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December 14, 2018

Via Electronic Submission

Ann Misback
Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Ave. NW
Washington, DC 20551
Regs.comments@federalreserve.gov

Re: Potential Federal Reserve Actions to Support Interbank Settlement of Faster Payments
Docket No. OP-1625

Dear Ms. Misback:

The Federal Reserve System is right to focus on the importance of moving America onto real time payments. Implementing real time payments is the single most important policy lever that the Federal Reserve can directly utilize to reduce income inequality in America. The value of real time payments for middle and lower income Americans is often underappreciated and misunderstood. The majority of this comment letter will focus on the benefits real time payments offers for consumers, including a discussion of why several arguments against adoption are flawed. Three key recommendations that the Federal Reserve should consider are highlighted below. A summary of these recommendations follows, with detailed rationales in support in the rest of the comment letter.

Recommendations:

- 1) The Federal Reserve ought to immediately extend operations of FedWire Funds Service to 24x7x365. FedWire is a critical part of the payment system backbone. Such an expansion is necessary to more easily facilitate development of other real time payment systems both among banks with consumers and for broker dealers in capital markets.
- 2) The Federal Reserve ought to use its regulatory authority under the Expedited Funds Availability Act (EFA) section 4002(d) to immediately shorten availability times for funds deposited by consumers. The law grants the Fed authority to set time periods for consumer funds to be held with statutory maximums sections 4002(a)(b)(c), no minimums, and regulatory flexibility with a stated Congressional goal of “as short a time as possible”.¹ Technology for real time payments has been in place for many years such

¹ “12 U.S. Code § 4002 - Expedited Funds Availability Schedules”. 2018. *Legal Information Institute*. Accessed December 13. <https://www.law.cornell.edu/uscode/text/12/4002>.

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that the Fed as regulator of the payment system is justified to require real time availability now. Doing anything less is in conflict with EFA as currently written.

- 3) An unresolved tension exists between the Federal Reserve's role as regulator of the payment system (especially for funds availability for consumers) and as payment system operator. The Fed has been placed in a difficult situation in managing this with sometimes conflicting statutory mandates. Optimal answers to the nine enumerated questions in the request, the multiple sub-questions, and the ancillary issues raised, will differ based on the perspective of regulator vs. operator. In answering these questions, the Fed should principally adopt the role of regulator, articulating policy principals as expressed by statute for regulatory purposes. The Fed should make clear to the public that its primary function is as a regulator of the payment system and that operational concerns are secondary. Failing to do so will result in a series of regulations designed not to achieve optimal policy, but rather to permit the Fed's operational side to remain in compliance.

Real Time Payments Address Income Inequality

The problem of income inequality is a great concern to the Federal Reserve as it rightfully should be.² The payment system is a contributor to income inequality. The slow payment system is responsible for significant costs to those with lower income and assets, costs that are not borne by those with more.³ These costs are also disproportionately borne by people of color, in rural communities, and others who have not had historical or current equal access to the financial system.

The Federal Reserve has the ability to significantly reduce these costs, returning disposable income to the bottom half of the income distribution. This can be done without imposing direct costs on the top half of the income distribution, avoiding concerns of redistribution policy. Given the Federal Reserve's argument that monetary policy is a blunt tool not well suited to address income inequality,⁴ instituting real time payments is the most efficient, effective, and fastest policy that the Federal Reserve could utilize to directly address the problem of income inequality.

The magnitude of the potential savings from faster payments is far greater than generally appreciated. The slow payment system is one reason why there are more payday

² "Perspectives on Inequality and Opportunity from the Survey of Consumer Finances." 2014. Speech presented at the Conference on Economic Opportunity and Inequality, Federal Reserve Bank of Boston, October 17. <https://www.federalreserve.gov/newsevents/speech/yellen20141017a.pdf>.

³ Klein, Aaron. 2018. "America's Poor Subsidize Wealthier Consumers in a Vicious Income Inequality Cycle." *Brookings*. February 6. <https://www.brookings.edu/opinions/americas-poor-subsidize-wealthier-consumers-in-a-vicious-income-inequality-cycle/>.

⁴ "Unconventional Times, Unconventional Measures: A Conversation with Federal Reserve Board Governor Jeremy Stein." 2012. Discussion, Brookings Institution, Washington, DC, October 11. <https://www.brookings.edu/events/unconventional-times-unconventional-measures-a-conversation-with-federal-reserve-board-governor-jeremy-stein/>.

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lending stores than McDonalds in America.⁵ Divide the country into those who frequently or occasionally reach the zero lower bound of their bank account. Research from the Federal Reserve, Pew Foundation, and others shows that roughly half of American families cannot come up with around \$500 to deal with an emergency.⁶ It is important to note that this shortfall, while often thought of as an unplanned expense (e.g. car repair) also applies to an unexpected shortfall in earnings, both in amount and in timing. In fact research shows that variability of earnings is substantial: the JP Morgan Chase Institute finds that even among its customer base, one out of four has earnings variance of 25% or greater at least one month a year.⁷ Additional research by the Financial Diaries Project, Center for Responsible Lending, and others highlights the growing variance of earnings as a cause of financial stress, particularly for those who near the zero lower bound of their bank account and face largely fixed expenses (rent/mortgage, child care, car payments, etc...⁸).

Variance of earnings is particularly important in the context of slow payments, as it creates the situation when Americans have sufficient funds to cover their needs, but are unable to access those funds because they are stuck in the time delay of the payment system. As a result, many Americans find themselves unable to utilize their own funds and face substantial costs, costs that are largely never experienced by those with sufficient liquidity to cover these periods. These problems are acute when individuals run out of funds (reach the zero lower bound) of their bank account. As Fed Governor Brainard correctly stated: “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.”⁹

The costs of reaching or breaching the zero lower bound are substantial. In the aggregate consumers spend \$24 billion in bank overdraft fees and \$7 billion for small dollar, short term lending (e.g. payday loans) as estimated by CFSI. These costs are borne exclusively

⁵ Cowley, Stacy. 2017. “Payday Lending Faces Tough New Restrictions by Consumer Agency.” *The New York Times*, October 5, sec. Business. <https://www.nytimes.com/2017/10/05/business/payday-loans-cfpb.html>.

⁶ The exact figures range from \$400 to \$500 worth of funds, and the percentages range between 40 and 60 percent for the year 2017; “Report on the Economic Well-Being of U.S. Households in 2017.” 2018. Board of Governors of the Federal Reserve; Taylor, Ben. 2017. “Why Half of Americans Can’t Come Up With \$400 in an Emergency -.” *The Motley Fool*. October 1. <https://www.fool.com/investing/2017/10/01/why-half-of-americans-cant-come-up-with-400-in-an.aspx>.

⁷ “Weathering Volatility: Big Data on the Financial Ups and Downs of U.S. Individuals.” 2015. JP Morgan Chase Institute. <https://www.jpmorganchase.com/corporate/institute/document/54918-jpmc-institute-report-2015-aw5.pdf>.

⁸ “Comments to the Consumer Financial Protection Bureau Proposed Rule on Payday, Vehicle Title, and Certain High-Cost Installment Loans.” 2016. Center for Responsible Lending and Americans for Financial Reform. http://www.responsiblelending.org/sites/default/files/nodes/files/research-publication/crl_payday_comment_oct2016.pdf.

⁹ “Speech by Governor Brainard on Fintech and the Search for Full Stack Financial Inclusion.” 2018. Speech presented at FinTech, Financial Inclusion -- and the Potential to Transform Financial Services hosted by the Federal Reserve Bank of Boston and the Aspen Institute Financial Security Program, Boston, Massachusetts, October 17. <https://www.federalreserve.gov/newsevents/speech/brainard20181017a.htm>.

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by those with bank accounts. An additional \$2 billion is spent on check cashing,¹⁰ a larger portion of which is spent by those with bank accounts than often realized. The Federal Reserve's SHED Survey indicates that 7 percent of Americans have used check cashing last year, but at a maximum, only 2.5% of Americans were both unbanked and used a check casher.¹¹ That would mean the majority of check cashing customers (4.5% of all Americans, or roughly 1 in 22) are also bank account holders. The actual proportion is likely higher, given the conservative nature of this calculation.

The slow payment system is a driver of check cashing demands. Consider two options, cash, which is the ultimate real time payment that clears instantly at a bank vs. depositing a check. A consumer facing a delay in clearing on a check, perhaps as little as one day perhaps five days or more (using real days, not business days), and some degree of uncertainty over the exact moment when those funds will be available. With a check, the calculation of how to deposit those funds becomes:

Cost of immediately turning the check into cash (check casher fee)

Vs.

Cost of delay in receiving funds.

Wealthier consumers have no concern about hitting the zero lower bound of their bank account and hence they see no cost in delay of receiving those funds. However, for those who are near the zero lower bound, have considerable potential costs, top among them overdrafts. A typical bank overdraft is on the range of \$35.¹² One study found the cost to cash a \$500 check ranges from \$8 to \$25 depending on your state.¹³ Another found the typical cost to cash a payroll check was just over 4%, leading to roughly \$20 for a \$500 payroll check.¹⁴

It is rational for a consumer to use a check casher to avoid a single overdraft fee. In fact, if there is a potential for multiple overdraft fees, check cashing becomes a large cost saver. Imagine having received your paycheck on a Friday and making it to the bank (whether in

¹⁰ Theresa Schmall, and Eva Wolkowitz. 2016. "2016 Financially Underserved Market Size Study." Center for Financial Services Innovation. https://cfsinnovation.org/wp-content/uploads/2016/11/2016-Financially-Underserved-Market-Size-Study_Center-for-Financial-Services-Innovation.pdf.

¹¹ Author's calculation combining Figure 15 and Table BK-2 from the SHED survey. The Fed should be able to find exact data on this using cross-tabulations, which it should publish; "Report on the Economic Well-Being of U.S. Households in 2017." 2018. Board of Governors of the Federal Reserve. <https://www.federalreserve.gov/publications/2018-economic-well-being-of-us-households-in-2017-banking-credit.htm>

¹² "Bank Overdraft Fees: What Are They and How Much Do Banks Charge?" 2018. *ValuePenguin*. Accessed December 13. <https://www.valuepenguin.com/banking/bank-overdraft-fees>.

¹³ "How Much Does Cashing a Check Cost? - CostHelper.Com." 2018. *CostHelper*. Accessed December 13. <https://personalfinance.costhelper.com/check-cashing.html>.

¹⁴ Fox, Jean Ann, and Patrick Woodall. 2006. "Cashed Out: Consumers Pay Steep Premium to 'Bank' at Check Cashing Outlets ." Consumer Federation of America. https://www.consumerfed.org/pdfs/CFA_2006_Check_Cashing_Study111506.pdf.

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person or on-line) that evening or Saturday morning. This was the situation I witnessed and explains why I saw a consumer leaving the bank to head to a check casher. This phenomenon is far more common than generally appreciated, which is why the only other customer in the bank, who did not know her, approached her with this check cashing solution.¹⁵ Research by Professor Lisa Servon from the University of Pennsylvania, came to a similar conclusion as she described why bank account holders often used check cashers: “if they made one mistake at their bank, that resulted in an overdraft, it would easily be more than” what they paid in check cashing fees.¹⁶

The calendar is also a driving force of the need for real time payments (and the cost of our current slow payment system). Last month, November 30th was Friday. Many obligations are routinely due on the 1st of a month, often taken out by direct debit (rent, mortgage, child care, monthly subscriptions, memberships, etc....). Imagine trying to take earnings that you have and make them available by the next morning. The existing automated clearing house (ACH) network fails this, especially for customers outside the Eastern Time zone, those who get paid at the end of the day, and those who have to rely on others to deposit payment. The Federal Reserve should publish in a clear and understandable format, the time it will take from when a consumer deposits a check under \$5,000 on a Friday evening until when that consumer can be certain all funds are available for use. That should take into account the possibility of a holiday on Monday. Technological advances like electronic check imaging have made some progress, but far too little. Real time payments solve this problem.

The current slow payment system sends banked customers near the lower bound of their account, or with substantial fixed expenses due, to an expensive maze of fees either through the banking system (overdraft), outside of the banking system (check cashing) or in between the two, through the provision of small dollar short term loans secured by a postdated check (payday lending). In the aggregate those three avenues totaled \$34 billion of revenue in 2015 according to CFSI (collection fees would add to this).¹⁷ There is no precise or even rough estimate as to what share of that figure would be fixed by real time payments. A conservative guess of 10 percent, this would result in \$3.4 billion in savings a year to lower income families directly from real time payments. If that figure is closer to 30 percent, savings triple to over \$10 billion a year. There is no cost or savings to the wealthier half of Americans who generally do

¹⁵ Remarks by Aaron Klein. 2016b. Conversation at “How to make fintech work for all Americans”, Brookings Institute, October 13. https://www.brookings.edu/wp-content/uploads/2016/10/20161013_financial_tech_transcript.pdf.

¹⁶ *What Is Driving The “Unbanking Of America”?* 2018. Fresh Air, NPR. Accessed December 14. <https://www.npr.org/2017/01/10/509126878/what-is-driving-the-unbanking-of-america>.

¹⁷ Other estimates differ but magnitudes are all substantial. Theresa Schmall, and Eva Wolkowitz. 2016. “2016 Financially Underserved Market Size Study.” Center for Financial Services Innovation. https://cfsinnovation.org/wp-content/uploads/2016/11/2016-Financially-Underserved-Market-Size-Study_Center-for-Financial-Services-Innovation.pdf.

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not use these services.¹⁸ Had the United States adopted real time payments when the United Kingdom did in 2007, middle and lower income Americans could have experienced cumulative savings potentially in excess of \$100 billion.

Further the slow system creates opportunities for banks to manipulate it to maximize revenue at consumers' expense. For example, financial institutions used the batch order ACH system to reorder payments to maximize overdrafts.¹⁹ Consumers experienced substantial harm in this system, which resulted eventually in large class-action legal settlements.²⁰ However, in a real-time payments system such batch ordering schemes could not occur. Further consumers would be empowered receiving instant notice when funds were overdrawn, as opposed to not knowing for one or more days. The Board should consider how the slow existing system allows for consumer abuses that would be eliminated in a real-time system and incorporate these levels of damage in their assessment of what the cost has been for the Board failing to act to expedite the payment system.

Data from the Federal Reserve's survey of mobile consumer finances highlight both the disproportionate impact of the slow payment system on communities of color and the unique opportunity that real time payments have to help these consumers. More than one in five (22 percent) consumers are categorized as 'underbanked' in the Fed's survey.²¹ 45 percent of the underbanked identified as black or Hispanic, compared with only 19 percent of the fully banked. This makes clear that those who are underbanked, which by the Fed's definition involves using one or more of these types of non-traditional banking services, are disproportionately likely to use these services and hence benefit from the potential to avoid these high costs through real time payments. This is one reason why the Congressional Black Caucus (CBC) responded to this request, stating, "We are writing to urge the Federal Reserve to use its existing authority under the Expedited Funds Availability Act to mandate real time payments."²² The CBC is correct and I reiterate their request.

Digital banking happens to be more prevalent among minorities. The Fed's data found that, "minorities continue to be more likely to use mobile banking than non-Hispanic whites"

¹⁸ Acknowledging a very macro argument can be made that it may reduce profits for owners of these non-bank financial service providers and/or owners of banks that profit off of overdraft fees.

¹⁹ Touryalai, Halah. 2013. "Yes, Banks Are Reordering Your Transactions And Charging Overdraft Fees." *Forbes*, June 11. <https://www.forbes.com/sites/halahtouryalai/2013/06/11/yes-banks-are-reordering-your-transactions-and-charging-overdraft-fees/>.

²⁰ Migoya, David. 2010. "Customers Challenge the Way Banks Reorder Debits in Order to Rack up Overdraft Fees." *The Denver Post*, August 20. <https://www.denverpost.com/2010/08/20/customers-challenge-the-way-banks-reorder-debits-in-order-to-rack-up-overdraft-fees/>.

²¹ "Consumers and Mobile Financial Services 2016." 2016b. Board of Governors at the Federal Reserve System. <https://www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201603.pdf>.

²² Congressional Black Caucus. 2018b. "Potential Federal Reserve Actions to Support Interbank Settlement of Faster Payments," October 29. <https://www.nacha.org/system/files/resources/CBC-Letter-on-Faster-Payments.pdf>.

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and that ““minorities are more likely to make mobile payments””.²³ While there are also factors beyond race driving these correlations, specifically age; it is difficult to think of other financial services technologies where adoption rates are higher among minorities. This is especially the case for financial services that have the potential to lower costs and fees, such as real-time payments.

Combining various forms of data on mobile banking leaves me with the strong impression that there are fundamentally different uses of mobile banking between those near the zero lower bound of their bank account and those who always have funds. Those near the zero lower bound use mobile banking to check their account balances; checking account balances is the most common form of mobile banking.²⁴ Those with funds are far more likely to move funds between accounts, or to generate payments. The prevalence of checking balances (also common at ATMs, I suspect more common among those with lower balances) is a result of a need to manage real time expenditures.

One of the limits of financial literacy and education initiatives (which have been long endorsed by many, including Federal Reserve leaders²⁵) is that they assume a level of data and stability that is not in place. Budgeting assumes a level of income stability and knowledge of when funds are available that is not knowable for a sizable and growing segment of the population. Managing your money requires knowing how much money you have available and at what time it will come available. Our current payment system inhibits that knowledge. Real time payments simplifies the process, turning the unknown into the known. This empowers lower income consumers, especially those who are engaging in rigorous budgeting and disciplined personal finance but are fundamentally hamstrung by the slow and uncertain system of funds availability.

Opponents of Faster Payments Are Wrong

Three arguments against adopting real-time payments deserve to be rebutted. The first is that there is not strong consumer demand for the service. This argument sometimes cites survey data or slow initial take-up with some faster payments products.²⁶ First, this argument is directly contradicted by data from the Consumer Financial Protection Bureau, which reported that the availability of funds deposited via check or through direct deposit is a major concern

²³ “Consumers and Mobile Financial Services 2016.” 2016b. Board of Governors at the Federal Reserve System. <https://www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201603.pdf>.

²⁴ *ibid*

²⁵ “Federal Reserve Financial Education Initiatives - Federal Reserve Bank of Chicago.” 2018. Accessed December 13. <https://www.chicagofed.org/region/community-development/cedric/federal-reserve-financial-education-initiatives>.

²⁶ Weyman, Julius. 2016. “Risks in Faster Payments.” Retail Payments Risk Forum Working Paper. Federal Reserve Bank of Atlanta. https://www.frbatlanta.org/-/media/Documents/rprf/rprf_pubs/2016/risks-in-faster-payments.pdf.

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for consumers. Consumers are often frustrated by bank check holding policies and by the length of time it takes for various negotiable instruments to clear and become available.²⁷

The international movement toward faster payments further contradicts this argument. As the Federal Reserve notes in its request for comments, other nations, both developed and emerging economies, have already instituted real time payments.²⁸ The United Kingdom created such a system more than a decade ago, around the time of the smart revolution. The European Union just this month rolled out a real-time payments system to create interoperability between EU member countries, a problem far more complex than providing it within America.²⁹ Other nations as diverse as Poland, Mexico, and South Africa have all adopted real time payments.³⁰ Given the strong consumer demand globally, and the continued advancement of real time payments (not a single country has adopted and then gone backwards), it would require a belief that American consumers are radically different than the rest of the world to not embrace this technology. There was a period when the rest of the world adopted SMS text messaging more than the US.³¹ Some argued that American consumers did not want to text.³² That has proven false³³. One danger with relying on consumer surveys for what new technologies they want was clearly articulated by Steve Jobs, who stated: “People don't know what they want until you show it to them. That's why I never rely on market research.”³⁴

A second argument concerns fears of increased fraud in real time payments. The argument here is that adoption of real time systems will increase consumer risk due to fraud.³⁵ Consumers already enjoy substantial protections from the Electronic Funds Transfer Act (EFTA), which effectively places the majority of fraud liability on financial institutions. Assignment of fraud liability to financial institutions resulted in widespread adoption of strong anti-fraud

²⁷ “Consumer Response Annual Report 2016.” 2017. Consumer Financial Protection Bureau. https://files.consumerfinance.gov/f/documents/201703_cfpb_Consumer-Response-Annual-Report-2016.PDF.

²⁸ Bank for International Settlements. 2016. “Fast Payments – Enhancing the Speed and Availability of Retail Payments.” Committee on Payments and Market Infrastructures.

²⁹ European Central Bank. 2017. “The New TARGET Instant Payment Settlement (TIPS) Service.” *European Central Bank*. June. https://www.ecb.europa.eu/paym/intro/mip-online/2017/html/201706_article_tips.en.html.

³⁰ SWIFT. 2015. “The Global Adoption of Real-Time Retail Payments Systems (RT-RPS).” <https://www.swift.com/resource/global-adoption-real-time-retail-payments-systems-rt-rps>.

³¹ *The Economist*. 2003. “No Text Please, We’re American,” April 3. <https://www.economist.com/business/2003/04/03/no-text-please-were-american>.

³² Mace, Michael. 2006. “European vs. American Mobile Phone Use.” *Mobile Opportunity*. September. <http://mobileopportunity.blogspot.com/2006/09/european-vs-american-mobile-phone-use.html>.

³³ According to a survey conducted by Pew Research Center in 2011, 73% of American adults who owned cell phones sent and received text messages. “Americans and Text Messaging | Pew Research Center.” 2011. September 19. <http://www.pewinternet.org/2011/09/19/americans-and-text-messaging/>

³⁴ Mui, Chunka. 2011. “Five Dangerous Lessons to Learn From Steve Jobs.” *Forbes*. October 17. <https://www.forbes.com/sites/chunkamui/2011/10/17/five-dangerous-lessons-to-learn-from-steve-jobs/>.

³⁵ Weyman, Julius. 2016. “Risks in Faster Payments.” Retail Payments Risk Forum Working Paper. Federal Reserve Bank of Atlanta. https://www.frbatlanta.org/-/media/Documents/rprf/rprf_pubs/2016/risks-in-faster-payments.pdf.

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protections and fostered consumer confidence for usage of the debit and credit networks. The Coase Theorem framework of EFTA has resulted in financial institutions accepting even more fraud liability than required, as part of competing for consumer business.³⁶ Any concerns around fraud increases must be considered in both, a world governed by the liability limits put in place under EFTA and in the real world where EFTA standards are often exceeded in the market place. There is no reason to think that would change in a real-time payments world. The Board should continue to work with the Bureau in expanding EFTA to digital wallets along the lines of the Bureau's 2016 proposal, which further strengthens the system.³⁷

A new system should be measured on how it compares to the current rates of fraud, not to a mythical zero fraud baseline. The international experience with real time payments provides substantial evidence that fraud decreases in a real time system. The United Kingdom's fast payment system has fraud rates below 1 basis point.³⁸ For comparison, the US debit card system deals with fraud at the 5 to 6 bps range and the credit card system at the 15 bps level.³⁹

Past arguments using concerns of fraud to oppose improving the payment system were proven false. In 2001, Federal Reserve proposed an ambitious and ultimately successful advancement in payment technology: check truncation. The Fed proposed legislation, ultimately enacted by Congress, Check-21 allowed for digitization of checks to replace the paper check system previously required under the UCC. At the time the some groups representing consumers opposed the legislation, in part, on the grounds that consumers would be more vulnerable to fraud.⁴⁰ The Federal Reserve correctly argued that would not be the case. The Fed was right to focus on utilizing new technology to improve the payment system in 2001 correctly expecting the combination of technology and liability incentives would solve the problem. The Fed should have similar confidence in adopting real time payments today.

One final argument not as frequently made against real time payments is that consumers use and enjoy the current set of delays to their advantage. The notion of 'playing the float' as it was called in the 1970s⁴¹ is that consumers could count on the time between offering a payment (such as a rent check) and when the funds from that check would actually be drawn from their account. In between those periods, they could come up with the funds

³⁶ Klein, Aaron. 2016. "Adapting Regulation for the FinTech World." *Brookings*. December 4. <https://www.brookings.edu/research/adapting-regulation-for-the-fintech-world/>.

³⁷ Klein, Aaron. 2016. "Adapting Regulation for the FinTech World." *Brookings*. December 4. <https://www.brookings.edu/research/adapting-regulation-for-the-fintech-world/>.

³⁸ Camarda, Bill. 2018. "Faster Payment Services and Payment Frauds | Payment Systems | American Express FX International Payments." *American Express*. Accessed December 13. <https://www.americanexpress.com/us/foreign-exchange/articles/faster-payment-services-and-payment-frauds/>.

³⁹ "Changes in U.S. Payments Fraud from 2012 to 2016: Evidence from the Federal Reserve Payments Study." 2018. Board of Governors of the Federal Reserve System.

⁴⁰ "Electronic Banking: The Check Truncation Issue." 2003. CRS Report for Congress RL31591. Congressional Research Service. <https://www.everycrsreport.com/reports/RL31591.html>.

⁴¹ Pritchard, Justin. 2018. "Can You Still Buy Time by Floating Checks?" *The Balance*. August 14. <https://www.thebalance.com/floating-checks-315303>.

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such that even if the funds were not present when the check was drawn they would be when they were needed for payment. Float also hurt consumers when they were on the receiving end of the payment.⁴²

This paradigm has little in common with current reality. It existed before wide spread adoption of debit cards allowed for 24x7x365 access to funds. It existed before on-line or mobile banking allowed for 24x7x365 knowledge of account balances. It existed in a non-internet, non-digital commerce environment. It existed in a world before overdrafts on debit allowed customers to make payment even when funds were not available. It also existed during a period of high nominal interest rates, and limited adoption of credit cards.

The differences between these eras are such that this argument should be viewed with substantial skepticism, to the point where older data from the pre digital age should be questioned as to its applicability in determining current policy. The modern period is about giving consumers access to real time information to monitor their financial situation. One cannot make real time choices if one does not know at what moment funds will be available for use. One of the flaws in implementation of Check-21 Act was the failure to align instant mobile deposit with instant availability. Beyond not aligning the two, the disclosure regime adopted by some institutions was highly confusing, telling consumers in an instant email that their check had been ‘approved’ a term often misunderstood as meaning funds were available. This problem was so widespread that it ranked as one of the most common complaint about banks on any topic according to the CFPB’s consumer complaint database.⁴³ Out of every possible topic to motivate a consumer to file a complaint about a financial institution on a government database, the misunderstanding of the availability of an electronically deposited check (itself a financial instrument on the decline) ranked number one. That itself is telling.

One argument that has some legitimacy is that the move to real time payments will reduce revenue sources for both banks and non-bank financial service providers. Reduced revenue from overdraft fees will impact bank earnings, potentially reducing profitability, lowering equity values, or requiring banks to increase costs in other areas. Likewise check cashing stores may suffer, as could payday lenders. The Federal Reserve should not consider the safety and soundness elements of bank earnings as a reason to not adopt technological improvements. The Fed did not use this rationale when it promoted Check 21, which hurt the aviation company that flew private checks.

⁴² Mester, Loretta J. 2000. “The Changing Nature of the Payments System: Should New Players Mean New Rules?” Federal Reserve Bank of Philadelphia. <https://www.philadelphiafed.org/-/media/research-and-data/publications/business-review/2000/march-april/brma00lm.pdf>.

⁴³ “Consumer Response Annual Report 2016.” 2017. Consumer Financial Protection Bureau. https://files.consumerfinance.gov/f/documents/201703_cfpb_Consumer-Response-Annual-Report-2016.PDF.

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Fed's Dual Role Raises Concerns

This letter has focused on the Fed's role as regulator of the payment system more than as operator of core components of it, including FedWire and the ACH network. The Request contains many questions regarding the operational aspect, understandably so. There are important operational questions regarding how to transition from the current slow, batch network ACH system to a real time, instant payment system. Given the global successes in making this transition, the Fed's multi-year effort with at least 4 different faster payments groups⁴⁴, the in-depth analysis that McKinsey provided⁴⁵, one would think that the various paths to solve the transitional problem have been uncovered.

The conflicting incentives between the role as operator and regulator have largely been ignored. As a thought experiment, consider the following possibility: what if the optimal regulatory policy was such that the Fed's own networks could not comply? Would the Fed institute this regulatory policy with one arm that would cause its own operational network to be in non-compliance? To avoid concerns about macro-economic stability, assume that there is an alternative payment system that can comply.

One would hope that the Fed as the regulatory body with an explicit goal from Congress to make the payment system clear funds in "as short a time as possible"⁴⁶ would institute the proper policy, regardless of its own operational system. Further, given that the reduction in payment processing times addresses the growing problem of income inequality, one might even hope that the Federal Reserve's economic policy goals would come into play.

However, there are substantial structural conflicts the Fed would face in operationalizing this. One of which is the impact on the Regional Banks, for whom the provision of payment services is a major role. Under the Monetary Control Act of 1980, any decline in payment services provided by Regional Banks is required to result in a reduction of the operating budget of the regional banks with a goal that: "The full amount of any savings so realized shall be paid into the United States Treasury."⁴⁷

The last time the Federal Reserve led an effort to use technology to reduce inefficiency in the payment system in 2001 it resulted in substantial savings in check processing costs for the Federal Reserve and the full economy. The Federal Reserve was able to handle many of

⁴⁴ NACHA. 2018. "NACHA Files Comment Letter for Fed RFC on Interbank Settlement of Faster Payments," December 3. <https://www.nacha.org/news/nacha-files-comment-letter-fed-rfc-interbank-settlement-faster-payments>.

⁴⁵ "Global Payments 2016: Strong Fundamentals Despite Uncertain Times ." 2016. McKinsey & Company. <https://www.mckinsey.com/~media/McKinsey/Industries/Financial%20Services/Our%20Insights/A%20mixed%202015%20for%20the%20global%20payments%20industry/Global-Payments-2016.ashx>.

⁴⁶ "12 U.S. Code § 4002 - Expedited Funds Availability Schedules", section (d). 2018. *Legal Information Institute*. Accessed December 13. <https://www.law.cornell.edu/uscode/text/12/4002>.

⁴⁷ "Monetary Control Act of 1980", Sec 105(D). 1980b. <https://www.gpo.gov/fdsys/pkg/STATUTE-94/pdf/STATUTE-94-Pg132.pdf>.

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these conflicts while it shut down over 40 check processing facilities across the country as a result of the new, more efficient check processing system, but as Senator Van Hollen stated in his comment letter: “Working families appreciate recent technological advances that allow for digital check capture and processing. Since the enactment of the Check 21 Act, the Federal Reserve has radically reduced its check processing footprint, from 45 different check processing centers to just one. Yet the American public still does not receive its funds in real time.”⁴⁸

Research from the Federal Reserve Bank of Philadelphia estimates the savings from reduced processing of paper checks at \$1.16 billion for 2010, split almost equally between savings for the Federal Reserve System and commercial banks.⁴⁹ The Federal Reserve acknowledged these savings in their annual budget for 2010. It is worth noting that the Regional Bank budget in 2010 rose in total by 2.5%, or \$78.8 million as a result of increases in supervision, regulation, loans to depository institutions and other cash operations. The Fed in its annual report in 2010 stated that, “These increases are significantly offset by decreases in priced services as a result of the decline in paper-check volume, reductions in the check-processing infrastructure, and the substantial reductions in check transportation costs.”⁵⁰ Although the full savings to the regional bank system would not be realized in operating budget reductions, a portion should be. Thus, combining the research from the Philadelphia Fed and the statement from the Board, one would have expected in the absence of Check-21 that the increase in the Federal Reserve regional bank budgets would have been on the order of hundreds of millions.⁵¹ The alternative would be the possibility that the language of the Monetary Control Act of 1980 is not effectively binding, given other statutory responsibilities and the fungibility of funds.

Conclusion

The Federal Reserve has substantial regulatory powers to require a real time payments system. Nations across the globe, both developed and developing, have implemented real time payments, often a decade or more ago. The European Union recently completed a trans-national real time payment system, better integrating their economies and providing valuable services for consumers and businesses. The United States is falling further and further behind.

Multiple Federal Reserve led and private task forces on faster payments have yet to result in concrete changes. Repeated engagement with a broad range of stakeholders provided

⁴⁸ “Van Hollen Urges Fed To Implement Real-Time Payments System | U.S. Senator Chris Van Hollen of Maryland.” 2018. August 28. <https://www.vanhollen.senate.gov/news/press-releases/van-hollen-urges-fed-to-implement-real-time-payments-system>.

⁴⁹ Humphrey, David, and Robert Hunt. 2012b. “Getting Rid of Paper: Savings from Check 21.” *Federal Reserve Bank of Philadelphia*, Working Papers, 12 (12). <https://philadelphiafed.org/-/media/research-and-data/publications/working-papers/2012/wp12-12.pdf>.

⁵⁰ “FRB: Annual Report: Budget Review 2010.” 2018. *The Federal Reserve Board*. Accessed December 13. <https://www.federalreserve.gov/boarddocs/rptcongress/budgetrev10/ch3/s1.htm>.

⁵¹ Not all of that increase would have been transmitting into operational savings, but it demonstrates the magnitude of the potential savings.

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an opportunity for all voices to be heard. It has also resulted in gridlock. This gridlock costs billions of dollars to working families. Continued delays exacerbate income inequality in the aggregate and result in substantial reductions in household wealth for those who are caught in a liquidity squeeze that does not otherwise exist for those with financial options.

This comment letter has focused on the impact on middle and lower income Americans and disproportionately represented communities of color. Real time payments would also offer substantial benefits to small businesses, particularly those for whom access to working capital is expensive, a point highlighted by Federal Reserve Governor Brainard and others.⁵²

Additional benefits from real time payments will come from innovations using that platform. Those debating the rules governing EFTA could never have imagined a world in which debit/credit cards become a requirement for on demand transportation services like Uber and Lyft. Even when the Federal Reserve was promoting electronic check imaging in 2001, the idea that within seven years this could be done on a cell phone from anywhere was not contemplated, yet it happened.

The Federal Reserve system is conflicted between its role as regulator and operator. Stakeholder groups are also divided. Banks and nonbank financial services companies will likely lose substantial revenue from products such as overdraft, check cashing and high cost small dollar loans. Many of the savings consumers would enjoy from real time payments come from these high margin profit-generating services. Further division exists between banks that have invested in real time payments platforms and services and those that have not. Regional Federal Reserve Banks that operate large portions of the payment system, including ACH, have different objectives than the Federal Reserve Board's legislative mandate.

Strong leadership from the Federal Reserve overcame similar conflicts to enact legislation to allow for check imaging. Imagine if the Fed had delayed electronic check imaging due to any of the concerns above. That would have been bad policy then, just as it is bad policy to delay real time payments today. While check imaging required an act of Congress, adopting real time payments does not. The Federal Reserve has ample legal and regulatory authority to set America on a path to quick adoption of real time payments. The question is whether the Fed will follow its own example from 2001 and press forward, or if it will continue the practice of study and delay. The answer will impact the lives of millions of American families who are living paycheck to paycheck, small businesses for whom access to funds is most expensive, and new businesses providing services that require technology appearing with growing ubiquity throughout the rest of the world, but not in the U.S.

⁵² "Speech by Governor Brainard on Fintech and the Search for Full Stack Financial Inclusion." 2018. Speech presented at the FinTech, Financial Inclusion -- and the Potential to Transform Financial Services hosted by the Federal Reserve Bank of Boston and the Aspen Institute Financial Security Program, Boston, Massachusetts, October 17. <https://www.federalreserve.gov/newsevents/speech/brainard20181017a.htm>.

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Sincerely,

Aaron Klein

Fellow in Economic Studies, Brookings Institution

PS: The following two pieces are submitted as an addendum of prior articles published on this issue.

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[The hidden danger of slow payment systems for middle-class families](#)

Aaron Klein

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Millions of middle-class families occasionally face the uncomfortable and expensive situation of temporarily running out of money. Many of these families live paycheck to paycheck, and sometimes those paychecks are a few days late or a few dollars short. Indeed, almost half of all Americans [report](#) that they “either could not cover an emergency expense costing \$400, or would cover it by selling something or borrowing money.” Living on the financial edge creates problems that those with a cushion never experience, including a large and often hidden cost: America’s slow payment system.

When you hit the zero-lower bound of your bank account, a tipping point occurs. Simply covering basic expenses of life — paying bills, childcare, or shopping for groceries for the weekend — can cause families to rack up hundreds of dollars in fees from bank overdrafts or late credit card payments. Some families may even require small, but expensive, small-dollar loans — also known as “payday” loans.

These fees add up. American families spend [\\$15 billion](#) a year in overdraft fees and an additional [\\$9 billion](#) in payday loans. Every payday loan involves someone with a bank account, as the loan is based on writing postdated checks for collateral. But what if I told you there is a solution to this problem as simple as having money instantly appear as fast as an email or text? It exists and here’s how we could do it.

When you deposit a check or your employer sends a “direct deposit,” you probably don’t think about how the payment system actually works. At one point the money just shows up. You may not realize that it can take up to five days for your money to be available for you to use; a “direct deposit” is not an instant one. In fact, depending on where you live and what time of day your employer sends the order, or you deposit the check, your funds can be caught in a byzantine payment system for days.

What does this mean? Imagine you deposit your paycheck, a child support payment, or some money you earned from a side job, on a Saturday morning and Monday is a holiday. Your money won’t be available until Tuesday at the earliest, more likely Wednesday or even until the following week, depending on how you make the deposit.

What if you have to pay your rent, daycare, or credit card? The obligations of real life are not as regularly scheduled as economists assume. And neither are the earnings of middle-class families. As the [New York Times](#) wrote, “Middle-income households, for example, saw their monthly expenses deviate by nearly \$1,300, the equivalent of a month’s rent or mortgage payment.”

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Slow payments are not a problem of technology. In a world where you can stream movies on the palm of your hand, surely a bank can take a picture of a deposited check and make your funds available immediately. In fact, this is the case [throughout the world](#) in countries like Japan, South Africa, Poland, and Mexico. England instituted real-time payments in 2007 when the first smartphones were introduced. In the U.S., smartphones let you deposit your check in an instant, but it still takes days for your money to be available. Yet in the U.S. if you really need the money immediately in your bank account, you can be forced to take the check to a check casher, paying a high fee to receive cash that can be deposited instantly. Check cashing fees are [not just felt by those who are unbanked](#).

So who can fix this? The Federal Reserve has the legal and regulatory responsibility to solve this problem. They also operate America's largest (and increasingly slowest) payment system. The Fed recently concluded a [working group on Faster Payments](#) calling for real-time payments to be adopted by 2020, but failed to use its authority to mandate adoption for itself or others. That is a choice by the Fed that can be overridden by Congress or by leaders within the Fed.

The financial services industry is not sitting idly by. Although they currently benefit from the slow system by earning interest when the money is in transit, and on all those overdraft fees, some banks realize that they do not want to be the taxicabs ignoring Uber. Zelle, a new app backed by many of the largest banks, allows money to be transferred between accounts in real time. The Clearinghouse, a private payment system also owned by banks, is piloting a real-time payment system and preparing to allow all banks to participate by 2020. Visa is expanding its system to allow funds to be pushed through in real-time. Already you can move money faster through PayPal and Venmo, but uploading those funds can take time or fees to move quicker.

New financial technology firms are challenging the basic framework outside of banks. The company Even allows workers to access a portion of their paychecks from their employer before payday, with no loan or fees, assuming your employer provides the service. After all, you have already earned the money — why does your employer get to keep it for so long?

As the nature of work changes, more and more middle-class families are relying on multiple income sources, each of which can vary from time to time. Expenses, both planned and unplanned, do not always line up with income. The mismatch in timing can cause bumps in the road for middle-class families who are not fortunate enough to have a permanent cushion.

The purpose of the financial and payment systems are to empower people to live life more smoothly, not to turn small bumps into giant craters. The government's role is to ensure that the financial system is working for middle class families, not for its own sake. America's payment system has failed that test. We can and must do better.

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[Why don't checks clear instantly? Ask the Fed.](#)

Aaron Klein

Published by Politico, September 28, 2016

Whenever you make a payment—with a credit card, a check, a wave of your iPhone—you're piggybacking on a system built during a time of punch-card computing, a time when billions of paper checks were flown across the country to be physically sorted one by one. Today, living in a land of smartphones and click-to-same-day delivery, one would think the payment system would have evolved. It has not.

Financial technology firms—or fintech—are gunning to change that. Payment transactions are one of the biggest targets for fintech firms, which want to revolutionize how you make payments, how fast they clear, and who profits from them. Nearly \$20 billion in new [venture capital](#) dedicated to fintech in 2015 is betting that it will. Banks are aggressively partnering with fintech firms and launching payment systems of their own, not wanting to be the taxicabs in this Uberization story.

In the middle of it all stands the Federal Reserve, which lies at the center of America's payment system but hasn't made the core changes the system needs. Its failure to do so is particularly costly for Americans living paycheck to paycheck, trying to manage their money in real time. As a direct result of the Fed's failure to achieve real-time payments, people are overdrafting their accounts and experiencing costly fees, all while their deposits are stuck in payment limbo.

Whether the Fed leads, follows or gets leapfrogged depends on how quickly the Fed can move. The recent results are not encouraging.

As the nation's central bank, the Fed operates a major payment system, the Automated Clearinghouse (ACH), the black box that converts things like your debit-card swipes and direct-deposit paycheck into credits and deductions from your bank account. It also writes the regulations for other payment systems, like bank-to-bank clearinghouses. This dual role as both operator and regulator can create a conflict of interest, especially given the Fed's additional responsibility to ensure that the banking system is safe and secure.

The stakes are high: Losing their role in the payment industry would cost the banks a significant source of profit; colonizing it would represent an opportunity for fintech startups. Yet the Fed's own attempt to speed up ACH payments has been slow and not terribly successful. Despite advances in technology, payments clear very slowly; debit-card transactions are processed in a batch just once at the end of each day, and deposits like checks take multiple days. The Fed has been trying to speed up the system so that it clears transactions twice a day, a marginal advance that would not fundamentally address the problems consumers face. In a smartphone world, the goal of real-time payments ought to be much closer at hand.

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To speed things up, the Fed has named a Faster Payments Task Force—a group with a remarkable 331 individuals who represent all imaginable aspects of the payment system, and that has spent almost two years working on the problem. The Fed [announced earlier this year](#) that it's hiring McKinsey & Company to help “assess faster payments solution proposals from various providers” across the payments industry. Despite (or perhaps because of) having a 331-member task force and the almost unlimited resources of the Federal Reserve System, the Fed still needs help deciding what to do.

Right now, the payment system is actually contributing to income inequality, helping the rich and harming the working class. Most people don't think of the existing payment system as regressive and falling harder on the poor, but that's exactly its effect. When you purchase something on a card, the associated fees range from dimes to 4 percent to 5 percent taken from the merchant and distributed among banks, issuers, processors and consumers. Wealthier people get rebates every time they use their cards in the form of points, miles and cash. The more you spend, the better your perks. These add up. Consider someone who spends \$50,000 a year on credit cards and earns 1 percent cash back. Their savings come to \$500 a year in tax-free money as a result of the payment system.

Lower-income Americans, who disproportionately use cash, prepaid cards or debit cards, get little to nothing and are in effect [subsidizing the wealthy](#) through the payment system. They also deal with a slow clearing and settlement system that causes additional expensive overdraft fees. It seems remarkable that in a world in which you can deposit a check from your bedroom or use PayPal or Venmo to send money across the world in seconds, it can still take two to five days to clear a check, or that debit-card transactions are processed only once a day. The result is that people who are living paycheck to paycheck run up overdraft fees thinking that their check cleared when in fact the money isn't there and the debit card keeps working.

Speeding up check processing is a clear example of how the Fed both moved the ball forward and failed to fully follow through for consumers. The Fed even sent Congress a draft version of what ultimately became the Check 21 Act of 2003, which allows all of us to use our smartphones to deposit checks. Yet the Fed hasn't used its regulatory authority to make those checks clear as quickly as they are deposited. Hence the confusion when a consumer gets an email saying that a mobile check deposit has been approved—which many assume to mean the money is in their account. But in reality the money isn't there, as the Fed doesn't require the money to settle that quickly and the payment industry enjoys the float. As a result, the Consumer Financial Protection Bureau recently reported that: “The availability of funds deposited via check or through direct deposit is a major concern for consumers. Consumers are often frustrated by bank check holding policies and by the length of time it takes for various negotiable instruments to clear and become available.”

Checks, however we deposit them, are quickly becoming a thing of the past; plastic cards may soon follow. Despite a myriad of new ways for banks to issue magnetic stripe cards—credit, debit and prepaid—the basic technology is old, expensive, and, as a result of the widespread

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adoption of so-called "Chip and Sign," less convenient and more time-consuming. Does anyone enjoy waiting extra time for an inserted card to be read? Or waiting behind that person?

Fintech is already engaged with new payment systems, using smartphones to simulate cards through new services such as ApplePay, Square and Andriod Pay, which offer the easier, faster and more secure interface of thumb-print technology. But this is also just a marginal advance. These systems are simply replacing your card with your phone. After all, while many consumers think of their cards as Visa or MasterCard, they are all tied to a bank. Payment transactions are bank-to-bank settlements that take days to play through, cost merchants substantial sums, and support an entire ecosystem of payment processors and intermediaries.

The potential for fintech to disintermediate banks from the payment system and create a totally alternative payment system is real and would have serious consequences. It does not necessarily have to be a world of Bitcoins; the change could come through any app that allows people to clear and settle payments in real time, saving merchants money and providing the security, speed and incentives that consumers demand.

Moving to this alternative world would come at a real and not fully appreciated cost. Consumers would lose a myriad of legal protections built into the existing payment system that are triggered through banks. Specifically, consumers are protected against fraud, stolen cards and unauthorized transactions by the Electronic Funds Transfer Act, which flows through their bank accounts—but do not cover fintech payment systems that avoid banks altogether. When your debit card is stolen or phony online transactions occur, the law limits your liability and holds the bank financially responsible. But if your PayPal balance is hacked or you fat finger a payment to the wrong person that never touches the banking system, these legal protections do not apply.

The Fed has an opportunity to improve the payment system in a way that would benefit banks, fintech firms and, most importantly, working Americans who are trying to manage their money in real time. But if they can not find a way to act and act quickly, then the result is a slow, fragmented system that reduces economic growth and hurts millions of Americans who suffer as a result of slow payments. It doesn't have to be this way. A better payment system awaits everyone from working Americans to small businesses to fintech firms. If the Fed can't lead, it should follow or get out of the way—and allow fintechs and banks to innovate and solve this problem.