# Connecting the Dots: How Adoption of Instant Payments Can Lead to a More Inclusive Economy

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#### **Abstract**

We examine how instant payments are an essential component of increasing financial inclusion. We explore how the Federal Reserve System, together with the private and public sector, is encouraging widespread adoption of instant payments because of their potential to help improve financial inclusion across a broad range of demographics and circumstances.

#### Disclaimer

The views expressed in this paper are solely the responsibility of the authors and should not be interpreted as reflecting the views of the Federal Reserve Bank of Atlanta or Federal Reserve Financial Services, or anyone else in the Federal Reserve System.

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# Introduction

The Federal Reserve has long been committed to helping the United States economy become one that works for everyone and has pursued many different strategies to accomplish this goal. Payment systems are critical infrastructures sustaining overall commerce. It is therefore vital that no one is left behind as these systems advance. A number of efforts to ensure financial inclusion have focused on payments. This focus is in part a function of the Federal Reserve's role in payments, a role created by the Federal Reserve Act. But we also have this focus because financial tools that enable and facilitate payments can help make families across the United States more economically resilient and economically mobile.

In July 2023, the Federal Reserve will introduce a new payments platform that can transform financial services in ways that advance this broad goal. Called the FedNow Service\*, this interbank instant payment infrastructure is specifically designed to make retail payments faster. This service complements other advancements in the speed of payments already available across the globe. Instant payment platforms are different from other faster payment innovations because they enable settlement across accounts more or less immediately. We anticipate that, at maturity, instant payments will be embedded into everyday life and will prove beneficial for everyone who uses or provides payments services, including consumers, businesses, service providers, and correspondents.<sup>1</sup>

We are especially interested in benefits of instant payments that advance financial and economic inclusion. The Special Committee on Payments Inclusion,<sup>2</sup> a multidisciplinary group of payments experts convened by the Federal Reserve Bank of Atlanta, has spent nearly two years studying how some Americans may be experiencing financial and economic exclusion so they can better understand any root causes and offer recommendations on how these causes might be mitigated. A final report of the committee's findings will be released in the summer of 2023.

This paper examines instant payments and how they could help promote financial inclusion. Two important benefits of instant payments—convenience and cost savings—also speak to main barriers to financial inclusion. Instant payments give consumers and businesses more control over their money and help reduce the time and cost of receiving payments, which makes them more economically resilient. As more payment products and services incorporate

<sup>&</sup>lt;sup>1</sup> The *maturity stage* occurs when most people, including those with fewer financial resources and those with a higher degree of skepticism, will have adopted instant payment innovations.

<sup>&</sup>lt;sup>2</sup> Read committee objectives and payments inclusion publications on the Atlanta Fed website <a href="https://www.atlantafed.org/banking-and-payments/payments-inclusion?panel=1">https://www.atlantafed.org/banking-and-payments/payments-inclusion?panel=1</a>.

instant payment technology, use cases will expand and adoption will increase, providing for a more inclusive financial system.

Section 1 begins with an overview of instant payments and existing networks. Section 2 then turns to the potential effect of instant payments on consumers, businesses, and service providers, particularly the benefits they could have for financial inclusion. Section 3 closes with some final reflections.

# Section 1: Instant Payments Technology Enables Innovation

An innovation platform is a technology or infrastructure that enables innovation by providing the opportunity for broad collaboration and advancement. Innovating new applications for such technology has the potential to transform an industry, sector, or economy. Because payment systems are part of a critical infrastructure sustaining overall commerce, it is important that instant payments technology be accessible to everyone so that people do not get left out of the economy. If enough people are left behind, the economy will not function at its full potential. Financial inclusion is critical to a healthy economy.

Making full use of such instant payments platforms can take time as users and stakeholders learn, develop, implement, and migrate from old technologies. But because the technology offers such a wide scope for improvements with many spillover effects, adopting instant payments platforms allows organizations to grow as they keep pace with technological advancements.

In 2015, the Federal Reserve System, together with the payments industry and after extensive consultation and collaborative efforts, published <u>Strategies for Improving the U.S. Payment System.</u> This report focused on the most desirable improvements, which are, increased speed, stronger security, greater efficiency, cross-border, and collaboration. The report stressed that these outcomes can be realized only through collective efforts by all stakeholders.

In the wake of the report, payments practitioners began to identify effective approaches for implementing a safe, ubiquitous, faster payments system in the United States. The result of these efforts was the creation of the first instant payments innovation platforms in the U.S. The Clearing House introduced their RTP® platform in 2017. Then in 2019, the Federal Reserve announced the decision to build a platform. In July 2023, the Federal Reserve's FedNow Service will enter the marketplace, supplying a foundation on which financial institutions and the broader payment industry can build modern, innovative, and safe instant payment services.

Most noncash payments require time for financial institutions to verify that purchasers have enough money in their bank accounts to pay for a product or service and then transfer that money into the bank accounts of the service providers (sellers). Instant payments are a new way to clear and settle payment transactions, virtually eliminating that delay.

Instant payments platform capabilities extend beyond interbank clearing and settlement: they allow people and businesses to send and receive payments within seconds at any time of the day, on any day of the week, on any day of the year. The receiver of an instant payment can use those funds right away. This immediacy of settlement is what differentiates instant payments from traditional electronic retail payment methods, including those that involve credit and

debit cards and some digital applications such as wallets and cash apps. While some faster payment types have clearing processes that occur within seconds, it can still take hours or even a day before settlement is finalized and funds become spendable.

The FedNow Service nationwide reach and central infrastructure for instant payments will enable financial institutions, fintechs, and other industry participants to develop new services. These services will increase innovation and competition in the industry, ultimately benefiting many end users. At maturity, the FedNow Service could enable ubiquitous availability of instant payments in the United States.

To what extent can technological innovation like instant payments drive financial inclusion? User adoption by those previously underserved or excluded will be the deciding factor. Success in maximizing user adoption will depend on compelling narratives, effective marketing activities of providers, positive customer experiences, and the emergence of useful, high-quality services and applications that use instant payments as a foundation.

# Section 2: Instant Payments Could Improve Financial Inclusion and Reduce Costs for Consumers and Businesses

Instant payments have a number of features that could improve the payment experience and promote financial inclusion for both consumers and businesses. Moreover, they could reshape the payments sector by sparking product innovation that reduces costs and increases convenience. This section discusses these benefits.

### The Benefits of Instant Payments from a Consumer's Perspective

Consumer payments have evolved over many decades. For many years, cash and checks dominated payments. Even today, many consumers rely on using cash for payments because cash offers consumers immediate clearing and settlement, with most cash payments typically used for transactions less than \$25.3.4 However, using cash requires consumers to carry or have access to sufficient amounts to cover the cost of whatever they intend to purchase over a given period of time and limits people's cash transactions to point-of-sale payments.<sup>5</sup>

In the United States, the number of check payments increased because mailing checks is less risky, especially for high dollar purchases. However, these benefits were offset by the sometimes-lengthy clearing and settlement process of checks. For many decades, checks had to be physically transported, so the process could take up to five days.<sup>6</sup>

More recently, the widespread adoption of electronic payments such as the Automated Clearing House (ACH; often used for direct deposit and bill payment) and card payments (with credit, debit, and prepaid cards) has further reduced the need for physical presence to conduct payments transactions. New products and services offered by financial institutions, networks, processors, and financial technology applications (fintechs) have expanded the use of cards, particularly for online shopping and even bill payments, and created new financial offerings.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> E. Cubides and S. O'Brien, S., 2023 Findings from the Diary of Consumer Payment Choice, May 5, 2023, Federal Reserve Bank of San Francisco. <a href="https://www.frbsf.org/cash/publications/fed-notes/2023/may/2023-findings-from-the-diary-of-consumer-payment-choice/">https://www.frbsf.org/cash/publications/fed-notes/2023/may/2023-findings-from-the-diary-of-consumer-payment-choice/</a>

<sup>&</sup>lt;sup>4</sup> Today, the broad availability of ATMs means people do not have to carry a large amount of cash. However, carrying smaller quantities means they have a higher time cost because they must acquire cash when the cost of their next transaction exceeds their cash holdings.

<sup>&</sup>lt;sup>5</sup> W. J. Baumol, "The Transactions Demand for Cash: An Inventory Theoretic Approach." *The Quarterly Journal of Economics*, November 1952, 66(4):545–56.

<sup>&</sup>lt;sup>6</sup> P. Bauer and G. Gerdes, "The Check Is Dead! Long Live the Check! A Check 21 Update," September 2009, The Federal Reserve Bank of Cleveland,

https://www.clevelandfed.org/en/publications/economic-commentary/2009/ec-20090609-the-check-is-dead-long-live-the-check-a-check-21-update

<sup>&</sup>lt;sup>7</sup> The Government Accountability Office defines fintech as "the use of technology and innovation to provide financial products and services." <a href="https://www.gao.gov/assets/gao-23-105536.pdf">https://www.gao.gov/assets/gao-23-105536.pdf</a>

The dramatic rise in online shopping during the COVID-19 pandemic is perhaps the best recent example of how new technology has reduced the necessity for buyers and sellers to be in the same place at the same time to exchange goods or services. Despite these benefits, clearing and settlement for payments involving these electronic vehicles still require time, though much less than what is needed for checks.

Instant payments, relative to existing payment vehicles, represent a potential advance for consumers in two specific ways that can increase financial inclusion. First, money management should be easier with instant payments than for other noncash payments, and as easy as with cash. Second, consumers who use instant payments vehicles could be at a lower risk of incurring penalties and fees on their bank accounts. Both benefits will likely increase the appeal of having a bank account, and so could lead to greater financial inclusion since bank accounts are the gateway to many financial services and tools.

Those benefits notwithstanding, consumers must be aware of one important risk associated with instant payments, and that is their irrevocability. With instant payments, once the payment has been completed, the payee cannot cancel the payment as the funds have already been transferred to the recipient's account. In some ways, the risks associated with instant payments are similar to the risks of using cash. To mitigate these risks, users must be educated about safe practices and are encouraged to promptly report any errors or suspicious activity.

Managing budgets as easily as with cash

In the Atlanta Fed's 2018 Diary of Consumer Payment Choice, approximately 13 percent of consumers reported that they prefer to use cash over cards or digital products because they find cash easier to budget with. § For example, respondents could know how much money they had on hand and could spend or save. They could withdraw a specific amount of cash and potentially receive a receipt showing their remaining account balance, so they would know exactly how much money they had left. Such certainty can offer peace of mind for some and help them plan for both short- and long-term expenses.

Households living paycheck to paycheck or with income variability often face challenges with cash-flow management. Federal Reserve data show that 21 percent of households with less than a high school degree report experiencing hardship from income variability. Furthermore, although 32 percent of all adults surveyed would be able to cover an emergency expense up to

<sup>&</sup>lt;sup>8</sup> 2018 Diary of Consumer Payment Choice, October 2018, Federal Reserve Bank of Atlanta, https://www.atlantafed.org/banking-and-payments/consumer-payments/diary-of-consumer-payment-choice/2018-diary

\$500 with just savings, 18 percent could cover only up to \$100.9 Instant payments would allow households to keep money in their bank accounts since settlement time is reduced from a few days to a few seconds. As a result, people would have more time to make needed payments, and this additional time can provide more financial security for individuals living paycheck to paycheck; they would be less likely to acquire funds through short-term loans at pawn shops or payday loans. Individuals could also receive their paychecks through instant payments, further reducing the time to access needed funds.

The certainty and finality of an instant payment product would allow many people to better manage their money. If someone were to check their balance after a purchase, perhaps through an app, they would see an up-to-date balance, one that reflects the withdrawal of funds associated with the most recent transactions. The ability to always know exact account balances would be an improvement over what happens now, when a consumer's purchases using a credit card or an online payment method might not show up in an account statement for hours or days.

Further, instant payments could evolve in ways that more closely approximate what happens when someone withdraws cash. To clear and settle transactions using instant payments, banking institutions will verify that an account has enough money to cover a purchase. This of course makes it possible for the banking institution to know exactly how much above the purchase amount is in the consumer's account. It's possible that institutions will one day include the remaining balance on a payment receipt.

In this way, the development of instant payments for consumer use combines key benefits of cash—instant access, instant settlement, and budgeting—with key benefits of card payments—access to deposit accounts, security, convenience, and the ability to make online payments. We expect that as consumers observe the similarities to existing payment methods along with benefits of instant payments, they may be more willing to use them in a wide array of circumstances. If this happens, instant payments could make having a bank account and other digital payment vehicles more appealing. And because having a bank account is necessary to access some of the newest and most sophisticated financial payments services, instant payments then could be a valuable driver of financial inclusion.

Reducing costs and creating opportunities for financial inclusion

Retailers use debit and credit card channels to verify that a customer has sufficient funds or credit to pay for a transaction. However, the lag between payment authorization and final

<sup>&</sup>lt;sup>9</sup> Board of Governors of the Federal Reserve System, "Survey of Household Economics and Decision making." October 2022. <a href="https://www.federalreserve.gov/consumerscommunities/shed.htm">https://www.federalreserve.gov/consumerscommunities/shed.htm</a>

settlement introduces the risk of overdraft<sup>10</sup> While alternative financial services also charge fees, the unpredictability and cost of banking fees are key reasons why some people do not have a bank account.<sup>11</sup>

An instant payment product for consumers would lower these risks. The possibility that authorized funds would be claimed by other payments would decrease significantly, and so the likelihood of overdraft fees would as well. Banking institutions could adjust their policies to help their customers avoid fees. Rather than allowing a customer's account to go below the minimum balance amount, financial institutions might choose to not let any payment resulting in a low-balance fee to settle. With the possibility of penalties and fees reduced, consumers might be more likely to use cheaper payment options and avoid the relatively expensive alternative financial services such as payday loans and check cashing services. These developments would benefit consumers, especially those most at risk of being financially excluded.

## The Benefits of Instant Payments from a Business Perspective

Instant payments are also likely to provide several benefits for businesses. The technology can help ease liquidity—cash flow—constraints for businesses, which is especially important for small, midsize, and minority-owned businesses. Research has shown that these businesses in particular tend to have higher cash-flow challenges. Moreover, instant payments could reduce friction and increase efficiency in business-to-consumer (B2C) payments, especially in emergencies, and business-to-business (B2B) relationships. But while instant payments offer many benefits, they do carry some risk, and the industry (banks, businesses, and vendors) needs to continue to mitigate the potential for fraud and errors in the payment process.

Creating opportunities for small and midsize businesses

Research has consistently found that, compared with larger more established enterprises, small and midsize businesses (SMBs) and minority-owned businesses have less cash on hand than do other businesses. They also have more limited access to mainstream financial services that can be sources of bridge funding when cash flow is constrained. Timeliness of payment receipt is thus of particular importance for these groups of businesses, so improving timeliness will enhance their ability to survive and thrive. Given that minority business ownership and

<sup>&</sup>lt;sup>10</sup> Federal Deposit Insurance Corporation (FDIC), "2021 FDIC National Survey of Unbanked and Underbanked Households," 2022, <a href="https://www.fdic.gov/analysis/household-survey/2021report.pdf">https://www.fdic.gov/analysis/household-survey/2021report.pdf</a>
<sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> "2023 Report on Startup Firms Owned by People of Color: Findings from the 2022 Small Business Credit Survey." 2023. Small Business Credit Survey. Federal Reserve Banks. https://doi.org/10.55350/sbcs-20230616

entrepreneurship rates are lower than the overall average, factors that help them survive will contribute to their financial inclusion.<sup>13</sup>

Instant payments can be an important tool for inclusion in this context. Instant payments have the potential to meet the needs of the 33.2 million small businesses in the United States by developing features like real-time transaction analysis, which can improve checkout conversions <sup>14</sup> and reduce declines as well as improve cash flow management. <sup>15</sup> Leveraging such products to improve conversions may be particularly important for those minority-owned businesses that may not have a broad customer base. Instant payments increase the timeliness of payments, so can support the success and growth of SMBs and minority-owned small businesses by providing them with greater financial access and flexibility. <sup>16</sup> This flexibility is especially important for small businesses on tight budgets, for whom receiving a payment instantly could reduce the need for more expensive short-term financing or the likelihood of incurring overdraft or late fees that may throw off their budgets. <sup>17</sup> As instant payments reach mass adoption, an SMB's customer base may broaden, and thus the SMB over time may gain sales and revenue. With instant payments products that are more inclusive, small businesses can compete more effectively in today's fast-paced and dynamic business environment.

#### Improving cash flow

Instant payments settle with finality within seconds, leading to better control of cash flow. Traditional payment methods often involve a delay of up to several days between the time a transaction is initiated and the receipt of funds. Some transactions may need even more time for potential dispute resolution, meaning the funds are not final even after receipt. Such delays can disrupt cash flow and create settlement risk, making it difficult for businesses to manage their finances effectively. But because instant payments are processed in real time, funds are transferred immediately and are almost immediately accessible, even during off-business hours. This accessibility can be particularly helpful for businesses that need to manage inventory or other expenses in real time. Businesses can receive funds quickly and use them to pay suppliers and other expenses, reducing the risk of late payments or the costs and fees

<sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Checkout conversion: Checkout conversion rate is an ecommerce metric that refers to the percentage of shoppers who begin the checkout process, then complete it, over a given period of time.

<sup>&</sup>lt;sup>15</sup> US Small Business Administration, Office of Advocacy, 2022, <a href="https://advocacy.sba.gov/wp-content/uploads/2022/08/Small-Business-Economic-Profile-US.pdf">https://advocacy.sba.gov/wp-content/uploads/2022/08/Small-Business-Economic-Profile-US.pdf</a>

<sup>&</sup>lt;sup>16</sup> Stax, "5 Payment Processing Challenges Small Businesses Face and How to Avoid Them," <a href="https://staxpayments.com/blog/5-common-payment-processing-challenges-small-businesses-face-and-how-to-avoid-them/">https://staxpayments.com/blog/5-common-payment-processing-challenges-small-businesses-face-and-how-to-avoid-them/</a>

<sup>&</sup>lt;sup>17</sup> Federal Reserve Board, FedNow Service, Frequently Asked Questions, September 2, 2022, <a href="https://www.federalreserve.gov/paymentsystems/fednow\_faq.htm">https://www.federalreserve.gov/paymentsystems/fednow\_faq.htm</a>

associated with wire transfers and checks.<sup>18</sup> With instant payments, businesses keep more of their revenue.

Reducing friction in business-to-consumer payments

B2C payments are an important class of transactions distinct from the retail payments that we often think about in this context. B2C payments range from insurance claim disbursements to wage payments. These types of payments could be particularly important in an emergency. For example, an insurance disbursement may provide essential monetary relief to a family who has experienced major loss from a natural disaster. Traditional modes of disbursements, like a check, can leave a family without funds while they wait for the check to arrive in the mail and then for it to clear, <sup>19</sup> possibly putting the family under considerable stress.

Instant payments can improve B2C payments by enabling businesses to offer a faster and more convenient way to receive their funds. Using the insurance example again, families would likely receive their insurance funds very close to the time the claim was approved, resulting in faster recovery and less stress. More generally, the advantages of instant payments could serve as a differentiator for businesses that use the technology. The discussion here offers a case for how it could help insurance providers attract and retain consumers. Further, in today's highly competitive job market, small- and medium-sized businesses that offer instant payroll could become more attractive and better able to compete for and retain workers. Hourly wage and gig workers, who are likely to be especially sensitive to the speed with which they can access their wages, could particularly benefit. <sup>21</sup>

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<sup>&</sup>lt;sup>18</sup> Payments Journal, "Everyone Benefits from the real-time payments networks." March 22, 2023. https://www.paymentsjournal.com/everyone-benefits-from-the-real-time-payment-networks/

<sup>&</sup>lt;sup>19</sup> Federal Reserve Financial Services, Instant Payments and B2C: Opportunity for Efficiencies and Modernization, <a href="https://www.frbservices.org/financial-services/fednow/instant-payments-education/instant-payments-b2c-opportunity-efficiencies-modernization.html">https://www.frbservices.org/financial-services/fednow/instant-payments-education/instant-payments-b2c-opportunity-efficiencies-modernization.html</a>
<sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> J. Alcazar and T. Bradford, "In the Nick of Time: The Rise of Earned Wage Access," September 23, 2020, Federal Reserve Bank of Kansas City, <a href="https://www.kansascityfed.org/research/payments-system-research-briefings/rise-earned-wage-access/">https://www.kansascityfed.org/research/payments-system-research-briefings/rise-earned-wage-access/</a>

Improving efficiency for business-to-business payments

B2B payments, which are often a labor-intensive process of gathering invoices and payment information, can be a significant pain point for companies of all sizes.<sup>22</sup> Instant payments holds promise in reducing B2B payment burdens and creating a more efficient payment experience.

Recently, businesses, banks, and vendors have moved toward standardizing electronic invoices (e-invoices).<sup>23</sup> E-invoicing enables businesses to automate both the accounts payable and accounts receivable processes. E-invoicing could facilitate requests for payment in a structured format that includes all the information a payor would need when sending a payment and help reduce unforced errors.<sup>24</sup> In addition, businesses could accelerate the adoption of standard e-invoices by offering a discount for using instant payments. The proliferation of instant payments has the potential to improve payments system efficiency by creating a foundation on which supplementary services can help with invoicing, discounting, and payment reconciliation.

#### Enabling request-for-payment services

A novel instant payments application could enable a business to send a consumer or other party a request for payment, <sup>25</sup> thus allowing a business (payee) to initiate payments conveniently and securely and without the need to share bank account details with the payer. The payer would receive a payment request and could choose to pay, decline, or request additional information. <sup>26</sup> If they pay, the payment could be initiated immediately, and the funds transferred to the payee's account in real time. The use of instant payments in business transactions provides an easier, faster way to accept payments. With the extra efficiency, the instant payments system can improve customer satisfaction and loyalty. Finally, instant

<sup>&</sup>lt;sup>22</sup> Payments Journal, "Optimizing Commercial Payments in the Digital Age," March 21, 2023. https://www.paymentsjournal.com/optimizing-commercial-payments-in-the-digital-age/

<sup>&</sup>lt;sup>23</sup> The Federal Reserve Payments Improvement, "B2B Payments Experts Launch Digital Business Networks Alliance" (announcement), June 1, 2023.

 $<sup>\</sup>frac{https://fedpaymentsimprovement.org/news/blog/b2b-payments-experts-launch-digital-business-networks-alliance/$ 

<sup>&</sup>lt;sup>24</sup> Federal Reserve Financial Services, "Use Case Series: Unlock Instant Payment Use cases with FedNow Service," July 21, 2021,

https://www.frbservices.org/binaries/content/assets/crsocms/financial-services/fednow/general-use-case.pdf

<sup>&</sup>lt;sup>25</sup> Federal Reserve Financial Services, "Request for Payment Is a Powerful Instant Payments Tool," <u>https://www.frbservices.org/financial-services/fednow/instant-payments-education/request-payment-powerful-instant-payments-tool</u>

<sup>&</sup>lt;sup>26</sup> Federal Reserve Financial Services, "What's Trending in the World of Faster and Instant Payments?" <a href="https://www.frbservices.org/financial-services/fednow/instant-payments-education/trending-world-faster-instant-payments.html">https://www.frbservices.org/financial-services/fednow/instant-payments-education/trending-world-faster-instant-payments.html</a>

payments can help businesses reduce the risk of payment processing errors and fraudulent activities, saving them money and improving their overall bottom line.

# Service providers will play a major role in instant payment success and stability

While payments may seem to be a straightforward relationship between businesses and consumers, facilitated by their chosen financial institutions, the reality can be far more complex. Thousands of financial institutions rely on third-party service providers to plug into payment systems. Collectively, these providers are a crucial component of the payment ecosystem.

When those service providers add plug-ins to instant payment platforms, financial institutions can leverage their connectivity and offer it to their customers. By establishing a technical connection to the platform or settlement through a third-party service provider, the access framework enables small institutions that generally lack technical capability to connect to the system easily. Modernized systems and platforms give financial institutions of all sizes access to a mechanism that allows them to connect to the marketplace.

The wider the coverage and the openness of instant payment platforms, the more likely they will be adopted. Adoption will likely also increase when both individuals and corporations see past a narrow set of transaction types to the possibility of a variety of instant payments applications.

We expect that broad adoption will help not only financial institutions but also the end users. Broad adoption of any platform makes it likely that even more people join the platform, and as more people join, it becomes more valuable to each participant. If a person wants to send an instant payment for a purchase, they can do so only if the person they are sending it to is also on the platform. So the more opportunities there are to connect to these payment platforms, the more benefits accrue to the user.

Creating innovative applications for instant payments

Service providers not only provide access options, but can also motivate adoption by enhancing customer experience through their design and implementation options. Providers can differentiate themselves and gain market share with innovative overlay applications. For instance, the most common interfaces are products addressing business or consumer uses. These may include bill pay, payroll, invoicing, brokerage, and claims.

Payment processors can enable seamless integration with various platforms such as e-commerce, mobile, and point-of-sale systems. This integration would allow businesses to

embed instant payment options directly into their existing interfaces, reducing the need for redirects or manual entry. By building an underlying instant payments channel with the FedNow Service, the Federal Reserve is encouraging competition among providers to offer services that help financial institutions improve their customers' financial lives. In a world with a growing number of options, businesses and consumers have come to expect to be able to customize a service according to their preferences, timetable, and price sensitivity.

#### Supporting operational functions

In the context of processing instant payments within a financial institution, providers offer products that support operational functions. We will highlight three examples.

The first function on the operational side is how service providers **design pathways to create interoperability between participants, payment instruments, and platforms.** These pathways can be integrated into core systems to process transactions internally and automatically. The efficient central design that many large service providers already offer consolidates, aggregates, and routes multiple payment types to the appropriate rails. The efficiency from a central processing operation hub increases value to the entire ecosystem as all counterparties will benefit from the connectivity, which allows for seamless transaction processing.

Second, service providers can support **fraud detection operations**, which can increase confidence regarding instant payment platforms. Fraud solutions already exist which utilize real-time, omnichannel monitoring and predictive analytics such as machine learning. These innovative methods will be important to apply to instant payment platforms. Service providers can make investing in these solutions more accessible to financial institutions of all sizes. The FedNow Service will offer fraud mitigation capabilities at launch, including network-level transaction limits, participant-level transaction limits, and participant-defined suspicious account lists. Providers will be able to design enhanced products that further complement these capabilities.

Third, providers help financial institutions with **liquidity and risk management**. By using real-time views from providers, institutions can monitor, analyze, and make decisions more efficiently. When the FedNow Service launches, the Federal Reserve will offer a liquidity-management transfer option. Financial institutions can also work with a private-sector provider to manage their liquidity and risk. Providers offer the additional benefit of round-the-clock support, which meets instant payment service requirements and bolsters the management of liquidity and risk.

Correspondent bank functions will likely be more important with instant payments

A distinct and specialized service provider in the payments ecosystem is the correspondent bank. This may be a bankers' bank, corporate credit union, or function within a larger bank. Their services are offered to other financial institutions (respondents) and can include treasury management, payment clearing and settlement, and securities settlement. Like other service providers, correspondents can potentially grow their market share through enhanced services by offering instant payments. Most correspondents have master accounts at the Federal Reserve since other financial institutions rely on correspondents to manage their balances and/or transactions.

The particular liquidity-management function that correspondents specialize in will be critical for instant payments settlement. A correspondent bank is required to maintain its own balances so it can settle on behalf of the client, which is a distinct advantage. Thus, financial institutions that utilize instant payments through correspondents can be certain their consumer and business transactions will settle without issues. Correspondents have nationwide reach and are recognizing the value of instant payments for financial institutions and their customers.

Access to financial services is a door to inclusion, and the technology that providers offer through customer-facing platforms is the key to unlocking it. As more service providers offer connectivity to instant payment platforms and communicate the advantages to their institutions, we expect that adoption will become more widespread and inclusive.

# **Section 3: Conclusion**

The Federal Reserve System is committed to helping the nation's economy work for everyone. An economy where people are financially resilient and have access to economic mobility and advancement is a healthy economy. Financial tools such as instant payments can play an important role in advancing this goal.

Adoption of instant payments could catalyze a more inclusive economy by improving cash-flow management, increasing confidence in financial services, stimulating innovation, and encouraging competition and collaboration within the financial industry. In an economy that works for everyone, organizations that are part of the financial services infrastructure can influence the adoption of products and services that would provide economic resilience and mobility, especially for those people who live on the margins of the economy—those we call the underserved.

The United States has a complex system of financial institutions that work together in offering payment services to consumers and businesses. Banks, credit unions, and fintechs, along with associated correspondents and service providers, can organize around the common goal to promote a more inclusive economy by incorporating instant payments into their financial inclusion strategies.

In our fast-paced world, it is essential that the entire economy has access to the most advanced, secure, and efficient payments systems. Without careful planning and design, digital innovations could inadvertently disadvantage small businesses and vulnerable populations—such as low- and moderate-income households—preventing these parts of our economy and society from benefitting from the advantages that new technology affords.

Instant payment innovations are an opportunity to minimize financial exclusion in an era of increasing availability of digital payment vehicles. The following elements describe a vision of how the ubiquitous adoption of instant payments could contribute to, and even enable, a more inclusive economy. Instant payments adoption:

- Moves people away from outdated beliefs about how transactions are conducted or were once conducted—and introduces a new narrative of innovation and inclusion.
   Instead of focusing on what can go wrong without access to instant payments, instant payments can demonstrate what can go right, with the benefits and positive impact that widespread adoption can offer.
- Addresses relevant problems with money management that the underserved experience more often, and with more severity, than those well-integrated in mainstream financial services. By making money management simpler and more

predictable, instant payments can improve the ability for businesses and consumers to control their finances. This advantage can, in turn, increase confidence in these payment tools and stimulate increased usage.

- Empowers financial institutions and service providers to focus on accelerating innovation. Adoption of instant payment systems built on modern technology can enhance the development and introduction of supplementary services that would benefit everyone, but especially the underserved. In other words, ubiquitous instant payments offer the potential for numerous positive spillovers.
- Promotes competition and connectedness, which benefits a wide user base and specifically the underserved. Competition to offer ubiquitous instant payments to end users will lower costs, increase quality and reliability, and create a variety of solutions targeted to the specific needs of customers. The result is increased trust, adoption, and usage.

To truly be successful, we need financial institutions, processors, service providers, and fintechs to collaborate with the Federal Reserve to achieve widespread availability of instant payments. We invite everyone to work together to make this a reality. Our call to action is for these organizations to learn, innovate, experiment, and promote instant payments.