

Christopher J Waller: Interlinking fast payment systems

Speech by Mr Christopher J Waller, Member of the Board of Governors of the Federal Reserve System, at the Global Fintech Fest, Mumbai, 28 August 2024.

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Thank you to the conference organizers for the opportunity to speak this year at the Global Fintech Fest—a place where there is so much payments innovation.¹ The technology-driven payments revolution in India has been enabled by a public-private partnership to build the "technology stack" of digital platforms that has broadened financial inclusion and done so at low costs.² Building on the foundation established by the public sector, innovators in the private sector seized the opportunity to enhance payments through the introduction of new capabilities that alleviate frictions while remaining within regulatory guardrails. In today's remarks, I am going to touch on how interplay between the public and private sectors may be the key to advancing cross-border payments.

Now that fast payment systems have been established around much of the globe—in over 70 countries and climbing—attention is turning to how these newer systems could potentially enhance global payments. Specifically, interlinking fast payment systems has been identified as a possible means to deliver enhanced cross-border payments for consumers and businesses. Interlinking arrangements would allow banks in different countries who are users of domestic fast payment systems to send payments to each other through technical connections between their respective domestic systems. As you all know, interlinking is one of the areas outlined in the G20 roadmap for further exploration as part of a holistic effort to enhance cross-border payments. The overarching G20 goal is to mitigate challenges with cross-border payments in a coordinated way at a global level, with input from key stakeholders including the private sector.

The G20 roadmap addresses a new topic that payments industry stakeholders have been circling around for years—more cost-effective and timely cross-border payments for consumers and businesses. This policy goal has been advanced by the Federal Reserve over time in various payment system improvement initiatives, dating back to the late 1990s when the Federal Reserve began adapting the automated clearinghouse (ACH) service to support international payments, and more recently in 2015 when we collaborated with industry to improve the payment system.³ Today's consumers and businesses can generally send a payment anywhere in the world, but they all seem to want faster and cheaper global payments, just like we always want faster flights and cheaper airfares. However, I am not entirely convinced that interlinking arrangements will necessarily deliver on those goals. Let me explain with some context.

Faster and cheaper cross-border payments

Not all frictions that slow payments down are bad. Certain frictions are purposely built into the global payment system for compliance and risk-management reasons. Slowing down the speed at which payments are cleared and settled helps banks prevent money laundering and counter the financing of terrorism, detect fraud, and recover fraudulent

or misdirected cross-border payments. Granted, the practice today of sending payments through an often complex chain of correspondent banks contributes to slower payments that could benefit from efficiency enhancements. However, there is no silver bullet that increases speed and efficiency without tradeoffs. Unless new solutions are found, interlinking fast payment systems might increase the risk-management burden for banks that participate in them. That is, legal, compliance, and operational considerations are critical to the discussion of the promise and challenges of interlinking. Governance, oversight, and settlement arrangements also need to be thought through, along with considerations for data privacy.

In addition, can we assume that all parties to a cross-border transaction want faster payments? The fundamental friction in any transaction is that the seller of an object—a can of soup, an hour of labor, or a good manufactured for export—wants to receive their money as fast as possible. However, the buyer of the object, or the buyer's intermediary, typically has an incentive to wait as long as they can to pay for something they have purchased. Under this logic, senders need to be properly incentivized to speed up cross-border payments. The one exception may be person-to-person remittances, where workers from other countries want to send money home, and recipients want access, as fast as possible. But remittances are only a small percentage of the value of cross-border payments, so we'd need to weigh the benefits against the costs of a potential public-sector intervention to shift incentives. So, I am still left with the larger question of whether we should be incentivizing faster cross-border payments.

Suppose we do want to incentivize senders by lowering costs of faster payments—whose responsibility is it to do that? Should it be left to private-sector competition to drive down costs as is typically the case with other products? Or is there something unique about payments that requires central banks or payment system operators to step in to interlink their networks with the goal of bringing costs down? We have already seen examples of the private sector leveraging technology to innovate in the market for cross-border instant payments, both at the wholesale and retail level. For example, we have seen a real-time payment system built for wholesale clients that allows clearing and settlement between global clients in seconds, with necessary compliance performed upfront in less than 24 hours. Another example is the SWIFT Global Payments Innovation, which offers improved speed and transparency for the business customers of participating banks, and, by their account, has been adopted by 150 banks globally. In mentioning these examples, I am not intending to endorse certain private-sector services. Rather, these newer services are illustrative of how market forces and competition can meet consumer and business demands for more efficient cross-border payments.

In the United States we have experience with offering low-cost international ACH payments. We provided direct ACH linkages from the United States to Europe and Canada, but after more than 20 years, the banks were not using it, and we stopped the service. It is possible that a fast payment interlinking arrangement adopted by Federal Reserve would be more effective for our bank customers than the former ACH service, but we would proceed cautiously to carefully consider the costs and benefits. Economic viability needs to be a cornerstone for any action we may take. We need to ask ourselves whether banks would find a central bank interlinking service more effective than their existing arrangements for cross-border payments, and if they would actually use it.

Practical aspects of interlinking fast payment systems

We know from basic economic theory that payment systems are similar to other networks in that greater participation is necessary for the network to grow and increase value to its users. This is true on a global scale, too, which in practical terms means that valuable global interlinked networks would have to be founded on underlying domestic networks with a breadth of senders and receivers. Domestic networks need to be developed first. If this condition is not in place, interlinked networks could end up being a road to nowhere.

Building out domestic networks has been done in different ways. In some countries the central bank has authority to mandate participation, notably in Brazil with the successful Pix system. In other countries, notably India, united efforts by the government, central bank, and private sector established the digital public infrastructure that enabled broad adoption.

In the United States, it's a different story, and the payments landscape is unique. With over 9,000 depository institutions and different authorities than other countries, the Federal Reserve determined that it needed to build a fast payment system accessible to all depository institutions to achieve our policy goals. At the time of our decision, there was only one private-sector instant payment system in the market, built by the largest banks. Based on our experience, we did not believe that this system would ultimately reach all depository institutions, nor would other private-sector systems emerge to compete with it and extend the scope of that service. Yet we knew from industry engagement that smaller banks across the country wanted a broadly accessible fast payment system, so we stepped in to address the clear coordination problem. This action is very much consistent with the Federal Reserve's role in the U.S. payment system historically.

We have seen widespread adoption of the FedNow Service in just a little over a year since implementation, with close to 1,000 depository institutions on the network including many of the largest banks that will drive origination volume. Yet we are still at the beginning of a multiyear journey of establishing a ubiquitous network covering the majority of institutions in our country. Variation around the world in domestic fast payment network adoption means that the value of globally interlinked systems is not yet clear.

From a technical perspective, the promise of interlinking, which is essentially interoperability between or among domestic fast payment systems, is that fast payment networks can just "connect" with each other and move payments globally. It sounds simple. In practice, however, achieving interoperability is not simple. Technology is probably the easiest part. The legal, compliance, settlement, and governance challenges I mentioned earlier are more substantial. In addition, even when technological connections are in place, payments may not actually be instant as they traverse across systems because of domestic variations in ISO 20022 implementation, which is the global standard used by most fast payment systems. To send an ISO message seamlessly from one country to another across a technical link, operators need to coordinate and align on common practices.

We should consider that new multilateral arrangements for interlinking could potentially address some of the challenges that I have outlined. Today, certain countries have established bilateral links between domestic fast payment systems primarily to support remittance payments. These arrangements demonstrate that linkages are technically possible and that legal and compliance issues can be addressed. Yet each link is unique and requires resource-intensive negotiation and alignment between parties. Establishing bilateral links across the globe simply will not scale. We know this to be true from our own bilateral ACH linkages, where each arrangement required bespoke agreements with correspondent banks and service providers. Multilateral arrangements might bring some efficiencies, yet they are no small undertaking.

Conclusion

To sum up, overall, I do see the value of a coordination role for the public sector to improve cross-border payments, an effort in which the Federal Reserve has been and will continue to be heavily engaged. We will continue our engagement with international fora to improve the speed and efficiency of cross-border payments and to investigate the issues critical to interlinking payment systems. Our chief focus in the near-to mid-term, however, is continuing to build the FedNow network domestically and increasing participation in the service. We are also improving existing cross-border rails by considering expanded operating hours on our large-value, real-time gross settlement system, the Fedwire Funds Service, and by adopting ISO 20022, a globally accepted messaging standard. Looking out over the longer term, we will continue to conduct research and experimentation on emerging technologies to better understand the role these innovations could play in the payments landscape of the future. I expect the technical capabilities, legal infrastructure, and use cases for faster cross-border payments will evolve, and I look forward to following the private-sector innovation that will emerge from stakeholders represented at this event.

¹ The views expressed here are my own and are not necessarily those of my colleagues on the Federal Reserve Board.

² The technology stack is a unified set of digital platforms that includes digital identity, payment rails, and data sharing policy. See Derryl D'Silva, Zuzana Filková, Frank Packer, and Siddharth Tiwari, "[The design of digital financial infrastructure: lessons from India.](#)" (PDF) BIS Papers No 106 (Basel: Bank for International Settlements, December 2019).

³ See "[Strategies for Improving the U.S. Payment System.](#)" (PDF) Federal Reserve System, last modified January 26, 2015 and "[Strategies for Improving the U.S. Payment System: Federal Reserve Next Steps in the Payments Improvement Journey.](#)" (PDF) Federal Reserve System, last modified September 6, 2017.