4. Developments in the Financial System Architecture

International agreement was reached in late 2010 on the main elements of the international bank capital and liquidity reforms, known as Basel III. Since then the focus has been on finalising the details of the agreed reforms and determining how these can best be implemented across countries. As highlighted in the September 2010 *Review*, one of the key outstanding areas for Australia related to the proposed liquidity coverage ratio (LCR). In particular, there were doubts that the LCR could work in countries where there are insufficient eligible liquid assets for banks to hold. This was resolved in December 2010, with the Basel Committee on Banking Supervision (BCBS) agreeing on alternative arrangements for such countries.

Two other areas of importance in recent months have been the continuing work at the international level on identifying financial institutions that are systemic in a global context and ways to strengthen their loss absorbency, and the move towards central clearing of over-the-counter (OTC) derivatives. Work has also continued on improving supervisory intensity and effectiveness, to complement the new Basel III regulations. This work, which is being led by the Financial Stability Board (FSB), aims at ensuring national supervisory agencies have the independence, resources and tools to perform their work effectively. The FSB is also undertaking work on issues such as shadow banking and credit rating agencies, as well as several peer reviews.

The key items on the international financial regulatory agenda and implications for Australia are outlined below.

The International Regulatory Agenda and Australia

Strengthening the capital framework for ADIs

The new framework for bank capital was largely agreed in September 2010. In December 2010, the BCBS published additional details in *Basel III:* A global regulatory framework for more resilient banks and banking systems. The Basel III framework sets out rules for higher and better-quality capital for banks and other deposit-taking institutions, better risk coverage and a new (non-risk-based) leverage ratio. It also includes measures to promote the build-up of capital that can be drawn down in periods of stress

As detailed in the September 2010 Review, the minimum requirement for higher-quality capital is being increased. When implemented fully on 1 January 2015, the new minimum will be 4.5 per cent of risk-weighted assets for common equity and 8.0 per cent for total capital. New 'capital conservation' and 'counter-cyclical capital' buffers are to be phased in over three years commencing 1 January 2016; from 1 January 2019, the required minimum total capital ratio plus conservation buffer will be 10.5 per cent of risk-weighted assets. With these details now decided, efforts are being focused on implementing the new standards at a national level. In Australia, the Australian Prudential Regulation Authority (APRA) has begun the process for developing draft prudential standards for authorised deposit-taking institutions (ADIs) to give effect to the reforms. APRA anticipates that it will begin consultation on these measures from mid 2011 and continue in 2012.

The BCBS has also recently released follow-up details on two outstanding capital-related matters:

- criteria for the eligibility of instruments to be counted as non-common equity Tier 1 and Tier 2 capital: and
- quidance for national authorities on operating the counter-cyclical capital buffer.

The first of these is aimed at enhancing the quality of bank capital by requiring that all classes of capital instruments are available to absorb losses at the point of non-viability. During the financial crisis, a number of distressed banks globally were rescued by the public sector injecting funds in the form of common equity and other forms of Tier 1 capital. While this protected depositors, it also meant that Tier 2 capital instruments (mainly subordinated debt), and in some cases, Tier 1 instruments, did not absorb any losses. From 1 January 2013, in order for an instrument issued by a bank to be included in non-common equity Tier 1 capital or in Tier 2 capital, it must have a provision that allows it to either be written down or converted into common equity, at the option of the relevant authority, when a trigger event occurs. The capital eligibility of instruments issued prior to 1 January 2013 that do not have this provision will be phased out. Instruments with such writedown/conversion features at the point of nonviability are sometimes referred to as 'gone concern' contingent capital. The BCBS is also continuing its work on 'going concern' contingent capital. These instruments would be triggered well before the bank becomes unviable, when equity falls below some pre-specified level.

Other bodies have also been examining measures to enforce losses on other asset classes. The European Commission recently launched a public consultation on a crisis management framework for the European Union (EU). Alongside more traditional bank resolution tools, such as splitting

a firm into a 'good bank' and 'bad bank', it includes proposals for converting debt to equity, or writing down debt. In the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act includes a provision prohibiting the use of taxpayers' funds to prevent the liquidation of any financial institution; the intention is that shareholders and creditors, not taxpayers, should bear losses in any bank failure in the future. The Federal Deposit Insurance Corporation has recently approved a rule that underlines this intent by clarifying the way it will treat certain creditor claims when an institution is liquidated. Recent legislation passed in Germany allows losses to be imposed on senior and subordinated debtholders without necessarily liquidating the bank. One element, called a reorganisation plan, gives shareholders and debtholders the discretion to restructure a struggling institution by imposing losses on subordinated and senior debtholders. A second element gives the German regulator discretionary power to arrange for the transfer of systemically relevant assets and liabilities to a 'good bank', while leaving all other assets and liabilities. such as subordinated and senior debt, within the remaining entity. Legislation was passed in Ireland in December 2010, giving the Government the power to impose losses on junior debtholders to protect financial stability.

The counter-cyclical capital buffer is a macroprudential policy tool directed against the buildup of system-wide risk. The aim of the buffer is to ensure that banks are holding extra capital to absorb losses when a downturn comes. To operate the buffer, the relevant authorities in each jurisdiction would monitor credit growth and a range of related indicators and use these to assess whether credit conditions are adding to system-wide risk. Based on this they will determine whether a counter-cyclical buffer should be imposed (within the range of zero to 2.5 per cent of risk-weighted assets), or varied once it is in place. Any increases in the buffer are to be preannounced by up to 12 months to give banks time to accumulate the extra capital; reductions in the buffer would take effect immediately in order to support banks' capacity to continue lending in a downturn. While the operation of the buffer will be a matter for national discretion, the BCBS guidelines envisage that it would only be imposed in conditions of unusually high risk-taking by credit providers and hence, would be mostly set to zero. In principle the buffer could also be used to lean against an upswing in credit, though the existing prudential tools can serve the same purpose, including bank-specific Pillar 2 capital add-ons and other supervisory interventions. As with the rest of the Basel III reforms, APRA would be responsible for making and disclosing any decision to require or amend this buffer. However, it is anticipated that the Reserve Bank would provide analysis to inform any such decision about the buffer.

Strengthening liquidity risk management by ADIs

Complementary to the capital reforms, the BCBS outlined major changes to banks' liquidity risk management policies in September 2010, and set out the details in Basel III: International framework for liquidity risk measurement, standards and monitoring, in December 2010. This document clarified a key element of the liquidity reforms for countries, such as Australia, that do not have enough eligible liquid assets for banks to hold. As reported in the September 2010 Review, the new standard, as originally proposed, would have been unworkable in Australia. Under the LCR requirement, high-quality liquid assets (classed as 'Level 1' assets) comprise the highest quality government or quasigovernment securities, cash and central bank reserves. However, the supply of government and quasi-government securities, which forms the bulk of Level 1 assets in most jurisdictions, is relatively limited in Australia and several other countries. Up to 40 per cent of the LCR requirement can be met through a second level of eligible liquid assets

('Level 2' assets), which includes certain non-bank corporate debt and covered bonds, and which would be subject to a haircut. However, a recent review by APRA established that, at this point in time, there are no such assets that trade in liquid enough markets to qualify as Level 2 assets in Australia.

To make the LCR requirement workable for countries in Australia's position, the BCBS' final framework incorporates three alternative treatments for the holding of liquid assets. The first option, and the one that APRA and the Reserve Bank have agreed should be adopted in Australia, involves allowing banks to establish contractual committed liquidity facilities with their central banks, subject to an appropriate fee; the committed amount would then count towards the LCR requirement. The two other alternative options endorsed by the BCBS were not seen as workable in Australia. One option exposes banks to the risks of holding liquid assets in a different currency; the other allows Level 2 assets to exceed the 40 per cent limit (subject to a higher haircut), but this too is impractical in Australia as outlined above.

Under the approach to be adopted in Australia, an ADI will be able to establish a facility with the Reserve Bank, large enough to cover any shortfall between the ADI's holdings of high-quality liquid assets and the LCR requirement. Qualifying collateral for the facility will comprise all assets eligible for repurchase transactions with the Reserve Bank under normal market operations. In return for the committed facility, the Reserve Bank will charge a market-based commitment fee. The fee is intended to leave participating ADIs with broadly the same set of incentives to prudently manage their liquidity as their counterparts in jurisdictions where there is an ample supply of high-quality liquid assets in their domestic currency. A single fee will apply to all institutions accessing the facility.

APRA is to apply the LCR to the larger ADIs (around 40 in number). It will require them to show that they have taken all reasonable steps towards meeting the

LCR through their own balance sheet management (see below) before relying on the Reserve Bank liquidity facility. The remaining ADIs will generally be exempt from the LCR requirement; these ADIs will continue to be subject to the simpler 'minimum liquid holdings' regime. APRA and the Reserve Bank will undertake a consultation process in 2011 and 2012 on the details of the facility, including the fee. While the LCR will not formally apply until 1 January 2015, there will be an observation period prior to this, during which banks must report to supervisors their overall LCR and information on all the components. Depending on industry feedback, APRA anticipates issuing its revised liquidity standard by end 2012.

The implementation timetable provides ADIs time to prepare for the LCR requirement and to adjust their liquid asset holdings. The LCR involves a test against a liquidity stress scenario lasting for 30 days. Banks could therefore reduce their LCR liquid assets requirement by replacing very short duration (less than 30-day) liabilities with longer-dated liabilities. This reduces the size of the liquid assets portfolio that needs to be held under the scenario (and in Australia's proposed arrangements, the size of the required liquidity facility at the Reserve Bank). As noted in 'The Australian Financial System' chapter, Australian banks have already been extending the term structure of their liabilities in recent years.

Systemically important financial institutions

In November 2010, the G-20 Leaders endorsed the FSB's proposals on reducing the moral hazard posed by systemically important financial institutions (SIFIs). These relate to the 'too big to fail' problem highlighted in the recent crisis, where public sector support was needed to rescue several large globally active financial institutions. The proposals seek to minimise the future need for such support. The G-20 agreed to distinguish between those institutions that are systemically important in a global context - termed global SIFIs (G-SIFIs) - and those that are important only in a domestic context. Given the greater risk they pose to the global financial system, the G-20 agreed that G-SIFIs should: have higher loss absorbency than the new Basel III minimum; be subject to rigorous and co-ordinated risk assessments by international supervisory colleges; and be required to develop international recovery and resolution plans. Countries where G-SIFIs are headquartered should negotiate institution-specific crisis co-operation agreements within cross-border crisis management groups and subject their G-SIFI policy measures to review by a new Peer Review Council of the ESB

The FSB and national authorities, in consultation with relevant standard-setters, are in the process of determining those institutions to which the G-SIFI recommendations will initially apply. The BCBS has been asked to develop a methodology for the FSB to identify banks that are G-SIFIs. This methodology is still being developed but is likely to draw on key indicators relating to a bank's size, the scale of its cross-border assets and liabilities. interconnectedness (linkages with other institutions in the financial system), substitutability (the extent to which other institutions in the financial system can provide the same services in the event of a failure) and complexity. The BCBS is also considering the merits of measures to enhance the loss absorbency of G-SIFIs, including capital surcharges. The FSB will consider developments in these areas at its meeting in the middle of 2011. As experience is gained over time, the FSB will also review how to extend the SIFI framework to cover a wider group of SIFIs, including financial market infrastructures, insurance companies and other non-bank financial institutions that are not part of a banking group. Also, the International Association of Insurance Supervisors (IAIS) has been asked to develop a methodology for the FSB to identify insurance companies that are G-SIFIs.

The G-20 also endorsed a policy framework to apply to all SIFIs (domestic and global) including improvements to resolution regimes to make distressed SIFIs easier to resolve, especially through identifying key attributes of such regimes, and more intensive supervisory oversight for SIFIs.

Several countries have begun setting higher prudential requirements for their SIFIs ahead of an agreement being reached by the FSB and BCBS. For example, in Switzerland, legislation currently being proposed would require its two largest banks to hold much higher levels of regulatory capital than required by Basel III in an effort to reduce systemic banking risks in Switzerland. Specifically, it proposed that Credit Suisse and UBS be required to hold total regulatory capital equivalent to 19 per cent of their risk-weighted assets. On top of the Basel III minimum requirement of 4.5 per cent common equity, this total would include a conservation buffer of 8.5 per cent (compared with 2.5 per cent under Basel III) and a 6 per cent 'progressive component' or surcharge. The latter two components would be allowed to include some contingent capital, with conversion triggers at 7 and 5 per cent common equity.

Financial market infrastructure

An area of increasing importance, both globally and for Australia, is the regulation of OTC derivatives markets. At the international level this work has largely been under the auspices of the FSB, but also involves bodies such as the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO). These bodies have been working on how to implement the commitment by the G-20 that all standardised OTC derivative contracts should be centrally cleared by end 2012. The major jurisdictions have begun implementing reforms in their markets, which in turn will shape the markets in which Australian banks operate. Of particular importance is the Dodd-Frank Act in the United States, which requires US-regulated banks to centrally clear all instruments deemed to be clearable from July 2011. Legislation has also been proposed in Europe that

would have a similar effect. Such changes, when implemented, will over time change the clearing environment in the United States and Europe, and also globally given the importance of these centres in international financial markets.

The Reserve Bank and the other Australian regulatory agencies have been contributing to international policy discussions regarding OTC derivatives regulation. Discussions have also commenced on possible clearing solutions with industry representatives.

One aspect of the Basel III capital rules relates to counterparty credit risk. The treatment of central counterparties (CCPs) under these rules is yet to be finalised. However, it is already clear that higher capital charges will apply to non-centrally cleared OTC derivatives. This, together with strengthened capital requirements for bilateral OTC derivative exposures, will create strong incentives for banks to move exposures to CCPs. APRA will implement these measures as part of its package of Basel III changes. These measures will need to be taken into account in the Australian response to the G-20 commitment on central clearing.

The CPSS and IOSCO recently issued, for public consultation, newand more demanding international principles for payment, clearing and settlement systems. While these systems, known collectively as financial market infrastructures (FMIs), generally performed well during the crisis, there were lessons to be learnt from that experience as well as over the period following the issuance of similar sets of principles earlier in the decade. Further, more robust and efficient FMIs are important not only to reduce the risk of contagion between highly interconnected financial institutions but also to ensure that they are, overall, better placed to withstand future financial shocks.

The proposals are for a comprehensive set of 24 new principles applying to all systemically important payment systems, central counterparties, central securities depositories, securities settlement

systems, and trade repositories. When finalised, the new principles will replace the three existing sets of standards (for systemically important payment systems, central counterparties and securities settlement systems), and introduce principles for trade repositories for the first time. Compared with the current standards, the new principles introduce more demanding requirements for:

- the financial resources and risk management procedures an FMI uses to cope with the default of participants;
- the mitigation of operational risk; and
- the links and other interdependencies between FMIs through which operational and financial risks can spread.

Combining the range of existing standards into a single set of principles will also provide greater consistency in the oversight and regulation of FMIs alobally.

The CPSS and IOSCO have invited comments on the proposals by 29 July 2011, following which final principles will be released in early 2012. It will then be up to national authorities to include the final principles in their legal and regulatory frameworks. Australian agencies are participants in this work via their membership of the CPSS (the Reserve Bank) and IOSCO (Australian Securities and Investments Commission (ASIC)).

Supervisory intensity and effectiveness

The importance of effective supervision was discussed in the September 2010 Review in relation to SIFIs, but also applies to banks and regulated institutions more generally. Strong regulations can only be effective if backed up by strong supervision and enforcement. Moreover, supervisors must have the powers to be able to detect problems proactively and intervene early to reduce the impact of potential stresses on individual institutions and therefore on the financial system as a whole.

International bodies such as the FSB and the BCBS. as well as the International Monetary Fund (IMF) and World Bank though their Financial Sector Assessment Program (FSAP), have been examining the area of supervisory intensity and effectiveness. The FSB released a report on this in November, identifying the following actions as being necessary to deliver more effective and intense supervision:4

- ensuring that supervisors have unambiguous sufficient independence appropriate resources;
- providing supervisors with the full suite of powers necessary for effective early intervention;
- improving supervisory standards to reflect the complexity of financial institutions and the system as a whole; and
- increasing the frequency of assessments of supervisory regimes.

In this context, FSB members, including Australia, are to conduct self-assessments of their banking and insurance supervisory frameworks against the international standards for banking (the BCBS Core Principles) and insurance (the IAIS Core Principles). The self-assessments should identify deficiencies and corrective actions relating to: supervisory mandates and independence; supervisory powers; and comprehensive consolidated supervision. These self-assessments are due to be submitted to the FSB around mid 2011 (for the banking principles) and early 2012 (for the insurance principles); Australia is likely to comply with both sets of principles.

Also, the BCBS, IAIS and IOSCO are tightening their core principles, implementation standards, assessment methodologies and criteria to provide enhanced guidance to supervisors and more support to assessors, including FSAP assessments. The BCBS will report on its work in this area to the FSB by end 2011.

⁴ Financial Stability Board (2010), Intensity and Effectiveness of SIFI Supervision: Recommendations for Enhanced Supervision, November.

Shadow banking

There has been increased focus by national and international authorities on the 'shadow' banking system. This refers to institutions, such as investment banks, structured investment vehicles, money market mutual funds and hedge funds, which are involved in the credit intermediation chain but which are not subject to the same prudential framework as banks. The interest in these institutions is based on two related factors. First, the financial crisis in the United States was propagated in part by institutions in the shadow banking system. This prompted regulators to consider extending the regulatory perimeter to cover firms that proved systemic during the crisis (or that may become systemic in a future crisis). While certain institutions, such as hedge funds, were not especially implicated in the recent crisis, they can be highly leveraged and closely interconnected with the rest of the financial system. As such, they have the potential to amplify and propagate stresses. Second, the tighter regulatory framework for banks and other regulated institutions has the potential to increase the incentives for business to migrate to the less regulated shadow banking system.

Given these concerns, at their November 2010 meeting, the G-20 Leaders requested that the FSB, in collaboration with other international standard-setting bodies, develop recommendations to strengthen the regulation and supervision of the shadow banking system. In response, the FSB is: clarifying the scope of the shadow banking system; developing potential approaches to monitor shadow banking institutions; and developing possible regulatory measures to address the issues posed by shadow banking.

Several countries and the EU have already taken steps to better monitor and/or regulate non-bank institutions, especially hedge funds and credit rating agencies (CRAs). In the United States, the newly established Financial Stability Oversight Council, comprised of key financial sector regulators, recently

released a framework to measure the systemic importance of non-bank financial firms. Non-bank institutions identified as systemic will be subject to tougher prudential requirements and required to submit resolution plans.

As discussed in the September 2010 *Review*, while intermediaries outside the core of the financial system exist in Australia, they account for a much smaller share of financing than in some other countries.⁵ Nevertheless, the regulatory framework for these institutions has strengthened over the past year or so. In particular, the regulatory coverage of credit products has been expanded to cover investor housing loans, and the operation of the *Corporations Act 2001* has been extended to cover margin lending.

Credit rating agencies

In October 2010, the FSB released principles for reducing reliance on CRA ratings. The background to this work is the view that CRAs, while not a direct cause of the financial crisis, did not adequately alert investors to the high risks posed, in particular, by structured finance products. The aims of the principles are to reduce the potential for ratings to be relied on in a mechanistic way and to remove the implicit 'seal of approval' they provide. The FSB has asked the standard-setters to develop specific policy actions that will be needed to implement the principles. It acknowledges that doing so will take time, given the need for some market participants build risk-management capabilities. The Australian authorities support the general principle of reducing reliance on ratings for structured credit products, but consider that rating agencies provide a useful service for corporate and financial institution ratings. Smaller, less-sophisticated institutions should not be forced to rely on internal credit assessments alone, given the resources that would require.

⁵ Reserve Bank of Australia (2010), Box B: 'The Shadow Banking System in Australia', *Financial Stability Review*, September.

Separately, there have also been developments at the country level. In February 2011, IOSCO reviewed the regulatory programs for CRAs in Australia, the EU, Japan, Mexico and the United States. The focus was on assessing recent developments against IOSCO's principles in the areas of:

- quality and integrity of the rating process;
- independence and conflicts of interest:
- transparency and timeliness of ratings; and
- measures for dealing with confidential information

The IOSCO review found that while the structure and specific provisions of regulatory programs across the five jurisdictions differ, the principles are embedded in each of the programs.

FSB review process

The FSB is currently undertaking a country peer review of the Australian financial sector. The review is part of a program the FSB has for examining all of its members' financial sectors over the next couple of years. The review of Australia is focusing on two issues: Australia's follow-up to relevant recommendations from the IMF ESAP that was undertaken in 2006; and features of the Australian financial landscape that supported our relatively strong performance during the global financial crisis. The Reserve Bank has contributed material to help inform the review, along with other Australian regulatory agencies. The results of the review will likely be published in the second half of 2011.

The FSB has also continued its program of thematic reviews, which aim to strengthen adherence to international standards in particular areas. Thematic reviews on risk disclosure practices of financial institutions and mortgage underwriting and origination practices have recently been published. A follow-up review on compensation practices is underway to assess country progress since the 2010 review. A review on deposit insurance is also planned for later this year. Reserve Bank staff were part of the expert team reviewing mortgage underwriting and origination practices.

Other Domestic Developments

In December 2010, as part of a package of measures affecting the financial system, the Government announced its intention to amend the Banking Act 1959 to allow ADIs to issue covered bonds, which are debt instruments that are backed by a segregated pool of high-quality assets. As discussed in 'Box A: Covered Bonds', holders of covered bonds have dual recourse, with a preferential claim on the cover pool assets and a non-preferential claim on any residual assets of the issuer. Preliminary consultation with industry on a regulatory framework for issuance of covered bonds in Australia has begun, with exposure draft legislation due to be released shortly.

ADIs have to date not been permitted to issue covered bonds because this would conflict with the depositor preference provisions of the Banking Act. The Government therefore intends to amend the Act to give covered bondholders a priority claim over the cover pool assets, thereby to that extent pushing depositors and unsecured creditors down the gueue in the event of a wind-up of an ADI. Given these implications, the Government announced that there would be a consultation process on an appropriate level of a cap to be placed on covered bond issuance by institutions. Partly to alleviate concerns about the potential impact of covered bonds on depositors, the Government also confirmed in December that the Financial Claims Scheme (FCS) would become permanent.

Work of the Council of Financial Regulators

The Council of Financial Regulators (the Council) continues to monitor international financial sector developments and their relevance for Australia. Recently, the Council considered Australia's position

on some of the developments outlined above, as well as issues around bank funding and competition, some of which were taken up in the Government's December package. The Council has an ongoing program of work reviewing issues related to the FCS and will continue to work with the Government, particularly on those aspects that are due to expire in October 2011. The Council also continues to review Australia's financial crisis management arrangements to ensure they take account of international experiences and developments.

Improving disclosure for retail investors

ASIC is continuing its work on improving financial product disclosure for retail investors and allowing for more straightforward comparisons between products and business models. Two consultative processes have recently commenced, one relating to disclosure requirements for hedge funds and another for over-the-counter contracts for difference (CFDs).

For hedge funds, the proposal involves the introduction of disclosure principles benchmarks that set out the specific characteristics of the fund that should be addressed in the Product Disclosure Statement (PDS). This includes information on fund structure, investment strategies and the use of short selling. It is also proposed that periodic reporting of information (such as funds under management and investment returns) be a benchmark disclosure in the PDS. The proposals for over-the-counter CFDs also involve a benchmarkbased disclosure model as well as guidelines on advertising for these instruments. Under both the hedge fund and CFD proposals, issuers would be required to report on a 'comply or explain' basis how they meet the benchmarks. *