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in 2023

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The Future of Money in New Zealand

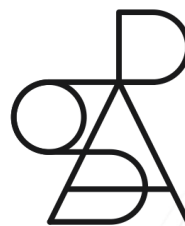
In conversation with
Ian Woolford of the
Reserve Bank of New Zealand
— Te Pūtea Matua

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SPOTLIGHT

The Sovereign Official Digital Association's (SODA) John Kiff provides an overview of how offline currencies work and what the future might hold for offline-capable CBDC. Read more on [page 14](#).

S O D A



In Conversation with Ian Woolford, Director of Money and Cash, Reserve Bank of New Zealand – Te Pūtea Matua



Reserve Bank
of New Zealand
Te Pūtea Matua

Central Bank Payments News (CBPN): The Reserve Bank of New Zealand initiated its Future of Money consultation in 2021, which grew out of an earlier consultation on the Future of Cash. As a starting point for those who may be less familiar with the [Future of Money](#) work program, can you discuss the impetus for the consultation and why preserving access to central bank money figures so prominently?

Ian Woolford: The genesis was around 2017 and early practical thinking on what might be needed to update or replace our current vaulting arrangements as they approach end of life. Consideration of obvious questions about location and operating models required understanding cash demand and flow through the cash system which, in turn, put falling transactional cash use in sharper focus under what was our Future of Cash program. This work affirmed the value of cash to financial and social inclusion (among other benefits), to commit to providing cash for as long as New Zealanders wanted and needed it, and to advocate for improved efficiency and resilience in the multi-party cash system. It also provided impetus to establish a new money and cash policy function in what became the Money and Cash Directorate, and for enabling in the recent update of our institution's governing legislation our stewardship role for money and cash.

So, our work broadened from thinking about the future of cash to effectively that of the future of central bank and private money and payments, as is reflected in four consultation papers published in late 2021 and 2022. Alongside enhancing the cash system and our own vaulting arrangements, we're exploring the potential for a Central Bank Digital Currency to circulate alongside cash, any need for regulatory intervention to better manage the risks and opportunities of private innovations such as stablecoins and crypto assets, while also building our stewardship function.

Preserving access to central bank money features so prominently because we see it as vitally important. As use of central bank money in the form of physical cash declines

as a proportion of transactions, and as new forms of private money have the potential to erode the dominance of local private money and its relationship to central bank money, it raises questions about monetary sovereignty. Add to that the important roles central bank money has in providing for inclusion and as a value anchor to private money through the one-for-one convertibility promise. Another very important motivator for us is that we also think digital forms of central bank money could play an important role by spurring and facilitating innovation and efficiency in the financial system.

CBPN: Responses to the stewardship and cash system redesign papers reflected an overwhelmingly positive view of cash, its cultural significance in New Zealand – Aotearoa, and the importance of ensuring continued access to it. Can you discuss the unique challenges facing the Reserve Bank in maintaining access to banknotes and coins, while simultaneously developing a payments infrastructure and regulatory regime that reflect the current and future needs of consumers and the broader economy? It seems like a difficult balance.

Ian Woolford: Let me start by saying that I believe that maintaining the cash system is both a current and future need. So I don't buy into a binary narrative involving the death of cash and the rise of digital alternatives because these are not pure substitutes for each other, and we know from our research that the public values the option of cash. As such, both digital and physical central bank money will be needed to help society and financial systems function, and central banks will maintain their keen interests in the stability of institutions and services, and in monetary sovereignty.

At a practical level this is also about ensuring product and service offerings — whether existing or new — support inclusion, offer choice, promote competition and innovation, are resilient to risks and threats (whether natural, technological, criminal, etc.), and consider climate impacts. The strong message that we take from public feedback, experience of natural disasters and the pandemic, and research is that physical and digital, public and

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private money forms — and having choices around these — are all important.

Particular cash challenges for New Zealand include:

- Our geography is relatively long and thin and difficult to negotiate, making for vulnerable and expensive logistics outside main centers.
- Economies of scale mean that our banknotes and coins are manufactured overseas, which also adds logistical and carbon footprint challenges.
- A highly concentrated banking system dominates the financial system, impacting innovation and service. Individual and merchant customers in regional New Zealand are worse off for access to bank-provided cash services. An unusually high proportion of New Zealand's economic activity is done by SMEs without strong negotiating power for banking services.
- We are one of the most 'cashless' societies in the world by many measures, but cash remains essential for a significant minority to live their lives, and is still valued by most as both an option and back-up to other means of payment.

CBPN: On a related note, in the face of declining cash usage, RBNZ has stated that “absent a policy response,” the cash system will not be fit-for-purpose. The redesign paper suggested 16 potential policy responses that could help deliver a fit-for-purpose system. It's been a little more than a year since this consultation closed — what is the Reserve Bank's current thinking on these potential responses?

Ian Woolford: We come at the pressures on the cash system from an economic perspective, and by that I mean building understanding of the costs, externalities, and incentives which all stakeholders and participants face. That helps us move away from an overly simplistic way of thinking that I would characterise as 'decline in cash use is simply a reflection of

consumer demand.' It is actually a complex network with both supply and demand effects at play.

As such, we don't see any single magic bullets, and we need to understand the incentives and costs various stakeholders face and tailor various solutions in an internally consistent way. Hence, we have identified 10 policy options amongst the 16 that we want to advance.

Since the consultation closed we have had many conversations with representatives of the cash industry, business, and communities. There has been general support for taking a merchant-centric approach, and so that has been our initial focus. We are currently working through how we might make some of the more novel ideas work — such as using smart machines to enable simultaneous cash acceptance and dispensing ('recycling') in the community or seeing banks remunerate merchants who provide cash outs for their customers. We're doing preliminary work to enable us to use carefully designed and evaluated community trials to test the workability of these policies, ahead of formal consultation and potential adoption of any which prove worthwhile. We're also doing further research on the potential to mandate cash acceptance, and generally building out our stewardship function, including cash and payments data collection and coordinating with other agencies with intersecting interests.

CBPN: In February, New Zealand and many neighboring islands endured severe devastation as a result of Cyclone Gabrielle. Can you touch on how this crisis intersects with many of the themes in the stewardship and redesign papers and whether the event highlighted the urgency of certain proposals in these papers?

Ian Woolford: One of the benefits of our ongoing stewardship work, including regular industry and bilateral engagement, are established relationships and operating rhythms for dealing with crises. We were able to co-ordinate with industry and work with the national response system in New Zealand to secure military and police support for cash movements for isolated areas. There was great industry co-operation and participation in this process, as there was during pandemic-related disruptions.

However, Cyclone Gabrielle did lay bare the lack of resilience in the cash system resulting from commercial banks' steady retreat from cash services and sites to meet public and business needs. Remaining infrastructure generally did not have basic back-ups of electricity and data warranted to support facilitating cash for those regions using the thin and long service chains left. This situation was particularly evident in the more isolated regions most affected by the cyclone.

It was also clear that cash remains a widely used payment mechanism of local business activity and individual wellbeing in regional New Zealand, and it was the only means of payment possible for some time as data, electricity, and roading networks were all disrupted. Further, the demographics of the affected regions suggested they are also likely to have more New Zealanders who ordinarily rely on cash to transact due to preference or lack of alternative means.

The readiness of banks to respond to emergencies such as Cyclone Gabrielle will be an increased focus of our prudential supervision engagement, as well for our Future of Money work. Having multiple, and resilient, payment options is even



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more important in a crisis, so you can, for instance, expect us to emphasize offline capabilities for potential CBDC solutions to meet connectivity challenges, whether every day or as a disaster impact.

CBPN: CBDCs also figure prominently in the consultation. RBNZ received nearly 7,000 total responses to the first three Future of Money papers (stewardship, CBDC, cash system redesign). Of those, roughly 93 percent of the responses were to the CBDC issues paper, many of which reflected certain misconceptions that the public may have about CBDCs. If a retail CBDC does one day become a reality for New Zealand, what measures should the Reserve Bank and other stakeholders take to ensure that the average citizen understands what a CBDC is and is not?

Ian Woolford: Any CBDC would need to have more than theoretical merit to be a success; it would have to meet users' money and payments needs in the widest sense and be intuitive to understand and use. These needs likely include everything from simplicity, to privacy protections, and the ability to work offline. We're embarking on user needs research to inform possible design choices which we would work up and share for feedback along with other aspects of how a CBDC might operate in New Zealand in a further round of public consultation. Our working hypothesis remains that a CBDC could ensure central bank money remains relevant in a digital age, continue to fulfill the value-anchor role, and support inclusion. A CBDC would help enable a money and retail payments ecosystem that is more open, innovative, and competitive, and boost our digital economy.

CBPN: Can you provide any indication as to when we might expect RBNZ's CBDC proof-of-concept to begin and what might that look like? And does the Reserve Bank have plans at the present time to engage in any cross-border CBDC collaborations with its central bank partners, or is it much too early in the journey?

Ian Woolford: We are not at the stage of testing any particular concept. The exploration underway is very much a policy-led exercise with tech-input, rather than being tech-led. Our focus is to identify and define a set of CBDC ecosystem design options that best meet the design principles we've previously floated in our consultation paper and have been further developing in our ongoing engagement and research. We need to confirm different use cases, consider design choices that might meet these, and understand the implications and trade-offs for the design principles and overarching objective we discussed earlier. This work, together with our broader policy exploration, will allow us to confirm the potential case for a CBDC, understand potential future investment needs, and to gain RBNZ Board approval to start focusing in on technical options in 2024. Assuming we achieve this, then we envisage further public consultation on more developed proposals will follow.

Naturally we are engaging with other central banks to exchange views and ideas, but our primary focus is on the potential for a general-purpose CBDC for domestic use. Cross-border or wholesale use cases would be further considered in future phases.

CBPN: The Private Innovation consultation, which closed on 3

April, was developed in the wake of the Terra and FTX collapses of late 2022. And, more recently, we've seen substantial upheaval related to Silvergate, Silicon Valley Bank, and other financial institutions and crypto-assets. In the consultation paper, the Reserve Bank proposes to develop a monitoring framework in response to the risks brought by private money and other innovations. Have these recent developments impacted what RBNZ views as the necessary response to stablecoins and other crypto-assets, or have these events only confirmed the soundness and urgency of such a proposal?

Ian Woolford: Our private innovation issues paper was already scoped before the first of those events, but it would be fair to say that they provide useful illustrative background to the issues raised and underline the importance of this work in respect of private innovation. The consultation has now closed. We are in the process of assessing the submissions and our response to them.

CBPN: Themes such as competition and innovation are also woven throughout the consultation. Globally, we've seen numerous jurisdictions pursue open banking to spur innovation and competition and, ultimately, give consumers more choice (and control) when it comes to payments and financial services. New Zealand's government is currently developing a consumer data right (CDR) framework, and banking has been identified as the first sector where such a framework would apply. What is the status of the CDR framework, and what are the Reserve Bank's thoughts on the potential of open banking to achieve its stated objectives?

Ian Woolford: We believe that money and payments system in New Zealand could be made more efficient and innovative if we have greater competition. This requires the barriers to entry to be lowered for the new providers, and we believe the CDR would support this by putting customers in greater control of their financial data and how it might be used and shared in ways they want to permit. We've been frustrated by the slow pace of the NZ banking industry's rollout of API standards, hampering innovation and open banking benefits being realized for New Zealanders. There are obvious opportunities for CDR to work alongside any CBDC, which could help spur innovation as fintechs made use of it directly, and we could also influence the incentives for other providers of private money — including banks — to innovate.

While the NZ CDR work is being led elsewhere, we welcome the intention to designate banking as the first sector to be covered by the new legislation. We look forward to seeing the release of an exposure draft of the proposed law for public comment, before a formal draft law (Bill) is introduced to the parliamentary process.

CBPN: Now that the Private Innovation consultation is closed, what's next for the Future of Money series? Can we expect further consultations in 2023?

Ian Woolford: As you'll have picked up from today's discussion, we are head-down in extensive and in-depth policy work following through on the issues papers' directions. While we continue to engage widely and publish updates on our website, we're unlikely to be publishing any further formal consultation papers before 2024. 