

For release at
2:00 p.m. EDT
June 25, 2019

Statement for the Record
of
Staff of the Board of Governors of the Federal Reserve System
Submitted to the Task Force on Financial Technology
of the
Committee on Financial Services
U.S. House of Representatives
June 25, 2019

Chair Lynch, Ranking Member Hill, and members of the Task Force on Financial Technology, on behalf of the Board of Governors of the Federal Reserve System (Board), staff of the Board are pleased to provide the following statement for the record.¹

The Federal Reserve is actively monitoring developments in financial technology through the lens of our long-standing public policy goals of safety and soundness of financial institutions, consumer protection, safety and efficiency for the payment system, and financial stability.

The Federal Reserve supports responsible private sector innovation in the financial services industry. Because of the transformative potential of financial technology in the financial services marketplace, the Federal Reserve is actively engaged in researching, monitoring, and assessing the policy implications of digital innovations in finance.² Throughout the Federal Reserve, we have been engaging with experts both inside and outside of the financial sector to study the potential implications of digital innovations for areas such as payments policy, supervision and regulation, consumer protection, financial inclusion, financial stability, financial market functioning, and the provision of financial services.

The Federal Reserve has committed substantial staff resources to assessing financial innovation related to our policy and regulatory responsibilities. Starting in 2016, members of the Board asked staff to create two Systemwide working groups of experts tasked with monitoring and analyzing financial technology or fintech and related emerging technology trends and undertaking related market intelligence. These working groups also conduct research related to our supervisory and payment system responsibilities. Several of the Board's divisions now have staff dedicated to policy and research around fintech and digital innovations in their respective

¹ The Statement for the Record was a collaborative effort by staff of the Board of Governors from the Supervision and Regulation, Consumer and Community Affairs, and Reserve Bank Operations and Payment Systems divisions.

² See the appendix for a sample of research, publications, and recent conferences.

areas of focus. Through these initiatives, conferences, and international organizations, Board members as well as Board and System staff routinely meet with banks, technology firms and other stakeholders, as well as domestic and foreign regulators to gather updates on new technologies and regulatory innovation.³

Supervision, Consumer Protection, and Financial Inclusion

The nexus between fintech innovations and the banking system is apparent. Most fintech innovations rely on connections to banks for: access to consumer deposits or related account data; access to the payment system; or credit origination. Accordingly, when considering the Federal Reserve's role as a bank supervisor, first and foremost, we have a responsibility to ensure that the institutions subject to our supervision are operated safely and soundly and that they comply with applicable statutes and regulations, including consumer protection laws, as they explore advances in fintech products and services.

³ See Lael Brainard, "Community Banks, Small Business Credit, and Online Lending" (speech at the Community Banking in the 21st Century, The Third Annual Community Banking Research and Policy Conference, St. Louis, MO, September 30, 2015), <https://www.federalreserve.gov/newsevents/speech/brainard20150930a.htm>; Lael Brainard, "Distributed Ledger Technology: Implications for Payments, Clearing, and Settlement," (speech at the Institute of International Finance Annual Meeting Panel on Blockchain, Washington, D.C., October 7, 2016), <https://www.federalreserve.gov/newsevents/speech/brainard20161007a.htm>; Lael Brainard, "The Opportunities and Challenges of Fintech," (speech at the Conference on Financial Innovation at the Board of Governors of the Federal Reserve System, Washington, D.C., December 2, 2016), <https://www.federalreserve.gov/newsevents/speech/brainard20161202a.htm>; Lael Brainard "Where Do Banks Fit in the Fintech Stack," (speech at the Northwestern Kellogg Public-Private Interface Conference on "New Developments in Consumer Finance: Research & Practice," April 28, 2017), <https://www.federalreserve.gov/newsevents/speech/brainard20170428a.htm>; Lael Brainard "Where do Consumers Fit in the Fintech Stack," (speech at "FinTech Risks and Opportunities: An Interdisciplinary Approach," Ann Arbor, MI, November 16, 2017), <https://www.federalreserve.gov/newsevents/speech/files/brainard20171116a.pdf>; Lael Brainard, "FinTech and the Search for Full Stack Financial Inclusion," (speech at FinTech, Financial Inclusion – and the Potential to Transform Financial Services, Boston, MA, October 17, 2018), <https://www.federalreserve.gov/newsevents/speech/files/brainard20181017a.pdf>; Lael Brainard, "What Are We Learning about Artificial Intelligence in Financial Services?" (speech at Fintech and the New Financial Landscape, Philadelphia, PA, November 13, 2018), <https://www.federalreserve.gov/newsevents/speech/files/brainard20181113a.pdf>; and Michelle W. Bowman, "Community Banking in the Age of Innovation," (speech at the "Fed Family" luncheon, San Francisco, CA, April 11, 2019), <https://www.federalreserve.gov/newsevents/speech/bowman20190411a.htm>.

Within that framework, we have an interest in encouraging socially beneficial and financially sound innovations to flourish, while ensuring the risks that they may present are appropriately identified and managed. For example, fintech has produced real benefits to consumers, including increased speed, convenience, and new product offerings that make it easier for consumers to manage their financial lives. Fintech also may offer ways to increase access to banking and bring new financial products to underserved communities, including products and accounts that help the underbanked budget, save, and otherwise manage their finances more easily. Additionally, many firms are exploring ways to leverage new data and analytic techniques to extend credit to more consumers. It may be possible to extend responsible and fair access to credit to more consumers who do not have a traditional credit history and who would otherwise be denied access to prime credit.⁴ Yet fintech is not immune from fair lending and other consumer protection risks, so compliance with fair lending and other consumer protection laws remains crucial.⁵

We want to contribute to a sound environment conducive to responsible innovations that can benefit consumers and small businesses as well as banks in serving them. If the marketplace and regulators can support responsible connectivity between fintech firms and supervised entities, such integration could benefit banks, including community banks that may have a strong

⁴ For example, the nonprofit research organization FinRegLab is focusing its research efforts on the use of cash flow data in lending. See “Research Interests,” FinRegLab, <https://finreglab.org/#research>.

⁵ For example, an academic study found that fintech lenders’ algorithmic approach did not eliminate the risk of unexplained racial disparities in mortgage pricing. See Robert Bartlett, Adair Morse, Richard Stanton, and Nancy Wallace, “Consumer-Lending Discrimination in the FinTech Era,” (Berkeley: May 2019), <https://faculty.haas.berkeley.edu/morse/research/papers/discrim.pdf>. The increased availability of consumer data coupled with sophisticated analytical techniques may also increase fair lending risk where data about consumers is used to target advertising. For example, a recent Department of Housing and Urban Development (HUD) Charge of Discrimination against Facebook alleges that the company violated the Fair Housing Act by facilitating the placement of discriminatory housing-related advertisements and by its reliance on machine learning and other prediction techniques to deliver advertisements. See “HUD Charge of Discrimination,” Department of Housing and Urban Development, https://www.hud.gov/sites/dfiles/Main/documents/HUD_v_Facebook.pdf.

interest in working with partners to develop more efficient digital consumer interfaces, mobile apps, digital wallets, or lending products.

Accordingly, we are thinking about how our guidance sets expectations for the way banks should engage with fintech. For example, with the growing connections between banks and fintech companies, the Federal Reserve often receives questions about the applicability of our vendor risk management guidance. Staff are reviewing this guidance to determine whether any adjustments or clarifications would be helpful to promote responsible innovation.

The Federal Reserve regularly engages interested stakeholders, including fintech firms, financial institutions, consumer advocates, and others through outreach activities, webinars, and publications, such as our “Ask the Fed” and “Consumer Compliance Outlook Live” webinars and our *Consumer Compliance Outlook* publication.⁶ These materials offer summaries of current issues and often include tips on managing risk. In addition, we provide regular training opportunities to our staff, particularly examination staff, on financial innovation issues to prepare them to engage better on such matters. Training is provided through in-person channels, such as the Federal Financial Institutions Examination Council (FFIEC) training programs, as well as webinars and podcasts.

The Federal Reserve System also coordinates regularly with our fellow banking agencies on innovation-related matters in the supervision area. Our Consumer and Community Affairs division has convened an interagency fintech discussion forum to facilitate information sharing between federal banking regulators on fintech consumer protection and financial inclusion

⁶ See Lael Brainard, “Perspectives on Fintech: A Conversation with Governor Lael Brainard,” *Consumer Compliance Outlook*, (2016), <https://www.consumercomplianceoutlook.org/2016/third-issue/perspectives-on-fintech-a-conversation-with-governor-lael-brainard>. The Third Issue 2016 is a special edition focused on fintech, including summarizing relevant federal laws, regulations, and guidance that may apply to mobile payments, fintech lending, and digital wealth management.

issues. The Federal Reserve also engages in interagency discussion of fintech-related issues through the FFIEC's Task Force on Supervision and its Task Force on Consumer Compliance.

Payments, Clearing, and Settlement

Work conducted by Federal Reserve staff related to payments, clearing, and settlement innovation is part of the broader function of the Federal Reserve to help to maintain the integrity of the U.S. payment system.⁷ Efficient, effective, and safe U.S. and global payments and settlement systems are vital to the U.S. economy. Federal Reserve staff monitor and analyze developments related to, for example, cryptocurrencies, stablecoins, central bank-issued digital currencies, wholesale digital tokens, and distributed ledger technology. Staff additionally conducts original research on these topics as noted in the appendix.

Although cryptocurrencies are innovative and may provide benefits related to automation and validation, they also pose challenges associated with speculative dynamics, investor and consumer protections, money-laundering risks, and governance. Consequently, cryptocurrencies have had little success in developing money-like properties. They have not become stable stores of value, achieved widespread adoption as a generally accepted payment method, or become common units of account. In addition to these challenges associated particularly with cryptocurrencies, they also may be vulnerable to traditional payment system risks such as

⁷ See Lael Brainard, "Distributed Ledger Technology: Implications for Payments, Clearing, and Settlement," (speech at the Institute of International Finance Annual Meeting Panel on Blockchain, Washington, D.C., October 7, 2016), <https://www.federalreserve.gov/newsevents/speech/brainard20161007a.htm>; Jerome Powell, "Financial Innovation: A World in Transition," (speech at the 41st Annual Central Banking Seminar, New York, NY, October 18, 2017, <https://www.federalreserve.gov/newsevents/speech/files/powell20171018a.pdf>; Randal Quarles, "Thoughts on Prudent Innovation in the Payment System," (speech at the 2017 Financial Stability and Fintech Conference, Washington, DC, November 30, 2017), <https://www.federalreserve.gov/newsevents/speech/files/quarles20171130a.pdf>; and Lael Brainard, "Cryptocurrencies, Digital Currencies, and Distributed Ledger Technologies: What Are We Learning?", (speech at Decoding Digital Currency Conference, San Francisco, CA, May 15, 2018), <https://www.federalreserve.gov/newsevents/speech/files/brainard20180515a.pdf>.

operational, fraud, and settlement risks. Cryptocurrency offerings continue to evolve rapidly with new features that entail different risks and tradeoffs.

Although central bank-issued digital currencies may be able to overcome some of the particular vulnerabilities that cryptocurrencies face, they too may face significant challenges related to cybersecurity, money laundering, and implications for retail banking deposits. Additionally, the Federal Reserve has not identified a compelling need for a Fed-issued digital currency. Federal Reserve staff continue to monitor and analyze developments across the spectrum of digital currencies to understand tradeoffs and to consider further these developments in the broader context of widespread payments innovations.

International Engagement

From an international perspective, the Federal Reserve is actively consulting and collaborating with international counterparts engaged in innovation issues. The Federal Reserve System engages with a wide range of international organizations on fintech issues, including the Financial Stability Board (and its Financial Innovation Network); the Bank for International Settlements (and related work through its Committee on Payments and Market Infrastructures, Markets Committee, Committee on the Global Financial System and the Basel Committee on Banking Supervision's Task Force on Financial Technology); the International Organization of Securities Commissions; and the Financial Action Task Force.

The Federal Reserve will continue to monitor developments in this area, with the goal of fostering long-run innovation while continuing to safeguard the public interest.

Appendix

Sample of Federal Reserve System Research and Publications on Fintech

Tim Dore and Traci Mach, *Marketplace Lending and Consumer Credit Outcomes: Evidence from Prosper*, Working Paper Finance and Economics Discussion Series 2019-022 (Board of Governors of the Federal Reserve System, February 2019), <https://www.federalreserve.gov/econres/feds/files/2019022pap.pdf>.

Julapa Jagtiani and Catharine Lemieux, *The Roles of Alternative Data and Machine Learning in Fintech Lending: Evidence from the Lending Club Consumer Platform*, Working Paper 18-15 (Federal Reserve Bank of Philadelphia, January 2019), <https://www.philadelphiafed.org/-/media/research-and-data/publications/working-papers/2018/wp18-15r.pdf>.

Barbara J. Lipman and Ann Marie Wiersch, *Browsing to Borrow: “Mom and Pop” Small Business Perspectives on Online Lenders* (Board of Governors of the Federal Reserve Bank of Cleveland, June 2018), <https://www.federalreserve.gov/publications/files/2018-small-business-lending.pdf>.

Julapa Jagtiani and Catharine Lemieux, *Do Fintech Lenders Penetrate Areas That Are Underserved by Traditional Banks?*, Working Paper 18-13 (Federal Reserve Bank of Philadelphia, March 2018), <https://www.philadelphiafed.org/-/media/research-and-data/publications/working-papers/2018/wp18-13.pdf>.

Carol A. Evans, *Keeping Fintech Fair: Thinking About Fair Lending and UDAP Risks*, Consumer Compliance Outlook (Board of Governors of the Federal Reserve System, December 2017), <https://www.consumercomplianceoutlook.org/2017/second-issue/keeping-fintech-fair-thinking-about-fair-lending-and-udap-risks/>, <https://www.consumercomplianceoutlook.org/outlook-live/2018/keeping-fintech-fair-thinking-about-fair-lending-and-udap-risks/>.

Mark E. Schweitzer and Brett Barkley, *Is ‘Fintech’ Good for Small Business Borrowers? Impacts on Firm Growth and Customer Satisfaction*, Working Paper 17-01 (Federal Reserve Bank of Cleveland, February 2017), <https://www.clevelandfed.org/newsroom-and-events/publications/working-papers/2017-working-papers/wp-1701-is-fintech-good-for-small-business-borrowers.aspx>.

David Mills, Kathy Wang, Brendan Malone, Anjana Ravi, Jeff Marquardt, Clinton Chen, Anton Badev, Timothy Brezinski, Linda Fahy, Kimberley Liao, Vanessa Kargenian, Max Ellithorpe, Wendy Ng, and Maria Baird, *Distributed ledger technology in payments, clearing, and settlement*, Working Paper Finance and Economics Discussion Series 2016-095 (Board of Governors of the Federal Reserve System, September 2016), <https://doi.org/10.17016/FEDS.2016.095>.

Ann Marie Wiersch, Barbara J. Lipman, and Brett Barkley, *Click, Submit: New Insights on Online Lender Applications from the Small Business Credit Survey* (Federal Reserve Bank of

Cleveland special report, October 2016), <https://www.clevelandfed.org/newsroom-and-events/publications/special-reports/sr-20161012-click-submit.aspx>.

Anton Badev and Matthew Chen, *Bitcoin: Technical Background and Data Analysis*, Working Paper Finance and Economics Discussion Series 2014-104 (Board of Governors of the Federal Reserve System, October 2014), <https://www.federalreserve.gov/econresdata/feds/2014/files/2014104pap.pdf>.

Sample of Federal Reserve System Conferences on Fintech

Federal Reserve Bank of New York, “The First New York Fed Research Conference on Fintech” (Research Conference) (March 22, 2019), <https://www.newyorkfed.org/research/conference/2019/fintech>.

Federal Reserve Bank of Philadelphia, “Fintech and the New Financial Landscape” (Research Conference) (November 13-14, 2018), <https://philadelphiafed.org/bank-resources/supervision-and-regulation/events/2018/fintech>.

Federal Reserve Bank of Boston and the Aspen Institute, “FinTech, Financial Inclusion – and the Potential to Transform Financial Services” (Research Conference) (October 17, 2018), <https://www.bostonfed.org/news-and-events/events/fintech-conference/2018.aspx>.

Federal Reserve Bank of San Francisco, Symposium on Asian Banking and Finance series “The Regulator of the Future: Supervision & Regulation in an Evolving Sector” (Research Conference) (June 25-26, 2018), <https://www.eventbrite.com/e/the-regulator-of-the-future-supervision-regulation-in-an-evolving-sector-registration-43953552258>.

Federal Reserve Bank of San Francisco, “Decoding Digital Currency” (Research Conference) (May 15-17, 2018).