Payments and the Pandemic

Loretta J. Mester
President and Chief Executive Officer
Federal Reserve Bank of Cleveland

Keynote Speech
20th Anniversary Chicago Payments Symposium
Federal Reserve Bank of Chicago
Chicago, IL
(via videoconference)

September 23, 2020

Introduction

It is a great pleasure being with you today as part of the 20th Anniversary Chicago Payments Symposium. Over the last two decades, this symposium has established itself as a valuable forum at which those interested in the payments system can gather to learn and share ideas. In recent years, the symposium has fostered important conversations between industry practitioners and policymakers. Those conversations have helped inform the Federal Reserve System's initiative to improve and modernize the U.S. payments system. That work is ongoing and has reached important milestones this year, despite the pandemic. Today, I will discuss some of the effects the pandemic has had on the U.S. payments system and update you on some of our ongoing efforts to modernize the payments system. As always, the views I'll express are my own and not necessarily those of the Federal Reserve System or of my colleagues on the Federal Open Market Committee.

I know I do not need to tell this audience that the payments system is a crucial part of the infrastructure of the U.S. and a well-functioning and secure payments system is vital for a sound economy. As is true of pretty much every aspect of life this year, the pandemic has affected the payments business, including payment patterns and volumes. The most important thing to recognize is that the U.S. payments system has been weathering the pandemic without significant disruptions. This has taken the hard work of many people in both the public sector and the private sector. Many of these workers were deemed to be essential, and we owe them all our deep gratitude for their dedication and public service. Because of the vital role played by the payments system, priorities had to change to meet the challenges posed by the pandemic. At the same time, progress continued on important projects that have longer-run consequences for the payments system.

There will be many lessons to take away from the current pandemic situation; two seem particularly relevant to the payments work in which we are all engaged. First, although it is safe to say no one anticipated an event quite like the pandemic, the industry's forethought, investment, and preparation to ensure that the payments system would be resilient to extreme scenarios has paid off greatly. It has allowed us to avoid a collapse of the payments system – an event that would have made what was already a grave situation much, much worse. One big takeaway is that once we get through the current pandemic, making necessary investments to ensure that the U.S. payments system remains resilient in the face of extreme stress events will need to remain a priority.

Another key lesson is that having the right technology in place can make a big difference in being able to address the challenges posed in an environment of rapid change in payments behavior. Industry participants may need to rethink their payments technology investment strategy once we are through the pandemic. The changes we have seen in customers' payment behavior since February have happened quickly. The spread of COVID-19 heightened the reliance of businesses and individuals on digital services and faster connectivity, as many employees began to work from home and consumers turned to online shopping. This is a global pandemic, and demand for consumer-to-consumer and cross-border payments has risen, as people want to send and receive payments in support of family and friends. Some payments technology is more resilient, scalable, and adaptable to such rapid changes in user behavior and volume. Some industry participants note that cloud technologies are inherently more scalable and adaptable, and early adopters of the cloud are likely better positioned during these times compared to those operating on mainframes.[1] It would be wrong to say that the pandemic has been the catalyst for payments system modernization: the Federal Reserve Banks have been assessing our payments technology for some time. We are investing in cloud technology and have platform modernization initiatives at various stages of completion across nearly all of our business lines. However, the pandemic does underscore the need to have a technology strategy that will meet the needs of the future. Industry efforts to replace decades-old core banking systems with more flexible, resilient, and cloud-friendly

[1] See Fintech Advisory Group (2020).

platforms, and to integrate the old with the new along the way, may need to be accelerated to ensure that we are prepared for the future.

Let me review some of the changes we have seen in payments activity during the pandemic.

Payments Volume and Mix

The coronavirus pandemic and actions taken to contain its spread have had tremendous effects on households, businesses, and communities across America and on economic activity. So it is not surprising that the pandemic has had significant effects on the types and volumes of payments flowing through the payments system. In March, the country took aggressive social-distancing measures to limit the spread of the virus and to buy some time for the healthcare system to increase its capacity to care for the sick, learn more about the virus itself, and develop testing and treatments. In March and April, with stay-at-home orders issued by state and local authorities in full swing, the number of checks processed by the Reserve Banks declined substantially.

But at the same time, global demand for U.S. currency notes increased at unprecedented rates in March as currency orders from domestic and international banks spiked dramatically. At times of crisis, people often turn toward safety, and the U.S. dollar is viewed as a stable and safe asset across the world. So it is not unusual that the pandemic has led to a shift toward cash, but the scale has been unprecedented. Adding to that, the fiscal support in the form of economic impact payments issued by the U.S. government to millions of households also likely contributed to the higher demand in the U.S. as many people converted the payments into cash for spending. On the supply side, just as in other industries, the pandemic has affected the supply chain of cash. With the shutdown in full swing earlier this year, currency deposits to the Fed decreased, as retailers had less cash to deposit and banks wanted to maintain higher inventories in their vaults. The Federal Reserve Banks had to adjust their usual cash operations to ensure that cash inventories were maintained and cash was delivered to meet the higher demand.

According to a Federal Reserve survey of consumers taken in May of this year, participants reported that, on average, during the pandemic, they had increased their holdings of cash on their person from $69 to $81, a 17 percent increase.[2] And the amount of cash stored at home or elsewhere rose even more, nearly 90 percent, from an average of $250 to over $475. Thirty percent of consumers did report they were avoiding using cash to pay for transactions, in favor of debit and credit cards. But even they were holding more cash in May than they were before the pandemic. Now, since May, as states and localities have relaxed stay-at-home restrictions and the economy has entered a reopening phase, the cash volumes at Reserve Banks have begun to return to more normal levels.

The pandemic has also caused a disruption to normal patterns of coin circulation. Deposits by banks to the Fed normally account for roughly 80 percent of the coins that the Federal Reserve puts back into circulation, with the remaining 20 percent coming from new coin produced by the U.S. Mint, the issuing authority for U.S. coin. While about $48 billion of coin is already in circulation, because coin-intensive businesses and bank branches have been less accessible during the pandemic, much of that coin has piled up in people's homes and piggybanks and in businesses that were shuttered by the pandemic.[3] This has made it more difficult to recirculate the coin where needed. This temporary supply disruption is likely to dissipate because as the reopening phase continues and more businesses resume normal activity, more coins will flow back into retail and banking channels.

Electronic payments have also been affected by the pandemic. Automated Clearing House (ACH) volumes declined in late March and early April, driven by lower payroll processing, business-to-business payments, and online bill payments. Once the federal government's economic impact payments were disbursed and the Small Business Administration's payroll protection plan loans were funded, there was a

---

[2] See Kim, et al. (2020)

[3] U.S. Coin Task Force (2020).

rapid rebound in these types of payments and ACH volume has nearly recovered to its pre-pandemic growth trend.

The Federal Reserve Bank of Cleveland is the primary collection agent for the U.S. Treasury, and in late March and early April, our receipts of credit and debit card payments to the Treasury dropped to about half of what they were compared to last year. On the other hand, the use of debit and credit card payments increased for some types of payments. In the Fed survey of consumers, about 20 percent of respondents reported switching to paying online or over the phone for items from restaurants and big-box stores, and nearly two-thirds reported that they had made no in-person payments during the first several weeks of the pandemic.[4]

Finally, I will note that payments related to securities transactions have increased dramatically during the pandemic amid increased volatility in financial markets, higher levels of government bond issuance, and a surge in mortgage refinancings prompted by low interest rates.[5]

All in all, the pandemic has had a wide-ranging and uneven impact across firms' and households' payment behaviors and patterns. Some of the changes seen early during the pandemic have already reverted to pre-pandemic norms and others are likely to revert as the pandemic recedes. But it is also the case that the changes we have seen for some forms of payment will be longer lasting. A consumer's decision to use a different form of payment during the pandemic may have been driven by circumstances, but now that the consumer has had experience with it, that payment method may become a more routine choice. Similarly, some of the changes in work and consumption patterns may last after the pandemic has ended, altering payment mix and types of transactions more permanently.

[4] See Kim, et al. (2020).

[5] Increases in average daily trading volumes for fixed-income municipal, U.S. Treasury, MBS, ABS, and corporate debt for August 2020 year-to-date over the same period a year ago range from 15 percent to 40 percent (SIFMA, September 3, 2020).

Federal Reserve Payments Actions

Given the importance of the payments system to the U.S. economy and the potential for wide-ranging effects of the pandemic and the actions taken to stem its spread, the Federal Reserve has been focused on mitigating disruptions and preparing for the unexpected. The Fed has established an active inventory management program to coordinate existing stores of cash and coin between Federal Reserve distribution locations. This has allowed us to better serve areas in the country experiencing high demand for cash and to increase the supply of fit notes available to the public. To help address the national coin circulation issues brought on by the pandemic, the Federal Reserve established temporary caps on coin orders in June. These caps, which have risen over time in response to changes in demand and supply conditions, have helped to ensure smooth ordering and fair distribution to financial institutions of all sizes. The Fed has also convened a U.S. Coin Task Force, with representatives from the Fed, the U.S. Mint, and the industry, to identify actions that could be taken to improve coin circulation.

The Fed understands that financial institutions have had to cope with several pandemic-related challenges – after all, we have faced similar challenges. So to ease some of the burden, in May through July of this year, the Fed offered a customer assistance package, including some fee concessions on reporting, transactional, and electronic access services, and provided temporary relief from certain operational requirements. We also announced that in 2021 we would hold our prices for most Federal Reserve financial services at their current levels.

As fiscal agent to the U.S. Department of the Treasury, the Federal Reserve Banks also provided service to the Treasury by processing more than 160 million economic impact payments to households and small businesses authorized by the CARES Act to help recipients cope with the financial effects of the pandemic. Payments were disbursed via ACH, check, and debit card in waves between April and August. The payments were made relatively quickly to those recipients whose bank account details were available to the government from prior tax returns or Social Security payments. Recipients whose bank account details were not known by the government could enter their account information on a specially created IRS website. Even so, this experience showed that the quality of recipients' routing information needs to improve in order to reduce the proportion of payments that cannot be posted automatically to the payee. And when exceptions occur, the processes for handling exceptions need to be sped up in order to avoid delays. It was a much bigger challenge to reach those without a bank account. This is a sizeable group: in 2017, this number was almost 8-1/2 million households, or about 6.5 percent of U.S. households.[6] Recipients without bank accounts had to wait much longer for their relief payments to be disbursed by checks or debit cards through the mail, and unfortunately, many of these households tend to be lower income and have the greatest need for speedy financial assistance. The pandemic has underscored the need to ensure that during a crisis, payments can flow quickly and to everyone: those with and those without a bank account.[7]

As many in this audience know, one of the goals of the Fed's recent efforts to modernize the U.S. payments system is to speed up the flow of payments between payer and payees. Another goal is to make sure that all Americans have access to the payments system.

FedNow[SM]

The Federal Reserve's FedNow service, which is currently being built, will be an around-the-clock service whereby payments can be originated, cleared, and settled within seconds. The service is expected to provide clear public benefits in the form of safety, efficiency, and accessibility of instant payments. Yesterday, my colleague Ken Montgomery provided an excellent overview of FedNow features and functions, so let me touch upon a few points about how we'll be rolling the service out.

---

[6] Federal Deposit Insurance Corporation (2017).

[7] George (2020).

While COVID-19 has affected many parts of the payments system, it has not slowed down our work on FedNow. Our goal is to bring FedNow to market as soon as practicably possible. The target release date remains 2023 or 2024, but we will announce a more specific time frame once additional work is completed. In order to get the service up and running as soon as possible, we are taking a phased approach to its features. We will begin with the most important features and introduce enhancements quickly and iteratively thereafter. To inform the design and to determine which features to include at the start, we have been engaging extensively with stakeholders through focus groups, industry meetings, and the establishment of a stakeholder-wide FedNow community, and through the more formal public comment process. We are working to finalize a technology strategy that will create a flexible infrastructure, one that is scalable and can evolve with the times.

In addition to offering secure instant payments, an important goal of FedNow is to establish a nationwide reach for the service so that this new type of payment is broadly accessible to consumers and businesses alike. The Federal Reserve's payments services have a broad reach, with connections to and customer relationships with more than 10,000 diverse financial institutions across the country. This existing reach will help support a nationwide infrastructure for FedNow instant payments. We are also working closely with private-sector payment providers to explore the best approach to achieve wide accessibility.

Thinking ahead, a service like FedNow, coupled with a directory service with accurate information on where to route payments for final distribution to households and businesses, has the potential to solve some of the challenges the government faced when distributing pandemic relief payments. Of course, creating such a directory and ensuring it is kept up-to-date is complex, and several challenges, including data privacy considerations, account information maintenance demands, and business case considerations, would have to be solved. The Federal Reserve understands the potential value of such a service, and has been exploring these issues as it evaluates the features to eventually include in FedNow.

Central Bank Digital Currencies

The experience with pandemic emergency payments has brought forward an idea that was already gaining increased attention at central banks around the world, that is, central bank digital currency (CBDC). Legislation has proposed that each American have an account at the Fed in which digital dollars could be deposited, as liabilities of the Federal Reserve Banks, which could be used for emergency payments. Other proposals would create a new payments instrument, digital cash, which would be just like the physical currency issued by central banks today, but in a digital form and, potentially, without the anonymity of physical currency. Depending on how these currencies are designed, central banks could support them without the need for commercial bank involvement via direct issuance into the end-users' digital wallets combined with central-bank-facilitated transfer and redemption services.[8] The demand for and use of such instruments need further consideration in order to evaluate whether such a central bank digital currency would allow for quicker and more ubiquitous payments in times of emergency and more generally. In addition, a range of potential risks and policy issues surrounding central bank digital currency need to be better understood, and the costs and benefits evaluated.

The Federal Reserve has been researching issues raised by central bank digital currency for some time. The Board of Governors has a technology lab that has been building and testing a range of distributed ledger platforms to understand their potential benefits and tradeoffs.[9] Staff members from several Reserve Banks, including Cleveland Fed software developers, are contributing to this effort. The Federal Reserve Bank of Boston is also engaged in a multiyear effort, working with the Massachusetts Institute of Technology, to experiment with technologies that could be used for a central bank digital currency. The Federal Reserve Bank of New York has established an innovation center, in partnership with the Bank for International Settlements, to identify and develop in-depth insights into critical trends and financial

[8] See Mester (2020) for further discussion.

[9] Brainard (2020).

technology of relevance to central banks.[10] Experimentation like this is an important ingredient in assessing the benefits and costs of a central bank digital currency, but does not signal any decision by the Federal Reserve to adopt such a currency. Issues raised by central bank digital currency related to financial stability, market structure, security, privacy, and monetary policy all need to be better understood.

Improving Traditional Federal Reserve Financial Services

FedNow and central bank digital currency have to do with the future, but the Fed is also working to enhance our current portfolio of payment services to ensure they meet evolving customer needs. We continue to make investments to modernize the technical platforms for traditional payment services, including the Fedwire Funds Service, FedACH, FedLine access channels, and currency-processing services.

We are investigating expanding the operating hours of wholesale payment services to meet the interbank settlement demands of a 24x7x365 world. We are enhancing services to facilitate cross-border payments, including expanding the reach of our FedGlobal ACH service and adopting the ISO 20022 global standard for several of our payment services. We are investigating emerging technical approaches, like APIs, to see whether they can be leveraged to facilitate broader access and efficiency. And, of course, we are doing what needs to be done to enhance the resilience of our platforms so that our services can run efficiently, reliably, and securely every day.

Conclusion

I hope my remarks today give you some sense of the payments work that has been going on at the Federal Reserve during the pandemic. The pandemic has triggered notable short-term changes to payments

---

[10] Bank for International Settlements (2020).

system patterns, practices, and usage. But the Federal Reserve and industry participants have responded to ensure that our payments system, a critical part of the U.S. infrastructure, continues to function well and to meet stakeholder needs. We have all learned a lot during the pandemic. We have seen that we can respond to unforeseen events and that we can be flexible. We have seen the importance of investing in the resilience of our payments system – such resilience helped ensure that the payments system was not disrupted and did not add another challenge to the long list caused by the pandemic. We have seen the important role the payments system can play in an emergency by distributing funds to those in need. There is some uncertainty about the extent to which some of the changes we have seen in consumer and business behavior with respect to their payment choices will continue after the pandemic. But one thing is certain: we must ensure that our payments system remains modern, resilient, and able to adapt to changing customer needs as they evolve. I am confident that by working together, the Fed and the industry will be able to achieve that goal for the benefit of the public.

References

Bank for International Settlements, "BIS Innovation Hub to Expand to New Locations in Europe and North America," June 30, 2020.
(https://www.bis.org/press/p200630a.htm)

Brainard, Lael, "An Update on Digital Currencies," at the Federal Reserve Board and Federal Reserve Bank of San Francisco's Innovation Office Hours, San Francisco, CA (via webcast) August 13, 2020.
(https://www.federalreserve.gov/newsevents/speech/files/brainard20200813a.pdf)

Federal Deposit Insurance Corporation, "2017 FDIC National Survey of Unbanked and Underbanked Households," October 2018.
(https://www.fdic.gov/householdsurvey/2017/2017report.pdf)

Fintech Advisory Group, "Minutes of the Regular Meeting of the Fintech Advisory Group," Federal Reserve Bank of New York, April 8, 2020.
(https://www.newyorkfed.org/medialibrary/media/aboutthefed/pdf/ftag-minutes-04082020.pdf)

George, Esther, "Pondering Payments: Challenges of Reaching All Americans," *KC Fed Policy Perspectives,* June 30, 2020.
(https://www.kansascityfed.org/~/media/files/publicat/speeches/2020/policy_perspectives_6_30_20.pdf?la=en)

Kim, Laura, Raynil Kumar, and Shaun O'Brien, "Consumer Payments & the COVID-19 Pandemic: A Supplement to the 2020 Findings from the Diary of Consumer Payment Choice," Cash Product Office, Federal Reserve System, July 2020.
(https://www.frbsf.org/cash/files/consumer-payments-covid-19-pandemic-2020-diary-consumer-payment-choice-supplement.pdf)

Mester, Loretta J., "Modernizing Our Payments System," remarks at the Fourth Annual Financial Literacy Day: Understanding Global Markets and Finance, Global Interdependence Center, University of South Florida Sarasota-Manatee College of Business, Sarasota, FL, February 14, 2020.
(https://www.clevelandfed.org/newsroom-and-events/speeches/sp-20200214-modernizing-our-payments-system)

SIFMA, U.S. Fixed Income Trading Volume, statistics, September 3, 2020.
(https://www.sifma.org/resources/research/us-fixed-income-trading-volume/)

U.S. Coin Task Force, "Statement from the U.S. Coin Task Force on the Coin Circulation Issue," July 24, 2020.
(https://www.aba.com/-/media/documents/email-bulletins/us-coin-task-force-public-statement-072420#_ga=2.166214334.1890085829.1597941665-539224350.1597941665)