Lael Brainard: The opportunities and challenges of fintech

Speech by Ms Lael Brainard, Member of the Board of Governors of the Federal Reserve System, at the Conference on Financial Innovation at the Board of Governors of the Federal Reserve System, Washington DC, 2 December 2016.

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Introduction

On behalf of the Board of Governors, I would like to welcome you to our conference on emerging financial technologies, or fintech. I'd like to begin by remembering our Federal Reserve colleague Teresa Curran—executive vice president and director of Supervision at the Federal Reserve Bank of San Francisco—who recently passed away after a long illness. Teresa's leadership on fintech was one of her many extraordinary contributions to the System. With her characteristic enthusiasm, Teresa helped us prioritize this topic early on and had a strong influence in helping shape our work program—with an emphasis on assessing the opportunities and challenges of fintech in a balanced way. We already miss her wise counsel here. I'm sure Teresa would have appreciated this conference's gathering of academics, industry participants, and policymakers to exchange information and discuss current research related to financial innovation.

Why is fintech important?

In my remarks today, I'd like to share a few thoughts about emerging financial technologies and their relevance to our work.[1] Fintech has the potential to transform the way that financial services are delivered and designed as well as the underlying processes of payments, clearing, and settlement.[2] The past few years have seen a proliferation of new digitally enabled financial products and services, in addition to new processes and platforms. Just as smartphones revolutionized the way in which we interact with one another to communicate and share information, fintech may impact nearly every aspect of how we interact with each other financially, from payments and credit to savings and financial planning. In our continuously connected, on-demand world, consumers, businesses, and financial institutions are all eager to find new ways to engage in financial transactions that are more convenient, timely, secure, and efficient.

In many cases, fintech puts financial change at consumers' fingertips—literally. Today's consumers, particularly millennials, are accustomed to having a wide range of applications, options, and information immediately accessible to them. Almost every type of consumer transaction—ordering groceries, downloading a movie, buying furniture, or arranging childcare, to name a few—can be done on a mobile device, and there are often multiple different applications that consumers can choose for each of these tasks based on their preferences. It seems inevitable for this kind of convenience, immediacy, and customization to extend to financial services. Indeed, according to the Federal Reserve Board's most recent survey of mobile financial services, fully two-thirds of consumers between the ages of 18 and 29 having a mobile phone and a bank account use mobile banking.[3]

New fintech platforms are giving consumers and small businesses more real-time control over their finances. Once broad adoption is achieved, it is technologically quite simple to conduct cashless person-to-person fund transfers, enabling, among other things, the splitting of a check after a meal out with friends or the sending of remittances quickly and cheaply to friends or family in other countries. Financial management tools are automating savings decisions based on what consumers can afford, and they are helping consumers set financial goals and providing feedback on expenditures that are inconsistent with those goals. In some cases, fintech applications are automatically transferring spare account balances into savings, based on monthly spending and income patterns, effectively making savings the default choice. Other

applications are providing consumers with more real-time access to earnings as they are accrued rather than waiting for their regular payday. This service may be particularly valuable to the nearly 50 percent of adults with extremely limited liquid savings.[4] It is too early to know what the overall impact of these innovations will be, but they offer the potential to empower consumers to better manage cash flow to reduce the need for more expensive credit products to cover short-term cash needs.[5]

One particularly promising aspect of fintech is the potential to expand access to credit and other financial services for consumers and small businesses. By reducing loan processing and underwriting costs, online origination platforms may enable financial services providers to more cost effectively offer smaller-balance loans to households and small businesses than had previously been feasible.[6] In addition, broader analysis of data may allow lenders to better assess the creditworthiness of potential borrowers, facilitating the responsible provision of loans to some individuals and firms that otherwise would not have access to such credit. In recent years, some innovative Community Development Financial Institutions (CDFIs) have developed partnerships with online alternative lenders, with the goal of expanding credit access to underserved small businesses.[7]

The challenge will be to foster socially beneficial innovation that responsibly expands access to credit for underserved consumers and small businesses, and those who otherwise would qualify only for high-cost alternatives. It would be a lost opportunity if, instead of expanding access in a socially beneficial way, some fintech products merely provided a vehicle to market high-cost loans to the underserved, or resulted in the digital equivalent of redlining, exacerbating rather than ameliorating financial access inequities.

We are also monitoring a growing fintech segment called “regtech” that aims to help banks achieve regulatory compliance more effectively. Regtech firms are designing new tools to assist banks and other financial institutions in addressing regulatory compliance issues ranging from onboarding new customers to consumer protection to payments and governance. Many of the current solutions are focused on Bank Secrecy Act (BSA) regulatory requirements, including know-your-customer (KYC) and suspicious activity reporting requirements. The solutions utilize new technologies and data-analytic techniques that may reduce the costs and time needed for banks to identify and assess customers’ money-laundering and terrorist-financing risks. However, it is too early to tell the degree to which innovative approaches to customer due diligence, such as KYC utilities, will deliver efficiency gains such as those outlined in the recent Bank for International Settlements Committee on Payments and Market Infrastructures report on correspondent banking.[8]

Ensuring risks are managed and consumers are protected

While financial innovation holds promise, it is crucial that financial firms, customers, regulators, and other stakeholders understand and mitigate associated risks. There is a tension between the lightning pace of development of new products and services being brought to market—sometimes by firms that are new or have not historically specialized in consumer finance—and the duty to ensure that important risks around financial services and payments are addressed. Firms need to ensure that they are appropriately controlling and mitigating both risks that are unique to fintech as well as risks that exist independently of new technologies.

For example, some fintech firms are exploring the use of nontraditional data in underwriting and pricing credit products. While nontraditional data may have the potential to help evaluate consumers who lack credit histories, some data may raise consumer protection concerns. Nontraditional data, such as the level of education and social media usage, may not necessarily have a broadly agreed upon or empirically established nexus with creditworthiness and may be correlated with characteristics protected by fair lending laws. To the extent that the use of this type of data could result in unfairly disadvantaging some groups of consumers, it requires careful

review to ensure legal compliance. In addition, while consumers generally have some sense of how their financial behavior affects their traditional credit scores, alternative credit scoring methods present new challenges that could raise questions of fairness and transparency. It may not always be readily apparent to consumers, or even to regulators, what specific information is utilized by certain alternative credit scoring systems, how such use impacts a consumer's ability to secure a loan or its pricing, and what behavioral changes consumers might take to improve their credit access and pricing.

Similarly, fintech innovations that rely on data sharing may create security, privacy, and data-ownership risks, even as they provide increased convenience to consumers. Recent examples of large-scale fraud and cybersecurity breaches have illustrated the significance of possible security risks. As the data sets that financial institutions utilize expand beyond traditional consumer credit histories, data privacy will become a growing concern, as will data ownership and whether or not the consumer has any say over how these data are used and shared or whether he or she can review it for accuracy. The Consumer Financial Protection Bureau recently issued a request for information to better understand the benefits and risks associated with new financial services that rely on access to consumer financial accounts and account-related information.[9]

In addition to the risks I have outlined that are specific to new financial technologies, firms also must control for risks that have always been present, even in brick-and-mortar financial institutions. For example, risks around the BSA and Anti-Money Laundering rules cut across all segments and all portfolios. Similarly, firms must monitor credit and liquidity risks of loans acquired or processed via fintech platforms, especially given that these products have not been tested over an economic cycle.

Furthermore, as a general rule, the introduction of new products or services typically involves heightened risks as a financial institution enters into new areas with which it may not have experience or that may not be consistent with its overall business strategy and risk tolerance. Banks collaborating with fintech firms must control for the risks associated with the associated new products, services, and third-party relationships. When incorporating innovation that is consistent with a bank's goals and risk tolerance, bankers will need to consider which model of engagement is most appropriate in light of their business model and risk-management infrastructure, manage any outsourced relationships consistent with supervisory expectations,[10] ensure that regulatory compliance considerations are included in the development of new products and services, and have strong fallback plans in place to limit the risks associated with products and partners that may not survive.

With the growing number of partnerships between banks and fintech companies, we often receive questions about the applicability of our vendor risk-management guidance. We are actively reviewing our guidance to determine whether any adjustments or clarifications may become appropriate in the context of these arrangements. We hear concerns from community bankers in particular about their internal capacity to undertake the requisite due diligence and ongoing vendor management on their own, especially with much larger vendors, and questions about whether the interagency service providers supervision program might be relevant in this context. We are thinking about whether changes brought about by fintech and fintech partnerships may warrant consideration of any changes to the interagency supervision program for service providers.

Regulatory engagement

I believe that the Federal Reserve is well-positioned to help shape this innovation as it develops, and it is important that we be clear about our expectations and mindful of the possible effects of our actions. The policy, regulatory, and supervisory decisions made by the Federal Reserve and other financial regulators can impact the ways in which new financial technologies are developed

and implemented, and ultimately how effective they are. It is critical that fintech firms and financial institutions comply with all applicable legal protections and obligations. At the same time, it is important that regulators and supervisors not impose undue burdens on financial innovations that would provide broad social benefits responsibly. An unduly rigid regulatory or supervisory posture could lead to unintended consequences, such as the movement of innovations outside of the regulated banking industry, potentially creating greater risks and less transparency.

The rapid pace of change and the large number of actors—both banks and nonbanks—in fintech raise questions about how to effectively conduct our regulatory and supervisory activities. In one sense, regulators' approach to fintech should be no different than for conventional financial products or services. The same basic principles regarding fairness and transparency should apply regardless of whether a consumer obtains a product through a brick-and-mortar bank branch or an online portal using a smartphone. Indeed, the same consumer laws and regulations that apply to products offered by banks generally apply to nonbank fintech firms as well, even though their business models may differ. However, the application of laws and regulations that were designed based on traditional financial products and delivery channels may give rise to complex or novel issues when applied to new products or new delivery channels. As a result, we are committed to regularly engage with firms and the technology to develop a shared understanding of these issues as they evolve.

Fundamentally, financial institutions themselves are responsible for providing innovative financial services safely. Financial services firms must pair technological know-how and innovative services with a strong compliance culture and a thorough knowledge of the important legal and compliance guardrails. While "run fast and break things" may be a popular mantra in the technology space, it is ill-suited to an arena that depends on trust and confidence. New entrants need to understand that the financial arena is a carefully regulated space with a compelling rationale underlying the various rules at play, even if these are likely to evolve over time. There is more at stake in the realm of financial services than in some other areas of technological innovation. There are more serious and lasting consequences for a consumer who gets, for instance, an unsustainable loan on his or her smartphone than for a consumer who downloads the wrong movie or listens to a bad podcast. At the same time, regulators may need to revisit processes designed for a brick-and-mortar world when approaching digital finance. To ensure that fintech realizes its positive potential, regulators and firms alike should take a long view, with thoughtful engagement on both sides.

When we look back at times of financial crisis or missteps, we frequently find that a key cause was elevating short-term profitability over long-term sustainability and consumer welfare. It was not long ago that so-called exotic mortgages originally designed for niche borrowers became increasingly marketed to low- and moderate-income borrowers who could not sustain them, ultimately with disastrous results. In addition to the financial consequences for individual consumers, the drive for unsustainable profit can contribute to distrust in the financial system, which is detrimental to the broader economy. It is critical that firms providing financial services consider the long-term social benefit of the products and services they offer. Concerns regarding long-term sustainability are magnified in situations where banks may bear credit or other longer-term operational risks related to products delivered by a fintech firm. One useful question to ask is whether a product's success depends on consumers making ill-informed choices; if so, or if the product otherwise fails to provide sufficient value to consumers, it is not going to be seen as responsible and may not prove sustainable over time.

The key challenge for regulatory agencies is to create the right balance. Ultimately, regulators should be prepared to appropriately tailor regulatory or supervisory expectations, to the extent possible within our respective authorities, to facilitate fintech innovations that produce benefits for consumers, businesses, and the financial system. At the same time, any contemplated adjustments must also appropriately manage corresponding risks.

Federal Reserve fintech engagement

To better understand technological changes in lending, payments, and other areas, the Federal Reserve has been engaging with a wide range of market participants to understand barriers to socially beneficial innovations. Our unique structure, with Board and Reserve Bank staff in over 30 locations, allows us to tap expertise in markets and innovation centers across the country to help establish channels of communication, including with nonbank participants with whom we may not otherwise have regular contact.

The Federal Reserve also engages in ongoing communication with other regulators to promote, to the greatest extent possible, consistency in approaches and alignment of supervisory requirements. Exchanging ideas and discussing fintech innovations with other regulators is critical to understanding and vetting risks and, where appropriate, reaching consistent views regarding the application of laws, regulations, or guidance.

Finally, we recognize the value of technical expertise. With fintech, as with any other emerging financial product or service, the Federal Reserve is learning as much as we can to ensure that we have a robust understanding of the technologies and activities in which banks and other financial firms are engaging, and to inform the development of our policy and supervisory approaches. To that end, the Federal Reserve Board has established a multidisciplinary working group that is engaged in a 360-degree analysis of fintech innovation. We are bringing together the best thinking across the Federal Reserve System, spanning key areas of responsibility—from supervision to community development, from financial stability to payments—to assess the impact of technological development on the Federal Reserve's responsibilities. As part of this effort, Federal Reserve senior officials and staff have been closely watching developments in fintech, evaluating its impact on financial services delivery, and assessing the policy and supervisory implications in this arena.

Conclusion

Current developments in the digitization of finance, including the establishment of new business models, are important and deserving of serious engagement on the part of policymakers and regulators. As policymakers, we want to facilitate innovation where it has the potential to yield broad social benefit, while ensuring that risks are thoroughly managed. In safeguarding the public interest, the first line of analysis and protection will always rest with the market participants closest to the new technologies and product innovations and to the organizations that consider adopting them. But regulators also should seek to analyze the implications of technology developments through constructive and timely engagement. We should be attentive to the potential social benefits of these new technologies, prepared to make the necessary regulatory adjustments if their safety and integrity are proven and their potential benefits found to be in the public interest, and vigilant to ensure risks are well understood and managed.

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[1] These remarks represent my own views, which do not necessarily represent those of the Federal Reserve Board.

[2] For a review of the potential of distributed ledger technologies to change payment, settlement, and clearance processes, see the forthcoming Federal Reserve Board Finance and Economics Discussion Series paper titled "Distributed Ledger Technology in Payments, Clearing and Settlement."

[3] Board of Governors of the Federal Reserve, *Consumers and Mobile Financial Services 2016* (PDF) (Washington: Board of Governors).

[4] The Federal Reserve Board's Survey of Household Economics and Decisionmaking finds that 46 percent of households report that they would need to borrow money or sell something in order to pay an unexpected expense of $400. The report of survey findings is available on the Board's website at www.federalreserve.gov/communitydev/shed.htm.

[5] Robo-advisors are making investing and retirement planning cheaper and more accessible, filling a particular need as the coverage of employer-provided retirement plans has declined. According to *Insider Newsletter* published by Willis Towers Watson (vol. 26, no. 2, February 2016), only 20 percent of Fortune 500 companies offered a defined-benefit plan to salaried new hires in 2015, down from 59 percent among the same employers in 1998.

[6] For more information on fintech and small business lending, see Karen Gordon Mills and Brayden McCarthy, "The State of Small Business Lending: Innovation and Technology and the Implications for Regulation (PDF) ," Harvard Business School Working Paper (2016).

[7] Most recently, Regions Bank announced a partnership with Fundation, an online lender, and TruFund, a CDFI, to provide small-dollar loans to underserved small businesses (for more information, see ir.regions.com/releasedetail.cfm?ReleaseID=989068). In 2015, Lending Club and the Opportunity Fund, a California-based CDFI, announced a partnership intended to provide $10 million in loans over a period of five months to 400 small businesses in underserved areas of California (for more information, see www.opportunityfund.org/media/blog/clinton-announces-partnership-between-opportunity-fund-and-lending-club).

[8] See www.bis.org/cpmi/publ/d147.pdf.

[9] See files.consumerfinance.gov/f/documents/112016_cfpb_Request_for_Information_Regarding_Consumer_Acc Consumer Financial Protection Bureau believes that "consumers should be able to use their financial records and account information and securely share access in an electronic format."

[10] See Supervision and Regulation Letter 13–19/Consumer Affairs Letter 13–21, "Guidance on Managing Outsourcing Risk."