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U.S. Regulation of FinTech – Recent Developments and Challenges

C. Andrew Gerlach,
Rebecca J. Simmons, Stephen H. Lam

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U.S. Regulation of FinTech – Recent Developments and Challenges

C. Andrew Gerlach – Partner, Sullivan & Cromwell LLP
Rebecca J. Simmons – Partner, Sullivan & Cromwell LLP
Stephen H. Lam – Associate, Sullivan & Cromwell LLP

Abstract
Regulation of financial technology (or FinTech) providers, products, and services serves many important policy objectives. The rapid development of FinTech products and services, and the dramatic entry of numerous new participants in the market that are not regulated like traditional financial institutions, have presented challenges for regulators around the globe. In the U.S., the financial regulatory apparatus is fragmented, exacerbating those challenges. That, coupled with a difficult financial regulatory environment in the U.S. in the aftermath of the financial crisis and other issues endemic to the FinTech sector, make for strong headwinds for both financial regulators and FinTech providers as they try to strike the right balance between regulation and flexibility to allow innovation to occur. There are a variety of potential paths to address some of those challenges and headwinds, but none are a panacea and a combination of solutions will need to be implemented to strike that balance appropriately.

INTRODUCTION

The regulation of financial services providers by U.S. financial regulators serves a critical function in the provision of financial services in the U.S. The purposes served by such regulation – protection of consumers, monitoring effect on financial stability, etc. – are indisputably of great importance in the post-"Great Recession" world. However, due in part to the highly fragmented financial regulatory system and the general financial regulatory environment in the U.S., such regulation is slow to adapt, burdensome for providers, and may be of questionable effect – particularly in the context of financial technology (FinTech) providers.

This article provides a brief description of the current FinTech phenomenon, the fragmented nature of the U.S. financial regulatory system and the key policy issues and objectives under active discussion by market participants today. We then review certain important potential avenues to address some of the challenges facing the regulation of FinTech in the U.S.[1]

BACKGROUND

FinTech generally

In recent years, the level of interest and activity in the FinTech sector have increased significantly, driven by the rising demand for new products and services by consumers and businesses and the rapid development of innovative technology with the potential to meet that demand. While banks and other regulated financial institutions have long been active participants in FinTech development, new types of unregulated and lightly regulated market participants, including both established technology companies and newer start-ups, have also gained significant traction. This phenomenon has been fueled by a significant increase in private investment in the FinTech sector, with private FinTech investment rising from approximately U.S.$2 bln in 2010 to U.S.$19 bln in 2015. This increase in interest and activity has been accompanied by growing scrutiny by financial regulators around the globe, who have begun to promulgate new regulations and guidance to clarify their expectations regarding the development and delivery of FinTech products and services. This is particularly so in the case of FinTech offerings that involve consumers.

Key FinTech participants

In the U.S., FinTech innovators broadly fall into four categories based on the existing level of supervision and regulation applicable to them:

- Traditional financial institutions like banking organizations, broker-dealers, insurance companies, and other similar institutions, which are subject to U.S. federal and/or state regulation and supervision by their primary financial regulators.[2]
- Technology and other companies that directly provide financial services to consumers or businesses, which may be subject to federal and/or state regulation and supervision by U.S. financial regulators depending on the nature and scope of the financial services that they provide.
- Technology and other companies that provide services to banking organizations and are subject to supervision and regulation by federal banking agencies under the Bank Service Company Act (BSCA). These companies are often not subject to regulation and supervision directly because they may not provide financial services directly to end users, but are subject to bank-like regulation under the BSCA due to the nature of the services they provide to banking organizations. For these companies, federal banking regulators have the authority to examine and regulate their activities, functions, and operations to the same extent as if they were conducted by the banking organization itself.
- "Pure" technology and software companies that provide products and services to companies in the financial sector but are generally not subject to regulation and supervision by financial regulators. Companies in this category provide technology solutions to companies in the financial sector, but do so as a natural extension of the technology and software products and services that they offer to customers in a variety of other industries. Companies in this segment are not generally viewed as a primary target of supervision and regulation by financial regulators due to the nature of their relationship with the financial sector.

U.S. FINANCIAL REGULATORY REGIME

Highly fragmented system

The U.S. financial regulatory system is complex and fragmented, with multiple federal and state regulators and law enforcement authorities exercising overlapping responsibilities and authority. This highly fragmented system is in many ways a product of the U.S.'s constitutional division of authority between the national government and the state governments (referred to as Federalism). At the federal level, it also reflects both historical developments that may or may not continue to reflect current priorities, as well as an intentional allocation of responsibilities to agencies with differing focuses and

1 This article is not intended to be a comprehensive review of the extensive scope of the U.S. financial regulatory regime, the scope of "FinTech" itself, or the myriad issues arising from the FinTech phenomenon.

2 For purposes of simplicity, this article will focus on banking organizations as key traditional FinTech providers.

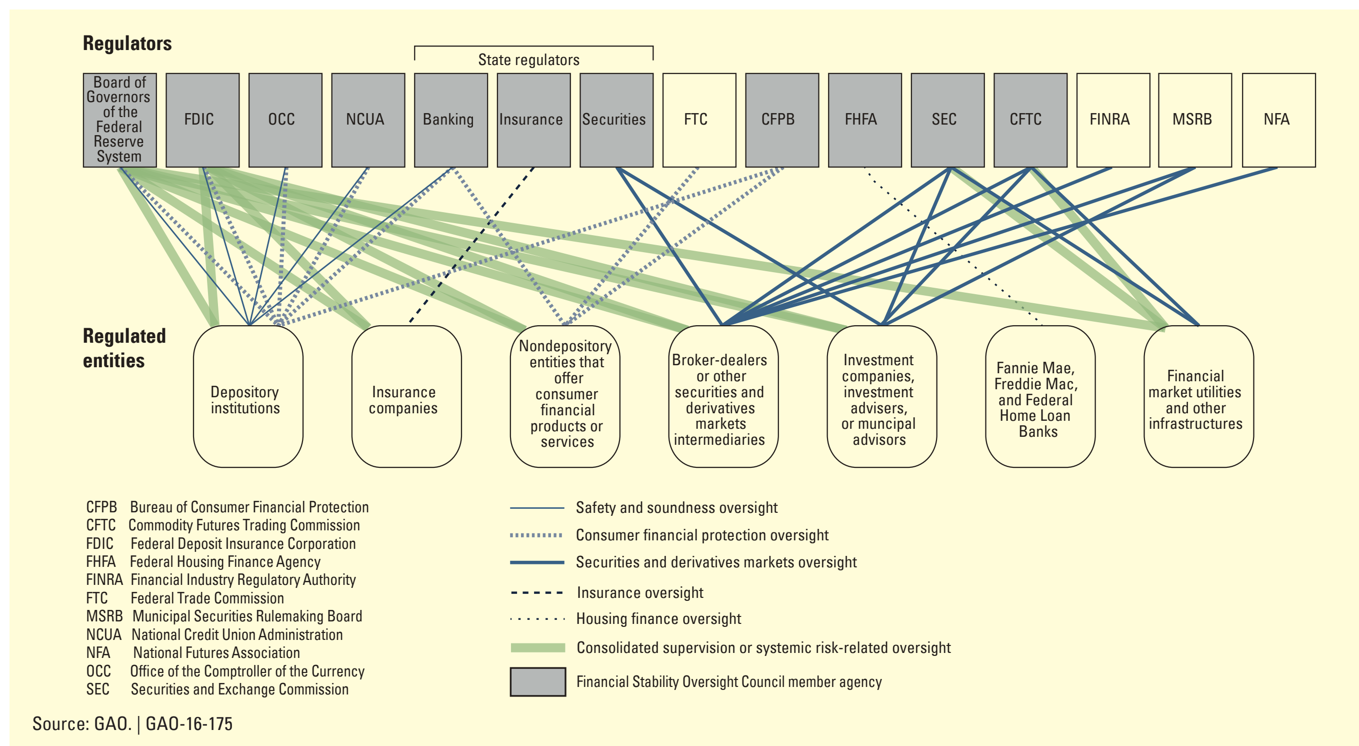

Figure 1 – U.S. GAO's analysis of the fragmented U.S. regulatory regime

missions. This regulatory structure can, in some cases, lead to inefficiencies in regulatory processes, inconsistencies in regulatory oversight of similar types of financial institutions, and opportunities for regulatory arbitrage. The system also makes it difficult for financial regulators to quickly and comprehensively adapt and respond to fast-moving developments.

To illustrate these challenges, the U.S. Government Accountability Office (GAO) recently released a Congressionally-mandated report analyzing the effects of fragmentation and overlap in the U.S. financial regulatory regime. It included the following schematic in that report (Figure 1).

As Figure 1 indicates, U.S. financial institutions face an overlapping and often confusing web of regulatory regimes and supervisors based on their regulatory status and the nature of the products and services they offer. Even where it is clear that a FinTech provider or a service should be regulated, it is not always clear which regulator FinTech companies should look to for guidance as to what regulatory requirements apply to them. This confusion results, in part, from the fact that the services and activities offered by some unregulated FinTech companies may not fit neatly within the statutory mandate of existing regulatory bodies. For many "traditional" regulated institutions, identifying the principal relevant regulator is a somewhat simpler task, as most such institutions are subject to primary supervision and regulation by their primary financial regulator (e.g., the OCC for national banks), although their FinTech-related activities also may be subject to supervision and regulation by one or more other regulators due to the nature of the FinTech product or service in question.

Furthermore, the sheer range of applicable regulatory requirements may be difficult for a new entrant to manage. For example, a FinTech provider that wishes to offer a consumer-facing automated investment platform may be subject to regulation by the U.S. Securities and Exchange Commission (SEC), the Financial Industry Regulatory Authority (FINRA), and the Consumer Financial Protection Bureau (CFPB) on the federal level and by one or more state securities regulators on the state level, each of whom may have different sets of regulatory guidelines and expectations. Of course, banking and other established financial services organizations also experience this overlapping regulatory structure, but the scale of their operations may permit them to spread over a broader base the cost of building and operating a legal and compliance structure to address the range of applicable requirements. In contrast, jurisdictions with a more consolidated financial regulatory system, such as the U.K., are better positioned to offer FinTech providers an integrated set of regulations and regulatory guidance for their activities.

Challenging U.S. financial regulatory environment

In the aftermath of the Great Recession, the complexity of the financial regulatory system has increased, making these challenges even greater. The U.S., like other major jurisdictions, has mounted an extraordinary effort to ensure that another financial crisis will not occur by increasing the scope and depth of financial regulation. The intensity of regulatory scrutiny has been increased further following significant enforcement actions against a number of large banking organizations in a range of compliance areas, including anti-money laundering and sanctions compliance and consumer protection. These trends have resulted in an extremely challenging regulatory environment for financial institutions of all types in the U.S.

The burden of this environment falls particularly hard on FinTech innovators. For startups and other FinTech innovators that do not have a history of operating under an extensive regulatory framework, it may be impossible – financially and operationally – to build a compliance function that adequately addresses regulatory requirements until a product or service has been developed and tested and shows promise. Compliance functions require capital, and without workable products and services it is difficult to attract capital. If a startup cannot even test the market without building a fully fleshed out compliance structure, it may be impossible to ever fully bring innovative ideas to the market to be tested.

More established financial institutions may also find it difficult to bring new products to market in a regulatory environment with little tolerance for error, particularly where it is not clear how existing rules may apply to a new product.

And yet both financial market participants and regulators acknowledge the importance of fostering financial innovation in the U.S. – or at least acknowledge its inevitability – as long as that innovation is "responsible."[3] As a result, major U.S. regulators have begun to grapple with the appropriate regulation of financial technology, whether offered by banking organizations or by non-bank FinTech players.

Key U.S. policy objectives for FinTech

U.S. financial regulators and market participants have articulated a number of key policy objectives for the regulation and supervision of FinTech. These include:

- **Prudential oversight:** prudential regulation, or regulation focused on the safety and soundness of institutions, has traditionally been understood to mean the exercise of supervisory authority by banking regulators over depository banking institutions for the purpose of protecting insured customer deposits and the deposit insurance system. However, for many financial regulators, one of the lessons learned during the recent financial crisis was that prudential oversight might also be used to address threats to stability of the financial system associated with firms that were previously exempt from prudential regulation. In the FinTech space, certain types of FinTech companies, such as the peer-to-peer/marketplace lending businesses developed by Lending Club, SoFi, and Prosper, are increasingly offering credit products that compete directly with the lending platforms traditionally associated with depository institutions. As these types of peer-to-peer/marketplace lenders become increasingly important providers of credit for consumers and businesses alike, regulators have begun to assess the risks posed by their capital structures, due to their inability to rely on the stable funding base provided by deposits and their inability to access the Federal Reserve's discount window in stressed situations.
- **Discouraging regulatory arbitrage and maintaining competitive equality:** in the view of some, it would not be appropriate for FinTech providers that are not banking organizations to gain a competitive advantage through a lighter regulatory burden. By seeking to ensure that comparable financial products and services are regulated similarly, regardless of the nature of the provider, regulators seek to minimize the opportunity for regulatory arbitrage.
- **Anti-money laundering and sanctions:** while payments platforms and money transmission services have proven to be some of the most active sub-sectors within FinTech, regulators have also expressed their desire to ensure that new FinTech providers are not vulnerable to being taken advantage of by users who seek to transfer funds in contravention of bank secrecy, anti-money laundering, and sanctions regulations. To this end, regulators have focused on making sure that FinTech providers comply with existing regulatory frameworks, such as state-level money transmitter licenses, to the extent such existing frameworks are applicable to FinTech companies, and have also begun to design new frameworks suitable for newer FinTech companies, including the new BitLicense Regulations recently adopted in New York.
- **Data privacy and cybersecurity:** while data privacy and cybersecurity considerations are important for all types of financial institutions, regulators have expressed their view that these considerations are even more important to FinTech providers that manage and retain personal information of consumers as part of their operations. Financial regulators have indicated that, going forward, they will continue to evaluate the need for heightened data privacy and cybersecurity protections for FinTech companies, in order to protect customers and to ensure a consistent playing field for all types of market participants, whether they are traditional financial institutions or newer FinTech upstarts.

3 See, e.g., Office of the Comptroller of the Currency, 2016, "Supporting responsible innovation in the federal banking system: an OCC perspective," Washington, D.C., at 2: "Innovation holds much promise. Technology, for example, can promote financial inclusion by expanding services to the underserved. It can provide more control and better tools for families to save, borrow, and manage their financial affairs. It can help companies and institutions scale operations efficiently to compete in the marketplace, and it can make business and consumer transactions faster and safer."

U.S. FINANCIAL REGULATORY RESPONSE TO FINTECH

In order to reconcile the overlapping nature of their authority and create a consistent set of expectations for FinTech providers, key U.S. financial regulators, including the Office of the Comptroller of the Currency (OCC), Treasury Department, and CFPB, have begun to highlight the importance of "responsible innovation." Responsible innovation seeks to balance a forward-thinking attitude towards innovation in the financial sector with a continued focus on financial stability, consumer protection, and other key regulatory priorities. The following are some of the key policy initiatives relating to FinTech developed by U.S. financial regulators to date, and the ways in which each of these regulators has chosen to implement this concept of responsible innovation.

OCC

The OCC, which supervises and regulates federally chartered national banks and savings associations, released a white paper on March 31, 2016 that sets forth its perspective on supporting responsible innovation in the federal banking system. In its white paper, the OCC defines responsible innovation to mean "the use of new or improved financial products, services, and processes to meet the evolving needs of consumers, businesses, and communities in a manner that is consistent with sound risk management and is aligned with the bank's overall business strategy." The OCC white paper identifies eight principles that guide the OCC's approach to responsible innovation, which are collectively intended to facilitate the ongoing development of the OCC's comprehensive framework:

- **Support responsible innovation:** the OCC is considering various reforms to improve its process for understanding and evaluating innovative financial products, services, and processes. As part of this process, the OCC will evaluate its guidance on new product development and third-party risk management and assess whether additional guidance is appropriate to address the needs of banks and their customers in the rapidly changing environment. To expedite decision-making in response to new proposals, the OCC is also evaluating whether it can streamline some of its licensing procedures, where appropriate, or develop new procedures where existing procedures may not work for certain innovative activities. In addition, the OCC is considering the possibility of creating a centralized office on innovation which could serve as a forum to vet ideas before a bank or nonbank makes a formal request or launches an innovative product or service.
- **Foster an internal culture receptive to responsible innovation:** the OCC will evaluate its policies and processes, define roles and responsibilities with respect to evaluating innovation, identify and close knowledge and expertise gaps, and enhance its communication with internal and external stakeholders. In addition, the OCC will develop or augment existing training to reinforce its receptiveness to responsible innovation and develop additional expertise to evaluate the opportunities and risks related to specific types of innovation.
- **Leverage agency experience and expertise:** the OCC will rely heavily on the breadth and depth of knowledge of its existing staff in implementing its responsible innovation framework.
- **Encourage responsible innovation that provides fair access to financial services and fair treatment of consumers:** to encourage responsible innovations that provide fair access to financial services and fair treatment of consumers, the OCC may issue guidance on its expectations related to products and services designed to address the needs of low- to moderate-income individuals and communities and may encourage innovative approaches to financial inclusion.
- **Further safe and sound operations through effective risk management:** the OCC's framework will consider how national banks and federal savings associations identify and address risks resulting from emerging technology, including cybersecurity risk.
- **Encourage banks of all sizes to integrate responsible innovation into their strategic planning:** according to the OCC white paper, a bank's decision to offer innovative products and services should be consistent with the bank's long-term business plan rather than following passing trends, and collaborations with nonbanks to offer innovative products and services should take into consideration whether such partnerships help the bank achieve its strategic objectives.
- **Promote ongoing dialogue through formal outreach:** the OCC plans to bring together banks, nonbanks, and other stakeholders through a variety of forums, workshops, meetings, and "innovator fairs" to discuss responsible innovation.
- **Collaborate with other regulators:** the OCC will work with other regulators, such as the CFPB, to collaboratively support responsible innovation in the financial services industry. As part of this collaborative process, the OCC expects to use best efforts to avoid inconsistent communications with supervised entities.

Following the release of the OCC's white paper, the OCC held a forum on "supporting responsible innovation" in June 2016, in which Comptroller Curry reiterated that the OCC's efforts to encourage responsible innovation were not meant to stifle growth and innovation, but rather meant to start a dialogue with FinTech companies, large and small. Recently, the OCC proposed a rule to address the manner in which uninsured banks chartered by the OCC would be liquidated if they were to fail. While seemingly an arcane topic, the OCC noted that the adoption of clear rules governing such liquidations would facilitate the use of such entities to conduct FinTech-related businesses.[4]

4 See Office of the Comptroller of the Currency, 2016, "Receiverships for uninsured national banks," 81 Federal Register 62835, 62837 (Sep. 13, 2016).

Treasury Department

The Treasury Department has issued guidance identifying the opportunities and challenges posed by peer-to-peer/marketplace lending.[5] In May 2016, the Treasury Department published a white paper on peer-to-peer/marketplace lending that establishes an overview of the market landscape, reviews emerging themes in stakeholder opinions, and provides a number of policy recommendations. The themes identified in the Treasury Department's white paper include the following:

- **Use of data and modeling techniques for underwriting is an innovation and a risk:** the Treasury Department recognized that the use of new types of data-driven algorithms by peer-to-peer/marketplace lenders to identify a borrower's credit risk presents both promise and risk. On the one hand, these new algorithms reduce costs and can expedite the credit assessment process, but on the other hand, these algorithms can create disparate impacts in credit outcomes and violations of fair lending laws. In addition, because there is a lack of transparency to these algorithms, consumers generally do not have an opportunity to check and correct incorrect data being used by peer-to-peer/marketplace lenders to assess their credit profile.
- **Online marketplace lending provides an opportunity to expand access to credit:** the Treasury Department noted that while peer-to-peer/marketplace lending is expanding access to credit by providing loans to borrowers who might not otherwise receive capital from traditional financial institutions, peer-to-peer/marketplace lenders currently serve mostly prime and near-prime borrowers in the consumer loan market. Additionally, the Treasury Department noted that peer-to-peer/marketplace lenders specializing in the student loan space may have difficulty expanding to borrowers beyond those with exceptionally high credit quality, and that the majority of peer-to-peer/marketplace lenders are helping student borrowers refinance existing debt, as opposed to expanding access to credit in the student loan market.
- **Small business borrowers will likely require enhanced safeguards:** the Treasury Department is one of several regulators that have noted the potential need for heightened safeguards for small and medium enterprise (SME) customers, due to the fact that SME borrowers do not currently enjoy all of the same consumer protection laws and regulations as individual borrowers and typically receive protection only through contract law or fair lending laws.

In connection with these themes, the Treasury Department's white paper also outlined a series of policy recommendations, which included the following:

- **Support more robust small business borrower protections and effective oversight:** the Treasury Department expressed its belief that more effective oversight of peer-to-peer/marketplace lenders (that mirrors oversight standards imposed on depository institutions) could enable greater transparency in small business online marketplace lending that could lead to better outcomes for borrowers.
- **Promote a transparent marketplace for borrowers and investors:** the Treasury Department also emphasized its belief that the peer-to-peer/marketplace lending industry should adopt (i) standardized representations, warranties, and enforcement mechanisms, (ii) consistent reporting standards for loan origination data and ongoing portfolio performance, (iii) loan securitization performance transparency, and (iv) consistent market-driven pricing methodology standards. Additionally, the Treasury Department recommended the creation of a publicly available, private sector driven registry for tracking data on transactions, including the issuance of notes and securitizations, and loan-level performance.
- **Expand access to credit through partnerships that ensure safe and affordable credit:** the Treasury Department also believes that for technology to truly expand access to underserved markets, more must be done to serve borrowers who are creditworthy, but may not be scoreable under traditional credit models.

FDIC

The FDIC, which has jurisdiction over all U.S. insured depository institutions and serves as the primary federal regulator for a significant number of smaller and community banks, has also focused its guidance on peer-to-peer/marketplace lending, most notably through guidance issued in early 2015. In its guidance, the FDIC recognized that peer-to-peer/marketplace lending is a small but growing component of the financial services industry that some banks are viewing as an opportunity to increase revenue. Additionally, the FDIC emphasized that it expects banks partnering with peer-to-peer/marketplace lenders to conduct thorough due diligence and ongoing monitoring to ensure that lenders are complying with applicable legal requirements, such as consumer protection and anti-money laundering laws. Finally, the FDIC guidance outlined a set of risks it associated with peer-to-peer/marketplace lending, including (i) compliance risk, or the risk of non-compliance with consumer protection, fair lending, and AML laws, (ii) transactional risk, or the risk arising from large loan volume, document handling, and movement of funds between institutions or third-party originators, (iii) servicing

5 While not discussed in depth in this article, it is important to note that the investing side of peer-to-peer/marketplace lending platforms is also subject to regulation by the SEC. See U.S. Securities and Exchange Commission, 2008, "Cease-and-desist order, Securities Act of 1933," Release No. 8984, November 24: finding that notes issued by Prosper Marketplace, Inc. through its marketplace lending platform were securities within the meaning of the Securities Act of 1933 and that Prosper violated Sections 5(a) and (c) of the Securities Act of 1933 by engaging in the sale of unregistered securities without an effective registration statement or valid exemption from registration.

risk, or the risk of insolvency of an unproven loan servicer, and (iv) liquidity risk, or the risk associated with the limited market for the resale of loans originated by peer-to-peer/marketplace lenders.

CFPB

The CFPB, whose statutory mandate includes jurisdiction over the consumer-facing activities of certain regulated financial institutions and their service providers, has adopted a proactive approach towards FinTech regulation that seeks to encourage a climate of ongoing dialogue with the FinTech companies that currently are, or may become, subject to its supervision and regulation.

In February 2016, the CFPB issued its final policy to facilitate consumer-friendly innovation (CFPB Innovation Policy). The CFPB Innovation Policy establishes a new process for financial services providers to apply for no-action letters[6] regarding the application of consumer regulations to new products that offer the potential for significant consumer-friendly innovation. Through this new process, the CFPB intends to permit providers to clarify regulatory uncertainty during the FinTech product development process.

The CFPB Innovation Policy was created as part of the CFPB's Project Catalyst initiative, which is designed to encourage consumer-friendly developments in markets for consumer financial products and services. The CFPB Innovation Policy is intended to enhance regulatory compliance in specific circumstances where a product promises significant consumer benefit and where there may be uncertainty around how the product fits within an existing regulatory scheme.

State regulation

In addition to federal financial regulators, state financial regulators have also been active in proposing and implementing new guidance relating to FinTech products and services. Historically, state financial regulators have been the principal regulators in certain key areas of the financial sector, with money transmitter laws standing out as one particular example. Nearly every state has a money services businesses statute in place that requires companies seeking to engage in the money transmission business or other money services businesses obtain a license before engaging in that business [Conference on State Bank Supervisors (2016)].[7] A person engaged in the money transmitting business must generally obtain a license from each state in which it conducts business.

Newer FinTech startups focusing on payments, virtual currencies, and related services have sought to understand the extent to which these requirements may be applicable to them. Companies, including now-established FinTech innovators like Paypal, have often asserted – at least at the outset – that money transmitter statutes did not apply to them, but have generally come to accept that obtaining a license is required. Paypal is now licensed in 53 jurisdictions within the U.S. alone (including Puerto Rico, the U.S. Virgin Islands, and Washington, D.C.).

For companies operating in the virtual currency (e.g., Bitcoin) space, the application of state-level money transmitter laws is particularly awkward. Whether such currencies constitute "money," and whether the services these companies provide constitute "transmission" or other regulated services, is not always obvious. Certain states have implemented new regulatory frameworks that are designed to address the challenges and risks posed by virtual currency companies. New York State's BitLicense and North Carolina's Virtual Currency Law provide examples of two different approaches to this new challenge.

New York BitLicense

New York State's BitLicense Regulations (23 C.R.R.-NY I § 200) were intended by New York regulators to address the risks posed by the use of virtual currencies by criminals, particularly in the wake of the federal government's efforts to close down the Silk Road website when authorities realized that the site was facilitating illegal activities including the sales of drugs and weapons. Finalized in June 2015, the BitLicense Regulations were the first attempt by any state (or federal) regulator to formally address the virtual currency sector. They require any person who engages in a virtual currency business activity involving New York or a New York resident to obtain a BitLicense from the New York Department of Financial Services (NYDFS), and establish minimum standards of conduct for all BitLicense holders to ensure compliance with customer protection, cybersecurity, and anti-money laundering regulations.

The BitLicense Regulations define "virtual currency" broadly to mean any type of digital unit that is utilized as a medium of exchange or as a form of digitally stored value, and also defines "virtual currency business activity" broadly to encompass a wide range of activities including (i) receiving or transmitting currency, except where the transaction is undertaken for non-financial purposes and does not involve the transfer of more than a nominal amount, (ii) storing, holding, or maintaining custody or control of virtual currency on behalf of others, (iii) buying and selling virtual currency as a customer business,

6 A "no-action letter" is a letter provided by the staff of an agency that provides guidance as to the way in which the staff of the agency would interpret the application of a law or regulation to a particular set of facts. In general, no-action letters do not bind the relevant agency, but they are generally considered to be good evidence of the way in which the agency itself would likely apply the law in analogous situations. Accordingly, they are an important source of guidance to parties seeking to understand the application of existing law to new situations.

7 Federal law also requires registration with the Secretary of the Treasury as a money transmitter by any person who "provides check cashing, currency exchange, or money transmitting or remittance services, or issues or redeems money orders, travelers' checks, and other similar instruments or any other person who engages as a business in the transmission of funds." 31 U.S.C. § 5330.

(iv) performing exchange services as a customer business, or (v) controlling, administering, or issuing a virtual currency. However, the BitLicense Regulations are intended to apply to persons that act as financial intermediaries, and are not intended to capture software developers or virtual currency miners unless their activities fall within the definition of "virtual currency business activity." Additionally, the BitLicense Regulations exempt two types of entities from the requirement to obtain a BitLicense: (a) entities that are chartered under New York Banking Law and approved by the Superintendent of the NYDFS, and (b) merchants and consumers that utilize virtual currency solely for the purchase or sale of goods or for investment purposes.

The BitLicense Regulations require BitLicense holders to comply with additional New York State anti-money laundering regulations. The BitLicense Regulations also require BitLicense holders to establish and maintain a cybersecurity program that meets certain prescribed standards, and also maintain sufficient capital levels set by the NYDFS.

North Carolina's virtual currency law

In contrast to New York's approach, North Carolina recently adopted a new virtual currency law of its own (N.C. Gen. Stat. § 53-208) that has been viewed by certain virtual currency advocates as friendlier to providers of distributed ledger, blockchain, and virtual currency services. Passed in July 2016, North Carolina's legislation updates the state's existing money transmitter laws to include a defined "virtual currency" term, and clarifies which activities using virtual currency trigger the requirement to obtain a money transmitter license. North Carolina's amended money transmitter law now defines "monetary value" to mean "a medium of exchange, whether or not redeemable in money" and expressly references "virtual currency" in several places, including in the definition of "money transmission," which now includes "engaging in the business" of "maintaining control of virtual currency on behalf of others."

Notably, the updated legislation clarifies that virtual currency miners and blockchain software providers – including smart-contracts platforms – operating in North Carolina will not need a money transmitter license to conduct their activities, and largely exempts business-to-business virtual currency transactions from licensure as money transmitters as well. However, companies that are required by the updated law to apply for a money transmitter license do face some new hurdles, as the minimum net worth requirement has been increased significantly for all applicants – including virtual currency businesses.

ADDRESSING THE CHALLENGES TO FINTECH INNOVATION

Despite the challenges posed by the structure and nature of the U.S. financial system, a number of possibilities have been suggested to ease the path for FinTech innovators. None of them is a panacea, but each may present an important opportunity for the regulation of "responsible innovation." In particular:

National FinTech charter

The creation of a national FinTech charter has been suggested as one solution that could benefit FinTech companies and regulators alike. The existence of such a charter would be intended to provide a platform for FinTech innovation that would apply nationwide, without the need to obtain licenses from each state, and permit a single regulator to clarify regulatory uncertainty regarding products and services that do not fit neatly into the scheme of existing regulations. Encouraged by positive reaction from some segments of the FinTech industry, the OCC has recently taken the lead in assessing the feasibility of a national FinTech charter. In June 2016, the OCC announced that it had begun to evaluate its statutory authority to offer a limited-purpose national charter to FinTech companies. However, Comptroller Curry has suggested that FinTech companies should conduct their own analysis of whether holding a limited-purpose national FinTech charter would be good for their business models, noting that "whether [a national FinTech charter] works for the business model of a FinTech firm is something that sector needs to think through" [Clozel (2016a)].

More recently, as noted above, the OCC released a proposed rule that sets forth a framework for placing uninsured national banks into receivership. The proposed rule would permit the OCC to have receivership powers over non-insured national financial institutions if such institutions were to fail. If adopted, the proposed rule could pave the way for the OCC to regulate these entities as uninsured national financial institutions. The OCC noted the potential applicability of the receivership model to FinTech companies operating under a national FinTech charter, acknowledging in its introduction to the proposed rule that it has requested comment on the utility of the receivership model structure for a special purpose bank operating under a potential national limited-purposed FinTech charter.

While the creation of a national FinTech charter by the OCC could provide greater regulatory clarity for certain FinTech companies that currently face uncertainty in terms of the types and scope of regulation applicable to them and their activities, it is not without its limitations. First, given the OCC's statutory focus on national banks, the types of FinTech companies that would be eligible for such a charter would likely be limited to those that are substantially bank-like in their products and services (i.e., focus on payments, lending and trust-related businesses), and would likely not include companies that operate in other unrelated segments of the FinTech industry, such as robo-advisors or payment processors.

In addition, both the OCC and state regulators have expressed their concern that some FinTech companies may be seeking the benefit

of a national charter specifically to escape the application of state regulations that would otherwise apply, which could weaken the authority of state regulators to enforce state consumer protection or licensing laws. As Comptroller Curry has remarked, "I would be very concerned, for example, if we were to authorize a federal license that offers the benefits of the national bank charter, including preemption, without any of the safeguards or responsibilities that apply to banks and thrifts" [ABA Banking Journal (2016)].

Development of uniform laws

The burden of complying with the laws of many states could be eased if the statutes are consistent from state to state. The National Conference of Commissioners on Uniform State Laws (Uniform Laws Commission), which develops statutory provisions that are intended to be adopted broadly by the states in the U.S., has commenced a project to develop a uniform statute regulating virtual currency businesses in anticipation of the adoption of legislation in additional states. This project is intended to "harmonize" legislation from state to state to the extent possible. The drafting committee "will consider the need for and feasibility of drafting state legislation on the regulation of virtual currencies, and will examine issues such as licensing requirements; reciprocity; consumer protection; cybersecurity; anti-money laundering; and supervision of licensees." The Uniform Laws Commission has developed uniform statutes in a number of areas in which the involvement of multiple states is inevitable, including the Uniform Commercial Code which governs much of the commercial activity within and between the states, and by doing so permitted market participants to operate with a significant degree of certainty and efficiency.

Similarly, the Conference of State Bank Supervisors, which also coordinates among the state regulators of money transmitters, has developed a model regulatory framework for virtual currency activities.

Creation of a regulatory "sandbox"

As an alternative approach to the full regulation model presented by a national FinTech charter, an alternative approach could be for U.S. financial regulators to adopt a regulatory sandbox approach similar to those currently in place in jurisdictions including the U.K., Singapore, and Hong Kong. These initiatives, which are briefly summarized below, allow FinTech companies to work closely with regulators to identify potential issues early on in the product development phase, without the risks of incurring fines or triggering other adverse consequences due to the "safe" nature of the sandbox model.

The U.K.'s regulatory sandbox was launched in May 2016 as a core component of the Financial Conduct Authority's (FCA) Project Innovative initiative. Billed as "a safe space for businesses to test out innovative ideas with real people," the FCA's regulatory sandbox allows it to provide restricted authorization, no action letters, waivers, and individual guidance to U.K. FinTech companies that face regulatory hurdles in the early stages of their development. In turn, FinTech companies that make use of the regulatory sandbox can use it as a virtual laboratory of sorts for new financial products and services without the worry of running afoul of regulations once they are considered to be in the "authorized firm umbrella."

Similarly, on June 6, 2016, the Monetary Authority of Singapore (MAS) announced the creation of its own regulatory sandbox. Through its sandbox, the MAS aims to provide FinTech firms with the ability to experiment by providing customers with actual products and services within a well-defined space and duration, once the FinTech company and customers have reached a satisfactory agreement with MAS. For the duration of the period that a company is in its regulatory sandbox, the MAS will relax specific regulatory requirements so that the FinTech firm can attempt its product pilot and determine whether it will be suitable on a wider scale and under severer regulatory restrictions.

Not to be outdone, on September 6, 2016, the Hong Kong Monetary Authority (HKMA) announced the launch of its own FinTech supervisory sandbox. The HKMA sandbox enables banks to collect data and feedback on new financial products in a regulatory "light" environment. HKMA plans for relaxed regulations to include looser security protocols for electronic banking services and more casual timing of independent assessments prior to the launch of technological services. The HKMA's sandbox differs from those in the U.K. and Singapore because it is not open to all FinTech start-ups, but only banks.

The Uniform Laws Commission draft legislation mentioned above includes an "on-ramp" that, like a sandbox, is intended to permit a new market entrant to experiment and develop their businesses to a certain threshold before being required to obtain a license.

Each of these sandbox models provides a creative solution for regulators seeking to gain a better understanding of the risks and challenges faced by FinTech companies by waiving or reducing the regulatory burden on companies, without stifling innovation while they are in the sandbox. Even though the aforementioned CFPB no-action letter policy has some parallels to this sandbox model, it is distinguishable in many ways, most importantly due to the fact that no-action letters from the CFPB are designed to be issued rarely and are non-binding on the CFPB.

If adopted by one or more financial regulators in the U.S., the regulatory sandbox model could provide a similarly creative solution that would allow regulators to gain a better understanding of the risks and challenges posed by FinTech products and services, while also providing FinTech companies with a safe space to pilot new ideas. However, this model is also not without its own challenges, the most significant of which is the overlapping jurisdictional nature of the

U.S. financial regulatory system, in addition to the often feuding nature of state and federal regulation, which will make it difficult to coordinate a unified review of potential products and services.

Other possible avenues

Even in the absence of a uniform statute or national charter, it may be possible for the cost of innovation and market entry to be reduced by other means. For example, it may be possible for state regulators to adopt a model similar to the "substituted compliance" approach adopted by the CFTC in regulating the inherently international swaps business. Such an approach would require each regulator to evaluate the regulatory approach taken by another regulator or jurisdiction and determine that the other approach is sufficient to serve the purposes of the regulator's own regulatory regime, even if it does so in a different manner – and then permit a FinTech provider to operate in that regulator's own jurisdiction while complying with the other jurisdictions regulatory framework. Even if full substituted compliance is not possible, encouraging regulators to extend reciprocity to other regulators – granting automatic or expedited registration to FinTech providers that are licensed or regulated in another qualifying jurisdiction, for example – could also reduce regulatory burden and facilitate new business development.

CONCLUSION

Great opportunities raise great risks, and the development of FinTech is no exception. In an environment where the tolerance for risk is low and the number of parties required to assess the risk is high, innovation may be difficult to sustain. However, given the significance of these developments and the demand for new products and services, the pressure on regulators and legislatures to find means to ease the path for innovators will continue.

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MORE INFORMATION

Prof. Philip Treleaven
Centre Director
p.treleaven@ucl.ac.uk

Yonita Carter
Centre Manager
y.carter@ucl.ac.uk

+44 20 7679 0359

Layout, production and coordination: Cypres – Daniel Brandt, Kris Van de Vijver and Pieter Vereertbrugghen
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