4. Developments in the Financial System Architecture

International regulatory reform efforts continue to focus on finalising and implementing post-crisis reforms, while remaining attentive to potential new and evolving risks. Work is ongoing across the four core reform areas identified following the financial crisis: addressing 'too big to fail'; responding to shadow banking risks; making derivatives markets safer; and building resilient financial institutions. Attention has increased more recently on areas such as potential risks stemming from asset management activities and reduced market liquidity, as well as market misconduct and the increasing importance of central counterparties (CCPs) to the financial system.

Domestically, in line with recommendations by the Financial System Inquiry (FSI) for the banking sector, the Australian Prudential Regulation Authority (APRA) has taken steps to narrow the competitiveness gap between banks vis-à-vis their capital requirements for mortgages and, more generally, to increase their resilience. Separately, authorities continued to work on implementing internationally agreed reforms, particularly in the area of over-the-counter (OTC) derivatives markets.

International Regulatory Developments and Australia

Addressing 'too big to fail'

One major element of the G20's post-crisis financial reform agenda has been to address the moral hazard and financial stability risks posed by 'too big to fail' or systemically important financial institutions (SIFIs).

Policy development in this area has focused on strengthening resolution frameworks for SIFIs as well as enhancing their supervision and resilience.

As discussed in the previous Review, a particular focus recently has been to develop a proposal for total loss-absorption capacity (TLAC) requirements for global systemically important banks (G-SIBs). This additional loss absorbency is intended to ensure that G-SIBs can be resolved in an orderly way that avoids using taxpayer funds for recapitalisation and limits the effect of failure on financial stability. The TLAC proposal aims to achieve these goals, in part, by allowing eligible debt instruments that can be 'bailed-in' (i.e. written down or converted into equity) to count towards the requirement, in addition to regulatory capital instruments. The Financial Stability Board (FSB) will present a final TLAC proposal to the G20 Leaders' Summit in November, taking into account feedback on a consultative proposal released in late 2014, as well as the results of a recent quantitative impact study.

While no Australian banks are directly captured by this proposal (as they are not G-SIBs), it is relevant for Australia because the final requirements will shape bank resolution frameworks, capital structures and funding markets internationally. Moreover, the FSI recommended that APRA should develop a framework for minimum loss-absorbing and recapitalisation capacity for Australian banks in line with emerging international practice. The Bank and other Council of Financial Regulators (CFR) agencies have maintained a close interest in the development of this international standard through

their membership of the bodies, such as the FSB and the Basel Committee on Banking Supervision (BCBS), where these discussions are taking place.

The orderly resolution of large, complex banks with cross-border operations is another ongoing issue being considered by the G20 and the FSB. Following an earlier consultation process, the FSB will publish guidance later this year on the effectiveness of cross-border recognition of resolution actions, including bail-in and temporary stays on financial contracts. The motivation of this work is that, unless resolution measures taken by one jurisdiction are recognised promptly by other jurisdictions, authorities are likely to face obstacles in implementing effective group-wide resolution plans. In 2014, the International Swaps and Derivatives Association (ISDA), in coordination with the FSB, developed a contractual solution (known as the 'ISDA 2014 Resolution Stay Protocol') to help prevent cross-border OTC derivatives contracts from being terminated disruptively in the event of a foreign counterparty entering resolution. Parties that adhere to the protocol agree to 'opt in' to laws that govern temporary stays in jurisdictions that are identified under the protocol. Legislative proposals are currently being developed in Australia to provide for a temporary stay regime that would be eligible to be identified under the protocol.

Work also continues on the implementation of previously agreed reforms to improve resolution frameworks. In April, the FSB launched the second peer review of implementation of its Key Attributes of Effective Resolution Regimes for Financial Institutions (Key Attributes). This review is focusing on the banking sector resolution powers available to authorities, and countries' progress in implementing recovery and resolution plans for domestic banks that could be systemic if they failed. Australia is participating in the review and the findings will be published in early 2016.

In May, the FSB published the findings of a thematic peer review on supervisory frameworks and approaches for systemically important banks, which highlighted the role that effective supervision plays in reducing moral hazard. The review found that national authorities had significantly enhanced their supervisory frameworks since the financial crisis, and recommended that supervisors strengthen cross-border cooperation, develop clear and transparent supervisory priorities and increase engagement with banks, particularly at the board level.

While much of the post-crisis regulatory focus on SIFIs has been on bank resilience and resolution, work also continues on addressing risks posed by systemically important non-bank entities. In particular:

- Following a consultation earlier in the year, in October, the International Association of Insurance Supervisors (IAIS) released the first version of the higher loss absorption (HLA) requirement for global systemically important insurers (G-SIIs). Under the HLA requirement G-SIIs will need to hold additional capital on top of a 'basic capital requirement'. The HLA requirement, expected to be endorsed by G20 Leaders in November, will be further reviewed by the IAIS, and refined where necessary, before it comes into effect for G-SIIs from 2019.
- Earlier this year, the FSB and International Organization of Securities Commissions (IOSCO) received responses to their second consultation paper on methodologies for identifying non-bank non-insurer global SIFIs such as brokerdealers, investment funds and asset managers. The FSB announced in July that it has decided to delay finalisation of these methodologies until its current work on potential risks from asset management activities is completed, which is likely to be in the first half of 2016 (discussed further below).
- Several international bodies have developed a workplan to promote CCP resilience, recovery planning and resolvability (see below).

Domestically, CFR agencies continued to collaborate on strengthening Australia's resolution and crisis management arrangements.

- Work is underway to prepare legislative reforms that will include updated proposals to strengthen APRA's crisis management powers and introduce a resolution regime for financial market infrastructures (FMIs), broadly in line with the Key Attributes. The latter follows a government consultation on FMI resolution regimes earlier in the year.
- In June, CFR agencies participated in a targeted crisis simulation exercise to test aspects of the crisis management framework, particularly those relating to inter-agency and external communication, and determine the scope for further refinements

In a related development, the government announced in September that, consistent with an FSI recommendation, the existing post-funding basis of the Financial Claims Scheme will be maintained. As such, the proposals of the previous government for an ex-ante levy on authorised deposit-taking institutions (ADIs) and a Financial Stability Fund will now not proceed.

Shadow banking

International bodies and national regulators continue to address the risks posed by shadow banking entities and activities that are more lightly regulated than the banking sector. With many of the post-crisis shadow banking reforms finalised, focus has shifted to implementation monitoring. In September, IOSCO published the results of peer reviews on money market funds (MMFs) and securitisation.

 The peer review on MMFs assessed the implementation of IOSCO's 2012 recommendations, which sought to introduce common standards for the regulation of MMFs, including for these funds' valuation methods, liquidity management and disclosures. In doing so, the reforms aimed to address the investor run risk faced by some MMFs. The peer review found that jurisdictions had made progress in adopting the reforms, particularly countries with large MMF sectors, such as the United States. However, liquidity management and fund valuation policies were highlighted as areas where further work was needed in a number of jurisdictions. The Australian Securities and Investments Commission (ASIC) is currently working with the Financial Services Council to develop a set of industry standards addressing several IOSCO recommendations relevant to the Australian market.

- The securitisation peer review assessed the adoption of IOSCO's recommendations, also released in 2012, relating to aligning the incentives of investors and securitisers in the securitisation process, including, where appropriate, through mandating retention of risk in securitisation products. The peer review noted that several countries had fully implemented the reforms, but a number of others, including the United States and some European countries. were yet to complete them. The report suggested that potential issues arising from cross-border differences in incentive regimes were yet to be addressed and that jurisdictions had a wide variety of exemptions that may need to be assessed in future reviews.
- In a related development, in July, the BCBS and IOSCO finalised criteria for identifying 'simple, transparent and comparable' securitisations.
 These criteria are intended to help investors and other transaction parties evaluate the relative risks of similar securitisation products.
 Currently, they only serve as a guide and have no regulatory implications; however, the BCBS is considering options for incorporating the criteria into its capital framework for securitisation.
- In Australia, APRA is expected to release in coming months its revised ADI prudential standard for securitisation, taking into account submissions on its 2014 proposals to simplify the regulatory framework for securitisation.

An FSB peer review is currently underway on countries' implementation of its policy framework for shadow banking entities (other than MMFs). The Bank coordinated with the other CFR agencies on preparing Australia's input for the review, and a senior officer from the Bank is on the peer review team. Preliminary findings of the peer review are to be presented to the G20 Summit, with the report to be released in early 2016.

In addition to this implementation monitoring, the FSB and BCBS are continuing to work on aspects of the regulation of securities financing transactions (SFTs), given the scope for procyclicality and leverage in SFT markets:

- The BCBS is currently working to incorporate the FSB's previously released haircut framework for bank-to-non-bank SFTs into the Basel capital framework.
- The FSB will soon publish the approach for applying its framework of numerical haircut floors for non-bank-to-non-bank SFTs, to address excessive leverage in these transactions.
- By the end of 2015, the FSB is expected to finalise a new data collection standard for SFTs, which jurisdictions will be expected to implement.

Meeting one of the FSB's SFT recommendations, the Bank recently consulted on the case for central clearing in the domestic repo market. The Bank is currently finalising a response paper, taking into consideration submissions received on the consultation paper.

OTC derivatives markets reform

In the most recent progress report on the G20 OTC derivatives market reforms, released in July, the FSB found that the implementation of central clearing of standardised OTC derivatives continues to be uneven across jurisdictions. In recent months. Australian authorities have made significant progress in implementing this aspect of the reforms. Following an earlier consultation, in September, the government issued a determination imposing mandatory central clearing obligations for internationally active dealers in Australian dollar-, US dollar-, euro-, British pound- and Japanese yen-denominated interest rate derivatives. ASIC is expected to soon make Derivative Transaction Rules (Clearing), which will set out the details of the requirements and the effective date.

Australian regulators also continue to make progress in establishing cooperative arrangements with overseas authorities to support the rollout of regulatory reforms in OTC derivatives markets and the regulation of cross-border FMIs:

- A Memorandum of Understanding between the Bank and the Monetary Authority of Singapore was signed in April to gain access to the data of DTCC Data Repository (Singapore), the only trade repository licensed in Australia.
- The European Securities and Markets Authority announced in April that ASX Clear (Futures) and ASX Clear were in the first group of non-EU CCPs to be recognised under the European Markets Infrastructure Regulation.
- In August, ASX Clear (Futures) was granted a permanent exemption from registration as a Derivatives Clearing Organisation in the United States, the first CCP globally to be granted such an exemption.

As reported in the previous *Review*, the international regulatory community has been working to overcome legal and other barriers to the reporting, sharing and aggregation of key information from trade repositories. The FSB will soon publish a peer review report on these issues. In particular, the report will include an agreed timeline for addressing these challenges. Separately, the Committee on Payments and Market Infrastructures (CPMI) and IOSCO are in the process of developing detailed guidance on the form of key data elements, which will facilitate the aggregation of data across trade repositories.

FMI regulation

CPMI and IOSCO continue to monitor the implementation of the Principles for Financial Market Infrastructures (PFMI), the international standards for CCPs and other types of FMIs. As part of this, a detailed assessment of the consistency of Australia's framework is currently in progress. Also, a peer review is assessing the extent to which authorities in member jurisdictions are observing the parts of the PFMI that relate to their roles as regulators and supervisors of FMIs. Both assessments are expected to be published by the end of 2015. In July, CPMI and IOSCO announced that they have also commenced assessing the consistency in outcomes achieved by FMIs' implementation of the PFMI, beginning with an assessment of derivatives CCPs' financial risk management. The scope of this review includes ASX Clear (Futures) and both the overseas CCPs licensed to clear OTC derivatives in Australia.

Given the growing use of CCPs, a workplan has been developed by the FSB, the BCBS, CPMI and IOSCO to promote CCP resilience, recovery planning and resolvability. The key elements of the workplan, which extends into 2016, include:

- conducting a stocktake of existing measures for CCP resilience and recovery planning to inform whether additional guidance to the international standards in these areas is needed;
- reviewing existing CCP resolution regimes and resolution-planning arrangements, and considering whether there is a need for more detailed standards or for additional pre-funded financial resources in resolution; and
- analysing the interconnections between CCPs and the banks that are their clearing members, and potential channels for transmission of risk.

In September, the four bodies noted above published a report outlining progress on the workplan. CPMI and IOSCO are in the process of analysing responses to a series of surveys conducted as part of the stocktake on CCP resilience and recovery planning. On the basis of a survey of authorities, the FSB concluded that CCP resolution planning regimes are currently not well developed. As a result, the FSB has established a cross-border crisis management group for FMIs. The group's initial focus will be on resolution planning for CCPs.

Building resilient financial institutions

With most of the post-crisis reforms aimed at building resilient financial institutions completed, work in this area continues to focus on implementation and on largely technical improvements to the Basel III capital framework. Work is progressing on the policy measures identified in the November 2014 report to the G20 addressing the excessive variability in banks' risk-weighted assets (RWAs); for example, in April, the BCBS published a list of national discretions it intends to remove from the capital framework to enhance comparability across jurisdictions and reduce variability in RWAs.

The BCBS has released consultation documents on two other areas of policy development:

- In June, the BCBS consulted on its review of the regulatory treatment of interest rate risk in the banking book, which is intended to replace the BCBS' 2004 Principles for the Management and Supervision of Interest Rate Risk. The consultation document proposed two approaches for the capital treatment: a minimum requirement and an approach based on supervisory review. The latter approach requires quantitative disclosure based on the proposed minimum requirement, but at the same time accommodates differing market conditions and risk management practices across jurisdictions. This consultation ended in September.
- In July, the BCBS issued its proposed Credit Valuation Adjustment (CVA) risk framework.
 Under the proposal, banks will be required to hold capital against potential future changes in the CVA, which is essentially an adjustment made to the price of derivative instruments to account for the credit risk of the counterparty.
 The consultation period ended in early October.

As discussed in 'The Australian Financial System' chapter, APRA has recently taken steps that improve the resilience of Australian banks. In July, APRA responded to the FSI recommendation to ensure Australian banks' capital ratios are 'unquestionably strong' and published the results of an international

capital comparison study. Overall, the study found that the Australian major banks are well capitalised, though not in the top quartile of international peers. Soon after this, APRA also announced an increase in average residential mortgage risk weights for the currently five banks using the internal ratings-based (IRB) approach to credit risk. This announcement is consistent with the BCBS work aimed at reducing the excessive variability in banks' RWAs, and also addresses the FSI's recommendation to narrow the difference between the mortgage risk weights of IRB banks and banks using the standardised approach.

Identifying and monitoring new and evolving risks

Two areas identified as new and evolving financial stability risks have been a focus of G20/FSB efforts in recent months: asset management activities and market misconduct.

Consistent with the G20/FSB's interest in financial stability risks arising from shadow banking, international attention on the risks posed by asset managers has increased, given the growing size of the funds they manage and their potential to exacerbate movements in financial markets where underlying liquidity has reduced.1 The work is evaluating the role that existing or additional activity-based policy measures could play in mitigating potential risks. This work is being undertaken by two FSB committees: the Standing Committee on Assessment of Vulnerabilities, of which the Reserve Bank Governor became chair in April; and the Standing Committee on Supervisory and Regulatory Cooperation. The FSB Plenary meeting in late September discussed the work on asset management activities, calling attention to elevated near-term risks, and encouraging appropriate use of stress testing by funds to assess their ability individually and collectively to meet redemptions under difficult market liquidity

conditions. Following a review of the initial work on the structural vulnerabilities in the asset management sector, areas for further analysis were identified, including: (i) mismatch between liquidity of fund investments and redemption terms and conditions for fund units; (ii) leverage within investment funds; (iii) operational risk and challenges in transferring investment mandates in a stressed environment; (iv) securities lending activities of asset managers and funds; and (v) potential vulnerabilities of pension funds and sovereign wealth funds. The FSB, jointly with IOSCO, will continue to conduct further analysis in these areas, and, as necessary, develop policy recommendations in the first half of 2016.

The G20 has increased its focus on misconduct risk given the potential for it to create systemic risks by undermining trust in financial institutions and markets. The FSB is currently following a workplan to address misconduct risks which focuses on corporate governance, financial benchmarks and enforcement of existing misconduct reforms. It also addresses the unintended consequences from prior reforms of the potential withdrawal from correspondent banking in response to rising compliance costs of anti-money laundering and other regulations and reputational risks. Several international bodies released reports in the market misconduct area in recent months.

- In June, IOSCO released a report identifying credible strategies for deterring market misconduct. The report identifies a number of factors as helpful in preventing misconduct, including swift investigation of offences, public communication, cross-country cooperation, proportionate sanctions, and enhancing the quality of legal and regulatory frameworks to provide legal certainty.
- In July, the BCBS issued revised corporate governance principles for banks. The revised principles place particular emphasis on risk governance in promoting the sound functioning of banks. They provide guidance to boards and others in risk management roles

¹ For more information about asset management, see Price F and C Schwartz (2015), 'Recent Developments in Asset Management', RBA Bulletin, June, pp 69-78.

on implementing effective risk management systems, and highlight the importance of compensation arrangements in communicating a bank's risk culture.

- In July, the FSB also published its interim report on the implementation of recommendations regarding major interest rate benchmarks. The report found that administrators of major benchmarks had made significant progress in reforming benchmarks, including by conducting reviews of methodologies and definitions, and increasing data collection. Market participants from countries without major benchmarks have also taken steps to reform rates in their own jurisdictions. And in early October, the FSB released a progress report on implementation of its 2014 recommendations for reforms to foreign exchange benchmarks. The report drew on assessments of market participants' progress, which were undertaken by the main foreign exchange committees as well as by central banks in other large foreign exchange centres. The report, the preparation of which was led by the Bank's Assistant Governor (Financial Markets), found that good progress had been made overall in implementing the recommendations. The Assistant Governor also chairs a working group set up by the Bank for International Settlements to establish a single global code of conduct for the foreign exchange market and to encourage greater adherence to the code.
- In Australia, ASIC released a report in July which outlined the importance of financial benchmarks and provided recommendations to help market participants avoid financial benchmark-related conduct issues. Key recommendations in the report were: dealers should review their past conduct, report misconduct and review internal oversight, culture and incentive arrangements to ensure they fully address conduct risk; benchmark administrators are encouraged to adopt IOSCO's Principles for Financial Benchmarks and publish self-assessments against those principles; and wealth managers and other clients should understand how dealers handle

their orders and information and how they have done so in the past. Relatedly, the Bank has been promoting industry discussions to improve the functioning of interest rate benchmarks in Australia.

In line with a request from the G20, the FSB is also conducting work on climate change and the financial sector. In September, the FSB hosted a meeting of public sector and private sector participants to consider the implications of climate-related issues for the financial sector, with a focus on any financial stability issues that might emerge. The meeting discussed possible financial stability risks and mitigants, such as encouraging disclosure and exploring stress testing. The FSB is to report to the G20 on potential follow-up work that would complement existing industry initiatives.

Other Domestic Developments

As discussed in the previous Review, following the Final Report of the FSI, the Bank's Payments System Board (PSB) commenced a review of the framework for the regulation of card payments with the publication of an Issues Paper in March 2015. This review was flagged in the Bank's March 2014 submission to the FSI, when the Bank noted that it would be reviewing aspects of the regulation of card payments, including interchange fee arrangements, the regulatory treatment of 'companion' card issuance and surcharging. The broad direction of the review received support from the FSI Final Report, which also recommended several areas for the PSB to consider further reform. In August, the PSB asked Bank staff to liaise with industry participants on the possible designation of certain card systems, including the bank-issued American Express companion card system, the Debit MasterCard system and the eftpos, MasterCard and Visa prepaid card systems. Following this liaison, the Bank designated these systems. Designation does not impose regulation; rather, it is the first of a number of steps the Bank must take to exercise any of its regulatory powers. **