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Supporting Fast Payments for All

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The Role of the Federal Reserve in Ensuring Safe and Reliable Payments

It is a pleasure to be here in Chicago today to talk about payments. The confidence that payments will be timely and dependable is a cornerstone of America's dynamic and resilient economy.[1]

Today, Americans take the reliability and safety of their payments for granted. But that was not always the case. The nation's first 150 years were frequently disrupted by panics in the financial system that extended into the payment system, which was highly fragmented and inefficient. Before the Federal Reserve took on a role in the payment system, a check recipient could not count on receiving the full value written on the check and faced long and unpredictable delays in getting access to the funds. As a result of banks' efforts to avoid excessive clearance fees, it could take days, weeks, or more to clear checks. The Federal Reserve's second Chairman, William P.G. Harding, described the circuitous, opaque, and costly route one payment made: "…a bank in Rochester, N.Y., sent a check drawn on a Birmingham, Ala., account to a correspondent bank in New York, which sent it along to a bank in Jacksonville, Fla. From there, it traveled to Philadelphia, Baltimore and Cincinnati before it finally reached the originating bank in Birmingham."[2] The fragmentation of the payment system imposed costs on American merchants, households, community banks, and, ultimately, on the overall U.S. economy.

Ensuring a reliable nationwide payment infrastructure was one of the motivations that led the Congress to create the Federal Reserve after the severe financial panic of 1907. Fostering a

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[1] I am grateful to Susan Foley, John Maggs, Mark Manuszak, and Anjana Ravi of the Federal Reserve Board for their assistance in preparing this text. These remarks represent my own views, which do not necessarily represent those of the Federal Reserve Board or the Federal Open Market Committee.

[2] Noted by Federal Reserve Chairman W.P.G. Harding in Robert Kramer and W. Putnam Livingston, "Cashing in on the Checkless Society," *Harvard Business Review*, September/October 1967, p. 143; Bill Medley, *Highways of Commerce: Central Banking and the U.S. Payments System* (Kansas City: Federal Reserve Bank of Kansas City, 2017), p. 23, www.kansascityfed.org/~/media/files/publicat/highwasyofcommer/highwaysofcommerce.pdf?la=en.

safe, efficient, and widely accessible payment infrastructure has been a crucial aspect of the Fed's mission from its founding in 1913. By creating a new core infrastructure for clearing and settling checks, the Fed was able to boost confidence in banks and America's payment system, ensure Americans received the full value of their checks, and speed up payments.

That was the first, but not the last, time that the Fed played a central role in transforming America's retail payment system. By the 1970s, the payment system was staggering under the weight of paper checks. In 1973, Governor Jeffrey Bucher of the Federal Reserve Board described the exponential growth in check volume and the time-consuming and expensive process to clear paper checks as a "time bomb."[3] The Federal Reserve and payment system stakeholders faced a choice: continue making incremental changes to manage the growing avalanche of checks, or look to technology to facilitate transformational change.

Working with the private sector, the Federal Reserve chose transformation, and the effect was dramatic. In partnership with the private sector, the Federal Reserve supported the implementation of the automated clearinghouse, or ACH system, to process payroll payments for individuals, bill payments for households, and vendor payments for businesses. Before the advent of the ACH, it would typically take a week for an employee to be able to access the funds from a paycheck. It would require first a trip to the bank during business hours to deposit the paycheck and then several business days for that bank to complete the time-consuming process of collecting the funds from the employer's bank.[4] With the advent of ACH, an employee could expect to access their pay from their bank on the same day it was deposited electronically by

[3] Jeffrey Bucher, "The Check," (remarks at the Annual Meeting, Bank Stationers Association, Colorado Springs, CO, June 4, 1973), https://fraser.stlouisfed.org/title/931/item/36180.

[4] Andre Pollack, "The New Look to Bankers' Hours," *New York Times*, April 8, 1989, www.nytimes.com/1989/04/08/business/the-new-look-to-bankers-hours.html.

their employer. Today, the ACH operates with important roles for the private sector and the Fed, is available nationwide, and constitutes a vital piece of infrastructure supporting earlier access to funds and reliable settlement of payments.[5]

Moving to 24/7 Real-Time Settlement

Today, our payment system is again at a crossroads. There is a growing gap between the transaction capabilities we need and expect in the digital economy--fast, convenient, and accessible to all--and the underlying settlement capabilities.

Consumers and businesses increasingly expect to complete transactions with a simple keystroke, swipe, or tap. If I want to split a restaurant tab with my friends, I can use an app on my smartphone. But my friends have to be signed up for the same app to receive the payment, and they may have to wait for confirmation that the funds have moved from the app into their bank accounts before they can use the funds outside the app. Similarly, if I want to make a purchase from a vendor online, all I have to do is upload my payment information and touch a screen to complete the purchase immediately. But that payment in turn may not be immediately available to the seller.

While we are seeing a growing demand for payments to be as instantaneous as the apps on our smartphones, in reality, under the hood, these payments currently rely on a patchwork of systems that can result in inefficiencies and delays, as well as uneven access. To meet the expectations of our 24/7 app economy, there is a growing demand for broadly and nationally accessible faster payments that make funds available immediately. Faster payments would allow

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[5] According to the *Federal Reserve Payments Study 2016*, in 2015, the ACH system was used for 23.5 billion payments, totaling $145.3 trillion in value. *See* www.federalreserve.gov/paymentsystems/files/2016-payments-study-20161222.pdf.

consumers and businesses to send and immediately receive payments at any time of the day, any day of the year, and provide recipients the ability to use their funds anywhere they choose.[6]

Nascent faster payment services are emerging to address this demand from individuals and businesses for the capability to manage their finances more efficiently in real time. These faster payment innovations are striving to keep up with this demand, but gaps in the underlying infrastructure pose challenges associated with safety, efficiency, and accessibility. In many circumstances, the underlying infrastructure in place today cannot ensure that a fast payment is fully complete before the recipient seeks to use the funds. To complete a payment, the banks behind the transaction need to transfer funds between each other. Until this happens, the payment between them is like an "IOU."

Today's systems that transfer funds between banks are not set up to work in a 24/7, real-time world. Instead, most faster payments settle funds between banks on a deferred basis. Deferred settlement entails a buildup of obligations--like IOUs between banks--that could present real risks to the financial system in times of stress. Although faster payment systems that rely on deferred settlements can incorporate certain measures to mitigate these risks, these measures may be appropriate for a nascent faster payment market only for a limited time. As we saw with the avalanche of paper checks prior to ACH, as the volume and value of faster payments grow over time, the potential risks of deferred settlement to the financial system are also likely to grow.

To fully deliver on the promise of faster payments into the future, we need an infrastructure that can support continued growth and innovation, with a goal of settlement on a

[6] The Faster Payments Task Force viewed 24x7x365 service availability and final funds provided to the recipient within one minute as characteristics of a "very effective" faster payment service. Faster Payments Task Force, "Faster Payments Effectiveness Criteria," January 26, 2016, https://fedpaymentsimprovement.org/wp-content/uploads/fptf-payment-criteria.pdf.

24/7 basis in real time. To ensure the robustness of the payment system into the future, banks and other providers acting as their agents should have access to a settlement system that operates 24/7 and settles each payment as soon as an individual sends it.

While everyone stands to benefit from faster payments, the benefits could be especially important for households and small business owners who face cash flow constraints. We know from the Fed's Survey of Household Economics and Decisionmaking that four in 10 adults say they would need to cover an unexpected expense of $400 by borrowing or selling something, or simply be unable to pay. A forthcoming Fed research note estimates that a quarter of households have less than $400 combined in their bank accounts.[7] For these households, the difference between waiting for a payment to clear and receiving a payment in real time is not merely an inconvenience; it could tip the balance toward overdraft fees, bounced checks, or collections fees. To be clear, faster payments would not address the root causes of these households' financial fragility. Even so, faster payments could help reduce the strain on some.

Similarly, many small businesses cite immediate access to working capital to finance inventories or pay employees as their number one constraint on growth.[8] Smaller businesses and merchants would benefit from faster payments because of their need to tightly manage how much of their capital is tied up in unused material or inventory. If a small business could count on its customers' payments being immediately accessible in its bank account, it could reduce its need for short-term financing to cover the costs of ordering materials and goods well in advance.

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[7] Board of Governors of the Federal Reserve System, *Report on the Economic Well-Being of U.S. Households in 2017* (Washington: Board of Governors, May 2018), www.federalreserve.gov/consumerscommunities/shed.htm; Neil Bhutta and Lisa Dettling, "Money in the Bank? Assessing Families' Liquid Savings Using the Survey of Consumer Finances," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, forthcoming).

[8] For example, in 2015, 22 percent of small businesses reported cash flow (for example, meeting payroll or paying for inventory) as their top business challenge. See *2015 Small Business Credit Survey: Report on Employer Firms*, March 2016, www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf.

The Role of the Federal Reserve in Faster Payments

So what is our role at this moment of opportunity for the payment system? In keeping with the Fed's historical role in payments, five years ago we launched a collaborative effort with a broad array of stakeholders to catalyze a safe, efficient, and accessible faster payment system for the United States. As part of that effort, 300 organizations representing consumers, businesses, banks, card companies, and technology providers, including many represented here today, came together to define expectations for the future of the retail payment system and to make recommendations on how to implement those expectations. The members of the task force told us that the Federal Reserve needed to develop a 24/7 settlement system.[9] The U.S. Treasury echoed this theme in a recent report.[10]

Over the past year, we have undertaken an assessment of what the Federal Reserve could do to modernize its infrastructure to support interbank settlement of faster payments. That assessment found that 24/7 payment-by-payment interbank settlement in real-time--what we refer to as real-time gross settlement (RTGS)--offers clear benefits in minimizing risk and maximizing efficiency. A 24/7 economy with 24/7 real-time payments needs 24/7 real-time settlement, and RTGS is the way to achieve this. That is where we believe that the Federal Reserve and the private sector together need to make investments for the future. In this regard, the U.S. retail payment system lags behind some other countries: the Reserve Bank of Australia and the European Central Bank have already implemented or are on the cusp of implementing RTGS systems to support private-sector faster payment services.

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[9] Faster Payments Task Force, *Final Report Part Two: A Call to Action*, July 2017, https://fasterpaymentstaskforce.org/.

[10] U.S. Department of the Treasury, *A Financial System That Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation* (Washington: Department of the Treasury, July 2018), https://home.treasury.gov/sites/default/files/2018-07/A-Financial-System-that-Creates-Economic-Opportunities---Nonbank-Financi....pdf.

The Federal Reserve and payment system stakeholders have an opportunity to upgrade America's payment system to meet the needs of households, businesses, and banks in the app economy. Today, we are publishing a *Federal Register* notice that seeks public comment on potential steps the Federal Reserve could take to support the vision of RTGS of faster payments. The Reserve Banks could develop a service for RTGS that is available on a 24/7 basis to provide payment-by-payment interbank settlement in real time and at any time, on any day, including weekends and holidays. The Reserve Banks currently provide payment services to more than 11,000 banks across the country. A 24/7 RTGS service provided by the Reserve Banks could significantly improve the prospect that banks of all sizes will have equitable access to a real-time interbank settlement infrastructure for faster payments in the long term.

This common infrastructure would support connections across banks, and faster payment service providers acting as their agents, with the potential to weave together the current patchwork of systems. As a result, we would also expect the overall safety of faster payments to increase. The capability to finalize interbank settlement before funds are made available to the recipient would avoid an undesirable buildup of risk in the system. The more banks that have access to real-time as opposed to deferred settlement mechanisms, the lower the risk would be from deferring settlement to the payment system as a whole. Although RTGS may be operationally demanding, it offers clear benefits from a risk and efficiency perspective over the long term.

The development of a nationwide real-time interbank settlement infrastructure could also support the development of private-sector faster payment services, thereby increasing innovation and choice in the market. Banks and technology providers of all sizes may be able to develop new services or enhance existing services by capitalizing on the underlying interbank settlement infrastructure. This could ultimately benefit all consumers by lowering costs, increasing choice, and improving quality.

In that regard, we are also seeking comment on whether the Reserve Banks should consider developing a liquidity management tool that would operate 24/7 in support of services for real-time interbank settlement of faster payments. The tool could support settlement services provided by the private sector or the Reserve Banks.

The Federal Reserve has a responsibility to promote a payment system that serves the evolving needs of the public. We hope to solicit as wide a range of views as possible as we consider these and possibly other options to support prompt, secure, and resilient settlement in a 24/7 world. To that end, the *Federal Register* notice poses a series of questions related to whether an RTGS is the appropriate strategic foundation for interbank settlement of faster payments. We also solicit views on the appropriate role for the Federal Reserve in such a system. We look forward to hearing from, and learning from, a broad array of stakeholders, including those who are actively involved in the provision of payment and banking services, as well as representatives of the consumers, households, and businesses who rely on the ability to make and receive payments every day.

The future of payments will be determined by the actions we take today. We can wait and watch how these issues evolve on their own. But this will likely result in a fragmented patchwork of systems that entails inefficiencies and risks and could leave behind many households, small businesses, and smaller banks. Alternatively, we can work with other stakeholders to embrace innovation and design a faster payments infrastructure for the future to promote broad access and resilience.

As technological change continues to drive payments innovation, we continue to focus on the same basic objective that motivated our initial engagement in the payment system a century ago: promoting a safe, efficient, and accessible payment system that serves the interests of all Americans. The Fed has the unique ability to provide the infrastructure to reliably settle obligations between banks using balances at the central bank. As such, we have a responsibility to serve the broad public interest by providing a flexible and robust payment infrastructure on which the private sector can innovate. We look forward to hearing from you on the important choices before us as we work to safeguard the integrity and efficiency of our payment system.