

Supporting Financial Innovation Through Flexible Regulation

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Policymakers should encourage financial innovation by using regulatory processes and approaches that promote flexible oversight, including stakeholder engagement, coordination, experimentation, alternative supervision, and regtech.

KEY TAKEAWAYS

- Increased use of technology in financial services enables greater innovation, which can increase financial inclusion, boost consumer welfare, and drive financial-sector productivity.
- To encourage continued innovation in financial services, regulators should strike the right balance between regulation and innovation.
- Policymakers should encourage financial innovation by using regulatory approaches that promote flexible oversight, including stakeholder engagement, regulatory coordination, experimentation, alternative supervision, and regtech.

OVERVIEW

New technologies and shifting business models have the financial services industry poised for significant innovation, from alternative methods of lending to blockchain-based financial instruments to peer-to-peer payment systems. As a result, financial regulators must often contend with competing priorities, such as encouraging innovation, market growth, and competition, while ensuring safety, stability, and consumer protection within the financial system. Mastering this balancing act requires agility from policymakers, as well as structural changes, in order to make mature regulatory processes more flexible and open to financial innovation. Policymakers all over the world are exploring flexible and targeted models of outreach, regulation, and coordination that encourage robust and knowledgeable oversight—while still enabling experimentation. This report analyzes these approaches and offers recommendations for how policymakers can capture the benefits while avoiding the pitfalls of these creative policy solutions.

INTRODUCTION

From lending to payments to investments, the financial services sector has experienced robust technological innovation over the last decade. Much of this has come from financial technology, or "fintech," companies—firms focused on using the latest innovations in information technology in order to improve financial services. Some fintech companies are adopting new business models, while others are using technology for process improvements. This trend is happening across many sectors, as retailers, telecom providers, and others introduce financial applications directly into their offerings.

Fintech benefits consumers, businesses, lenders, and borrowers alike by creating more convenient, higher quality, and cheaper services. Those lower costs mean more consumers—including those traditionally underserved by the financial industry—not only save money, but also have greater access to capital. But while fintech has brought consumer benefits, some types of financial innovation have brought harm. In particular, certain novel financial instruments, such as mortgage-backed securities and collateralized debt obligations, when combined with inadequate regulatory intervention, helped spark the financial crisis that led to the Great Recession.³ Failure to prevent the financial crisis may have made financial regulators especially cautious toward innovation.

The challenge for financial regulators comes from the fact that innovation, by its very nature, involves risks and mistakes—which regulators often want to avoid. Therefore, regulators often halt innovative financial products and services that do not fit neatly into predefined categories within the law. For example, in December 2018, the cryptocurrency project Basis announced it would stop operating and return the \$133 million it had raised in capital because the project was in conflict with transfer restrictions required by regulations from the Securities Exchange Commission (SEC).⁴ In addition, state, federal, and international regulators often conflict over which has what authority to regulate emerging applications. This trend, for instance, can be seen in the ongoing lawsuits between state and federal banking regulators over what entities can receive banking charters.⁵ Many fintech firms caught in regulatory tugs of war are unable to launch in the United States due to the uncertainty over whether their products could draw enforcement action from risk-adverse regulators.⁶

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There are also risks with creating inflexible and heavy-handed rules. Regulations can have two types of unintended consequences: They can block beneficial innovations if they are too burdensome, and they can fail to guard against harmful innovations if they are too lax. Regulators often focus on minimizing the latter since this type of mistake makes agencies look ineffective, and exposes them to public backlash, as in the case of mortgage-back securities. Moreover, when the pace of change is slow and international competition is minimal, it costs little to overregulate in a way that inhibits innovation. This calculation changes, however, when the pace of innovation and international competition increases, as it has over the last few decades in the financial services sector.⁷

To overcome these challenges and strike the right balance, financial regulators from around the world are trying new models of regulation, or altering old ones, to become better informed and more efficient and effective at oversight. These programs include stakeholder engagement initiatives, coordinated regulatory efforts, special oversight that provides relief to companies enabling experimentation, alternative supervision, and innovative compliance regimes. This report explores the benefits and limitations of each of these tools, and offers suggestions for how policymakers can embrace flexible models of financial regulations.

HOW REGULATORS PROMOTE FINANCIAL INNOVATION

Many governments see the value of fintech transformation, and are taking steps to promote financial innovation. For example, Singapore created a Fintech and Innovation Group in 2015 to facilitate deployment of technology in its financial sector; and in 2016, Australia and the United Kingdom both launched their own strategies to promote fintech.⁸ Similarly, in February 2017, the Trump administration released an executive order on the core principles for regulating in the U.S. financial system, which launched several exploratory efforts by the Department of the Treasury into fintech and financial innovation.⁹ While individual policies and legal stringency may differ across jurisdictions, many countries are taking novel and interesting approaches to financial innovation, with an eye to maximizing their relative competitiveness in financial services.

The following section discusses the major categories of administrative processes and regulatory approaches that promote flexible oversight and financial innovation.

Stakeholder Engagement and Support

The most common approach to innovative oversight is for financial regulators to affirmatively reach out to stakeholders in order to improve both communications about rules, and their own understanding of financial products and services. Regulators can accomplish this through a variety of methods, such as conducting fact-finding missions; issuing requests for expert commentary that examines emerging issues; creating offices that can be approached by fintech companies for information and assistance; convening forums and events to better understand industry trends; and even actively supporting local fintech firms. These efforts act as a feedback loop, enabling regulators to clarify and better understand the impact emerging products are likely to have on consumers, businesses, and the market. Stakeholders also benefit by better

understanding both the current regulatory framework in a local context, and how regulators may adjust rules based on industry trends.

These efforts often start with a fact-finding mission about the effects of new trends in the financial services industry. For example, the primary financial regulator of the United Kingdom, the Financial Conduct Authority (FCA), issued a call in 2014 for input from stakeholders to develop a way for the regulator to work with industry. ¹⁰ It set up offices that continue to serve as a point of contact for the industry, actively helping firms understand and navigate the local regulatory framework. The preeminent example of this approach is FCA's Project Innovate and Innovation Hub, which was launched in 2014 to coordinate with industry to better understand and mitigate industry concerns with financial regulation. In the United States, several financial regulators have followed in FCA's footsteps, including the Federal Reserve's task forces, the Office of the Comptroller of the Currency's (OCC) Innovation Office, the Consumer Financial Protection Bureau's (CFPB) Innovation Office, and Commodity Futures Trading Commission's (CFTC) Lab CFTC. At least 31 other financial regulators around the world have created innovation offices. ¹¹

Each of these programs coordinates with financial services firms to exchange information about new products and services in order to better tackle regulatory challenges. This is done through periodic conferences and one-on-one meetings. For example, in 2017, FCA's Project Innovate created "regulatory surgery" sessions that allow firms time to address specific regulatory issues and concerns. Similarly, OCC holds "Innovation Office Hours" around the United States to give national banks and fintech companies time to discuss the agency's approach to regulation. This dialogue between regulators and stakeholders is most useful when it serves to inform for the purpose of broader regulatory reform. For example, the Netherlands Authority for the Financial Markets uses feedback from its Innovation Hub to inform its interpretation of rules and provide guidance to firms.

Some of these efforts go further than regulatory feedback into actual support for the fintech industry. Some governments have launched fintech accelerators, which provide mentoring, workspaces, access to funding, and other tools for industry to launch fintech products in their countries. For example, the government of Ontario, Canada, created a fintech accelerator office to help local fintech start-ups develop and scale their businesses by connecting them with the appropriate Canadian regulators, and other stakeholders.¹⁵

While stakeholder-engagement programs can result in many benefits, such as better-informed policymaking, improved effectiveness of rules, and increased competition, there are a few pitfalls regulators should avoid. Stakeholder-outreach efforts work most effectively when staff has the resources and knowledge to provide innovators with clarity regarding regulatory frameworks. One survey found that these offices were not helpful when "the regulator did not have a strong enough understanding of underlying technologies to provide useful advice and support." Due to the skill set required to operate innovation hubs, there are also often challenges with attracting and retaining employees in innovation offices. 17

Coordinating Regulatory Efforts

Coordination is also essential to effective supervision of fintech applications. From an international perspective, companies doing business across borders must navigate a complex set of rules in order to bring their services to global markets, as each country has different financial

regulations. National regulators within a country often do not exist in a vacuum and can clash over how to regulate novel financial products and services. This is especially the case in the United States, which, unlike many other countries, does not have a single financial regulator. For example, SEC and CFTC are at odds with their approach to cryptocurrencies (virtual currencies that use cryptographic techniques to regulate and decentralize the creation of currency and verify the transfer of funds) classifying them under different rules for securities and commodities, respectively. And state governments have added to this complex system by creating their own rules and regulations for financial services.

Without a single, comprehensive strategy for financial regulation, regulators will continue to be at odds, and states will continue to pass mismatched rules that raise costs and reduce consumer welfare.

The United States should strive for a digital single market for payments and other interstate financial products. Lack of harmonization and coordination creates excessive costs for fintech companies operating across jurisdictions. Take, for example, state money licensing in the United States. Currently, 53 states and territories have individual licensing requirements for money transmitters. ¹⁹ As a result, businesses that try to break out in the payment space across the United States must get licenses for each state in which they operate. Given these licenses can cost over \$1 million each, and it can take 2 years for each application to get approved, this burden is often simply too much for many businesses. ²⁰ Moreover, firms may face additional costs for national and international compliance with multifarious, conflicting money-sending rules.

Fortunately, there are ongoing efforts for coordination and harmonization on the subnational, national, and international level.

Subnational Coordination

On the subnational level, some U.S. states have attempted to align rules for certain fintech applications. For example, to address burdensome conflicting state rules in the mortgage industry, the American Association of Residential Mortgage Regulators and the Conference of State Bank Supervisors launched the Nationwide Multistate Licensing System (NMLS) and registry in 2004—a system which was made into a national framework by Congress in 2008. The Conference of State Bank Supervisors is also seeking to update and further harmonize NMLS through its Vision 2020 program. Similarly, some states—Georgia, Illinois, Kansas, Massachusetts, Tennessee, Texas, and Washington (collectively, "Signatory States")—have taken steps to standardize licensing practices for payment systems.

More states should join these efforts and follow this process in other areas, such as insurance, with contradictory rules for financial services. To this end, states should adopt multistate compacts or create reciprocity agreements whenever they cannot agree on the same rules. 24 When these efforts succeed, Congress can create a backstop (e.g., NMLS) for states that do not participate, ensuring equal protections for citizens in states not covered by the agreements, and removing conflicting regulatory regimes. If these efforts fail, or states cannot agree on a common path forward, Congress and federal regulators should take a lead in promoting regulatory coordination and harmonization. 25

National Coordination

Financial regulations in the United States are more decentralized than in other countries, which often have one major financial regulator (e.g., the United Kingdom's FCA). In contrast, the United States has different regulators for specific financial products, with over a dozen dedicated to stopping money laundering, and regulating capital markets, banking, money transmission, and more. ²⁶ Some of these regulators are independent, while others fall under the supervision of the U.S. Treasury Department. This complex environment means different regulatory agencies often have oversight over similar financial services, making it important for them to coordinate.

U.S. federal regulators have a history of coordination in certain circumstances. For example, the Financial Stability Oversight Council, which comprises the heads of all major federal financial regulators, assesses financial system risks and coordinates actions across each of its members. Regulators often coordinate when engaging in enforcement actions that may implicate multiple statutory authorities, or when hosting conferences on emerging issues. For example, the FTC and CFPB plan to host a joint workshop on consumer reporting in December 2019. Furthermore, in a report to the president on fintech and innovation, the U.S. Department of Treasury called for federal regulators to use interagency coordination to enable better credit decision-making using new data sources, protect consumer credit data, and create faster payment systems, among other things. Protect consumer credit data, and create faster payment systems, among other things.

The U.S. government can and should do more to coordinate regulatory efforts and facilitate harmonization. Without a single, comprehensive strategy for financial regulation, regulators will continue to be at odds, and states will continue to pass mismatched rules that raise costs and reduce consumer welfare.³⁰

International Coordination

Several governments around the world have engaged in innovative coordination and harmonization efforts. Launched in January 2019, the Global Financial Innovation Network (GFIN) comprises 38 financial regulators and related organizations committed to supporting financial innovation.³¹ The goal of GFIN is to "create a more efficient way for innovation firms to interact with regulators, helping them navigate between countries as they look to scale and test new ideas."³² So far, GFIN has launched global sandbox efforts, accelerator programs, and conferences in pursuit of this goal. Other international regulation-coordination bodies exist. For example, the International Organization of Securities Commissions is an ideal forum for harmonizing issues related to securities and futures markets.³³

Moreover, there are regional efforts to coordinate regulations and harmonize rules. For example, in 2017, several countries in Asia, including Indonesia, Thailand, Singapore, and Vietnam, signed an agreement to harmonize their payment regulations and standards to link their respective real-time payment systems.³⁴ Similarly, the Inter-American Development Bank announced that under a "regional public good" initiative, it would seek to boost regional regulatory coordination for fintech companies in Latin America.³⁵ In addition, a number of national banking regulators, including the head of Japan's central bank and Switzerland's financial watchdog, have expressed interest in international cooperation in regulating Libra, a major global cryptocurrency initiative backed by Facebook and other multinationals.³⁶

To enhance financial services around the globe, governments should continue seeking to harmonize their laws and regulations that focus on the financial services industry, such as those

affecting routing transactions, transparency, money laundering, regulatory compliance, and international access to financial data for law enforcement. A sound international framework of cooperation and coordination based on harmonization is essential to effective regulation and supervision of fintech applications, reducing systemic risks to financial stability, and ensuring innovation proceeds apace. Governments should also avoid restricting financial data flows and actively push back on policies requiring data localization. And they should focus on improving mutual legal assistance treaties in order to provide cross-border cooperation on criminal investigations.

Facilitating Experimentation

Financial regulators often halt novel financial services whose technological solutions or business models do not fit into predefined categories in the law. Innovation is often not a priority for regulators. Indeed, The Consumer Financial Protection Bureau is the only U.S. financial regulator with the explicit statutory remit to promote innovation in financial services.³⁷ This reticence toward novel products generates uncertainty, as fintech companies fear they could be subject to enforcement actions, which for some small companies can pose an existential threat.³⁸ To tackle this problem, regulators have started adopting two primary administrative tools that offer an alternative to enforcement actions by facilitating experimentation: no-action letters, whereby agencies suspend certain regulations for novel products and services; and regulatory sandboxes, which function as controlled testing environments for financial innovators.

No-Action Letters

One alternative administrative tool that enables regulators to provide relief to companies without resorting to enforcement actions is no-action letters (NALs), which are letters issued by government agencies, in response to an inquiry, publicly stating an agency will not bring enforcement actions against a particular product or service. Most NALs describe the request, analyze the particular facts and circumstances involved with the novel product, service, or business model, and discuss applicable rules. If the agency accepts a company's petition, it agrees not to bring action against the product or service based on the facts described in the NAL. NALs allow regulators to send a signal to the market about what behaviors are permissible, thereby setting precedent and allowing financial services to innovate around those signals. Through these letters, regulators can also learn more about changing products and services. Several regulators in the United States, including SEC and CFPB, have NAL authority.

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One major example of this relief is CFPB's Project Catalyst, which was initiated in 2016.³⁹ As part of the project, CFPB sought to issue NALs, subject to its stated limitations, declaring the agency would not initiate enforcement of or supervisory action against petitioners. This project is fundamentally designed to promote collaboration between regulators and financial services companies. CFPB may revoke its no-action-letter relief under many circumstances, such as when an organization has failed to comply in good faith with the terms and conditions, or an organization has caused material, tangible harm to consumers. Unfortunately, under the original program, only one company thought it was valuable enough to seek an NAL.⁴⁰ In 2018, CFPB sought to change the program by streamlining the application process, giving the Bureau greater

discretion on when it can issue no-action letters; and enabling the agency to issue no-action letters that are valid indefinitely.⁴¹ In 2019, CFPB issued its first NAL to the Department of Housing and Urban Development to help facilitate its housing counseling program.⁴²

In some circumstances, NALs have significantly helped alleviate regulatory confusion over novel products or services. For example, SEC issued a no-action letter for TurnKey Jet, Inc. in April 2019 that offered guidance on when cryptographic tokens are not securities. This NAL, along with its accompanying guidance, sent the clearest signal to cryptocurrency companies yet about what products or services SEC considers securities.⁴³

NALs do, however, have drawbacks. For one, because they are based on a specific set of facts, NALs often are very narrow in effect. Firms other than the applicants, with slightly different circumstances, may fall outside the bounds of the original NAL. Moreover, because there are often no hard-and-fast rules for when and how NALs are issued, they can become subject to regulatory capture. It is therefore important for agencies to be transparent about their processes for creating NALs. Finally, in complex regulatory systems such as in the United States, no-action letters can fail to provide relief from regulators with competing missions. For example, while CFPB may issue a no-action letter for a financial service, that same service may be subject to enforcement actions from SEC.⁴⁴ When this occurs, the issuing agency should intervene and forcefully defend the relief it is promising from other federal and state actors. Otherwise, industry partners will lose confidence in the process.

Sandboxes

Another form of regulatory relief that enables experimentation is called a "regulatory sandbox," which is a formal regulatory program that allows market participants to test new financial services or business models with real customers in a confined environment under the watchful eye of regulators. In a regulatory sandbox, companies sign up for data-sharing agreements, thereby enabling the regulators to work together with industry to allow for more innovative solutions to come to market. To mitigate any dangers that could result from a sandbox, regulators have the ability to revoke these safe-harbor agreements in the event a recipient has demonstrated failure to comply in good faith with the terms and conditions, or a company has caused material, tangible harm to its consumers. Sandboxes are becoming increasingly popular around the world, with over 31 countries already having operationalized one.⁴⁵

There are three types of sandboxes. ⁴⁶ First, product-testing sandboxes provide no-action relief, subject to formal licensing by the agency, to companies while they live test their services. Participants benefit by getting feedback from regulators and consumers about their product, thereby enabling them to refine it before official launch. Regulators benefit by getting more data about innovative services and the stresses they put on the financial system. If regulators approve of a test, then the financial service is allowed to launch into the marketplace under the existing or modified license. This approach is most popular around the world. For example, the United Kingdom's FCA launched its regulatory sandbox in 2016, and has enabled 29 firms to test whether their financial applications were viable. ⁴⁷ Similarly, In the United States, Arizona has launched its own regulatory sandbox effort. ⁴⁸ CFPB has also created its own product sandbox. ⁴⁹

Second, some regulators use policy-testing sandboxes to better understand how regulations impact new financial products and services. The most prominent example of this approach comes from Singapore. The Monetary Authority of Singapore describes its sandbox as "a

mechanism for evaluating whether particular rules or regulations should be changed based on specific use cases." ⁵⁰ Using this method, regulators can revise or strengthen mature rules and policies. The 2016 Singapore sandbox experiment was so successful, the financial authority launched a second iteration with fast-track approval. ⁵¹

Finally, some regulators around the world have launched multi-jurisdictional sandboxes to promote cross-border regulatory harmonization and coordination. For example, GFIN announced a cross-border global sandbox in January 2019 that allows firms to simultaneously trial new technologies in multiple jurisdiction. Security in November 2018, the ASEAN Financial Innovation Network (AFIN), a coalition of several financial regulators from Asian countries and the World Bank's International Finance Corporation, launched the API Exchange (APIX), an online marketplace for sharing application programming interfaces (APIs) from different fintechs. This regional sandbox promises to promote fintech companies and financial institutions in emerging markets in the ASEAN region.

While there are many benefits for participants and regulators, sandboxes do have limitations. First, while sandboxes can be very beneficial in helping regulators understand how a technology may impact financial markets, this understanding is limited. By its very nature, products in a sandbox are limited in scale. When widely deployed, a product that performs admirably for a limited number of consumers may produce instability. Moreover, U.S. regulators should approach products tested in regulatory sandboxes that have been approved by non-U.S. regulators, especially in emerging jurisdictions, with caution. While regulators in like-minded countries, such as in Europe, may subject products to rigorous criteria and risk-testing, other jurisdictions may use these processes to disreputable ends.⁵⁴ Indeed, sandboxes are popular, with versions popping up in Russia, Indonesia, Kuwait, Bahrain, and Sierra Leone.⁵⁵ One only need look to tax havens such as the Cayman Islands to see how international financial regulations can be abused. Finally, regulators may have to defend the regulatory relief they provide participants, like they do NALs, from other regulators working at cross-purposes.

Alternative Supervision

The administrative tools in this category promote financial innovation by moving and sharing supervision between regulators and other entities. Some of these tools involve moving a financial services company into the supervision of a single entity, thereby protecting it from an otherwise complex and conflicting regulatory environment. Other tools bring emerging fintech companies that are not regulated, such as traditional financial services companies, into regulatory parity with them through partnerships. Finally, self-regulation allows industries, especially those with no specific guiding laws, to set rules and enforce them under the supervision of traditional regulators.

Bank Charters

To allow banking companies to participate in banking activities, U.S. regulators give those banks a charter, which specifies the rights of that banking instruction and, when issued by a federal regulator, allows companies to offer services without having to comply with certain state rules. The federal banking system has experienced tremendous innovation with improved banking services from both traditional entities and emerging fintechs. To keep up with the pace of change, banking regulators are starting to create new bank charters and repurpose older charters for financial institutions that are not usually the recipients of such charters.

First, in a 2016 attempt to bring nonbank fintech firms into the national bank regulatory system, OCC created an entirely new "special purpose charter." This charter would enable fintech companies to bypass complex state rules to offer services nationwide, supervised exclusively by OCC. Because these firms are regulated like similarly situated national banks, they must make capital, liquidity, and financial inclusion commitments as is appropriate, as well as submit contingency plans to address financial stress. In July 2018, OCC officially began accepting applications for this program. Unfortunately, the charter's rules have been tied up in lawsuits from state regulators since they were announced. As a result, there have been no fintech charters issued to date, as judges have blocked the regulator's issuance of any more.

While efforts to create new charters have stalled, some regulators have applied traditional banking charters to new institutions. This process is referred to as "de novo" charters, whereby those institutions can offer banking services. For example, in 2017, the Swedish Financial Supervisory Authority granted a full banking license to a payments start-up called Klarna.⁵⁹ In the United States, the de novo process can be very difficult—and the number of banks entering the market, especially since the Great Recession, has remained low. From 2009 to 2013, only 7 new banks received charters from the federal government; and 2013 to 2017 saw the addition of only 5 more.⁶⁰ However, the Federal Deposit Insurance Corporation (FDIC)—a federal agency charged with providing deposit insurance for U.S. financial institutions—saw an upticks in recent years in de novo applications of all types.⁶¹ To ease the application process, in 2017, FDIC published a "Handbook for Organizers of De Novo Institutions" and an updated "Deposit Insurance Applications Procedure Manual."⁶²

Many of these de novo charters come from the states. Some state regulators offer charters to create industrial loan companies (ILCs) that enable companies to offer FDIC-insured deposits. Only seven states offer ILC charters. While most ILCs are owned by leading national financial services firms, such as Morgan Stanley and Goldman Sachs, some are owned by nonfinancial companies. Indeed, if commercial companies want to own a financial institution, their only option is to obtain an ILC charter. For example, many firms in the automobile industry own ILCs. Other nonbank companies have applied for ILCs in the past, to poor results. For example, Walmart attempted to get an ILC in 2006, but withdrew its applications after years of political backlash from banks and politicians that were worried the retailer would offer banking services that competed with small banks—even though there is clear evidence that, on average, larger banks are more efficient and productive than smaller ones. In recent years, fintech companies have increasingly sought these charters to offer banking services. For example, the payment company Square has applied for an ILC.

For innovators, these charters are opportunities to ease the regulatory burden of nonbank entities launching financial products across the United States. Differing state licensing regimes increase costs significantly. National rules minimize transaction costs for businesses, the benefits of which are passed along to users. ⁶⁹ National rules also encourage economies of scale, whereby firms' costs of providing services tend to fall with each additional customer. Moreover, national rules increase efficiency in the policymaking process. When 50 different states make laws on the same topics, stakeholders must engage in the same policy debates in multiple forums. This creates an enormous amount of waste and leads to suboptimal outcomes, especially for less-well-funded stakeholders that may not have the resources to participate in every state.

There are several concerns policymakers will need to address in order to maximize the potential benefits of bank charter innovation. First, in some cases, providing charters to nonbanks risks lowering protections for consumers by exempting these companies from rules that apply to other financial services. For example, some worry the ILC process could create a "parallel banking" system" that lowers protections and standards for ILCs compared with traditional banks. 70 While policymakers should not regulate all new fintech applications as they would traditional financial goods and services, they should seek to create parity between market entrants and incumbents.⁷¹ However, lowering barriers, such as by exempting businesses from state rules in favor of federal ones, does not in-and-of itself generate disparity. Second, some worry about conflicts of interest for nonbank entities offering loans. For example, a commercially owned financial institution could grant loans to its affiliates at below-market terms, resulting in distortions in the creditgranting process. Regulators, such as FDIC and OCC, should monitor firms' behavior and stop unfair actions. Finally, there are concerns regarding new charters potentially limiting competition. In reality, charters promote fair competition by encouraging new entrants, such as fintech firms and other commercial entities, to offer alternative financial services to traditional banks. 72 Moreover, given that, on average, larger banks are more productive than smaller ones, new entrants becoming big and thereby reducing smaller banks' market share is likely to boost productivity and consumer welfare.⁷³

Third-Party Supervision

Often, banks work with fintech companies to offer a new product or service. Some companies partner with banks to offer services directly to consumers, such as payment services, wealth management, and mortgages, while others act as third-party providers to banks. These arrangements benefit fintechs through access to new markets, enhanced risk management, and oversight; and benefit banks with technical expertise and economies of scale they could not achieve on their own.

To ensure oversight of both these partnerships and the third-party providers, financial regulatory regimes around the world approach third-party supervision in two different ways. ⁷⁴ In one method, bank supervisors have the authority to directly supervise third-party service providers or activities provided by third-party service providers to banks. ⁷⁵ This system allows regulators to help control the effects of nonbank innovations by applying the same scrutiny to them as to bank products. This approach is popular among many national regulators, including the banking supervisors in Luxembourg and Saudi Arabia, as well as OCC, FDIC, and the Federal Reserve in the United States. ⁷⁶ In January 2017, for example, OCC revised guidance for banks, requiring them to implement third-party supervision of their partnerships with marketplace lenders, subjecting them to the same risk-management standards as their bank partners. ⁷⁷ In the other approach, bank supervisors gain access to third parties through the contracts they signed with supervised banks. ⁷⁸ This method is more common among international bank supervisors. ⁷⁹

Third-party supervision is beneficial because it levels the playing field between bank and nonbank services. Traditional financial companies, such as banks, tend to have a higher regulatory burden, and are the focus of many different national and subnational regulatory agencies. In contrast, entrants and start-ups tend to have less of a regulatory spotlight on them. For example, the lenders Prosper and Lending Circle are able to operate under U.S. financial regulations more easily than banks, which have been saddled with more restrictions since the

2008 financial crisis. 80 Third-party supervision can help generate parity and improve risk management for nonbanks.

However, while many banks believe partnering with fintech companies is the best strategy for innovation, many fintech companies do not want to partner with those legacy institutions. ⁸¹ Moreover, concerns that nonbank providers increase risks to the financial system, both in terms of consumer protection and financial stability, have pushed many regulators to halt banks from partnering with nonbanks. In the early 2000s, banking regulators cracked down on these types of relationships between banks and payday lenders, attempting to stop the latter from circumventing state rules. ⁸² This created a de facto moratorium on these partnerships for the subsequent decade. ⁸³ In 2018, OCC reversed course on this approach, lifting the prohibition on payday lending partnerships with national banks. ⁸⁴ This portends the likelihood of more third-party supervision of nonbanks in the future.

Self-Regulation

The U.S. government also frequently allows industries with no specific guiding laws to self-regulate. Examples include higher education, fashion, advertising, mining, and marine fishing. Self-regulation is "a regulatory process whereby an industry-level organization (such as a trade association or professional society), as opposed to a governmental- or firm-level organization, sets and enforces rules and standards relating to the conduct of firms in the industry." Whereas standard regulations may be rigid, self-regulation benefits the economy by creating a more flexible regulatory environment than is typically found with government regulation. Industry experts review current activities, identify best practices, and develop them into industry guidelines. These processes can also eliminate conflicts of interest, jurisdictional conflicts, and legal limitations. Self-regulation industry guidelines.

Many self-regulatory activities occur through self-regulatory organizations (SROs). SROs are the nongovernmental organizations formed by the financial sector to set standards, monitor for compliance, and enforce rules. Most financial SROs operate with government endorsement. For example, the Financial Industry Regulatory Authority (FINRA) is an SRO that regulates the securities industry in the United States with oversight from SEC.⁸⁷ Governments around the world have looked to SROs for emerging fintech companies and changing business models. Take, for example, blockchain-based applications. The Japan Virtual Currency Exchange Association, an SRO established in 2014, is authorized to develop regulations and oversee registration for the cryptocurrency-trading services in Japan.⁸⁸

Industry and government jointly administer the self-regulatory process by providing oversight of industry standards or SROs and enforcing penalties for violations. In addition, the United States has other forms of "soft law," such as government-issued recommendations, principles, and codes of conduct that create a nonbinding regulatory framework. For example, through its "unfair or deceptive acts" enforcement, the FTC brings enforcement actions against any entity that has not kept the promises it made to consumers in its stated privacy or cybersecurity policies. ⁸⁹ Similarly, if a securities company's employees do not follow FINRA's code of conduct, that company could be subject to a penalty from SEC. ⁹⁰

Opponents of self-regulation may incorrectly assume it is necessarily "weaker" than state regulation, either because it has less stringent rules or it ineffectively enforces its rules. This assumption is often incorrect. First, SROs can be effective self-policing organizations,

particularly when the institutions are designed to eliminate conflicts of interest. Businesses provide a high degree of oversight because they regularly monitor the activities of their competitors and have an incentive to report violations. Moreover, SROs can be more efficient and effective than government agencies at making rules. When businesses come together to develop rules, those involved are likely to have a higher degree of technical and industry expertise than government regulators. And self-regulation benefits government and taxpayers by reducing costs placed on regulators. Federal rulemaking can be a resource-intensive process—and SROs may have more resources than do agencies. Finally, the criticism that self-regulation is weaker implies regulation can be measured on a sliding scale, with more stringent rules always leading to better outcomes. This interpretation fails to account for the real trade-off between costs and the protection of other public goals, including innovation.

Certainly, there are also legal and economic limitations of self-regulation. For example, some actions of SROs have raised antitrust concerns in the past when their activities became anticompetitive and limited new entrants. SROs can also generate "free riders"—individual businesses that do not participate yet receive the same benefits. To be effective, an SRO may set rules for an industry, including for firms that do not participate in the SRO. Bad actors that want to avoid the rules of the SRO will also stay outside the system. Such a system is unfair to duespaying businesses. Therefore, in instances without additional government oversight, self-regulation may be an inadequate choice.

Regtech

Due to the highly regulated nature of the financial sector—especially in the aftermath of the financial crisis—financial services companies have seen their compliance costs steadily rise over the last decade due to enhanced regulatory scrutiny. ⁹³ Unlike the other initiatives discussed in this report that help regulators coordinate with the private sector—or actually regulate—regtech (the portmanteau of "regulation" and "technology") focuses on how to monitor, report, and enforce compliance of those activities. There are two primary types of regtech. ⁹⁴ First, compliance technology helps firms reduce compliance costs and manage risks. Second, supervisory technology helps firms and regulators monitor their activities. Regtech applications not only benefit fintech firms by lowering costs, increasing transparency, and allowing them to self-monitor, it helps regulators quickly respond to market developments and improve their supervision of financial products.

Although regtech adoption among regulators is in its early stages, there are many examples from both emerging and developing economies that show its effectiveness. In the United Kingdom, FCA has both launched investigations into how firms can better submit regulatory returns using regtech, and enabled machine-readable regulations. FCA has also launched "TechSprints" to develop proof-of-concepts for better regulation through regtech. Similarly, regulators in Singapore and India have, with varying levels of success, trialed regtech solutions for electronic know-your-customer compliance. In the United States, the Treasury Department released a report encouraging regulators to adopt regtech and calling for "regulators to appropriately tailor regulations to ensure innovative technology companies providing tools to regulated financial services companies can continue to drive technological efficiencies and cost reductions."

Policymakers should support the use and adoption of regtech, not just for financial services, but also for a wide range of other industries under intense scrutiny, such as sectors with

environmental reporting requirements. ⁹⁹ Regulators should partner with financial institutions offering regtech applications to support these services by removing inconsistencies of interpretation and updating obsolete reporting portals to improve reporting efficiency. For example, regulators could provide APIs or use blockchain technology to share information, such as suspicious transactions and mandatory reports. ¹⁰⁰ Finally, policymakers should encourage financial regulators and fintech companies to develop open-source platforms for financial regulation, wherein the system can stream machine-readable reporting data directly to the regulator. This type of system would allow third parties to create apps for analytics and visualization of that data, thereby improving transparency in the system. ¹⁰¹

CONCLUSION

Fintech can increase financial inclusion, improve consumer financial services, and boost financial-sector productivity—but only if regulators strike the right balance between regulation and innovation. Regulators around the world have, through stakeholder engagement, coordination, alternative supervision, and regtech—and by facilitating experimentation—taken steps to promote financial innovation. While U.S. regulators have also taken some of these steps to promote innovation, overall, U.S. regulation lags behind many of the leading nations, primarily due to a lack of harmonized rules across federal and state regulators. State barriers in particular have stymied efforts to promote streamlined rules that could enable innovative financial services at scale.

Given the financial-services sector is already highly regulated, a hands-off approach is not enough—policymakers will need to actively support fintech innovation, such as through creating more flexible regulations, for fintech transformation to occur in a timely manner. For example, the Treasury Department could take a more active role in encouraging flexible financial regulations and coordinating agencies with different missions. Congress and the states should work to create a consistent national framework for fintech applications in areas such as payments and insurance. Bank regulators can enforce models of alternative supervision in order to bring more entities into the banking system. And every financial regulator can promote stakeholder engagement and regtech applications in order to encourage innovation in the marketplace while maintaining compliance.

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