4. Developments in the Financial System Architecture

International regulatory efforts have continued to focus on the core post-crisis reform areas of addressing 'too big to fail', finalising outstanding Basel III capital reforms and shadow banking. While the goal of completing the Basel reforms by the end of 2016 was not reached, discussions are ongoing to try to finalise an agreement soon. A potential source of uncertainty is the deregulatory focus of the new US administration, including for the financial sector, which could affect the international financial reform agenda in the period ahead.

As implementation of global reforms has progressed, there has also been a continued focus on assessing the effects of reforms and whether they have achieved their intended outcomes. In addition, work has progressed on new and emerging risks, such as those related to the asset management industry and financial technology ('fintech').

Domestically, the Council of Financial Regulators (CFR) agencies have continued work on implementing internationally agreed reforms, as well as regulatory enhancements, in areas such as resolution and crisis management, risk management in financial institutions, and settlement systems.

International Regulatory Developments and Australia's Response

Addressing 'too big to fail'

A key issue highlighted during the financial crisis was that governments can feel obligated in certain cases to 'bail out' a failing bank or other financial institution that is very large, performs critical functions and/or is highly interlinked with other parts of the financial system. This is commonly referred to as 'too big to fail' and can lead to institutions taking on more risk than they otherwise would. Recent work on ending 'too big to fail' has largely focused on implementing the Financial Stability Board's (FSB's) total loss-absorbing capacity (TLAC) standard for global systemically important banks (G-SIBs). As discussed in the previous *Review*, TLAC aims to ensure that G-SIBs can be resolved in an orderly manner by requiring them to have sufficient liabilities (or capacity) suitable to absorbing losses. Some G-SIBs have issued TLAC-eligible securities, though major jurisdictions have not yet finalised how their TLAC regimes will operate in practice. G-SIBs with headquarters in advanced economies are required to start meeting the new standard from 1 January 2019.

The TLAC standard is also intended to provide 'host' authorities (i.e. authorities in jurisdictions where a G-SIB subsidiary or branch operates) with confidence that there is sufficient loss-absorbing capacity available to subsidiaries. This is being addressed through 'internal TLAC' – a mechanism whereby losses of a subsidiary of a G-SIB are passed to the parent without the need for the subsidiary to enter into resolution. The FSB released a consultation paper on internal TLAC provisions in December, and will issue guiding principles later this year.

With international work on the resolution of banks well progressed, the FSB, along with other standard-setting bodies, has more recently been focusing on the resolution of central counterparties (CCPs) given their increasing importance in over-the-counter (OTC) derivatives markets. The FSB released draft guidance on CCP resolution and resolution planning in February, which aims to assist with the development and implementation of effective regimes and credible resolution strategies for CCPs. The guidance considers the policy objectives for CCP resolution, and the resolution powers and tools required. Finalised guidance is expected to be published in June. Relevant to this work is an ongoing assessment coordinated by the FSB of the interdependencies between CCPs, major clearing members and financial service providers.

Domestically, legislative changes to enhance the Australian Prudential Regulation Authority's (APRA's) crisis management powers are expected to be introduced into parliament during 2017. Reforms to introduce a resolution regime for financial market infrastructures (including CCPs) will also be developed over the next year or so.

Building resilient financial institutions

As discussed in previous *Reviews*, the Basel III reforms were the key element of G20 efforts to build resilient financial institutions following the crisis. Most elements of these reforms have already been completed, and the Basel Committee on Banking Supervision (BCBS) has been working on finalising the remaining Basel III capital reforms. The outstanding reforms aim to reduce the observed variability in banks' risk-weighted assets, including by adjusting the 'standardised' (i.e. fixed risk weights set by regulators) and 'internal ratings-based' (i.e. weights based on banks' own models) approaches for credit risk, as proposed in earlier BCBS consultation documents. Also to be finalised is the 'output floor,' which would place a limit on the benefit a bank derives from using its internal models for estimating regulatory capital. The expectation is that there would not be a significant increase in *overall* capital requirements as a result of these changes but that there would be some impact on the minimum capital requirement for outlier banks.

The BCBS had set a goal of completing these outstanding capital reforms by the end of 2016. However, in January, the Group of Central Bank Governors and Heads of Supervision (GHOS) – the oversight body of the BCBS – announced that more time was needed to finalise the remaining work. The Bank and APRA, as BCBS and GHOS members, are continuing to contribute to these discussions.

Separately, the BCBS has continued its monitoring of Basel III implementation as well as ongoing policy development work.

- In its February progress report on the implementation of the Basel III reforms, the BCBS found that, as at June 2016, all member jurisdictions have implemented the main Basel III risk-based capital rules, Liquidity Coverage Ratio regulations and capital conservation buffers. The BCBS also reported the results of a survey of banks on the interaction of regulatory instruments. The survey found that banks see their most important challenges as regulatory uncertainty, the complexity of the regulatory framework and the difficulty of meeting many of the new Basel III requirements simultaneously.
- In March, following an earlier consultation, the BCBS released its standard retaining the current regulatory treatment of accounting provisions for an interim period. Under new international accounting standards that start to come into effect from 2018, a forward-looking estimate of credit losses would be used by banks to calculate provisions. These accounting standards require the recognition of credit losses earlier than is currently the

case and thereby address a problem that arose during the crisis where losses were not fully recognised in a timely manner. The BCBS's standard allows more time for it to consider the longer-term implications of these accounting changes for regulatory capital before finalising the regulatory treatment of provisions in the Basel framework.

- Also in March, the BCBS released its 'consolidated and enhanced' framework for Pillar 3 disclosure requirements. The new standard has three main elements: consolidation of all existing BCBS disclosure requirements into the Pillar 3 framework (covering, for example, the composition of capital, the leverage ratio and the countercyclical capital buffer); enhancements to the Pillar 3 framework (such as a 'dashboard' of a bank's key prudential metrics); and revisions and additions to the Pillar 3 standard arising from ongoing reforms to the regulatory policy framework. In most cases, the implementation date has been set for each bank's 2017 financial year end.

Shadow banking

Following the crisis, international bodies such as the FSB, the BCBS and the International Organization of Securities Commissions (IOSCO) released a series of reforms to address the risks posed by shadow banking entities (such as money market funds (MMFs) and finance companies) and shadow banking activities (including securities financing transactions (SFTs) such as repurchase agreements and securities lending). These bodies have continued with policy development in this area, as well as the monitoring of implementation.

- Following on from its 2013 framework for the regulation of SFTs, in January the FSB finalised further elements of its SFT recommendations. These focused on how collateral held under SFTs can be used, with the FSB publishing reports on 're-hypothecation' and collateral re-use, as well as non-cash collateral re-use. (The FSB defines 're-hypothecation' as the use of *client* assets by a financial intermediary, and defines 'collateral re-use' as the use of assets delivered as collateral in a transaction by an intermediary or collateral taker.) The report on re-hypothecation and collateral re-use examined the possibility of harmonising regulatory approaches on the re-hypothecation of client assets. The FSB concluded that there was no immediate case for harmonisation as there would be significant operational challenges associated with such an effort. In addition, jurisdictions' current regulatory approaches, while varied, are already designed to protect client assets. The second report finalised the FSB's preferred measure of non-cash collateral re-use in SFTs, and associated indicators that authorities can use to monitor collateral re-use for financial stability purposes.
  - A CFR working group has recently assessed the need for Australia's compliance with the SFT framework. It found that the small size of Australia's SFT market meant that certain recommendations (regarding haircut floors on non-bank to non-bank SFTs) did not need to be implemented in Australia (as allowed under the FSB's framework). The Bank will continue to monitor the size of the SFT market along with broader shadow banking developments, including in its annual shadow banking update to the CFR.

The BCBS's post-crisis reform work on shadow banking has focused on addressing the systemic risks arising from banks' involvement with shadow bank entities. In March, it released a second consultation paper on identifying and managing 'step-in' risk. This is the risk that a bank might support unconsolidated entities (such as securitisation conduits and MMFs) beyond any contractual obligation in order to protect itself from reputational damage that might arise from its connection to such entities. If not appropriately anticipated, the materialisation of step-in risks could erode banks' capital and liquidity positions. The BCBS has proposed several measures to manage step-in risk, such as including relevant entities within the regulatory scope of consolidation and within the banks' stress-testing frameworks.

IOSCO has been monitoring the implementation of shadow banking measures, along with broader shadow banking developments.

- In October, it published a report on the implementation status of the G20/FSB policy recommendations related to strengthening securities markets, covering areas such as hedge funds, securitisation and structured products, and improving the oversight of credit rating agencies. IOSCO concluded that most responding jurisdictions have taken steps to implement the FSB recommendations and IOSCO guidance in each reform area, with reforms most advanced in relation to hedge funds, structured products and securitisation, and still in progress in relation to commodity derivatives markets.
- In February, IOSCO published its findings from a survey on 'loan funds' – an innovative type of fund that is involved in restructuring, granting or acquiring loans. The report described how the market has evolved and how regulators are addressing emerging risks from these products. The report concluded that, while IOSCO will continue to monitor developments in this market, further work is not warranted at this stage, with many jurisdictions considering their general rules for funds to be sufficient to mitigate any specific risks arising from loan funds.

Risks and reforms beyond the post-crisis agenda

Newer areas of focus for the FSB include vulnerabilities associated with asset managers, efforts to evaluate the effectiveness of the post-crisis policy reforms, along with work on 'fintech', correspondent banking and climate change.

The FSB has been considering structural vulnerabilities posed by **asset management activities** and, following an earlier consultation, published its final policy recommendations in January. These vulnerabilities include, in certain cases, mismatches between the relative illiquidity of asset managers' investments and the relative ease of redemptions in open-ended funds. IOSCO will operationalise recommendations on liquidity mismatch in open-ended funds by the end of 2017 and develop consistent leverage measures for funds by the end of 2018.

With the majority of the core post-crisis policy reforms in the process of being implemented, there is increasing focus on **assessing their effects and effectiveness**. There are two elements to this work.

- The FSB is developing a comprehensive post-implementation policy evaluation framework. This aims to guide assessments of whether the G20 reforms are achieving their intended outcomes and to help identify any material unintended consequences that may need to be addressed. The Bank is a member of this FSB workstream. The framework was issued for consultation in April. It will be published by July, ahead of the G20 Summit.
- Ahead of the G20 Summit, the FSB will release its third annual report on the implementation and effects of reforms, which will include results of reviews underway in two core reform areas: the adequacy of post-crisis shadow banking policy tools and monitoring

processes; and progress in OTC derivatives market reforms and their effects to date.

'**Fintech**' is gaining increased attention from global and national regulators as fintech start-ups emerge in new fields within the financial system, often aiming to disrupt long-standing business models. Fintech and the spread of digital technology more generally are themes of the German G20 Presidency this year and the FSB is to prepare a report to the G20 by July on the regulatory and supervisory issues raised by fintech. The Australian Treasury is contributing to this work, in liaison with the Bank and the Australian Securities and Investments Commission (ASIC).

One aspect of fintech that has been examined closely is the emergence of distributed ledger technology (DLT), often referred to as 'blockchain' technology. The Bank is participating in a working group of the Committee on Payments and Market Infrastructures examining DLT and its implications. In February, the working group published an analytical framework for authorities wishing to review and analyse the use of this technology for payments, clearing and settlement.

In February, IOSCO published a research report on fintech that highlighted the increasingly important intersection between fintech and securities market regulation, and discussed the impact fintech could have on investors and financial services. The report analysed four main innovative business models and emerging technologies that are transforming financial services: financing platforms, retail trading and investment platforms, institutional trading platforms and DLT.

Domestic regulators are also directing attention to fintech:

- A CFR working group has considered the potential implications of DLT and how it fits within the existing regulatory framework in Australia.
- The Bank has established an internal working group to consider the implications of the technology.
- In December, ASIC announced a class waiver to allow eligible fintech businesses to test certain services on a limited scale without an Australian financial services or credit licence (referred to as a 'regulatory sandbox'). ASIC has also established an 'innovation hub' that makes it easier for fintech start-ups to engage with ASIC and understand the regulatory environment.

The FSB and other international bodies are continuing their work on assessing and addressing the decline in **correspondent banking**, based on an FSB workplan released in November 2015. The work reflects increasing concern about 'de-risking' in correspondent banking, since a decline in the number of correspondent banking relationships may affect the ability to send and receive international payments, or may drive some payment flows to less regulated channels. These risks could in turn affect growth, financial inclusion and financial stability. The FSB published a progress report on this initiative in December.

In a related development, the BCBS initiated a consultation in November on revisions to its *Sound management of risks related to money laundering and financing of terrorism* guidelines. The proposed revisions recognise that not all correspondent banking relationships bear the same level of risk, and accordingly banks should conduct correspondent banking business with the best possible understanding of the applicable requirements regarding anti-money laundering and countering the financing of terrorism.

In December, the FSB-convened **Task Force on Climate-related Financial Disclosures** (TCFD) initiated a consultation on a proposed framework for the disclosure of climate-related risks in financial statements. The TCFD's final report, due in mid 2017, will detail a set of voluntary and consistent disclosure recommendations for use by both financial and non-financial firms to provide information on their climate-related financial risks to investors, lenders and insurance underwriters. The work of the TCFD has been extended to at least September 2018 to promote and monitor the adoption of its recommendations.

In February, APRA noted the work of the TCFD as part of a broader speech on climate change and prudential risks. APRA stated that some climate risks are distinctly financial in nature and that many of these risks are foreseeable, material and actionable now. A key first step is for firms to understand and monitor these risks, and be transparent about them. APRA will look at climate risks as part of its system-wide stress testing, and expects firms to include these risks in their own stress testing of risks. ASIC too has been reminding companies of the requirement to disclose any material climate-related risks in the 'Operating and Financial Review' part of their annual reports, and in transaction documents.

Other Domestic Developments

Risk management

As noted in the 'The Australian Financial System' chapter, in October APRA released an information paper on risk culture practices in a range of banking, insurance and superannuation businesses. The paper notes that there has been a stronger focus on risk culture among APRA-regulated institutions over the past year or so. Nonetheless, it stresses that continued effort and ongoing attention are required by institutions to better understand and manage their risk cultures. As part of its increased focus in this area, APRA will also review remuneration policies and practices among financial institutions and assess how these interact with risk culture.

Following feedback on an earlier consultation, in October APRA released the final version of its prudential standard on margining and risk mitigation for non-centrally cleared derivatives. This standard implements in Australia an important component of the G20's post-crisis reforms aimed at reducing systemic risk in OTC derivatives markets. It requires banks and other covered APRA-regulated entities that trade in non-centrally cleared derivatives to exchange margin (i.e. collateral) to mitigate counterparty credit risk associated with their derivative activities when the level of this activity exceeds minimum qualifying levels. The new risk mitigation requirements are intended to increase the transparency of bilateral positions between counterparties, promote legal certainty over the terms of non-centrally cleared derivative transactions and facilitate the timely resolution of disputes. The prudential standard commenced on 1 March 2017, with a multi-year phase-in that reflects the internationally agreed timetable.

Settlement systems

In March the CFR released a consultation paper on competition in the settlement of Australian cash equities. The paper seeks feedback on risks and policy issues associated with competition in the settlement of these products, and on proposed policy guidance to ensure that any such competition is safe and effective. This work was prompted by views that technological changes have increased the likelihood of competition in settlement; a review of competition in clearing of Australian cash equities was finalised in 2016.