

In the spirit of reconciliation, the Reserve Bank of Australia acknowledges the Traditional Custodians of Country throughout Australia and their connections to land, sea and community.

We pay our respects to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Payments System Board Annual Report

2024

Contents

Governor's Foreword		
1.	About the Payments System Board	2
	Role of the Board and the RBA	2
	Strategic priorities	3
	Board members as at September 2024	5
	Retirement from the Board	11
	Meetings of the Board	12
	Code of conduct	13
	Conflicts of interest	13
	Accountability and communication	13
2.	Payments System Regulation and Policy Issues	17
	Oversight of safety and resilience of payment systems	17
	Policy issues in the payment cards market	19
	Payments regulatory reforms	21
	ATM access framework	23
	Enhancing cross-border payments	24
	Research on central bank digital currency and innovations in digital money	25
3.	Developments in the Clearing and Settlement Industry	27
	Clearing and settlement facilities operating in Australia	27
	Financial stability standards for securities settlement facilities	28
	Supervisory lessons from the CHESS replacement project	29
	Oversight of clearing and settlement facilities	29
	Central clearing of Australian bond and repo markets	31
	Financial market infrastructure regulatory reforms	31
Ab	breviations	32

Governor's Foreword

The Australian payments landscape is changing rapidly, with new business models and technologies entering the space. The industry is also moving from legacy systems towards new platforms that can deliver payment services that are faster, safer and more convenient. The Payments System Board continues to focus on fostering competition and innovation in a regulatory environment that supports the safety and security of the Australian payments system.

There has been a continued shift from cash to card payments, and a rapid uptake of mobile wallets offered by large technology companies. Use of the New Payments Platform (NPP) – Australia's fast payments system – has also continued to grow. The Board has a close interest in the capability of the NPP, especially in the development and uptake of new functionality to meet the evolving needs of end users. The safety and resilience of the NPP will also become increasingly important given industry's efforts to migrate account-to-account payments from the legacy Bulk Electronic Clearing System by the end of the decade.

The RBA has been working with the Australian Government to enhance the regulatory framework for the payments system, and significant progress has been made in 2023/24 on these reforms. Legislation to modernise the *Payment Systems (Regulation) Act 1998* is being considered by the Australian Parliament and more work has been done on developing a new licensing framework for payment service providers. Another focus area has been the government's regulatory reforms for financial market infrastructures, where legislation is also before the Parliament. These reforms will be critical to ensuring that the RBA and other regulators have the capabilities required to appropriately supervise financial market infrastructures and effectively manage crisis scenarios.

Globally, central banks, including the RBA, are investigating the potential use and implications of central bank digital currencies (CBDCs). During the year, RBA staff, in partnership with the Digital Finance Cooperative Research Centre (DFCRC), completed a pilot study exploring potential use cases for CBDC in Australia. The RBA and the DFCRC have recently embarked on a new research project to explore how different forms of digital money could support the

settlement of transactions in tokenised asset markets. The results of these projects will help to inform future work on assessing the policy case for issuing a CBDC in Australia.

The oversight of clearing and settlement facilities is an important area of the Board's work. Over the past year, there has been significant focus on ASX's governance and management of operational risk. It is important that the ASX continues to prioritise the delivery of safe and reliable clearing and settlement infrastructure for Australia's financial markets. The Board also continued to focus on the operational resilience of other financial market infrastructures that operate in Australia given their importance to the ongoing stability of the financial system.

RBA staff have carried out their work with professionalism and provided excellent support to the Board throughout the year. The Payments System Board joins me in thanking the staff for their work and for their ongoing contribution to the efficiency, competitiveness and safety of Australia's payments system.

Michele Bullock

Governor and Chair Payments System Board 20 September 2024

Chapter 1

About the Payments System Board

The Payments System Board has responsibility for the RBA's payments system policy, including policy on clearing and settlement facilities. In 2023/24, the Board comprised eight members and met at the RBA Head Office through the year. During the year, it set five strategic priorities to guide the RBA's payments policy work, strengthened its code of conduct and its conflict of interest policy, and ensured a high degree of transparency and accountability around its actions through reporting and the RBA's communication program.

Role of the Board and the RBA

The Reserve Bank of Australia (RBA) is responsible for promoting the stability, efficiency and competitiveness of the payments system through the Payments System Board. The Board has a duty under the Reserve Bank Act 1959 to ensure that the RBA's payments system policy is directed to the greatest advantage of the people of Australia, and that the powers of the RBA under the Payment Systems (Regulation) Act 1998 and the Payment Systems and Netting Act 1998 are exercised in a way that, in the Board's opinion, will best contribute to:

- controlling risk in the financial system
- promoting the efficiency of the payments system
- promoting competition in the market for payment services, consistent with the overall stability of the financial system.

Under the Payment Systems (Regulation) Act, the RBA has the power to designate payment systems and to set standards and access regimes for designated systems. The Payment Systems and Netting Act provides the RBA with the power to give legal certainty to certain settlement arrangements to minimise the risks of systemic disruptions from payment systems.

In addition, the Board has a duty to ensure that the powers and functions of the RBA under Part 7.3 of the *Corporations Act 2001* are exercised in a way that, in the Board's opinion, will best contribute to the overall stability of the financial system. These powers and functions relate to the supervision of central counterparties (CCPs) and securities settlement facilities (SSFs), which are key infrastructure supporting the clearing and settlement of transactions in financial markets. The RBA's Payments Policy Department also acts as overseer of Australia's high-value payments system – the Reserve Bank Information and Transfer System (RITS).

Payments System Board 2024 | Strategic Priorities



Strengthen the safety and resilience of payments and market infrastructures



Advance and implement reforms for payments and market infrastructures



Promote competitive, cost-effective and accessible electronic payments



Enhance cross-border payments



Shape the **future of money in Australia**

Strategic priorities

The Payments System Board periodically sets strategic priorities to guide the RBA's payments policy work. At its August 2023 meeting, the Board agreed on five strategic priorities, outlined below, which focus on:

- developments in the payments system that could have significant implications for competition, efficiency and safety over the next few years
- issues affecting payments and market infrastructures and their implications for financial stability.

The Board will review the strategic priorities as the payments landscape evolves and in the context of its broader powers.



Strengthen the safety and resilience of payments and market infrastructures

Payments and market infrastructures play a crucial role in facilitating payments and financial risk management. The reliance of the economy and financial system on their services means that disruptions can have wide-reaching effects. The RBA is focused on ensuring these risks to payments and market infrastructures are managed appropriately. To achieve this, the RBA has:

- required market infrastructures to prioritise the management of aging infrastructure and adopt replacements and upgrades in a safe manner
- established a risk-based framework for the oversight of key retail payment systems
- required payments and market infrastructures to further uplift their cyber resilience with clearly defined cyber strategies and rigorous cyber-testing programs.



Advance and implement reforms for payments and market infrastructures

The Australian Government is modernising the regulatory frameworks for payments and market infrastructures. To advance and implement these reforms, the RBA has:

- assisted the government to develop legislation for regulating payments and market infrastructures
- prepared to conduct the Review of Retail Payments Regulation under a modernised Payment Systems (Regulation) Act.



Promote competitive, cost-effective and accessible electronic payments

Consumers and businesses are relying on electronic means of payment more than ever before. The RBA has an important role to play in promoting a payments system that delivers competitive, cost-effective and accessible electronic payments for consumers and businesses. To achieve this, the RBA has:

- reduced payment costs for small businesses by requiring industry to deliver merchant choice of debit card network
- encouraged industry to deliver and promote additional fast payment capabilities to end users
- modernised the retail payments statistics collected and published by the RBA to account for new technologies and business models.



Enhance cross-border payments

The RBA is supporting international work under the G20 to make cross-border payments cheaper, faster, more transparent and more inclusive. The RBA has a key role to play in promoting priority initiatives in the Australian market that will, over time, help deliver better outcomes for Australian customers. To achieve this, the RBA has:

- contributed to implementing the G20 roadmap to enhance cross-border payments
- explored interlinking the NPP to fast payment systems in other jurisdictions.



Shape the **future of money** in Australia

Australians need safe, efficient and cost-effective payment options, both now and in the future. As the payments landscape changes, the RBA is helping to shape the future of money by exploring the case for new digital forms of currency, and by ensuring cash remains a viable means of payment for those who need or want it. To achieve this, the RBA has:

- conducted research on whether a policy case for a CBDC exists
- supported innovation and resilience in wholesale digital payments
- supported access to physical cash.

Board members as at September 2024

The Payments System Board comprises up to eight members: the RBA Governor; a representative of the RBA (currently the Assistant Governor, Financial System); a representative of the Australian Prudential Regulation Authority (APRA) (currently the Chair of APRA); and up to five other non-executive members appointed by the Treasurer.

Members of the Board as at September 2024 and details of their qualifications and experience are given below.

During the year, Philip Lowe retired from the Board.

Michele Bullock

BEc (Hons) (UNE), MSc (LSE)



Chair and RBA Governor

Governor since 18 September 2023 Present term ends 17 September 2030

Michele Bullock commenced as RBA Governor on 18 September 2023. She is also Chair of the Reserve Bank Board, the Payments System Board and the Council of Financial Regulators.

Prior to her current role, Ms Bullock was the RBA Deputy Governor. She has also held a variety of senior management positions at the RBA. She was Assistant Governor (Financial System), Assistant Governor (Business Services), Assistant Governor (Currency), Adviser for the Currency Group and, before that, Head of Payments Policy Department.

Ms Bullock is a member of Chief Executive Women and a signatory to the Banking and Finance Oath.

Other roles

Chair - Reserve Bank Board

Chair – Council of Financial Regulators

Chair – Financial Markets Foundation for Children

Member – Financial Stability Board

Member – Trans-Tasman Council on Banking Supervision

Director – The Anika Foundation

Brad Jones

PhD (Macquarie)



Deputy Chair and RBA Assistant Governor (Financial System)

Deputy Chair since 16 January 2024

Brad Jones joined the RBA in 2018 and was appointed RBA Assistant Governor (Financial System) in 2022.

Prior to his current role, Dr Jones was the Head of International Department and then the Head of Economic Analysis Department.

Before joining the RBA, Dr Jones held roles at the International Monetary Fund in Washington DC, Deutsche Bank in London and Hong Kong, and the University of Cambridge Judge Business School.

Dr Jones is a Graduate member of the Australian Institute of Company Directors, holds the Chartered Alternative Investment Analyst designation and is a signatory to the Banking and Finance Oath.

Other roles

Member – Basel Committee on Banking Supervision

Member – Council of Financial Regulators

Member – Financial Stability Board Standing Committee on Assessment of Vulnerabilities

Member – Institute of Global Finance Advisory Board

Chair – RBA Financial Market Infrastructure Review Committee

Ross Buckley

BEcon, LLB (Hons) (UQ), PhD (UNSW), LLD (Melbourne)



Non-executive member

Member since 1 August 2023 Present term ends 31 July 2028

Ross Buckley is a Scientia Professor at the University of New South Wales and an Australian Research Council Laureate Fellow. His key research areas include fintech, regtech, central bank digital currencies and cryptoassets more generally. He has written seven books and over 200 journal articles, book chapters and major reports. He has twice been a Fulbright Scholar, at Yale and Duke universities.

Professor Buckley has consulted to government departments in over a dozen countries and written reports for a range of institutions, including the Alliance for Financial Inclusion, Asian Development Bank, Bank for International Settlements, European Commission and the United Nations Capital Development Fund.

Other roles

Chair – Digital Finance Advisory Panel, Australian Securities and Investments Commission

Member – Consultative Panel, Australian Securities and Investments Commission

Strategic Research Advisor – Digital Finance Cooperative Research Centre Fellow and Academic Member – European Banking Institute, Frankfurt Fellow –Salzburg Global Finance Forum

Gina Cass-Gottlieb

BEc (Hons), LLB (Hons) (Sydney), LLM (Berkeley)



Non-executive member

Member from 15 July 2013 to 14 July 2018 Reappointed from 1 August 2018 Present term ends 31 July 2028

Gina Cass-Gottlieb has extensive expertise in competition law and economic regulatory advice and in the regulation of payments in Australia. She was appointed Chair, Australian Competition and Consumer Commission on 21 March 2022.

Prior to this, Ms Cass-Gottlieb was a senior partner in Gilbert + Tobin's competition and regulation practice, advising and representing corporations, industry associations, government and non-government agencies. She has over 25 years' experience, including advising in relation to access arrangements in a range of sectors across the economy.

Ms Cass-Gottlieb attended the University of California, Berkeley, as a Fulbright Scholar.

Michelle Deaker

BSc (Hons) (Sydney), MSc (Sydney), PhD (UC)



Non-executive member

Member since 1 August 2023 Present term ends 31 July 2028

Michelle Deaker is a Founding Partner and the Managing Director of OneVentures, a venture capital firm that focuses on technology and healthcare sectors. Dr Deaker has over 20 years' experience in the development of high-growth technology companies in Australia and the United States. She has served on the boards of large and small listed and unlisted companies and has a strong background in Australian research and development as well as expertise in global business expansion.

Prior to establishing OneVentures in late 2006, Dr Deaker established IT enterprise business Networks Beyond 2000 and later E Com Industries, a leading prepaid card and electronic voucher provider in several countries.

Dr Deaker is a member of the Australian Institute of Company Directors and Chief Executive Women.

Other roles

Director – Phocas Group Director – Buildkite Director – WinVC Limited Board Observer – Employment Hero

Scott Farrell

BEc (Sydney), LLB (Hons) (Sydney), PhD (UNSW)



Non-executive member

Member since 23 March 2022 Present term ends 22 March 2027

Scott Farrell has more than 25 years' experience in financial markets and financial systems law. In 2016, he was appointed to the Australian Government's FinTech Advisory Group at its formation and in 2018 was appointed its co-Chair.

Dr Farrell has led a number of reviews for the Australian Government, including the Review into Open Banking in Australia in 2017, the Inquiry into Future Directions for the Consumer Data Right in 2020 and the Review of the Australian Payments System in 2021.

Other roles

Strategic Counsel – King & Wood Mallesons

Adjunct Professor – School of Private and Commercial Law, University of New South Wales

Chair – International Standards Organisation TC 307 Blockchain and Distributed Ledger Technologies

John Lonsdale



APRA-appointed member

Chair – Australian Prudential Regulation Authority

Member since 1 November 2022

John Lonsdale was appointed as Chair of the Australian Prudential Regulation Authority (APRA) on 31 October 2022 after joining APRA as Deputy Chair on 8 October 2018. In his Deputy Chair role, Mr Lonsdale was responsible for oversight of Australia's banking sector, as well as oversight of APRA's work on culture and remuneration, building APRA's crisis-resolution capability and strengthening APRA's collaboration with peer regulators.

Prior to joining APRA, Mr Lonsdale worked for the Australian Treasury for over 30 years. He was a member of the Treasury's Executive and, in his role as Deputy Secretary for the Markets Group, he had responsibility for financial system, consumer and foreign investment policy. In 2014 he led the Secretariat for the Financial System Inquiry.

Other roles

Member – Council of Financial Regulators

Member – Financial Stability Board Standing Committee on Supervisory and Regulatory Cooperation

Member – Trans-Tasman Council on Banking Supervision

Deborah Ralston

BEc, Dip Fin Mgt, MEc (UNE), PhD (Bond)



Non-executive member

Member since 15 December 2016 Present term ends 14 December 2026

Deborah Ralston has more than 25 years of board-level experience in education, banking, superannuation and fintech sectors. She has held senior leadership and research roles in Australian universities, most recently as the Executive Director of the Centre for Financial Studies.

Dr Ralston's expertise in public policy is reflected in appointments to the Australian Government's Retirement Income Review Panel, the Comprehensive Income Products for Retirement Framework Advisory Committee and as inaugural Chair of the Australian Securities and Investments Commission's Digital Finance Advisory Board.

Dr Ralston is currently a Professorial Fellow at Monash University Business School, with research interests in financial regulation and superannuation. She is a Fellow of CPA Australia and the Australian Institute of Company Directors.

Other roles

Chair – Advisory Board, Household Capital Director – SMSF Association Member – Advisory Board, Connexus Institute Member – Future Fund Board of Guardians

Retirement from the Board

Philip Lowe retired from the Payments System Board on 17 September 2023.

Philip Lowe

BCom (Hons) (UNSW), PhD (MIT)



Chair and RBA Governor

RBA Governor from 18 September 2016 to 17 September 2023

Philip Lowe's appointment as RBA Governor took effect in September 2016.

Prior to that, he held various senior positions at the RBA, including Assistant Governor (Financial System), Assistant Governor (Economic) and Deputy Governor.

Mr Lowe spent two years at the Bank for International Settlements working on financial stability issues. He has authored numerous papers, including on the linkages between monetary policy and financial stability. The University of New South Wales awarded Mr Lowe the Chancellor's Award for Exceptional Alumni Achievement in June 2021 and a Doctor of Business, *honoris causa* (Hon.DBus) in May 2024. Mr Lowe is a signatory to the Banking and Finance Oath.

Other roles

Chair - Reserve Bank Board

Chair – Council of Financial Regulators

Chair – Bank for International Settlements Committee on the

Global Financial System

Chair – Financial Markets Foundation for Children

Member - Financial Stability Board

Member – Trans-Tasman Council on Banking Supervision

Director – The Anika Foundation

Resolution passed by the Payments System Board – 17 August 2023

On the occasion of Philip Lowe's final meeting after seven years as Governor and Chair of the Board, members expressed their appreciation for his exceptional contribution to the RBA's work on payments policy matters in Australia for two decades and to the Board's deliberations in continuing to meet its mandate for efficiency, competition and controlling risk in the payments system. On behalf of all members, the Governor-designate, Michele Bullock, paid tribute to Mr Lowe's exemplary leadership of the Board and the RBA during a period of significant change, growing sophistication and challenges in the payments area. Members warmly recorded their appreciation of Mr Lowe's dedication to public policy in a career spanning more than four decades. They thanked him for his service to the RBA and the nation and wished him well in the future.

Meetings of the Board

The Payments System Board met four times in 2023/24. Meetings were all in person and held at the RBA Head Office in Sydney. Five members form a quorum at a meeting of the Board; five members are also required to pass a resolution without a meeting. Table 1.1 sets out meeting attendance by members during the year.

Table 1.1: Board Meetings in 2023/24

Attendance by members

Member	Role	Term	No. of meetings attended	No. of meetings eligible to attend
Philip Lowe	Chair; RBA Governor	Sep 2016 – Sep 2023	1	1
Michele Bullock ^(a)	Chair; RBA Governor	Sep 2023 – Sep 2030	4	4
Brad Jones	Deputy Chair	Jan 2024 –	2	2
John Lonsdale	APRA representative	Nov 2022 –	3	3
Ross Buckley	Non-executive member	Aug 2023 – Jul 2028	4	4
Gina Cass-Gottlieb	Non-executive member	Jul 2013 – Aug 2028 ^(b)	3	4
Michelle Deaker	Non-executive member	Aug 2023 – Jul 2028	4	4
Scott Farrell	Non-executive member	Mar 2022 – Mar 2027	4	4
Deborah Ralston	Non-executive member	Dec 2016 – Dec 2026	4	4

⁽a) Michele Bullock's term on the Board as Deputy Chair ended on 17 September 2023 and she commenced as Chair (RBA Governor) on 18 September 2023.

Source: RBA.



Payments System Board members at their meeting in August 2024. From left to right: Anthony Dickman (Reserve Bank Secretary), Gina Cass-Gottlieb, Michelle Deaker, Ross Buckley, Governor Michele Bullock, John Lonsdale, Deborah Ralston, Scott Farrell, Assistant Governor (Financial System) Bradley Jones.

Source: RBA.

⁽b) Gina Cass-Gottlieb's first term on the Board ended on 14 July 2018 and she was reappointed to a second term on 1 August 2018.

Code of conduct

A code of conduct for Payments System Board members supplements statutory requirements and imposes obligations on members to ensure the highest possible standards of ethical conduct. At its November 2023 meeting, the Board agreed to strengthen arrangements to manage members' actual or perceived conflicts of interest. This included introducing a prohibition on active trading in financial instruments of potentially regulated institutions and introducing a 'blackout period', during which members and associated entities are prohibited from conducting any transactions in financial instruments of potentially regulated institutions. The code is published on the RBA website.¹

Conflicts of interest

The RBA has several distinct areas of responsibility in the Australian payments system. It:

- owns, operates and participates in Australia's real-time gross settlement (RTGS) system – RITS
- provides transactional banking services to the Australian Government and its agencies
- is principal regulator of the payments system through the Payments System Board.

This combination of functions is conventional internationally, but their existence in the one institution may give rise to concerns about conflicts of interest. In view of this, the Board has adopted a policy on managing actual or perceived conflicts of interests, which focuses on the interactions between the RBA's Payments Policy and Banking departments. The policy is published on the RBA website.²

Details of the steps taken to achieve compliance with the policy, including the minutes of informal meetings between departments, are audited regularly, with the results presented to the Board.

In November 2023, the Board amended the policy to allow staff from the Payments Policy and Banking departments to collaborate on work related to the winding down of the cheques system.

The amendment allows the RBA to better support the government in its objective of achieving an orderly closure of the cheques system in the public interest.

The Board also has a governance role in managing conflicts of interest relating to the RBA's oversight of RITS. While an internal Financial Market Infrastructure

Review Committee has the formal responsibility to review and approve assessments of other payments and market infrastructures, the Board retains primary responsibility for approving the staff's periodic assessments of RITS.

Accountability and communication

The Payments System Board seeks to ensure a high degree of transparency and accountability around its actions through regular reporting to the Australian Government and through the RBA's communication program.

Accountability

The RBA has a range of reporting obligations that serve to ensure the accountability of the Payments System Board. Under the *Reserve Bank Act 1959*, the Board is required to:

- inform the government, from time to time, of the RBA's payments system policy (section 11(1)(b))
- prepare and give to the Treasurer a report that covers certain matters relating to the standards that the RBA determines under section 827D of the Corporations Act 2001 and developments in the clearing and settlement industry that are relevant to Australia's financial stability (section 25M(1)).

This annual report addresses these requirements and is the primary accountability vehicle for the RBA's payments system responsibilities. The House of Representatives Standing Committee on Economics holds twice-yearly public hearings at which the RBA presents an opening statement on the economy, financial markets and other matters – including payments system matters – related to the RBA's operations, and responds to questions from Committee members. These hearings may include discussion of developments in the payments system and the RBA's payments system policy.

The broader accountability of the RBA includes its obligations under the *Public Governance, Performance* and Accountability Act 2013. The RBA's annual report, including the annual performance statement, covers the RBA's role in the payments system.

Communications

The RBA regularly communicates on payments system issues and its regulatory and oversight work through media releases, speeches, research publications, the RBA website, and community and industry liaison. The RBA also engages in various international forums relating to payments and market infrastructures.

The RBA publishes a media release in the afternoon immediately following each quarterly Payments System Board meeting, outlining matters that were discussed by the Board and foreshadowing any forthcoming documents to be released by the RBA. Media releases also accompany any major announcements following decisions taken by the Board.

During 2023/24, senior RBA staff gave a number of public speeches and participated in discussion panels on various payments system-related topics, including modernising Australia's payments system, a tokenised future for the Australian financial system and policy issues in online retail payments. Audio files and transcripts of speeches are published on the RBA website.

Submissions and parliamentary appearances

Where appropriate, the RBA makes submissions to parliamentary and federal government committees and inquiries on payments and market infrastructure-related topics. During 2023/24, the RBA made submissions to the Senate Economics Legislation Committee and/or the Australian Treasury on the financial market infrastructure regulatory reforms, the reforms to the *Payment Systems* (*Regulation*) *Act 1998* and the reforms to the licensing of payment service providers. The RBA also appeared before Senate Economics Legislation Committee hearings regarding the legislative reforms. Copies of the RBA's submissions can be found on the RBA website.

Research and statistics

To support the RBA's research and policy work, the RBA collects statistics on retail payments on a monthly basis from financial institutions, card companies and other payments system participants. Data on debit and credit cards, ATM transactions, merchant fees, bulk electronic transfers, NPP transactions and cheques provide

insights on how individuals and businesses make and receive payments. These aggregated data are published as part of the statistical tables on the RBA website.

In addition, the results from the latest Consumer Payments Survey, which was conducted in late 2022, were published in a research discussion paper in November 2023.³

Liaison activity

The RBA engages with a wide range of stakeholders in Australia and overseas.

During 2023/24, the RBA engaged with a range of participants in the payments industry to discuss policy issues and market developments. A key focus of stakeholder engagement was on the upcoming Review of Retail Payments Regulation.

The RBA's meetings with stakeholders on retail payments issues over the past year focused on a wide range of issues, including competition in the debit card market, the tokenisation of online card transactions, challenges in cross-border payments, payments system access arrangements, the development of the NPP, initiatives to bolster the security and reliability of retail payments, and the future of cash. RBA staff continued to engage with stakeholders about their obligations under the RBA's card payments regulations. The RBA also engaged with payments industry participants on technology and innovation, especially on CBDCs and the role of new players in the payments ecosystem.

RBA staff meet regularly with senior staff of the Australian Payments Network (AusPayNet), the main industry body for the payments system, to discuss industry initiatives and developments. These meetings take place consistent with a Memorandum of Understanding (MOU) on liaison arrangements between the two organisations that is published on the RBA website.

RBA staff also meet periodically with counterparts from a range of government agencies, including the Australian Competition and Consumer Commission (ACCC), Australian Prudential Regulation Authority (APRA), Australian Securities and Investments Commission (ASIC), the Australian Transaction Reports and Analysis Centre (AUSTRAC), Treasury and the Attorney-General's Department as part of the cross-agency forum on payments. An MOU

between the ACCC and the RBA sets out an agreed basis for policy coordination, information sharing and liaison between the two agencies.

There was significant engagement with Treasury and other agencies during the past year on issues relating to implementing the government's reforms to the regulation of the payments system.

NPP is operated by NPP Australia Ltd, a wholly owned subsidiary of Australian Payments Plus (AP+). Staff from the RBA's Payments Policy Department hold regular meetings with senior staff from AP+ to discuss developments in relation to the NPP as well as the other domestic payments infrastructure operated by AP+ (eftpos and BPAY).

The RBA meets regularly with each clearing and settlement facility (CS facility) it supervises.

These meetings cover a wide range of topics, including developments in financial and operational risk management. As ASIC and the RBA have complementary regulatory responsibilities for the supervision of CS facilities, the two agencies coordinate their liaison with these facilities. ASIC and the RBA also liaise with market participants on a range of topics related to clearing and settlement.

The RBA continues to work closely with other agencies of the Council of Financial Regulators (CFR) (and, where relevant, the ACCC) on a number of policy issues. These include the Australian Government's reforms to the regulatory regime for financial market infrastructures and the introduction of a crisis management regime for CS facilities, competition in clearing and settlement of equities, and cybersecurity.

RBA staff also attend various conferences and seminars on issues related to payments and market infrastructures, in some cases as speakers or panellists.

International engagement

The RBA is a member of the Bank for International Settlements' (BIS) Committee on Payments and Market Infrastructures (CPMI), which serves as a forum for central banks to monitor and analyse developments in payment, clearing and settlement infrastructures, and the development of relevant international standards. It has members from 28 central banks.

Joint working groups of the CPMI and the International Organization of Securities Commissions (IOSCO) bring together members of these two bodies to coordinate policy work on the regulation of payments and market infrastructures. RBA staff are members of a number of CPMI working groups, including those involved in the international roadmap for enhancing cross-border payments.

The RBA also participates in a Financial Stability Board (FSB) working group on CCP resolution.

During 2023/24, the RBA was Chair of the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) Working Group on Payments and Market Infrastructures. This is a regional forum for sharing information and experiences relating to the development, oversight and regulation of payments and market infrastructures.

In addition, the RBA also participates in several multilateral and bilateral arrangements to support its oversight of overseas-based payments and market infrastructures.

Table 1.2 provides details of the RBA's participation in the international forums relevant to the mandate of the Payments System Board.

Table 1.2: RBA's Participation in International Forums dealing with Payments and Market Infrastructure Issues

Name of the forum	Organiser/ secretariat	Mandate	Membership
Policy-focused forums			
CPMI	BIS	Monitoring and analysing developments in payment, clearing and settlement infrastructures, standard setting.	Central banks.
CPMI–IOSCO Steering Group	BIS/IOSCO	Providing operational guidance on joint CPMI–IOSCO work.	CPMI and IOSCO members.
CPMI–IOSCO Policy Standing Group	BIS/IOSCO	Developing supervisory policies and guidance.	CPMI and IOSCO members.
CPMI–IOSCO Implementation Monitoring Standing Group	BIS/IOSCO	Monitoring of Principles for Financial Market Infrastructures implementation in 28 CPMI–IOSCO jurisdictions.	CPMI and IOSCO members.
FMI Cross Border Crisis Management Group	FSB	Development of resolution strategies and operational resolution plans for CCPs.	Representatives from jurisdictions, major international financial institutions and standard-setting bodies.
EMEAP Working Group on Payments and Market Infrastructures	RBA (2023/24)	Information and experience sharing on the regulation and oversight of payments and market infrastructures.	East Asia-Pacific central banks.
Cooperative oversight forur	ns		
CLS Oversight Committee	Federal Reserve Bank of New York	Cooperative oversight of the CLS.	Central banks representing CLS settlement-eligible currencies.
SWIFT Oversight Forum	National Bank of Belgium	Providing input to cooperative oversight of SWIFT exercised by SWIFT Oversight Group (OG).	G10 central banks (OG) and additional central banks.
LCH Ltd Supervisory College and Crisis Management Group	Bank of England	Cooperative oversight of LCH Ltd.	Central banks and securities regulatory authorities from jurisdictions where LCH Ltd operates.
Multilateral Oversight Group for the Euroclear Bank	National Bank of Belgium	Cooperative oversight of Euroclear Bank.	Central banks from jurisdictions where Euroclear Bank operates.

Source: RBA.

Endnotes

- 1 RBA (2023), 'Code of Conduct for Payments System Board Members', November.
- 2 RBA (2024), 'Managing Potential Conflicts of Interest Arising from the Bank's Commercial Activities', August.
- Livermore T, J Mulqueeney, T Nguyen and B Watson, 'The Evolution of Consumer Payments in Australia: Results from the 2022 Consumer Payments Survey', RBA Research Discussion Paper No 023-08.

Chapter 2

Payments System Regulation and Policy Issues

The RBA undertakes regulatory and policy work on retail payment systems. Over the past year, the RBA focused on implementing policy actions aimed at enhancing competition and efficiency in the debit card market. The RBA also assisted Treasury and other regulatory bodies on reforms to the regulatory framework for payments. With the ongoing shift from cash to electronic payments, the RBA continued to examine issues on access to cash, and those related to the cost, reliability and security of electronic payment services. The RBA also continued to monitor the rapid pace of innovation in the payments system and changes in market structure. The RBA considered a number of policy and regulatory issues associated with innovations in the payments system, with a key focus area being research on central bank digital currencies.

Oversight of safety and resilience of payment systems

Businesses and consumers are more reliant on electronic payment systems than ever before. Reliability and security problems can impose significant costs on end users, cause economic disruption and damage public confidence in the financial system. At a minimum, payment systems need effective risk management frameworks, particularly for managing operational risk. The Payments System Board considers it vital that participants in the payments industry invest in resilient and secure infrastructure, systems and customer services, and that strong efforts are made to manage fraud and scam risks.

The RBA oversees the safety and stability of payment systems that are systemically important since they handle high-value payments for key financial market infrastructures. In 2023 the RBA's oversight of payment systems was extended to include prominent payment systems, where an outage could cause significant economic disruption and damage confidence in the financial system. In February 2024, the Board reviewed developments in the payments landscape and reaffirmed that:

- the Reserve Bank Information and Transfer System (RITS) and CLS Bank International (CLS) are the only systemically important payment systems operating in Australia
- the New Payments Platform (NPP), eftpos,
 Mastercard and Visa are prominent payment
 systems (these systems are also specified as critical
 to the security and reliability of the financial
 services and markets sector by the government).

In addition, the Board determined that the Bulk Electronic Clearing System (BECS) is a prominent payment system and tasked the RBA to perform a risk assessment of industry's efforts to transition payments from BECS to alternative systems.

The threat of increasingly sophisticated fraud and scams can also undermine confidence in the Australian payments system and economy more broadly. Measures to address these threats enhance the security of the payments system. The RBA engages with payments industry participants and regulatory agencies on measures to disrupt and combat fraud and scams, and their impact on safety, efficiency and competition in payments.

Assessment of the Reserve Bank Information and Transfer System

RITS – Australia's high-value payments system – is used by banks and other approved institutions to settle their payment obligations on a real-time gross settlement basis. In May 2024, the Payments System Board endorsed the most recent assessment of RITS against the relevant Principles for Financial Market Infrastructures (PFMI). The assessment concluded that RITS observed all PFMI except for: Principle 2 (Governance), which it broadly observed; Principle 3 (Framework for the comprehensive management of risks), which it partly observed; and Principle 17 (Operational risk), which it partly observed. To fully observe all PFMI, the assessment recommended the program of work established following the RBA's 2022 technology outage be progressed and intended outcomes delivered. The Board expects this program of work to have materially advanced by March 2026.

Developments in prominent payment systems

New Payments Platform

The NPP – Australia's fast payments system – is expected to continue to grow rapidly due to the migration of payments from legacy systems and new services. The RBA considers that the NPP is likely to meet the criteria to be designated as a systemically important payment system in the years ahead. To support their common objective of promoting the safety and resilience of the NPP, the RBA, Australian Payments Plus and New Payments Platform Australia established a Memorandum of Understanding (MOU), setting out cooperation arrangements on observance, and assessment of observance, of the PFMI by the NPP system. The MOU is published on the RBA website.

Bulk Electronic Clearing System

BECS – Australia's largest retail payment system – is the primary system for account-to-account payments, including pension, welfare, salary and dividend payments. A significant disruption to BECS could cause serious economic harm to end users. BECS is over 30 years old, and industry has announced the target of decommissioning BECS by June 2030. The significant changes required to facilitate decommissioning have the potential to heighten risks across the payments system. In February 2024, the Payments System Board approved the classification of BECS as a prominent payment system

and asked the RBA to assess the risks associated with the migration of BECS transactions to payment alternatives and how they are being managed.

International payments infrastructure

The RBA participates in cooperative oversight arrangements for two international payments infrastructures – CLS and Swift – to promote the stability of the Australian financial system.

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 RBA participates in a cooperative oversight arrangement for CLS, facilitated by the Federal Reserve.

Swift

Swift provides critical messaging and connectivity services to both RITS and CLS, as well as other market infrastructures and participants in Australia and overseas. The G10 central banks oversee Swift through the Swift Cooperative Oversight Group (OG). The RBA 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 that align with standards for critical services providers in the PFMI.

Policy issues in the payment cards market

The share of payments made electronically continues to rise as cash and cheques are used less frequently. New technologies and new participants in the payments system are also providing more payment options to consumers and businesses. This gives rise to new and emerging policy issues in the payment cards market.

Competition in the debit card market

To promote competition in the debit card market, a key focus for the RBA has continued to be encouraging widespread issuance of dual-network debit cards (DNDCs) and greater availability and adoption of least-cost routing (LCR). This includes the extension of LCR availability to mobile wallet and online transactions, as adoption by consumers of these payment methods for debit card transactions continues to grow. Work in this area over 2023/24 involved the following:

- The RBA published six-monthly updates on LCR availability and adoption by merchants across the major acquirers for both the device-present (in-person) and device-not-present (online) environments, to provide greater transparency on the progress of individual institutions in meeting the RBA's expectations. In June 2024, large providers had enabled LCR for 70 per cent of their merchant customers for in-person transactions. For online transactions, six out of 12 providers had made LCR available to all of their merchants. As part of the upcoming Review of Retail Payments Regulation, the RBA will seek stakeholder views on the effectiveness of LCR and whether further regulatory intervention is appropriate.
- The RBA actively monitored the industry's plans for meeting the RBA's expectation for delivering LCR functionality for mobile wallet transactions by the end of 2024. The industry was on track to meet this expectation.
- The RBA monitored compliance with the RBA's expectation that large debit card issuers issue DNDCs and provision both networks on DNDCs in mobile wallets. Large issuers made significant progress over the year in meeting this expectation.

Security of card transactions online

Over 2023/24, the RBA sought to promote the standardisation of some industry practices on card tokenisation and the storage of sensitive card information. Tokenisation replaces sensitive card details with a unique token that contains less critical information. This helps to lower fraud and improve the security of online card transactions by reducing the amount of sensitive card details that can be stolen from merchants and payment service providers.

Work by the Australian Payments Network (AusPayNet) identified that some standardisation may help the industry realise the full benefits of tokenisation and reduce frictions, particularly related to the portability and synchronisation of tokens. Token portability allows merchants to retain their customers' current tokens when switching payment service providers and is important for competition in the acquiring market. Token synchronisation allows lifecycle events (such as card expiries) to be communicated across the payments chain and supports the reliability of transactions.

In December 2023, the RBA published a set of high-level expectations for the industry on tokenisation. AusPayNet began coordinating the industry's work to meet these expectations and, in April 2024, recommended that it:

- undertake further work on potential technical standards for token portability
- investigate a unique account identifier to aid synchronisation.

The Payments System Board publicly endorsed AusPayNet's proposed actions, including by adjusting and clarifying some of the RBA's earlier expectations. The RBA also reiterated its expectation that all relevant industry participants should support the portability of both scheme and proprietary tokens by the end of June 2025.

Mobile wallets

Source: RBA

The RBA continued to monitor the growth in mobile wallet card transactions, such as those through Apple Pay and Google Pay. Payments using mobile wallets reached 39 per cent of card transactions in the June guarter 2024 (Graph 2.1).

Graph 2.1 **Mobile Wallet Transactions** Share of card transactions 40 40 30 30 Total 20 20 . Credit 10 10 2021 2022 2023 2020 2024

The Payments System Board considered that several practices relating to the provision of mobile wallet services could have an impact on competition, efficiency and safety in the payments system. The issues include:

- transparency of fees charged to issuers by mobile wallet providers
- ability of issuers to pass on those fees to customers
- access by competitors to the digital ecosystems that facilitate mobile wallet transactions (including access to 'near-field communication' technology).

The RBA will consider whether formal regulatory intervention is required to address these issues as part of the Review of Retail Payments Regulation once the reforms to the *Payment Systems (Regulation) Act 1998* (PSRA) are implemented.

Advanced encryption standard

Consistent with its strategic priority of strengthening the resilience of payments, the Payments System Board was briefed on industry efforts to upgrade encryption standards for Australian card payments to the Advanced Encryption Standard (AES). The data associated with card payments in Australia are currently encrypted using the Triple Data Encryption Standard (TDES). Advances in quantum computing present a material risk that the TDES will be compromised at some point in the future.

To address this risk, AusPayNet has been coordinating industry efforts to upgrade encryption standards for card payments in Australia to AES. Consistent with the Australian Government's Strategic Plan for Australia's Payments System,² the Board expressed strong support for the proposal to commence migration in 2025 and encouraged the industry to progress the migration with sufficient urgency to enable the transition to AES to be completed within the industry's estimated timeframe of five to seven years.

Compliance with card payments regulation

There was a high level of compliance with the RBA's card payments regulations. Card schemes, issuers and acquirers certified their compliance with various aspects of the regulations, while the card schemes also continued to comply with the RBA's interchange fee regulations and access regimes. The net compensation provisions also continued to work as intended, with fewer issues reported than in previous years. Ongoing monitoring of the surcharging framework suggests that issuers, acquirers, payment facilitators and card schemes are adequately discharging their obligations to provide relevant disclosures to help merchants surcharge appropriately.

Payments regulatory reforms

The payments landscape is changing rapidly as new technologies, business models and participants continue to emerge. It is important that regulation can adapt to new developments as the payments system evolves. The Australian Government is implementing a series of reforms to modernise payments regulation and address policy issues posed by new payments technologies and market entrants. The RBA has been assisting Treasury and other regulators with advancing the payments reforms, some of which have implications for the RBA's regulatory powers and responsibilities in the retail payments system. These reforms include:

- publishing and reviewing the Strategic Plan for Australia's Payments System
- · broadening the scope of the PSRA
- introducing a new payments licensing framework
- setting common access requirements for non-banks seeking direct access to payment systems
- introducing a framework for setting mandatory payments industry standards.

PSRA reforms

On 30 November 2023, the Treasury Laws Amendment (Better Targeted Superannuation Concessions and Other Measures) Bill 2023 (the Bill) was introduced to the Australian Parliament. Schedule 8 to the Bill amends the PSRA to modernise the payments regulatory framework, ensuring it is fit-for-purpose and can address emerging risks related to payments. In particular, Schedule 8 expands the regulatory coverage of the PSRA by:

- updating key definitions such as for 'payment system' and 'participant' in a payment system – to capture relevant entities in the payments value chain, including digital wallet providers, 'buy now, pay later' (BNPL) providers, payment facilitators and gateways
- introducing new ministerial powers to ensure the government can respond to issues beyond the existing remit of the RBA
- modernising the existing penalty regime in the PSRA, including by providing the RBA with additional enforcement powers.

The Senate Economics Legislation Committee completed and reported on its inquiry into the Bill on 10 May 2024. The RBA made a submission in support of the PSRA reforms and appeared before the Committee as part of the inquiry.³

Preparations for Review of Retail Payments Regulation

In December 2023, the RBA Governor announced that the RBA would begin a comprehensive Review of Retail Payments Regulation (the Review) once the proposed PSRA amendments are passed. Historically, the RBA has reviewed its payments regulation roughly every five years, with the last review occurring in 2019–2021.

The Review is intended to be broad-ranging and will consider how the RBA should respond to the changing payments landscape as well as the proposed changes to Australia's regulatory framework. The Review will consider whether any changes are warranted to the principles that guide the RBA's approach to regulation, or to the RBA's existing regulations, and whether any further regulatory interventions are needed to address competition, efficiency or safety issues in the payments system.

During the year, the RBA engaged with government agencies, industry participants, business groups, consumer groups and other stakeholders to ensure the Review focuses on the most important issues. The issues identified as key priorities for the Review are:

- principles for guiding the RBA's regulatory activity
- transparency of the cost of payment services
- merchant payment costs
- surcharging
- mobile wallets
- cost and transparency of cross-border payments.

In August 2024, the Board agreed to commence consultation on merchant card payment costs and surcharging as part of the Review ahead of the passage of the proposed PSRA amendments. The RBA will publish an issues paper as the first step in the review process.

New payment service providers licensing framework

The introduction of a tailored payments licensing framework for payments service providers (PSPs) is an important initiative. The new PSP licensing framework will involve the setting of regulatory obligations for the purpose of managing risks to payments users. Successful implementation of the framework should also provide greater regulatory certainty and address some of the challenges faced by PSPs seeking to operate in Australia, supporting competition and innovation in the supply of payment services.

In December 2023, Treasury released a second consultation paper on the payments licensing framework, setting out an updated list of payment functions for which a PSP licence would be required and the proposed regulatory obligations for PSP licensees. ⁴ The RBA has been supporting Treasury and other regulators in this work, particularly on access to payments systems and industry standard setting.

Access to payment systems

The RBA supports PSPs having competitive access to payment systems when providing services to their customers, while managing the associated risks.

To create a more level playing field, the reforms propose that the Australian Prudential Regulation Authority (APRA) will set 'common access requirements' to help facilitate direct access to Australian payment systems for non-bank PSPs. The RBA considers that the introduction of proportionate regulatory and supervisory arrangements by APRA would generate confidence that non-bank PSPs undertaking clearing and settlement activity are managing the associated risks appropriately. The RBA intends to work with the relevant payment system operators to ensure that they recognise non-bank PSPs holding the new APRA licence for clearing and settlement activity as eligible to join their system, and that there are no additional requirements that discriminate against licensed non-bank PSPs.

Industry standard setting

The introduction of mandatory payments industry standards aims to achieve a common and transparent approach among participants to addressing key technical issues in payments, which should support the smooth and effective functioning of the payments system. The proposed framework involves the RBA being responsible for authorising and overseeing industry bodies developing mandatory technical standards for payments. In fulfilling this new responsibility, the RBA would have regard to a standard-setting body's governance and capabilities, and ensure that it performs its functions in a way that is consistent with broader payments policy objectives. The RBA will continue to work with Treasury and other regulators on the design of the industry standard setting framework.

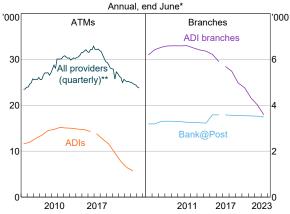
ATM access framework

Consumers' use of cash for everyday transactions has declined in recent decades as electronic methods of payment have become more convenient and accessible. However, cash remains an important means of payment for some people and is widely held for precautionary and store-of-wealth purposes and as a backup to electronic payment methods.

Cash access points

The decline in the transactional use of cash is affecting the economics of providing cash services. This is associated with a significant reduction in the number of cash access points over recent years, including bank-owned ATMs and bank branches, resulting in a larger share of third-party ATMs that often charge fees (Graph 2.2). Despite the decline in the total number of cash access points, the distance people need to travel to access cash services has been little changed in recent years, largely due to the strong geographic coverage of Bank@Post outlets. However, some communities, particularly in non-metropolitan areas, may be increasingly susceptible to a decline in cash access if there were to be further removal of cash access points. The RBA will continue to closely monitor these trends.

Graph 2.2
Cash Access Points



- * Series break in annual data in June 2017 due to APRA data collection change.
- ** The decrease in the number of active ATMs in June 2020 was largely due to temporary COVID-19-related venue closures.
 Sources: APRA; AusPayNet; RBA.

Access Regime and Code

The RBA regulates pricing aspects of the ATM industry via an Access Regime. In 2023, the Payments System Board reviewed the ATM access framework, which was introduced in 2009 to promote competition and efficiency in the ATM market. This review included a consultation on the future of the RBA's ATM Access Regime and the industry-administered Access Code.⁵

When originally introduced, the ATM Access Regime transitioned market arrangements for ATM providers from an opaque and rigid set of bilateral interchange arrangements to a more transparent direct charging model in which ATM owners can set their own fees and compete for transactions. The consultation demonstrated continued support from stakeholders for the framework and the direct charging model.

While the policy case for the ATM Access Regime is not as strong as when it was introduced, the Board decided to retain it on the basis that it can still play a useful role in protecting fair access and competition in the industry.

Wholesale cash distribution

The decline in the use of cash for transactions over recent decades has contributed to significant excess capacity within the cash distribution network in Australia. Similar developments have been evident overseas, resulting in a general trend towards consolidation in the cash-in-transit (CIT) industries in many economies.

In June 2023, the Australian Competition and Consumer Commission (ACCC) approved the merger between the two largest CIT companies in Australia – Linfox Armaguard (Armaguard) and Prosegur Australia. The merger was subject to a three-year undertaking on pricing and service levels, and both firms agreed to continue supplying CIT services to existing customers until September 2026.

In June 2024, Armaguard's major banking and retail customers agreed to provide approximately \$50 million of additional funding support in 2024/25, allowing more time for Armaguard to embed efficiency gains and improve its ongoing financial sustainability.

In response to challenges in the CIT industry, the RBA convened a number of Wholesale Banknote Distribution Roundtables in late 2023 and early 2024.

Together with Treasury and key participants in the cash distribution industry, the RBA has also formed a number of working groups to consider actions to support the sustainability of cash distribution and business continuity arrangements in the event of a disruption to the supply of cash.⁶ Another focus has been the longer term sustainability of the cash distribution system. These roundtables and other industry discussions – that may not otherwise have been permitted under competition laws – have been enabled by ACCC authorisations.

Enhancing cross-border payments

The need for efficient, competitive and safe cross-border payment services has increased as global commerce continues to grow. However, globally, the end-user experience with cross-border payment services lags well behind that of domestic payment services.

Recognising the challenges in cross-border payments and the need for international collaboration, the G20 countries (including Australia) endorsed a roadmap to make cross-border payments cheaper, faster, more transparent and more accessible. The RBA has been contributing to the international effort to enhance cross-border payments through its participation in international working groups responsible for various aspects of the roadmap.

A foundational aspect of the roadmap is a set of quantitative global targets for cost, speed, transparency and access to be met by 2027.
Assessing performance against the G20 roadmap targets is an important step towards determining where the greatest improvements are needed and which cross-border payments initiatives to prioritise. The RBA has been encouraging industry to make progress in addressing shortcomings in existing cross-border payments arrangements and improving outcomes for end users. The available evidence indicates there remains substantial scope to improve the average cost and speed of cross-border retail payments for Australian customers.

The RBA is also undertaking several key actions to encourage the adoption of new messaging capabilities and functionality for cross-border payments over the coming years, in collaboration with Australian industry participants and other regulatory agencies. Some of these initiatives are discussed below.

Uplifting payments infrastructure

A key initiative that will help to achieve more seamless cross-border payments is the adoption of richer, internationally harmonised payments messaging based on the ISO 20022 messaging standard, which should help to lower costs and speed up payments over time. The RBA chaired the CPMI working group that developed a set of harmonised ISO 20022 requirements for use in cross-border payments. These requirements will help to align the implementation and use of ISO 20022 globally to deliver its full benefits. The operators of Australia's High Value Clearing System (HVCS) and the NPP have publicly stated their intention to meet these requirements by the global timeline of 2027.

Another important initiative that will help Australia to make progress in meeting its G20 commitments is the NPP's International Payments Service, which allows the Australian dollar leg of inbound cross-border payments to be processed via the NPP. This service enables incoming payments to reach beneficiaries faster and provides more complete payer information for financial crime screening purposes. Most NPP participants are now able to accept payments via this service, which became mandatory in December 2023. The RBA will continue to monitor the adoption of the International Payments Service by NPP participants in the period ahead.

Exploring interlinking fast payment systems

Interlinking fast payment systems is receiving significant international attention as a possible way to enhance the efficiency of cross-border payments. Some countries in Southeast Asia have established bilateral connections between their fast payment systems for low-value retail payments. Several ASEAN countries and India are also working to link up their fast payment systems multilaterally over the next few years, and a number of other countries are considering, or actively pursuing, interlinking projects for their fast payment systems.

Given these international developments, the RBA recently collaborated with industry participants to better understand the issues associated with linking fast payment systems from an Australian perspective. Following this study, the RBA released a report analysing the benefits, design choices and challenges associated with linking fast payment systems across countries. The report found that connecting fast

payment systems has the potential to considerably improve the speed and transparency of cross-border payments. It identified several payment capabilities and scheme rules that would be needed to manage risk and ensure a seamless cross-border payments experience. The report also discussed the key challenges to establishing interlinking arrangements, including dealing with differences in legal and regulatory frameworks across jurisdictions – such as in relation to financial crime and data privacy – and the need to reach agreement on governance arrangements and scheme rules.

Looking ahead, the RBA and industry participants involved in the study intend to build on this analysis through further engagement with international stakeholders, including on the development of multilateral interlinking arrangements, and by undertaking further analysis with subject matter experts on key aspects of interlinking. This work will help inform future discussions in Australia about the potential for the NPP to be linked to other fast payment systems.

Research on central bank digital currency and innovations in digital money

There is significant innovation occurring in the payments system related to the emergence of new technologies and the broader digitalisation of the economy. The RBA continues to undertake work to understand these new technologies and innovations and any implications for the competition, efficiency and safety of the payments system. Research on central bank digital currencies (CBDCs) and other innovations in digital money has been a particular focus.

A CBDC refers to a digital form of money that would be issued by a central bank and could be used by households and/or businesses as a medium of exchange. It would function as a complement to existing forms of money – such as physical cash and deposits in commercial bank accounts. Consideration of CBDC has generally distinguished between two broad use cases:

 a CBDC for retail (or general purpose) use, which would be like a digital version of cash that is essentially universally accessible a CBDC for wholesale use, which would be accessible only to certain wholesale market participants – such as banks, institutional investors and large corporates – for use in wholesale payment and settlement systems.

In 2023 the RBA collaborated with the Digital Finance Cooperative Research Centre (DFCRC) on a CBDC research project that focused on understanding potential use cases of CBDC in Australia. The project highlighted a range of areas where CBDC could add value in wholesale payments, including by facilitating atomic settlement in tokenised asset markets. Around one-third of the piloted use cases assessed opportunities for CBDC-enabled atomic settlement to enhance the operation of established financial markets or facilitate the development of new asset markets. ¹⁰

In response to the findings from this project and growing industry interest in asset tokenisation, the RBA, in collaboration with the DFCRC, embarked on a new research project to explore how different forms of digital money and/or infrastructure could support the settlement of transactions in tokenised asset markets. The project involves the identification and analysis of different settlement models for tokenised assets, with some of the models involving the use of a CBDC. Research is considering how these models could support different tokenised asset use cases, assisted by ongoing industry engagement.

The RBA and Treasury also continued to research the policy case for a retail CBDC in Australia. A paper will be published later in 2024 that will cover the work on CBDC to date, and set out a forward work plan for the RBA and Treasury on CBDC and digital money in Australia.

The RBA continued to pursue an active research agenda on CBDC-related issues, with findings to feature in the report. For example, the RBA recently published a research discussion paper examining how much Australian consumers value the safety and privacy features of public money. This research concluded that while Australian consumers do not strongly value the safety features of a CBDC, privacy settings could be more consequential for the CBDC value proposition.

The RBA and the University of New South Wales also co-hosted a multi-disciplinary academic roundtable to discuss the question of whether people are entitled to government-issued digital money. This roundtable aimed to solicit diverse views on this topic in the context of access to, and acceptance of, physical cash continuing to decline, and the economy becoming increasingly digitised. Roundtable participants shared varied perspectives and frameworks that can help inform the ongoing policy debate.

Consistent with the G20 cross-border payments roadmap, the RBA has been actively exploring the potential for innovations in digital money to enhance cross-border payments. This includes involvement in a number of BIS Innovation Hub (BISIH) projects.

The RBA has partnered with the BISIH Singapore Centre, Bank of Korea, Bank Negara Malaysia and Monetary Authority of Singapore in Project Mandala. The project aims to develop a proof-of-concept to automate compliance procedures, provide real-time transaction monitoring and increase transparency and visibility around country-specific policies.

The RBA is also a member observer of Project mBridge, which explores how CBDCs could be used for cross-border payments using a common multi-CBDC platform.

Endnotes

- 1 RBA (2024), 'Assessment of Reserve Bank Information and Transfer System', Report, June.
- 2 Treasury (2023), 'A Strategic Plan for Australia's Payments System', June.
- 3 For further information about the Committee's inquiry into the Bill, including RBA's submission, see the Parliament of Australia website.
- 4 Treasury (2023), 'Payments System Modernisation: Regulation of Payment Service Providers', Consultation Paper, December.
- 5 RBA, 'ATMs: Regulatory Framework'.
- 6 See ACCC (2024), 'Australian Banking Association Ltd (Cash-in-transit Initiatives)', 27 May; ACCC (2024), 'Authorisations Register: Australian Banking Association Limited'.
- 7 FSB (2020), 'Enhancing Cross-border Payments: Stage 3 Roadmap', 13 October.
- 8 FSB (2021), 'Targets for Addressing the Four Challenges of Cross-Border Payments', Final Report, 13 October.
- 9 RBA (2024), 'Interlinking Fast Payment Systems for Cross-border Payments', Report, April.
- For details on the opportunities and challenges arising from the tokenisation of assets in Australia, see Jones B (2023), 'A Tokenised Future for the Australian Financial System?', Speech to the Australian Financial Review Cryptocurrency Summit, October.
- 11 Fairweather Z, D Fiebig, A, R Guttmann, J Ma and J Mulqueeney (2024), 'Valuing Safety and Privacy in Retail Central Bank Digital Currency', RBA Research Discussion Paper No 2024-02.

Chapter 3

Developments in the Clearing and Settlement Industry

The RBA supervises and oversees licensed clearing and settlement facilities to ensure they conduct their affairs in a way that is consistent with financial system stability. Over the past year, the RBA updated the Financial Stability Standards applying to securities settlement facilities, and completed and published assessments of certain facilities. The RBA also worked with CFR agencies to reassess the costs and benefits of central clearing of bonds and repos, and supported regulatory reforms for financial market infrastructures.

Clearing and settlement facilities operating in Australia

Clearing and settlement facilities (CS facilities) play a critical role in making financial transactions more efficient and in managing risk within the financial system. These facilities support the processing of transactions in securities such as bonds and equities, and in derivative instruments such as options and futures. There are two types of CS facility that operate in Australia:

 Central counterparties (CCPs) act as the buyer to every seller, and the seller to every buyer. As a consequence, the exposure of all parties is to the CCP, rather than between the counterparties to the original trade. Securities settlement facilities (SSFs) provide for the final settlement of securities transactions, and the maintenance of records of transfer of title.
 Settlement typically involves the transfer of the title to a security and transfer of cash between counterparties.

The Payments System Board has determined policies for the supervision and oversight of CS facilities in accordance with its powers under the Reserve Bank Act 1959. The RBA holds powers related to the supervision and oversight of CS facilities. This includes the power to determine financial stability standards for CS facility licensees and assessing how well licensees have complied with the standards and their obligation to do all other things necessary to reduce systemic risk. The RBA has determined two sets of Financial Stability Standards (FSS) – one for CCPs and one for SSFs. Day-to-day oversight and supervision is undertaken by the RBA's Payments Policy Department. In carrying out these activities, the RBA works closely with the Australian Securities and Investments Commission (ASIC), which has separate, but complementary, responsibilities for the supervision of CS facilities.

Table 3.1 provides an overview of the CS facilities most relevant to the Australian market, the products they clear or settle, and their home regulator.

Table 3.1: Clearing and Settlement Facilities 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 (IRDs).	Australia (RBA/ASIC)	
LCH Ltd	SwapClear service: OTC IRDs and inflation rate derivatives.	United Kingdom (Bank of England)	
Chicago Mercantile Exchange Inc. (CME)	IRS service: OTC IRDs, and non-AUD IRDs 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).	United States (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)	
FinClear Pty Ltd (FCX)	Cash equities and trust vehicles traded on the FCX market.	Australia (RBA/ASIC)	
Euroclear Bank SA/ NV ^(c)	Debt and equity securities, including government bonds, and repurchase agreements.	Belgium (National Bank of Belgium)	
Clearstream Banking S.A. ^(c)	Debt and equity securities, including government bonds, and repurchase agreements.	Luxembourg (Banque Centrale du Luxembourg and Commission de Surveillance du Secteur Financier)	

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

Source: RBA.

Financial stability standards for securities settlement facilities

In June 2024, the RBA increased the settlement activity threshold under the Financial Stability Standards for Securities Settlement Facilities (SSF Standards) to achieve a better balance between the risks posed by small firms to financial stability and the regulatory burden imposed on them.¹ The SSF Standards will not apply to a CS facility licensee that settles less than \$40 billion of financial obligations

through the facility in a financial year; this threshold was previously \$200 million. The new threshold is equivalent to around 1 per cent of total annual settlement activity for Australian equity securities and less than 1 per cent of total annual settlement activity for Australian debt securities. To implement this change, the RBA revoked the existing SSF Standards and determined new SSF Standards in accordance with powers under the *Corporations Act 2001*.

⁽b) ASX Group entities.

⁽c) Not licensed nor exempted in Australia as at 30 June 2024.

Supervisory lessons from the CHESS replacement project

In April 2024, the Parliamentary Joint Committee on Corporations and Financial Services released a report into the ASX CHESS Replacement Project.² The report included joint recommendations for the RBA and ASIC aimed at improving the regulatory supervision of critical financial services technology platforms such as CHESS. The RBA and ASIC are developing a response plan to address the recommendations of the report and contributing to the government's response.

Oversight of clearing and settlement facilities

The RBA seeks to align the intensity and scope of its oversight and assessment of CS facility licensees to be proportionate to their degree of systemic importance in the Australian financial system.³ All CS facilities licensed to operate in Australia must meet the FSS unless otherwise exempt. They also must do all other things necessary to reduce systemic risk in Australia, to the extent that it is reasonably practicable to do so. Where a CS facility is based overseas, the RBA seeks to rely on supervision and assessments undertaken by the home regulator, where appropriate. The key developments from the past year are summarised below.

Annual assessment of the ASX clearing and settlement facilities

The RBA's assessment of the ASX CS facilities as at 30 June 2024 concluded that ASX should place high priority on addressing recommendations related to the Operational Risk Financial Stability Standard.

The focus on operational risk should accompany ongoing efforts to improve ASX's governance arrangements and risk culture. The assessment also included a deep dive into ASX's compliance with the Segregation and Portability Financial Stability Standard and recommended that ASX benchmark its current arrangements against international best practice. The full assessment is published on the RBA website.⁴

Assessment of LCH Ltd's SwapClear Service

In Australia, SwapClear is considered to be systemically important. It clears around 90 per cent of the cleared Australian dollar OTC IRD market. This market is used by banks and corporations to manage interest rate risk and to take speculative positions. It has six Australian direct participants, including the four major banks.

The RBA considers that the SwapClear service has been conducted in a way that is consistent with LCH's obligations to meet the FSS as at 30 June 2024. This assessment is based on the RBA's bilateral engagement with LCH, information from the Bank of England (LCH's home regulator), and LCH's progress towards meeting the RBA's regulatory priorities. Table 3.2 provides a summary of the RBA's regulatory priorities and areas of supervisory focus, with further details discussed below.

Table 3.2: Regulatory Priorities and Areas of Supervisory Focus for LCH Ltd's SwapClear Service

Name	Description	Status	Relevant Financial Stability Standard(s)	
Regulatory priorities				
Extension of operating hours	LCH should complete its work to extend the operating hours of the SwapClear service within the next year, while maintaining the resilience of its operations; it should keep the RBA informed of its progress. LCH's business developments should not negatively affect its work on operating hours.	closed	Margin (CCP Standard 6) Operational Risk (CCP Standard 16)	
Area of supervisory fo	Area of supervisory focus			
Operational resilience and operational risk management	The RBA will monitor LCH's work to embed the lessons from operational outages experienced in January 2024 to strengthen its operational resilience and operational risk management. This includes its oversight of third-party providers and service support arrangements. The RBA will actively engage with the Bank of England and LCH on the progress of this work.	opened	Framework for the Comprehensive Management of Risks (CCP Standard 3) Operational Risk (CCP Standard 16)	
Cyber risk management	The RBA will continue to monitor LCH's work to enhance its cyber risk management.	ongoing	Operational Risk (CCP Standard 16)	

Source: RBA.

Extension of operating hours

In August 2023, LCH extended SwapClear's operating hours to fully cover the Australian business day. This completed a multi-year program of work, which was encouraged by the RBA. SwapClear now opens at 9:00 am Sydney time on a Monday morning, providing continuous trade acceptance and registration until the close of business in New York on Friday evening. This is a good outcome for Australian and Asia Pacific-based participants as they were previously required to manage bilateral credit exposures while the service was closed.

Operational resilience and operational risk management

In January 2024, SwapClear experienced two operational incidents affecting its ability to register new trades. On 8 January, an issue with a network storage device prevented SwapClear from opening its service for around nine hours. On 18 January, an intermittent network issue led to delays in new trade registrations over a period of three hours.

Both were serious incidents, though the effects on LCH's participants and its ability to manage risk were limited. Trades were queued while the service was unavailable and one intraday margin run was delayed for 40 minutes. There were no reports that either incident materially affected the functioning of the Australian dollar OTC IRD market. The RBA will be closely monitoring LCH's response to ensure that it has appropriate support arrangements in place for Australian markets and participants, and that SwapClear continues to provide reliable clearing services. The RBA will also engage with the Bank of England on this issue.

Cyber risk management

LCH has continued to refine its approach to cyber risk management and has also enhanced its cyber defence capabilities. LCH regularly engages independent experts to assess the effectiveness of its cyber controls and keeps the RBA informed of developments. The RBA will continue to monitor developments in this area.

FinClear Pty Ltd

In September 2024, FinClear Pty Ltd (FCX) was granted a CS facility licence to operate an SSF for company securities and interests in managed investment schemes traded on the financial market operated by FCX. As FCX is expected to hold a small share of settlement activity in the Australian financial system and does not interoperate with another financial market, CS facility or payment system, it is unlikely to directly pose systemic risks to financial stability.⁵

Central clearing of Australian bond and repo markets

There have been considerable changes in the size and structure of the Australian bond and repo markets in recent years. Recent analysis by RBA staff indicates that the potential benefits of central clearing in these markets has increased, and that the case for central clearing may be stronger than in the past.⁶ In

response to this and renewed interest from Australian market participants, the RBA is working with other Council of Financial Regulators (CFR) agencies to reassess the costs and benefits of central clearing of bonds and repos in Australia.⁷

Financial market infrastructure regulatory reforms

The RBA welcomes progress on a package of legislative reforms to modernise the regulatory framework of financial market infrastructures (FMIs) in Australia. The reforms will support the maintenance of financial stability in Australia by strengthening and streamlining powers for the licensing and supervision of FMIs and establishing a crisis management framework for CS facilities. The updated framework will enhance regulators' ability to monitor, manage and respond to threats to Australia's financial stability that may arise from clearing and settlement systems.

Endnotes

- 1 RBA (2024), 'New Financial Stability Standards for Securities Settlement Facilities', Media Release No 2024-13, 20 June.
- 2 Parliamentary Joint Committee on Corporations and Financial Services (2024), 'Statutory Inquiry into ASIC, the Takeovers Panel, and the Corporations Legislation', Final Report, April.
- 3 RBA (2023), 'The Reserve Bank's Approach to Supervising and Assessing Clearing and Settlement Facility Licensees', December.
- 4 RBA (2024), 'Assessment of ASX Clearing and Settlement Facilities', Report, September.
- 5 RBA (2024), 'Assessment of FinClear Pty Ltd', Report, September.
- 6 Cheshire J and J Embry (2023), 'Reassessing the Costs and Benefits of Centrally Clearing the Australian Bond Market', RBA *Bulletin*, March.
- 7 CFR (2024), 'Reassessing the Case for Central Clearing of Bonds and Repos in Australia', Consultation Paper, July.

Abbreviations

ACCC	Australian Competition and Consumer Commission
AES	Advanced Encryption Standard
AP+	Australian Payments Plus
APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities and Investments Commission
ASX Clear	ASX Clear Pty Limited
ASX Clear (Futures)	ASX Clear (Futures) Pty Limited
ATM	Automated teller machine
AUD	Australian Dollar
AusPayNet	Australian Payments Network
AUSTRAC	Australian Transaction Reports and Analysis Centre
Austraclear	Austraclear Limited
BECS	Bulk Electronic Clearing System
BIS	Bank for International Settlements
BISIH	BIS Innovation Hub
BNPL	Buy now, pay later
CBDC	Central bank digital currency
CCP	Central counterparty
CFR	Council of Financial Regulators
CIT	Cash-in-transit
CLS	CLS Bank International
CLS Settlement	CLS payment-versus-payment settlement system
CME	Chicago Mercantile Exchange Inc.
CPMI	Committee on Payments and Market Infrastructures
CS facility	Clearing and settlement facility
DFCRC	Digital Finance Cooperative Research Centre
DNDC	Dual-network debit card
eftpos	Electronic funds transfer at point of sale
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
FCX	FinClear Pty Ltd
FEX	FEX Global Pty Ltd
FMI	Financial market infrastructure
FSB	Financial Stability Board
FSS	Financial Stability Standards
HVCS	High Value Clearing System
IOSCO	International Organization of Securities Commissions

IRD	Interest rate derivative
LCH	LCH Limited
LCR	Least-cost routing
MOU	Memorandum of Understanding
NPP	New Payments Platform
OG	Oversight Group
OTC	Over-the-counter
PFMI	Principles for Financial Market Infrastructures
PSP	Payment service provider
PSRA	Payment Systems (Regulation) Act 1998
RBA	Reserve Bank of Australia
RITS	Reserve Bank Information and Transfer System
RTGS	Real-time gross settlement
SOF	Swift Oversight Forum
SSF	Securities settlement facility
SSF Standards	Financial Stability Standards for Securities Settlement Facilities
TDES	Triple Data Encryption Standard