

United States House of Representatives  
Committee on Financial Services  
2129 Rayburn House Office Building  
Washington, D.C. 20515

September 23, 2019

## Memorandum

**To:** Members, Committee on Financial Services  
**From:** FSC Majority Staff  
**Subject:** September 26, 2019, “The Future of Real-Time Payments”

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The Task Force on Financial Technology will hold a hearing entitled, “The Future of Real-Time Payments,” on September 26, 2019 at 2:00 p.m. in Room 2128 of the Rayburn House Office Building. This single-panel hearing will have the following witnesses:

- **Ms. Esther L. George**, President and Chief Executive Officer, Federal Reserve Bank of Kansas City
- **Mr. Harsh Sinha**, Chief Technology Officer (“CTO”), TransferWise
- **Mr. Bob Steen**, Chairman and Chief Executive Officer, Bridge Community Bank, on behalf of the Independent Community Bankers of America (“ICBA”)
- **Mr. Rodney Williams**, Cofounder and Chief Commercial Officer, LISNR
- **Ms. Carol Benson**, Founding Partner, Glenbrook

### Overview

From the perspective of the typical consumer, making an electronic payment is simple. A consumer swipes a card, clicks a button, or taps their mobile device and the payment is usually approved within seconds. Yet, the infrastructure and technology underlying modern payment systems is substantial and complex.<sup>1</sup>

A more thorough description of the same payment involves a few more steps: (1) the sender (i.e., the person making the payment) initiates the payment through an end-user service, such as an online payment service or mobile application, instructing the payer’s bank to make a payment to the recipient; (2) the payer's bank sends a payment message involving the payment details to the recipient's bank through a payment system (sometimes called a clearing service); and (3) the payment is eventually completed (or “settled”) when the two banks transfer funds through a settlement system.<sup>2</sup> Figure 1 below illustrates the integral parts of Federal Reserve’s (“Fed”) payment system and related parties discussed above.

At the same time, continued technological advances in digitization, data processing and storage have greatly increased the availability and convenience of electronic payments. Traditional payment services providers, technology companies, and financial technology (“fintech”) firms are all developing and implementing new payment systems and improving the performance of existing ones. Payment apps

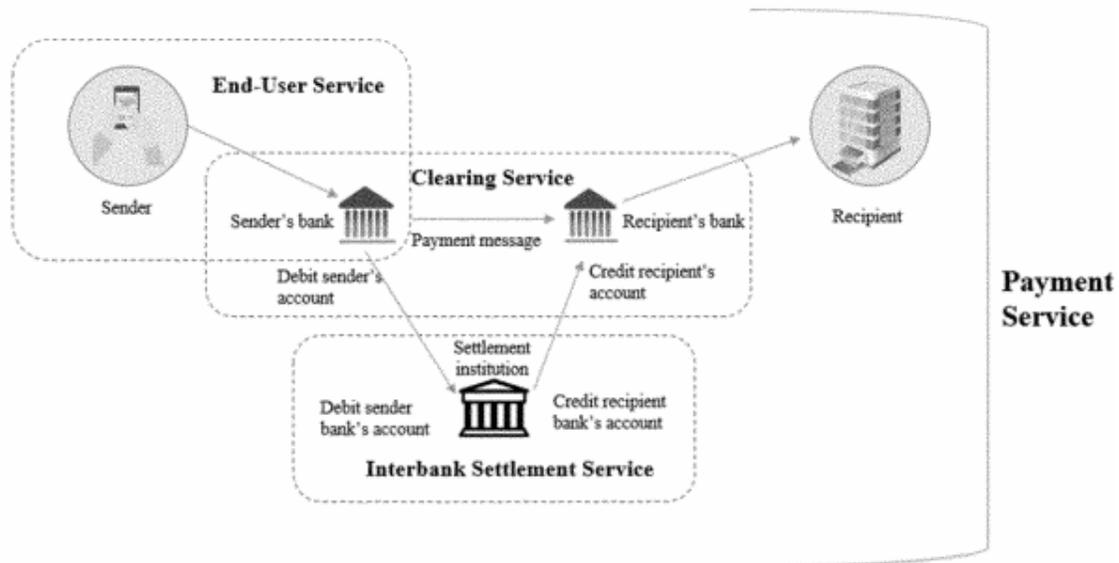
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<sup>1</sup> This memo was prepared with the assistance of Cheryl R. Cooper, Marc Labonte, and David W. Perkins from the Congressional Research Service (CRS).

<sup>2</sup> Federal Reserve, “Potential Federal Reserve Actions To Support Interbank Settlement of Faster Payments, Request for Comments,” 83 *Federal Register* 57355-57357, Nov.15, 2018, at <https://www.govinfo.gov/content/pkg/FR-2018-11-15/pdf/2018-24667.pdf>.

linked to bank accounts and payment cards can easily be downloaded onto mobile devices that allow individuals to send payments to each other and/or to merchants.<sup>3</sup> Another advance in payments is allowing consumers to make payments using a mobile device, wherein debit card, credit card, or bank account information is stored in a “digital wallet” and sensitive information is protected by transmitting coded replacement data (a process called tokenization) at the point of sale.<sup>4</sup>

**Figure 1. Parts of the Payment System<sup>5</sup>**



### Real-Time Payments (“RTP”)

A thorough RTP system is still emerging in the United States. Fed Chair Jerome Powell stated, “the United States is far behind other countries in terms of having real-time payments available to the general public.”<sup>6</sup> Nonetheless, there are several private sector initiatives underway, some which would make funds available to the recipient in real time (with deferred settlement) and some of which would provide real-time settlement.<sup>7</sup> However, for the most part, a bank-to-bank electronic payment today, is settled on the same or next business day.<sup>8</sup> In August 2019, the Fed introduced plans to develop a RTP system called FedNow in 2023 or 2024.<sup>9</sup> FedNow would be “an interbank 24x7x365 real-time gross

<sup>3</sup> PwC, “Payments in the Wild Tech World: Digitization and Changing Customer Expectations,” 2016, at <https://www.pwc.com/gx/en/financial-services/fintech/assets/payments-in-the-wild-tech-world.pdf>. Examples include Venmo (owned by PayPal), Zelle (owned by a consortium of large U.S. banks), and Cash App (owned by Square). Companies also provide hardware and software products that allow individuals and small businesses to accept debit and credit card payments, online or in person. Examples include Paypal, Square, and Stripe.

<sup>4</sup> European Union Agency for Network and Information Security (“ENISA”), “Security of Mobile Payments and Digital Wallets,” Dec. 19, 2016, at [https://www.enisa.europa.eu/publications/mobile-payments-security/at\\_download/fullReport](https://www.enisa.europa.eu/publications/mobile-payments-security/at_download/fullReport). Examples include Apple Pay, Google Pay, and Samsung Pay.

<sup>5</sup> See Federal Reserve, *supra* 2 at 57356.

<sup>6</sup> Federal Reserve, Transcript of Chair Powell’s Press Conference, Jul. 31, 2019, at <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20190731.pdf>.

<sup>7</sup> For an overview, see NACHA, “Faster Payments 101,” at [https://www.nacha.org/system/files/2019-05/FasterPayments101\\_2019.pdf](https://www.nacha.org/system/files/2019-05/FasterPayments101_2019.pdf); see also, The Clearing House, “The RTP Network: For All Financial Institutions,” at <https://www.theclearinghouse.org/payment-systems/rtp/institution>.

<sup>8</sup> Federal Reserve, “Potential Modifications to the Federal Reserve Banks’ National Settlement Service and Fedwire® Funds Service To Support Enhancements to the Same-Day ACH Service,” 84 Federal Register 221223, May 16, 2019, at <https://www.federalregister.gov/documents/2019/05/16/2019-09949/potential-modifications-to-the-federal-reserve-banks-national-settlement-service-and-fedwire-funds>. The Fed sought comments on this proposal in November 2018. See Federal Reserve, *supra* 2 at 57351.

<sup>9</sup> The Federal Reserve stated, “it will likely take longer for any service, whether the FedNow Service or a private-sector service, to achieve nationwide reach regardless of when the service is initially available.” Federal Reserve, “Federal Reserve Actions to Support Interbank

settlement service with integrated clearing functionality to support faster payments in the United States,” that “would process individual payments within seconds . . . [and] would incorporate clearing functionality with messages containing information required to complete end-to-end payments, such as account information for the sender and receiver, in addition to interbank settlement information.”<sup>10</sup> The Fed intends to make FedNow available to all banks with a reserve account and will require banks using FedNow to make those funds available to their customers immediately after being notified of settlement.<sup>11</sup>

### **Current Payments Regulatory Regime and Marketplace**

How payments are federally regulated depends, in part, on whether they are being provided by banks or nonbanks. Generally, banks are subject to prudential regulation, enforcement and supervision by federal bank regulators. For example, a nonbank payment processor that provides services to a bank, excluding enforcement, would be subject to similar regulation and supervision that a bank receives; whereas a nonbank payment processor that does not provide services to a bank could be regulated as a “money transmitter”<sup>12</sup> at the state level and “money service business”<sup>13</sup> at the federal level, a potentially less stringent form of supervision in some instances. Further, there are two other mechanisms that could subject a technology-focused payment company to federal supervision: the Office of the Comptroller of the Currency’s (“OCC”) special purpose national bank charter<sup>14</sup> and a state-chartered industrial loan company (“ILC”) with Federal Deposit Insurance Corporation (“FDIC”) insurance.<sup>15</sup> The OCC has not issued such a charter to date and it has been a number of years since the FDIC last approved an ILC application. Meanwhile, stakeholders are challenging the appropriateness and legality of the federal government’s ability to issue such charters. State regulators have filed lawsuits seeking to block the granting of OCC charters and litigation is ongoing.<sup>16</sup> Opponents of ILC charters argue that allowing commercial firms to own depository institutions blurs the line between commerce and banking.<sup>17</sup>

Another market feature of any future payment system is interoperability or the ability to make payments across different systems. The current Automated Clearing House (or “ACH”) network demonstrates how interoperability can be achieved between two different payment systems (The Fed and The Clearing House (“TCH”). It is presently unclear if the RTP systems being implemented will feature

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Settlement of Faster Payments,” Aug. 5, 2019, Docket No. OP-1670, at <https://www.federalreserve.gov/newsevents/pressreleases/files/other20190805a1.pdf>.

<sup>10</sup> Federal Reserve, “Federal Reserve Actions to Support Interbank Settlement of Faster Payments,” Aug. 5, 2019, Docket No. OP-1670, pp. 72-73, at <https://www.federalreserve.gov/newsevents/pressreleases/files/other20190805a1.pdf>.

<sup>11</sup> *Id.*

<sup>12</sup> Benjamin Lo, “Fatal Fragments: The Effect of Money Transmission Regulation on Payments Innovation,” *Yale Journal of Law and Technology*, vol. 18, no. 1 (2017), pp. 111-141, at <https://digitalcommons.law.yale.edu/vjolt/vol18/iss1/4/>; see also, Conference of State Bank Supervisors, “Vision 2020 for Fintech and Nonbank Regulation,” Jun. 7, 2018, at <https://www.csbs.org/vision2020>.

<sup>13</sup> See U.S. Department of the Treasury, “A Financial System That Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation,” Executive Order 13772 Report to the President, Jul. 2018, pp. 144-146, at <https://home.treasury.gov/sites/default/files/2018-08/A-Financial-System-that-Creates-Economic-Opportunities--Nonbank-Financials-Fintech-and-Innovation.pdf>.

<sup>14</sup> Office of the Comptroller of the Currency (OCC), “OCC Begins Accepting National Bank Charter Applications From Financial Technology Companies,” Jul. 31, 2018, at <https://www.occ.gov/news-issuances/news-releases/2018/nr-occ-2018-74.html>; see also, Testimony of Nathaniel Hoopes, Marketplace Lending Association, U.S. Congress, House Committee on Financial Services, Subcommittee on Financial Institutions and Consumer Credit, “Examining Opportunities and Challenges in the Financial Technology (“Fintech”) Marketplace,” 115<sup>th</sup> Cong., 2<sup>nd</sup> sess., Jan. 30, 2018, pp. 9-10, at <https://financialservices.house.gov/uploadedfiles/hrg-115-ba15-wstate-nhoopes-20180130.pdf>.

<sup>15</sup> Independent Community Bankers of America (ICBA), “Industrial Loan Companies: Closing the Loophole to Avert Consumer and Systemic Harm, Mar. 19, 2019,” p. 4, at <https://www.icba.org/docs/default-source/icba/advocacy-documents/reports/ilc-white-paper.pdf>.

<sup>16</sup> Conference of State Bank Supervisors, “CSBS Sues OCC Over Fintech Charter,” Oct. 25, 2018, at <https://www.csbs.org/csbs-sues-occ-over-fintech-charter>, and Jonathan Stempel, “New York Sues U.S. to Stop Fintech Bank Charters,” *Reuters*, September 17, 2018, at <https://www.reuters.com/article/us-usa-treasury-fintech-lawsuit/new-york-sues-u-s-to-stop-fintech-bank-charters-idUSKCN1LU210>; Rachel Witkowski, “Google and PayPal Explored OCC’s Fintech Charter, Then Walked Away,” *American Banker*, Jun. 16, 2019.

<sup>17</sup> Depository institutions include credit unions and savings associations, as well as banks. Neither type of institution is generally allowed to mix commercial activity with banking activity.

interoperability.<sup>18</sup> The various levels of regulatory oversight of payment systems raises concerns by private RTP system stakeholders as to whether or not the Fed can justify creating a RTP system in the presence of competing private systems.<sup>19</sup> On the other hand, small banks, credit unions and others are concerned that a market dominated by a single, privately-run RTP system could behave anticompetitively.<sup>20</sup>

### **Consumer Fraud, Cybersecurity, and Data Privacy**

When developing a new or faster retail payment system, consumer protection is an important consideration.<sup>21</sup> Potential issues include to what extent a consumer may be liable if a payment is fraudulent, as well as to what extent, if a consumer makes a mistake or does not receive the goods that they paid for, can the transaction be reversed. The Electronic Funds Transfer Act (“EFTA”)<sup>22</sup> and Expedited Funds Availability Act (“EFAA”)<sup>23</sup> are the two most relevant consumer protection laws when discussing a RTP system. The EFTA is implemented by the Consumer Financial Protection Bureau (“CFPB”)<sup>24</sup> through Regulation E,<sup>25</sup> and it protects consumers engaged in electronic fund transfers by (1) limiting consumer liability for unauthorized transfers and (2) maintaining procedures for resolving payment errors. The Fed implements the EFAA through Regulation CC,<sup>26</sup> which prescribes how quickly banks must make funds available to customers.

All payment methods expose users to some risk that their money will be stolen or that fraudulent payments will be made using their accounts or identity. While improving technology reduces one type of risk, it may also expose consumers to new types of risks. For example, if a pickpocket steals cash from a person, the victim has little recourse. If instead the pickpocket steals a payment card, the victim can cancel the card and will generally not be held liable for fraudulent purchases. However, thieves can install skimmers on card readers that steal card information, allowing identity thieves to open and use lines of credit in a victims’ name without their knowledge.<sup>27</sup>

Payment systems necessarily collect detailed consumer information on transactions, such as where the consumer shops, the businesses and individuals the consumer pays, and the dates, times, and amounts of each transaction.<sup>28</sup> Through analysis, this data has the potential to reveal a lot about individual consumers, including where they live, their gender, age, race, ethnicity, and approximate income, scammers could use this data to facilitate fraud.<sup>29</sup> Additionally, as this payment information becomes

<sup>18</sup> Federal Reserve, FAQs, Aug. 5, 2019, at <https://www.federalreserve.gov/newsevents/pressreleases/files/other20190805a2.pdf>.

<sup>19</sup> Thomas Wade, “Primer: What Is A Real-Time Payments System, And Who Should Operate It?”, American Action Forum Insight, June 11, 2019, at <https://www.americanactionforum.org/insight/primer-what-is-a-real-time-payments-system-and-who-should-operate-it/>.

<sup>20</sup> ICBA, comment letter, Docket No. OP-1625, December 14, 2018, at [https://www.federalreserve.gov/SECRS/2019/March/20190315/OP-1625/OP-1625\\_121418\\_133342\\_402680988614\\_1.pdf](https://www.federalreserve.gov/SECRS/2019/March/20190315/OP-1625/OP-1625_121418_133342_402680988614_1.pdf). Based on the Clearing House’s (TCH) plans in 2017, the Department of Justice sent a letter stating that it did not intend to challenge TCH’s RTP system on antitrust grounds. U.S. Department of Justice, “Letter Re: The Clearinghouse Payments Company LLC Business Review Request,” Sept. 21, 2017, at [http://business.cch.com/ald/tch\\_business\\_review\\_letter\\_0.pdf](http://business.cch.com/ald/tch_business_review_letter_0.pdf).

<sup>21</sup> For a more detailed discussion of the payment dispute resolution processes, see FTC, “Paper, Plastic... or Mobile? An FTC Workshop on Mobile Payments,” FTC Staff Report, Mar. 2013, pp. 5-11, at <http://www.ftc.gov/os/2013/03/130306mobilereport.pdf>.

<sup>22</sup> P.L. 95-630, at <https://www.govinfo.gov/content/pkg/STATUTE-92/pdf/STATUTE-92-Pg3641.pdf>.

<sup>23</sup> Title VI of P.L. 100-86, at <https://www.govinfo.gov/content/pkg/STATUTE-101/pdf/STATUTE-101-Pg552.pdf>.

<sup>24</sup> In 2015, the CFPB developed consumer protection principles. See CFPB, “Consumer Protection Principles: CFPB’s Vision of Consumer Protection in New Faster Payment Systems,” Jul. 9, 2015, pp. 3-4, at [https://files.consumerfinance.gov/f/201507\\_cfpb\\_consumer-protection-principles.pdf](https://files.consumerfinance.gov/f/201507_cfpb_consumer-protection-principles.pdf).

<sup>25</sup> 12 C.F.R. §1005, at <https://www.consumerfinance.gov/policy-compliance/rulemaking/regulations/1005/>.

<sup>26</sup> 12 C.F.R. Part 229, at <https://www.govinfo.gov/app/details/CFR-2017-title12-vol3/CFR-2017-title12-vol3-part229>.

<sup>27</sup> Max Eddy, “How to Spot and Avoid Credit Card Skimmers,” CNET, at <https://www.pcmag.com/article/328010/how-to-spot-and-avoid-credit-card-skimmers>.

<sup>28</sup> See FTC, *supra* 15 at 13.

<sup>29</sup> CFPB, “Mobile Financial Services: A Summary of Comments from the Public on Opportunities, Challenges, and Risks for the Underserved,” Nov. 2015, p.7, at [https://files.consumerfinance.gov/f/201511\\_cfpb\\_mobile-financial-services.pdf](https://files.consumerfinance.gov/f/201511_cfpb_mobile-financial-services.pdf).

aggregated and stored on multiple websites, apps, and devices, it creates more opportunities for hackers to steal it than if the information existed only on the card itself.<sup>30</sup> For example, a digital wallet on mobile devices can eliminate the need to carry physical cards that can be lost or stolen and can protect sensitive information at the point of sale through tokenization, but, the device itself can be compromised by malware which may also lead to fraudulent charges.

### Financial Access and Inclusion

A faster retail payment system can provide low-income, liquidity-constrained consumers (colloquially, “paycheck to paycheck”), and the unbanked access to funds faster. In particular, many lower-income consumers say that they use alternative financial services, such as check cashing services and payday loans, because they want immediate access to funds.<sup>31</sup> Faster payments may also help some consumers avoid overdraft fees on checking accounts and are able to manage money better.<sup>32</sup> At the same time, an internet-based payment system could disadvantage consumers who prefer to rely on cash payments, do not have easy internet or mobile access, or do not feel comfortable using this new technology. Further, the cost of internet and mobile data plans may limit the ability of underserved consumers to access a faster payment system if it is internet or mobile based.<sup>33</sup> Lastly, as new technology is introduced into financial products, consumers may need to learn new skills, sometimes referred to as “digital financial literacy”, which includes known how to safely use financial products through digital devices and creating strong passwords.<sup>34</sup>

### Legislative Proposals

- **Payments Modernization Act of 2019 (Pressley)** is a discussion draft that would mandate the Fed to create a real time payments system within three years that would operate as a public utility, prioritizing security, consumer health and transparency. The bill would require semiannual reports by the Fed to Congress on the implementation of the system. If the system is not active within three years, the Fed Chair would be required to testify before Congress to explain why the Fed missed the deadline with more frequent reporting and additional testimony required until the service is up and running. Furthermore, the bill amends EFAA to require funds be readily available in real time, effective within three years of enactment. The bill also requires a GAO study on payments systems to explore improvements that could be made, including in relation to EFAA and EFTA, to better protect consumers, deter fraud and promote cybersecurity. This proposal is an updated version of H.R. 3951, the Payments Modernization Act, previously introduced and sponsored by Reps. Ayanna Pressley, Chuy Garcia, Rashida Tlaib and Cynthia Axne.

<sup>30</sup> See ENISA, *supra* 4.

<sup>31</sup> See, Lisa Servon, “The Unbanking of America: How the New Middle Class Survives” at <https://www.npr.org/2017/01/10/509126878/what-is-driving-the-unbanking-of-america>; Aaron Klein, “Real-Time Payments Can Help Combat Inequality, Brookings Institution,” Spotlight on Poverty and Opportunity, Mar. 5, 2019, at <https://spotlightonpoverty.org/spotlight-exclusives/real-time-payments-can-help-combat-inequality/>.

<sup>32</sup> CFPB, “Consumer Voices on Overdraft Programs,” Nov. 2017, pp. 16-19, at [https://files.consumerfinance.gov/f/documents/cfpb\\_consumer-voices-on-overdraft-programs\\_report\\_112017.pdf](https://files.consumerfinance.gov/f/documents/cfpb_consumer-voices-on-overdraft-programs_report_112017.pdf).

<sup>33</sup> See generally, David Perkins, CRS, “The Potential Decline of Cash Usage and Related Implications,” at <https://www.crs.gov/Reports/R45716>.

<sup>34</sup>*Id.*