4. Financial Market Infrastructures

Financial market infrastructures (FMIs) are critical to the smooth functioning of the financial system. The Reserve Bank has a role in overseeing and supervising FMIs to contribute to financial stability. The COVID-19 pandemic generated significant strains in financial markets, highlighting the importance of the Bank's continuous monitoring of FMIs' financial risk management practices. The Bank has also focused on FMI's governance and their operational resilience to market pressures and external threats, such as cyber attacks. Serious operational incidents have occurred at some FMIs over the past year, preventing them from meeting their availability targets. The Bank is monitoring their efforts to ensure that such incidents do not reoccur.

The role of clearing and settlement facilities in financial markets

Clearing and settlement (CS) facilities support the processing of many transactions in financial markets. There are two types of CS facility – central counterparties (CCPs) and securities settlement facilities (SSFs) – which carry out clearing and settlement, respectively.

CCPs play a major role in managing the risks associated with trading in many types of financial instruments. They stand between the counterparties to a financial trade, acting as the buyer to every seller and the seller to every buyer; this activity is known as 'central clearing'. Participants in centrally cleared markets have credit and liquidity exposures only to the CCP, rather than other participants in the market. In the event that a participant defaults, the CCP takes over their portfolio. The CCP faces potential losses from changes in the value of a defaulting participant's portfolio until it closes out the positions in that portfolio. CCPs hold financial resources to meet these potential losses.

Securities settlement involves the delivery of a financial security in exchange for payment, typically through an SSF. An SSF typically registers the change of ownership of securities and facilitates payments between the investors and issuers of securities. The settlement of two linked obligations brings about principal risk (e.g. the securities are delivered but no cash payment is received). Therefore, an SSF's main responsibility is the mitigation of principal risk by conditioning the final settlement of one obligation upon the final settlement of the other via a delivery-versus-payment (DvP) mechanism.

The Bank's regulatory framework

Under the powers to regulate FMIs assigned to the Bank and the Payments System Board by the *Corporations Act 2001* and the *Reserve Bank Act 1959*, the Board has determined policies for the supervision and oversight of CS facilities and systemically important payment systems (SIPS).[1] In accordance with these policies, day-to-day oversight and supervision of FMIs is undertaken by the Bank's Payments Policy Department. In carrying out these activities in respect of CS facilities, the Bank works closely with the Australian Securities and Investments Commission (ASIC). The two agencies have complementary oversight powers over CS facilities and share the responsibility for ongoing supervision and assessment under the Corporations Act. Where an FMI is based overseas, the Bank seeks to defer to assessments undertaken by the home regulator, where practicable.

The Bank's Financial Stability Standards for CS facilities

Under the Corporations Act, the Bank may determine financial stability standards for CS facility licensees. The Bank is responsible for assessing how well licensees have complied with the standards and their obligation to do all other things necessary to reduce systemic risk.

The Bank has determined two sets of Financial Stability Standards (Standards) – one for CCPs and one for SSFs.[2] Each licensed CS facility is obliged to meet the relevant set of Standards. The objectives of the Standards are to ensure that CS facility licensees identify and properly control risks associated with the operation of their facility, and conduct their affairs in a way that is consistent with the overall stability of the Australian financial system. The Standards set principles-based requirements and regulatory expectations, rather than prescribing detailed rules and obligations.

The Bank's Standards draw on the *Principles for Financial Market Infrastructure* (PFMI), which are internationally agreed standards for FMIs set by the Committee on Payments and Market Infrastructures (CPMI) and the Technical Committee of the International Organization of Securities Commissions (IOSCO). The Bank also applies guidance developed from time to time by CPMI and IOSCO when interpreting its Standards.[3] Cyber risk management has been an increasingly important area of such guidance, as outlined in Box B. There were no changes to the Standards or associated guidance during 2020/21.

The Bank's determination of systemically important payment systems

A payment system is systemically important if it has the potential to trigger or transmit systemic disruption – for example, because it processes a large share of the value of payments in the financial system, or because it is used for high-value or time critical payments or for payments in other FMIs. A problem affecting a SIPS has the potential to cause significant damage to the stability of the financial system because financial institutions and their customers may be unable to make payments necessary to meet critical obligations.

The Bank has set out criteria to determine which payment systems are systemically important, and carries out an annual review against these criteria. Currently, the Bank considers the following systems to be SIPS:

- Reserve Bank Information and Transfer System (RITS) – RITS is Australia's high-value

[1] RBA (2021), 'The Reserve Bank's Approach to Supervising and Assessing Clearing and Settlement Facility Licensees', 25 February. Available at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/standards/approach-to-supervising-and-assessing-csf-licensees.html#the-banks-supervisory-and-assessment-approach>. See also RBA (2019), 'Policy Statement on the Supervision and Oversight of Systemically Important Payment Systems', 21 June. Available at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/high-value-payments/policy-statement-on-supervision-and-oversight-of-systemically-important-ps.html>.

[2] RBA (2013), 'Clearing and Settlement Facilities – Financial Stability Standards'. Available at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/standards/>.

[3] For the full list of guidance the Bank has adopted, see notes to the Financial Stability Standards at RBA (2013), 'Clearing and Settlement Facilities – Financial Stability Standards'. Available at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/standards/>.

payment system used by banks and other financial institutions to settle payment obligations. It is owned and operated by the Bank. The Bank's Payments Policy Department undertakes annual assessments of RITS against the PFMI.

- CLS Bank International (CLS) – CLS operates a payment-versus-payment settlement system for foreign exchange transactions in a range of currencies, including the Australian dollar. Globally, it processes payments for over half of all foreign exchange transactions.[4]

Table 4.1 presents an overview of FMIs most relevant to the Australian market, the products they clear or settle, and their home regulator.

Financial market developments affecting FMIs

Trading activity in financial markets

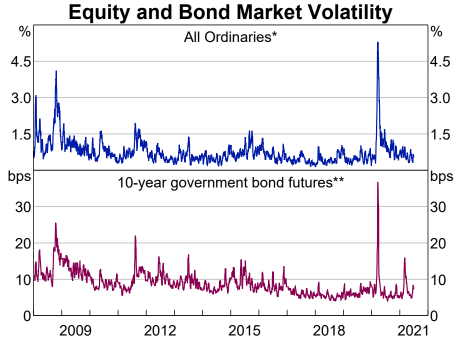
Trading activity in financial markets in 2020/21 was generally lower than the peaks seen around March 2020, when volatility spiked across financial markets (Graph 4.1). For equities, there was a more pronounced decline in trading activity in derivatives than for securities (Graph 4.2). Equity market volatility has, however, remained higher than before the COVID-19 shock. With short-term interest rates at very low levels reflecting highly accommodative global monetary policy, trading activity in shorter-dated interest rate derivatives has been well below earlier levels (Graph 4.3). There has also been a decline in repurchase agreements activity in debt securities markets, which weighed on overall debt securities settlement activity in Austraclear (Graph 4.4). In contrast, the spike in bond market volatility around February 2021 amid an increase in global inflation expectations saw increased trading activity in 10-year Treasury bond futures cleared by ASX Clear (Futures) and in IRS, which are cleared predominantly by LCH Ltd SwapClear (Graph 4.3; Graph 4.5).

High-value payments activity

High-value payments settled in RITS declined in 2020/21 (Graph 4.6). The volatile conditions in financial markets in March 2020 resulted in settlement activity rising sharply, with activity then declining over the months that followed.

Graph 4.1

Equity and Bond Market Volatility

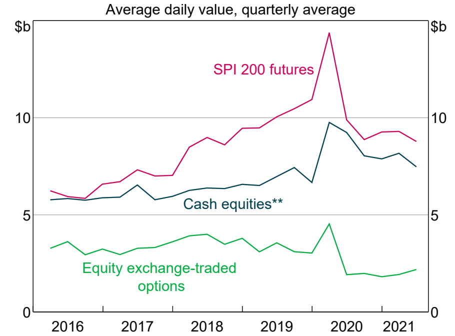


* 10-day moving average of absolute per cent change
** 10-day moving average of intraday range
Source: Bloomberg

Graph 4.2

ASX Equities – Trading Activity*

Average daily value, quarterly average



* This graph has been updated with the latest available figures; Q2 2021 data for cash equities is expected to be received by PSB
** ASX Trade and Chi-X
Sources: AFMA; ASIC; ASX; Bloomberg; RBA

[4] See Bank for International Settlements (2019), 'Triennial Central Bank Survey: Global Foreign Exchange Market Turnover in 2019', Monetary and Economic Department, 8 December. Available at <https://www.bis.org/statistics/rpfx19_fx_annex.pdf>.

Table 4.1: Financial Market Infrastructures Most Relevant to the Australian Market

Name	Products relevant to the Australian market[a]	Home jurisdiction (regulator)
Central counterparties		
ASX Clear[b]	Cash equities, debt products, warrants and equity-related derivatives traded on Australian exchanges or over-the-counter (OTC).	Australia (RBA/ASIC)
ASX Clear (Futures)[b]	Futures and options on interest rate, equity, energy and commodity products traded on the ASX 24 market, as well as AUD and New Zealand dollar-denominated OTC interest rate derivatives (IRD).	Australia (RBA/ASIC)
LCH Ltd	Swapclear service: OTC IRDs and inflation rate derivatives.	UK (Bank of England)
Chicago Mercantile Exchange Inc (CME)	IRS service: OTC IRD, and non-AUD IRD traded on the CME market or the Chicago Board of Trade. FEX service: Commodity, energy and environmental derivatives traded on the financial market operated by FEX Global Pty Ltd (FEX).	USA (Commodity Futures Trading Commission)
Securities settlement facilities		
Austraclear[b]	Debt securities, including government bonds, and repurchase agreements.	Australia (RBA/ASIC)
ASX Settlement[b]	Cash equities, debt products and warrants traded on Australian exchanges.	Australia (RBA/ASIC)
Euroclear Bank	Debt securities, including government bonds, and repurchase agreements.	Belgium (National Bank of Belgium)
Clearstream Banking S.A.	Debt securities, including government bonds, and repurchase agreements.	Luxembourg (Commission de Surveillance du Secteur Financier)
Systemically important payment systems		
RITS	Wholesale and other SWIFT payments, settlement of interbank obligations arising from other payment systems (cheques, Direct Entry, cards, CLS, property settlements) and other types of FMIs (CCPs and securities settlement systems).	Australia (RBA)
CLS	Foreign exchange transactions involving the AUD.	USA (Federal Reserve)

(a) Including service name if applicable (e.g. for overseas facilities that only provide some services relevant to the Australian market)

(b) ASX Group entities

FMIs' financial risk management

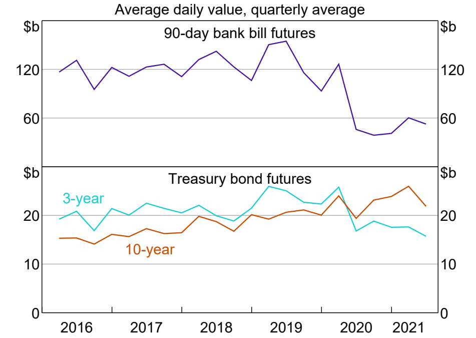
The decline in activity in various segments of Australia's financial markets in 2020/21 translated into lower levels of financial resources collected by many CCPs. The main source of these resources is initial margin. It is collected from every participant to cover potential losses on their portfolio in the event they default. While the amount of margin collected by most of the licensed CCPs in Australia has declined, it still remains above levels seen before the onset of COVID-19 in early 2020 (Graph 4.7). This partly reflects a choice by some CCPs to maintain higher margin levels brought about by the increased volatility associated with the pandemic. More broadly, market participants have focused on the increases in margin requirements in this period of market stress and international regulators have been reviewing whether margin requirements could be made less procyclical.

In addition to initial margin, CCPs also hold default funds that can be used in the event of a participant default. Default funds typically consist of mutualised resources and various categories of additional margin. They are used to cover the losses that would arise from a participant default that exceeded the initial margin provided by the defaulting participant. Overall, with many CCPs holding higher levels of initial margin since the onset of COVID-19, the loss coverage provided by their default funds has remained robust (Graph 4.8).

Graph 4.3

ASX Interest Rate Futures – Trading Activity

Average daily value, quarterly average

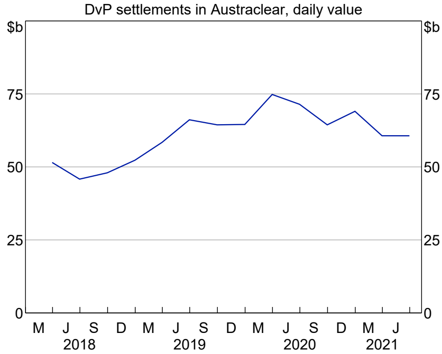


Sources: ASX; Bloomberg; RBA

Graph 4.4

Debt Securities Activity

DvP settlements in Austraclear, daily value

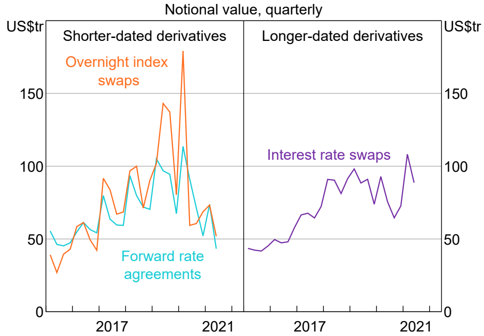


Source: ASX

Graph 4.5

SwapClear – Trades Registered by Product*

Notional value, quarterly



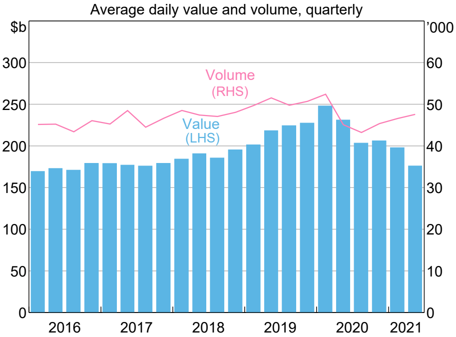
* Data count two sides of each trade

Source: LCH Ltd

Graph 4.6

RITS RTGS Transactions

Average daily value and volume, quarterly

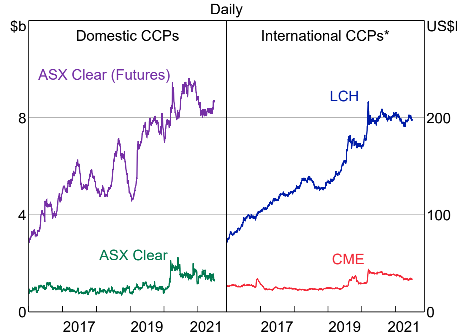


Source: RBA

Graph 4.7

Initial Margin – Australian-licensed CCPs

Daily



* OTC interest rate derivatives services only (covering all currencies)

Sources: ASX; CME Inc.; LCH Ltd

The Bank's supervision and oversight of financial market infrastructures

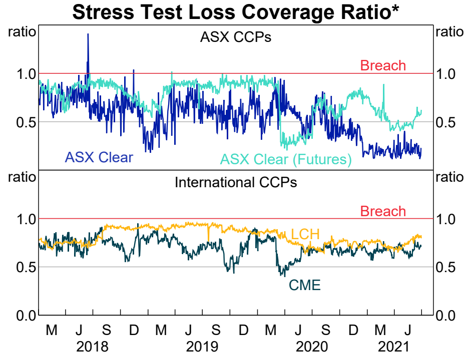
The Bank undertakes assessments of licensed CS facilities based on their degree of systemic importance in the Australian financial system.[5] The four CS facilities in the ASX Group are systemically important domestic CS facilities, and LCH Ltd's SwapClear service is a systemically important overseas CS facility. CME's CCP services have not been classified as systemically important and are therefore subject to less-intensive supervision.

ASX

The Bank has recently published its 2021 Assessment of the ASX CS facilities.[6] This assessment concluded that the CS facilities have conducted their affairs in a way that promotes overall stability in the Australian financial system. However, ASX will need to place a high priority on addressing recommendations related to margin at ASX Clear (Futures) and operational risk across the ASX CS facilities. The steps taken by ASX to address the Bank's regulatory priorities and other material developments are set out below. Further detail is provided in the 2021 Assessment report.

Graph 4.8

Stress Test Loss Coverage Ratio*



* Ratio of Cover 2 stress test losses to default fund including additional default fund margin

Source: ASX; CME Inc.; LCH Ltd

Governance

The special topic for the 2021 Assessment was governance. Good governance is essential to an entity's resilience and compliance with regulatory requirements. Failures in risk management or compliance generally involve a weakness of governance. The Bank's review of the governance of the ASX CS facilities involved interviews with directors and executives of the ASX Group, as well as a review of ASX Board and other documents. The ASX CS facilities have no staff or assets of their own – these are provided by other ASX Group entities – and the operation of the ASX Group is governed on a group-wide basis. Accordingly, the Bank's review considered whether the CS facilities' business and their regulatory and stakeholder obligations received appropriate attention and focus within the ASX Group. The Bank concluded that this was not always the case and made recommendations to increase the attention given to the CS facilities within the ASX Group structure.

The Bank also concluded that the lines of responsibility and accountability for the operation of the CS facilities were insufficiently clear and inadequately documented, and made a series of recommendations in this regard.

Additional issues addressed in the assessment included the skills and experience required by the ASX Board to supervise the ASX's ambitious program of technology projects and the organisation's increased focus on stakeholder management.

CHESS replacement and uplift

ASX implemented significant improvements to the capacity of the CHESS clearing and

[5] RBA (2021), 'The Reserve Bank's Approach to Supervising and Assessing Clearing and Settlement Facility Licensees', 25 February. Available at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/standards/approach-to-supervising-and-assessing-csf-licensees.html#the-banks-supervisory-and-assessment-approach>.

[6] See RBA (2021), 'Assessments'. Available at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/assessments/>.

settlement system for cash equities during 2020/21. This followed a recommendation in the Bank's 2020 Assessment that ASX improve the capacity of CHESS to mitigate the risk of processing delays such as those experienced in March 2020. The system can now accommodate 10 million trades per day across consecutive days, well above the peak single-day trade volume to date of 7 million trades. Further work is underway to ensure that the system connecting CHESS to ASX's trading platform can also accommodate this volume of trades.

ASX is also continuing work to replace the CHESS system with more modern technology, which will support much higher trading volumes over time. In October 2020, ASX announced that the target launch date for the CHESS replacement system had been delayed by two years to April 2023. This delay allows ASX to make changes to improve the replacement system's ability to respond to future growth in trading volumes; it also provides more time for ASX and the industry to prepare for and test the new system.

Operational incidents

During the week of 16 November 2020, ASX experienced a number of serious operational incidents, involving trading as well as clearing and settlement. This included an outage affecting the ASX market for nearly the whole day on 16 November, and ASX's Centre Point order matching service was closed for several days. There was also a delay in the completion of the CHESS settlement batch on 17 November by around 3½ hours. ASX has subsequently developed a procedure that will allow it to resolve such a CHESS issue more quickly if it were to reoccur. It has also provided greater clarity to participants and payment providers on the actions it may take if an operational incident affects the CHESS batch. The Bank has engaged with ASIC and ASX to understand whether there are any underlying systematic issues that contributed to the incidents that may have implications for ASX's clearing and settlement operations.

An independent expert review of the ASX Trade upgrade project that preceded the trading system problems found that, while the project met or exceeded leading industry practices in a majority of cases, there were a number of key shortcomings that should be addressed. ASIC and the Bank are engaging with ASX on its response to the review, including to understand how lessons learned will be incorporated into the CHESS replacement program.

Financial risk management

During 2020/21, ASX progressed work on a number of regulatory priorities identified in the Bank's 2020 Assessment arising from the ASX CCPs' response to the pandemic-related volatility in financial markets in March 2020. These included:

- *Stress-test scenarios* – ASX reviewed its CCP stress test scenarios to consider any adjustments it should make to the boundary of the 'extreme but plausible' stress events that the scenarios cover in light of the extreme market moves in March 2020. The review led to the introduction of a number of new and strengthened stress test scenarios.
- *Anti-procyclicality measures* – ASX Clear (Futures) implemented a new methodology for setting floors on the margin that participants need to provide, designed to reduce the risk of destabilising 'procyclical' increases in margin in times of stress. The Bank has recommended that ASX broaden this approach into a systematic procyclicality framework covering its full range of risk models across both ASX Clear and ASX Clear (Futures).
- *Late-in-day and overnight price movements* – The ASX CCPs' margin processes do not

enable them to collect variation margin to cover large late-in-day price movements, such as those experienced in March 2020, until the following morning. ASX Clear (Futures) is developing an initial process for collecting overnight variation margin and is exploring ways to improve this process over the longer term. Both CCPs must undertake further work to address risks arising from price movements in the late afternoon.

LCH Ltd

The Bank's most recent assessment of LCH Ltd's SwapClear service was published in December 2020.[7] The key developments from the assessment were:

- LCH Ltd had provided the Bank with a plan to move its SwapClear service to a 24 hours, five days a week clearing model, while ensuring the resilience of its operations. When implemented, this change will mitigate the build-up of bilateral credit risk exposures arising from trading activity that currently occurs while the service is closed during most of the Australian trading day.
- LCH Ltd had made enhancements to improve the efficiency of its contingency arrangements for making and receiving timely cash payments from participants (such as variation margin) in the event of an outage or failure at a bank involved in processing those payments.
- The Bank identified three areas of supervisory focus for its 2020/21 supervision. The first related to the management of operational and cyber risks. The second focused on ensuring LCH Ltd is benchmarking its margin models against industry practice and documenting these procedures. The third included a periodic review of LCH Ltd against the Legal Basis Standard, focusing on the enforceability of LCH Ltd's rules and related contracts in relation to its operations in Australia.

An operational incident at LCH Ltd's SwapClear service in February 2021 resulted in a temporary disruption of service. Trade registration was halted for the entire Australian trading day and the production of end-of-day reports was delayed. The Bank is satisfied with the steps being undertaken by LCH Ltd to prevent similar incidents from occurring in the future.

CME

Since the Bank's most recent assessment of CME, published in March 2019, the Bank has closed two areas of supervisory focus related to how CME's practices align with international guidance on financial and cyber resilience. The Bank's next assessment of CME is planned to take place during 2022/23. It will include a review of CME's compliance with the Bank's requirements placed on its clearing service for products traded on the FEX commodity, energy and environmental derivatives market, which launched in March 2021.

Euroclear Bank

Euroclear Bank is an internationally focused SSF based in Belgium that provides settlement and custodial services for securities denominated in a wide range of currencies, including Australian dollar securities such as Australian Government Securities and semi-government securities.[8] Investors' assets held within the Euroclear Group, which includes Euroclear Bank, are valued at over $50 trillion. Overseas investors use Euroclear Bank's services to access Australian securities markets. The Bank is a member of the Euroclear Bank Multilateral Oversight Group,

[7] RBA (2020), 'Assessment of LCH Limited's SwapClear Service', December. Available at <https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/assessments/lch/2020/lch-assess-2020-12.html>.

[8] In its home jurisdiction of Belgium, it is classified as an International Central Securities Depository.

which is chaired by the National Bank of Belgium (Euroclear Bank's home supervisor). It serves as a cooperative oversight forum between the central banks of the major currencies settled in Euroclear Bank.

Clearstream Banking S.A.

Clearstream Banking S.A. is a financial institution based in Luxembourg that provides securities settlement and custodial services in a wide range of currencies, including for Australian dollar securities. Clearstream Banking S.A. is supervised under the Central Securities Depositories Regulation, as well as the European Union banking supervision framework in its home jurisdiction (Luxembourg) by the Commission de Surveillance du Secteur Financier. The Securities Settlement System it operates falls under the oversight of the Central Bank of Luxembourg.

Reserve Bank Information and Transfer System

The most recent assessment of RITS against the PFMI, prepared by the Bank's Payments Policy Department and endorsed by the Payments System Board, was published in June.[9] The assessment concluded that RITS 'observed' all relevant principles as at 31 March, except for the principles on Participant-Default Rules and Procedures, and Operational Risk, which were rated as 'broadly observed'.

The assessment included a number of recommendations for the Bank to implement to achieve full observance with the principles. To observe the principle on Participant-Default Rules and Procedures, the assessment recommended the Bank formally document its decision-making and crisis-management arrangements in the event of a RITS member default. To observe the Operational Risk principle, the assessment recommended that the Bank complete implementation of: all initiatives related to the Bank's Technology Stability Improvement Program that are material to the continued operational stability of RITS;[10] and proposals to improve oversight of maintenance activities conducted by external contractors on the Bank's critical infrastructure (this recommendation was made in response to events that contributed to a RITS operational outage that occurred in July 2020).[11]

The assessment also noted that, over the next assessment period, Payments Policy Department will focus on two particular areas: enhancements to cyber risk defences; and the impact of planned upgrades to the Bank's physical infrastructure on the operational stability and resilience of RITS.

CLS Bank International

CLS operates a payment-versus-payment settlement system (CLS Settlement) for foreign exchange transactions in 18 currencies, including the Australian dollar. CLS is chartered in the United States and is regulated and supervised by the Federal Reserve. The Bank participates in a cooperative oversight arrangement for CLS, facilitated by the Federal Reserve.

In June, CLS migrated CLS Settlement from its legacy technology platform to CLS's Unified Services Platform. The new arrangements give CLS more control over its operations and the delivery of changes to its services. The migration lays the foundation for achieving a single platform for all CLS settlement services.

[9] RBA (2021), 'Assessment of the Reserve Bank Information and Transfer System', May. Available at <https://www.rba.gov.au/payments-and-infrastructure/rits/self-assessments/2021/>.

[10] Further information on the Bank's Technology Stability Improvement Program can be found in section 3.3.1 of the 2021 RITS assessment.

[11] Further information on the July 2020 outage can be found in section 3.1.2 of the 2021 RITS assessment.

SWIFT

SWIFT provides critical messaging and connectivity services to both RITS and CLS, as well as other FMIs and market participants in Australia and overseas. The G10 central banks oversee SWIFT through the SWIFT Cooperative Oversight Group (OG). The Bank is a member of the SWIFT Oversight Forum (SOF), which affords a broader set of central banks the opportunity to discuss oversight matters and provide input into the OG's priorities and policies. Oversight of SWIFT is supported by a set of standards – the High-level Expectations – which are consistent with standards for critical service providers in the PFMI.

During 2020/21, the SOF focused on cyber resilience, including SWIFT's ongoing program to ensure SWIFT members' defences against cyber attacks are up to date and effective, to protect the integrity of the wider financial network. All SWIFT members, including the major banks and other large financial institutions in Australia, are required to submit an independent assessment of their compliance with the Customer Security Programme by the second half of this year. The migration to ISO 20022 messages for cross-border payments is on track to restart in 2022 after being delayed due to the COVID-19 pandemic. This work is still expected to be completed in November 2025 (see chapter on 'Retail Payments Regulation and Policy Issues').

FMI policy issues

The Bank works with other regulators internationally and domestically on policy issues relevant to the supervision and oversight of FMIs.

International policy issues

In 2020/21, the Bank continued to contribute to the CPMI–IOSCO work on policy development and implementation for FMIs. This included contributing to peer review exercises that assess the extent to which a jurisdiction's implementation measures are complete and consistent with the PFMI, and the consistency of outcomes in the implementation of the PFMI by FMIs. Further, the Bank contributed to reports on stablecoins, client clearing and non-default losses in FMIs.

The Bank is also represented on a group carrying out analysis of the changes that were seen in margin requirements during the March 2020 market turmoil. The group is a joint initiative of CPMI, IOSCO and the Basel Committee on Banking Supervision and is feeding into the Financial Stability Board's broader work on lessons learned from the pandemic, which will be reported to the G20 later in the year.

The Bank has also been involved in international policy work on CCP resolution issues. This has included considering the adequacy of financial resources for CCP resolution and the treatment of CCP equity in resolution. Guidance on these issues was released in November 2020.[12]

Regulators globally have determined that the London interbank offered rate (LIBOR) benchmark cannot be relied on beyond 2021 given its notable deficiencies. Markets need to transition to more robust and reliable market-determined interest rate benchmarks, known as alternative risk-free rates (RFRs). The transition to RFRs is expected to accelerate as some existing reference rates are discontinued at the end of 2021. LCH Ltd's SwapClear service and CME's IRS service are scheduled to convert affected LIBOR contracts to corresponding RFR contracts in the final quarter of this year.[13] As

[12] Financial Stability Board (2020), 'FSB Releases Guidance on CCP Financial Resources for Resolution and Announces Further Work', Press Release, 16 November. Available at <https://www.fsb.org/2020/11/fsb-releases-guidance-on-ccp-financial-resources-for-resolution-and-announces-further-work/>.

[13] CME USD LIBOR-referenced contracts that are not affected will be converted/transitioned at a later stage when relevant USD LIBOR settings will no longer be published (i.e. around 2023).

Australia's bank bill swap rate (BBSW) credit-based benchmark remains unaffected, Australian dollar denominated swaps linked to BBSW will not require conversion.

Domestic policy issues

The Bank has worked with other regulators through the CFR, the coordinating body for Australia's main financial regulatory agencies, to develop reforms to the regulation of CS facilities, markets, trade repositories and benchmark administrators. The proposed reforms aim to support the effective regulation of the systems, services and facilities that underpin Australia's financial system by strengthening the supervision and enforcement powers of ASIC and the Bank.

The CFR's proposed reforms were provided in Advice to Government in July 2020, with the Treasurer announcing in June 2021 that the government will introduce the reforms package. The Advice and the CFR's Response to Consultation, which addressed submissions on the 2019 consultation paper on the proposed reforms, were published on the CFR's website.[14]

Importantly, the reforms provide for the introduction of a crisis management regime for licensed CS facilities. The Bank has commenced preliminary planning for such a regime (see Box C).

[14] Council of Financial Regulators (2021), 'Financial Market Infrastructure Regulatory Reforms: Response to Consultation and Advice to Government', Media Release No 2021-02, 8 June. Available at <https://www.cfr.gov.au/news/2021/mr-21-02.html>.