive for participation in the interbank cash market is preserved, while sufficient liquidity is still provided to allow RITS participants to meet obligations arising from after-hours settlement of payment obligations.

In general, open repos have only been adopted by those participants required to do so for late direct entry settlement, and have largely replaced the use of intraday repos by those participants. With the value of open repos significantly greater than the intraday repos they replaced, total system intraday liquidity has increased significantly over the past six months, from about 8 per cent to 13 per cent of settlement values (Graph 2.20). As well as facilitating the settlement of direct entry payments later in the day, the effect of this additional liquidity has been seen in shorter settlement queue times for real-time gross settlement (RTGS) payments, which have declined by 43 per cent.

To monitor the safety and stability of the payments system, the Reserve Bank has periodically completed self-assessments of RITS against relevant international standards. Since the publication of the Principles for Financial Market Infrastructures by the



Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commissions in 2012, the Bank has committed to carrying out these self-assessments annually. The first assessment against the new standards, published in December 2013, concluded that RITS observed all the relevant internationally agreed principles. However, to ensure high standards are maintained, some tasks were identified for future action, including a comprehensive review of the RITS Regulations and Conditions of Operation, and enhancements to the resilience of RITS by an upgrade of its core infrastructure.

Use of CCPs for clearing OTC derivatives

While Australian authorities continue to work towards introducing mandatory central clearing for certain standardised over-the-counter (OTC) derivatives (see the 'Developments in the Financial System Architecture' chapter), the voluntary transition to central clearing of standardised contracts is accelerating. As noted in the September 2013 *Review*, two CCPs – LCH.Clearnet Ltd (LCH.C Ltd) and ASX Clear (Futures) – received regulatory approval in July 2013 to offer their OTC interest rate derivatives clearing services in Australia. This means

⁷ For further details, see RBA (2013), 'Operations in Financial Markets', Reserve Bank of Australia Annual Report 2013, October.

that domestic participants can now become direct participants in these CCPs, while in some cases also continuing to clear OTC interest rate derivatives indirectly (that is, as clients of another bank) through LCH.C Ltd or the Chicago Mercantile Exchange (CME).

- Two Australian banks have joined as direct participants of LCH.C Ltd's SwapClear service. The other large Australian banks have client clearing arrangements that allow them to clear trades indirectly through this service; these banks are expected to join as direct participants in coming months.
- ASX Clear (Futures) now has eight active OTC derivatives participants and, by January 2014, had cleared a notional outstanding of around \$5 billion in Australian dollar-denominated interest rate derivatives. In parallel, ASX continues to work towards developing its OTC client clearing service, which it plans to launch in early April 2014. This will allow smaller market participants who are unable to meet ASX Clear (Futures) participation requirements to centrally clear OTC derivatives as clients of a direct participant. The rule changes to give effect to this service are now in place and ASX has commenced participant testing of the operational arrangements.

ASX has also recently introduced some refinements to its arrangements for managing the potential default of an OTC derivatives participant. Since OTC derivatives markets are less liquid than exchange traded markets, the standard approach that is adopted by OTC derivatives CCPs when managing the default of a participant is to hedge the defaulter's OTC derivatives portfolio, before auctioning the hedged portfolio to non-defaulting participants. To provide advice and assist with the hedging process, OTC CCPs second experts from non-defaulting OTC participants. ASX's default management arrangements are consistent with this approach. To enhance this ASX recently introduced a mechanism that incentivises surviving participants to bid competitively at a default management auction. This mechanism works by ordering the allocation of any losses to be met by survivors' contributions to default resources according to the quality of their bids

In addition to the interest rate derivatives cleared through ASX, the notional value of Australian dollar-denominated interest rate derivatives cleared through CME and LCH.C Ltd reached A\$3.9 trillion at the end of February 2014 (Graph 2.21). This includes clearing by domestic and overseas participants, both as direct and indirect participants. The total of all currencies cleared by LCH.C Ltd and CME for Australian banks continues to grow, reaching US\$1.5 trillion by the end of December 2013. Industry feedback suggests that almost all new interbank transactions are being centrally cleared, while historical positions are expected to be back-loaded into CCPs over the next few years.



Graph 2.21 A\$ Interest Rate Derivatives Cleared at