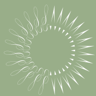
A report from  THE PEW CHARITABLE TRUSTS | Aug 2018

How Can Regulators Promote Financial Innovation While Also Protecting Consumers?

International lessons should inform the U.S. approach

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The Pew Charitable Trusts is driven by the power of knowledge to solve today's most challenging problems. Pew applies a rigorous, analytical approach to improve public policy, inform the public, and invigorate civic life.

Overview

Innovation changes the way consumers access, borrow, and transfer money. Checks, ATMs, and debit cards are examples of technologies and products that changed people's use of funds. Today, innovations such as mobile banking and payment apps (sometimes referred to as financial technologies, or fintech) are attracting attention from consumers, investors, service providers, and regulators.[1] However, these technologies—whether new ways to deposit old instruments, such as checks, or novel tools like mobile banking apps—can expose regulatory gaps, ambiguities, and duplication.[2] Recent research demonstrates the difficulties regulators around the globe face in addressing innovations in the financial system, especially emerging mobile payments and banking platforms.[3]

One key challenge policymakers contend with is the need to manage sometimes conflicting priorities such as market growth, competition, and safety in the financial system. Striking that balance may involve altering mature regulatory structures, defining how nontraditional financial service providers—such as technology companies and retailers—fit within these structures; creating agencies, licenses, or rules to oversee innovation; or fostering desirable financial services. And which approaches regulators choose can have substantial effects on people's financial well-being. Although innovation is fundamentally a neutral force, its consequences can be clearly positive, facilitating consumer transactions, as the ATM did starting in the 1960s,[4] or markedly negative, such as when novel forms of mortgage-backed securities helped cause the Great Recession. Effective regulation can promote positive outcomes and maintain a healthy, safe financial market.

The Pew Charitable Trusts examined the regulatory approaches taken by several governments with a notable interest in financial technology—Australia, the European Union, Malaysia, Singapore, South Korea, Thailand, Abu Dhabi, the United Kingdom, and the United States[5]—and found that:

- International and U.S. regulators approach emerging business practices, products, and services in three distinct but complementary ways:
  - Creating outreach programs to bring together regulators and market participants to clarify how innovation fits into the existing regulatory framework.
  - Changing the regulatory framework to encompass new products, practices, and providers.
  - Suspending regulatory barriers to encourage innovation.
- Although regulators worldwide have generally adopted common strategies for outreach and regulatory modification, some U.S. policies to promote innovation have diverged from international practices. International authorities have coordinated national strategies to encourage development of specific, desirable types of products and services by reducing regulatory burdens while also prioritizing near- and long-term consumer protections. In contrast, U.S. efforts to foster innovation are fragmented, characterized by a patchwork of state and federal initiatives that lack a common organizing strategy, exposing markets to regulatory uncertainty and consumers to potentially harmful products and services without adequate protections.

Innovation can spur growth and competition in financial markets and provide new and better options for customers. But without careful, balanced regulation, it can also present serious risks to consumers. International examples show that regulators can encourage innovation in a manner that promotes a safe and efficient marketplace, and this study looks closely at those models and how they might help the U.S. do more to advance creative solutions that make transactions easier, faster, and safer for American consumers.

How regulators respond to innovation

Innovation is a constant, often disruptive, but fundamentally neutral force within the financial system. It can expand financial options and improve lives, but it can also lead to significant harm for consumers, especially because market participants are frequently uncertain about how consumer protections and other rules apply to new products and services. Regulators, who operate under a legal mandate to set and enforce rules for market compliance, must balance such priorities as market growth, transparency, competition, stability, and safety to minimize turbulence and risk, while enabling needed advancements.

Historically, product and regulatory innovation have gone hand in hand. In ancient Mesopotamia, growers stored grain and other commodities in temples,[6] which would lend the excess to other customers, just as modern banks use consumer deposits to fund loans. Records of the temple deposits and withdrawals were etched onto clay tablets—innovative receipts that made commerce more efficient by enabling a claim to property but that worked only because a legal system, Hammurabi's Code, emerged to protect depositors' property, set interest rates for the loans, and address unfair practices that harmed borrowers.[7]

Almost four millennia later, regulators still wrestle with how to respond to financial innovation in a way that encourages commerce and protects market participants. For example, consumers began using credit cards in the 1950s,[8] and in 1968 Congress passed the Truth in Lending Act to promote informed use of consumer credit products by requiring disclosures about their terms and costs.[9] Similarly, in the 1970s, consumers began using electronic payments, such as bank cards, in place of traditional cash and check transactions, and Congress passed the 1978 Electronic Fund Transfer Act to establish standards and protections for that emerging market.[10]

Today, new business practices in the global financial system cut across sectors, incorporating technologies from industries as diverse as telecommunications, retail, and e-commerce. For instance, a growing number of consumers are using services such as PayPal via their smartphones, and technology companies, including Apple, Samsung, and Facebook, have begun offering payment services through their mobile platforms; Walmart has joined with Green Dot Bank to offer financial services to its customers, including check depositing, prepaid cards, and mobile banking.

From 2015 through 2016, investors poured nearly $40 billion into U.S.-based financial technology companies, and experts expect that market to grow rapidly in the next few years.[11] The emergence and proliferation of these nonbank companies in the financial services marketplace present new challenges for regulators that are only starting to be understood and addressed.

Coordinating regulatory efforts

Although each country's approach varies, regulatory frameworks for new financial services abroad tend be more centralized than those in the U.S. For instance, some countries have articulated clear reasons for encouraging certain types of financial innovation, such as establishing their financial systems as global hubs for technology, enhancing market infrastructure, facilitating regulatory compliance, and improving consumer outcomes. These goals provide a basis for a nationwide strategy regarding emerging products, and the actions taken to achieve these goals are often coordinated across government agencies in accordance with that strategy. For example:

In April 2015, Hong Kong's government established a steering group to advise it on how to develop and promote the region as an Asian financial technology hub. The group, chaired by the secretary of finance and treasury, includes representatives from all relevant regulatory agencies and industry.[12] In 2016, Hong Kong's central bank

established the Fintech Facilitation Office to help coordinate outreach between stakeholders and regulators, conduct research on financial technology, and serve as a resource for industry.[13]

Singapore's central bank established a Fintech and Innovation Group in May 2015 to develop policies that facilitate technology in the financial sector.[14] The following year, the group created a FinTech Office to align financial technology programs across the government and propose cross-agency strategies and policies that could position Singapore as a hub for innovation.[15]

In March 2016, Australia's Treasury Department organized a governmentwide plan to promote financial technology as a competitive advantage, diversify the country's economy, and encourage investment in new technologies.[16] The government coordinated the efforts of the treasury, central bank, attorney general, and key financial regulators to set national priorities for innovation in the financial system.

U.S. Regulatory Structure

The U.S. response to financial innovation is complicated by the nation's dual regulatory system that governs most traditional and nonbank financial services:

- Banks are chartered either nationally or at the state level. The federal Office of the Comptroller of the Currency (OCC) charters, supervises, and regulates national banks. All other banks are chartered, supervised, and regulated by state agencies and are subject to additional supervision and regulation by the Federal Deposit Insurance Corp. (FDIC) or the Federal Reserve.*
- Credit unions may be chartered and supervised federally by the National Credit Union Administration or at the state level by a regulatory agency.
- The federal Consumer Financial Protection Bureau (CFPB) and states have joint regulatory authority over certain financial products, such as payday loans and prepaid cards. Prior Pew research evaluated state regulatory frameworks for payday loans, which are also subject to some federal oversight by the CFPB and Federal Trade Commission (FTC).†
- States are the primary regulators of insurance companies, although the Federal Insurance Office, created under the Dodd-Frank Wall Street Reform and Consumer Protection Act, also provides some oversight to the sector.‡
- The Securities and Exchange Commission (SEC) and Commodity Futures Trading Commission regulate securities and commodities, respectively, at the federal level, and state administrators oversee relevant state-level activity.
- States license and regulate money transmitters, which provide money transfer services to consumers, as well as consumer finance companies, payday lenders, check cashers, debt collectors, mortgage companies, and loan originators. These providers are also regulated by the FTC and CFPB at the federal level.

Many new innovations, however, do not fit easily into this regime. For example, some nonbank institutions, such as Starbucks and PayPal, have begun offering services like those available at banks by allowing consumers to store funds and conduct transactions through an app on their mobile devices. In addition, some innovations cross regulatory lines. For instance, eight federal and 50 state financial regulators have jurisdiction over mobile payments (see Figure 1) because a transaction may involve banks, credit unions, nonbank financial services providers, consumer products manufacturers, and communications companies, among others.§

* All insured institutions are subject to supervision by the FDIC.

† The Pew Charitable Trusts, "State Payday Loan Regulation and Usage Rates" (January 2014), http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/state-payday-loan-regulation-and-usage-rates.

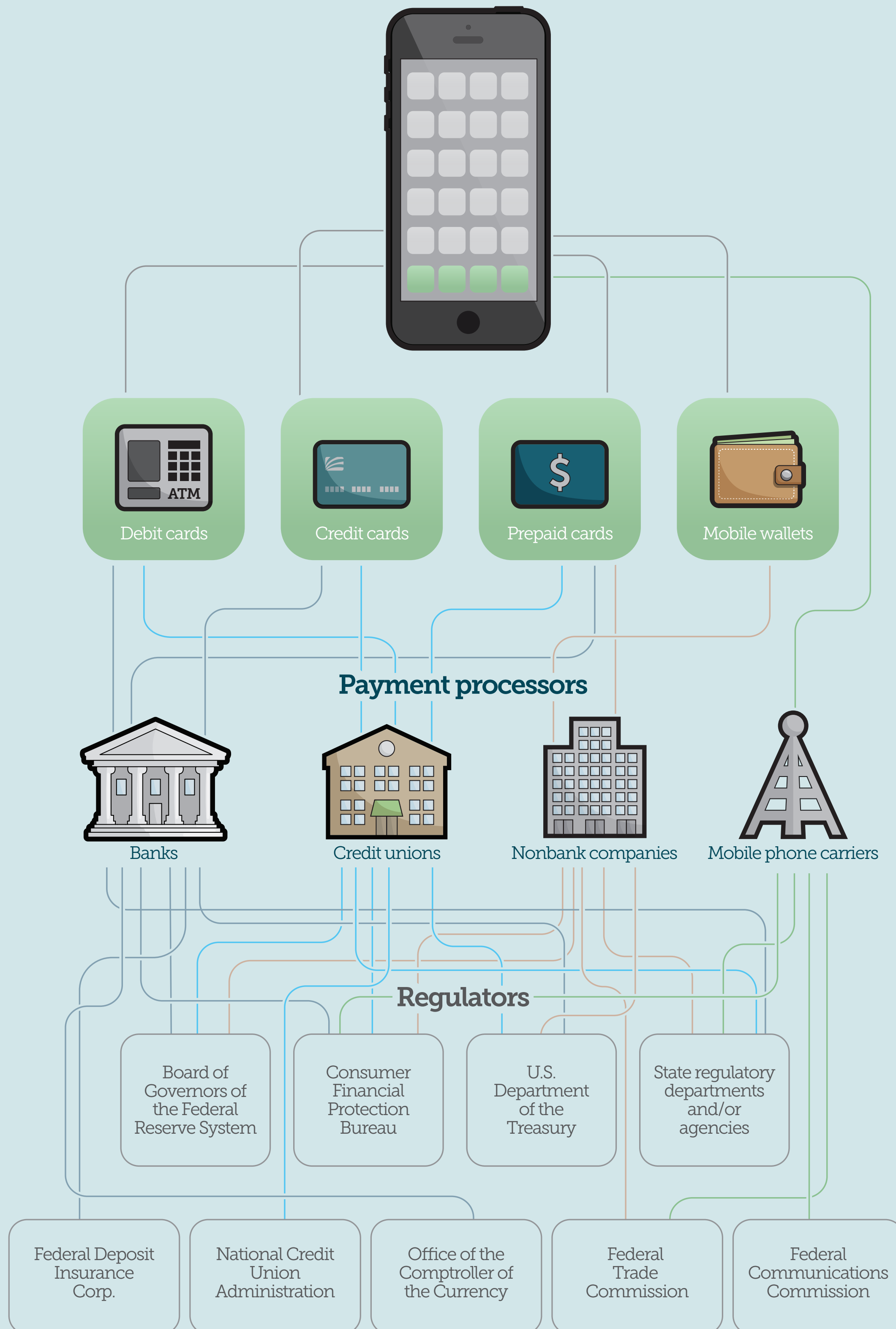
‡ U.S. Department of the Treasury, "Domestic Finance: Federal Insurance Office," last modified June 17, 2013, https://www.treasury.gov/about/organizational-structure/offices/Pages/Federal-Insurance.aspx.

§ The Pew Charitable Trusts, "Mobile Payments: Regulatory Gaps, Ambiguities, and Overlap" (February 2016), http://www.pewtrusts.org/~/media/assets/2016/02/mobile-payments-infographic_artfinal.pdf?la=en.

Figure 1

How Mobile Payments Are Regulated in the U.S.

Complexity can create uncertainty for industry, risk for consumers



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The regulatory landscape is vast and varied, but this analysis found that approaches to new types of financial services can generally be broken into three categories:

- Outreach to market participants to improve communication and understanding.
- Amendment of the regulatory framework to encompass emerging products, practices, and providers.
- Suspension of regulatory barriers to encourage innovation.

However, within these broad approaches, policies and strategies vary across jurisdictions. Although the countries selected for this analysis are not the only ones with a regulatory interest in financial technologies, their regulatory efforts were publicly available and allowed for comparisons. Together, they provide a general picture of international and domestic regulatory actions with respect to select innovations, especially those of interest to bank regulators.

Outreach

One way regulators around the world have responded to innovation is by engaging with stakeholders to clarify the impact that emerging products are likely to have on consumers and the regulatory framework. Among the strategies regulators use to communicate with stakeholders is creating offices that serve as a point of contact for industry; issuing requests for comment on papers that examine emerging issues; and participating in or hosting convenings, forums, and other industry or consumer events. Some examples follow.

United Kingdom

Financial technology is one of the fastest-growing markets in the country. In 2014, U.K. Trade and Investment, the nation's trade policy authority, commissioned an independent analysis, which estimated the U.K. fintech market at almost $30 billion.[17] According to PitchBook Data, a financial data and analysis company, financial technology was the leading sector for venture capital in the U.K. in 2017, attracting almost $2 billion in investment.[18]

Another regulator, the U.K. Financial Conduct Authority (FCA), found that a wave of innovation was applying digital technology to financial services and sought to better understand the relevant issues and challenges. The agency issued a call for input on the development of a financial innovation hub, which included communication with stakeholders as a specific agency objective.[19] To achieve this goal, the FCA created new offices to work with market participants, developed channels to facilitate communication between industry and government, and issued requests for input to learn from industry about market developments.

Project Innovate

In October 2014, the FCA launched Project Innovate and the Innovation Hub to foster competition and growth in financial services by helping firms with new products understand and navigate the regulatory framework and apply for a business license.[20] In June 2015, Project Innovate called for information on barriers to innovation in digital and mobile solutions at the U.K. and European Union level.[21] The FCA found that industry was most concerned about rules relevant to consumer communications, anti-money laundering due diligence, payments systems, data storage and protection, financial advice, and the FCA's approach to technology.[22]

Today, Project Innovate operates primarily in London but has also begun engaging businesses in regional hubs, such as Manchester, England, and Glasgow, Scotland.[23] As of April 2017, it had assisted over 350 firms, 40 of

which have started the authorization process.[24] The project has also created "regulatory surgery" sessions to allow firms time to address specific regulatory issues, questions, or concerns.[25]

Payment Systems Regulator

In April 2015, the U.K. established the Payment Systems Regulator (PSR) to oversee the payment systems industry. Similar to the FCA's engagement, the PSR created the Payments Strategy Forum in October 2015 to give industry and users an opportunity to contribute to the policy discussions. The forum engages with a broad group of stakeholders by hosting roundtable discussions, events, and individual meetings with consumers, service providers, major financial regulators, and anyone interested in payment issues, regardless of membership in the forum.[26]

> So it should be clear now that the FCA not only believes in the ability of innovative technologies to widen consumers' access to financial services, but also that we're giving practical support to firms developing these models."
>
> —Christopher Woolard, U.K. Financial Conduct Authority board member and director of strategy and competition, June 17, 2016

Australia

The Australian government identified financial innovation as a potential lever to help it develop a more globally competitive financial sector. With that in mind, several regulators created outreach programs to engage with stakeholders about how to boost exports of financial services.[27]

ASIC Innovation Hub

One of the more notable outreach programs is the Australian Securities and Investments Commission's (ASIC's) Innovation Hub, which allows businesses to request informal guidance from ASIC on the licensing process, key regulatory issues, and possible waivers from licensing and authorization requirements.[28] Hub staff members also host and attend industry events to facilitate interaction with companies and provide them with a designated government contact who can guide them through the regulatory process.

In addition to the hub, ASIC established the Digital Finance Advisory Committee to encourage collaboration between its staff and members of financial services and technology communities, academia, and consumer groups.[29]

United States

U.S. bank regulators are also using outreach strategies to address the growth of financial service offerings from nonbank firms. The programs bring together regulators and industry participants to exchange information about new products and practices.

Federal Reserve task forces and outreach programs

The Fed convenes industry working groups, task forces, and outreach programs to establish standards, and a regulatory point of contact for emerging financial products and services. For example, in 2017, the agency's Faster

Payments Task Force, which included more than 300 stakeholders, established a governance framework and made recommendations for the development of a real-time payments system that could support broad adoption and ensure safety, integrity, trust, and cross-border functionality.[30] Additionally, the Federal Reserve Bank of San Francisco launched Fintech Navigate in May 2017 as a point of contact for financial technology firms and banks that want to better understand the regulatory framework around their business models.[31] Program staff host office hours twice a month.

Lab CFTC

In 2017, the federal Commodity Futures Trading Commission established Lab CFTC, a program to support engagement between the commission and industry participants looking to create products that may benefit consumers in the commodities marketplace, such as farmers and ranchers.[32] The program has two components:

- GuidePoint supports communication between companies and the CFTC about regulations and how to bring products to market.
- CFTC 2.0 provides a networking service to foster collaboration among industry participants.

OCC Innovation Office

In March 2016, the OCC outlined its approach to "responsible innovation in the federal banking system," including plans for an Office of Innovation (which opened in early 2017) to serve as the primary point of contact for financial services companies on issues relating to new technologies and to monitor and research trends.

The OCC also serves as a technical assistance hub, developing educational materials for banks and conducting regular meetings with innovators.[33] It named its first chief innovation officer in May 2017[34] and is holding Innovation Office hours around the country to give national banks, federal savings associations, and financial technology companies one-on-one time to discuss the agency's approach to regulating innovation.[35]

CFPB principles of data sharing and aggregation

Financial innovations such as bill payment, fraud screening, and personal finance tools can help people make smarter decisions, but consumer-authorized data sharing offers significant consumer protection challenges. To shore up safeguards around data privacy and security as technologies and business practices develop, the CFPB released a set of nonbinding principles in October 2017,[36] which falls short of regulation or supervisory enforcement but still communicates to industry the bureau's interest in ensuring that consumers are protected within this emerging market.

Regulatory amendment

The global financial crisis compelled many financial regulators to enhance their frameworks to better balance regulation and development in the financial services sector. In recent years, some countries have expanded their agencies' authority to cope with technological advances by writing regulations, simplifying complex rules, issuing special charters, and increasing supervision of firms that partner with banks, among other measures.

European Union

Worldwide, e-commerce transactions such as purchases made online using a computer or mobile phone grew considerably over the past two decades; the European market's estimated value in 2017 was around $685

billion.[37] By comparison, the U.S. market exceeds $450 billion.[38] In 2011, the European Central Bank estimated that payments accounted for about 25 percent of total bank revenue in the EU.[39] Acknowledging the important role of technology in the payments system, the EU has taken steps to incorporate innovations into its regulatory framework and strengthen protections for consumers.

European financial regulation employs a single-market concept, meaning that the regulatory frameworks in EU member countries are similar enough that financial institutions face a consistent regime across borders. Additionally, companies that are authorized to operate in one country can "passport," or transfer, their authorization to do business in other EU member countries. To facilitate unionwide regulations, the EU issues directives, which member nations transpose into national law:

- The 2009 E-Money Directive established a set of rules for the business and supervision of electronic money that lowers capital requirements, providing market access to new companies and encouraging competition by bringing the regulatory regime for these services in line with the requirements for other payments institutions.[40]
- In 2015, the EU updated its Payment Services Directive, which governs the payments system among member countries, to further integrate electronic transactions into the existing framework by establishing strict security requirements for e-payments, mandating the protection of consumer data and transparency of requirements for payments services, and setting the rights and obligations of users and providers.[41] The update also amended the universe of institutions eligible to participate in the system.[42]
- The General Data Protection Regulation, adopted in 2016, updated data privacy rules first set in 1995.[43] The regulation expanded the scope of data privacy to cover any company that processes personal data for EU residents and strengthened the conditions for consumer consent, mandating that requests for information be issued in clear and easily accessible form. The rule also made breach notifications mandatory and gave consumers the right to access their data, have it erased, or shift it to another processor.

'Where Will This Innovation Take Us?'

Sabine Lautenschläger, a member of the European Central Bank's executive board, discussed the future of banking at the institution's Fintech Workshop in Frankfurt, Germany, on March 27, 2017:

> "The question is: Where will this innovation take us? Is it the end of banking as we know it? Will it create new risks? As I said before, it is hard to guess how innovations will evolve and easy to get it wrong. That said, let us take a very brief look at some potential futures:
>
> "Scenario 1: Banks might embrace the digital trend and team up with fintechs. For banks this would be one of the more benign outcomes. And it seems to be happening right now.

Continued on next page

"Scenario 2: Fintechs might break up the value chain of banking. Banks would end up losing revenue, market share, and direct contact with clients. The result might be a more fragmented market where some players operate outside the scope of regulation and supervision.

"Scenario 3: Banks might still end up being crowded out. At the same time, however, the fintechs could be swallowed up by big tech companies such as Google, Amazon, and Facebook. The market would become more concentrated, less competitive, and less diversified.

"Whichever direction we are headed, there is one thing we supervisors worry about: increasing or unidentified risk. And there are indeed some risks that have become more apparent now that fintechs have entered the scene."

South Korea

Mobile payments technologies evolved in South Korea in part as a response to the needs of the underbanked: Many young people, who as a group have high rates of mobile device adoption, have limited access to credit and few ways to conduct electronic transactions.[44] This population was the first to subscribe in large numbers to mobile payment services, which provided many consumers with their initial access to financial markets. The Korean government has promoted financial inclusion internationally through its leadership of the Group of 20's Global Partnership for Financial Inclusion Subgroup on Regulation and Standard-Setting Bodies[45] and domestically with two laws giving regulators oversight of mobile payments and establishing consumer protections.[46]

These statutes, the Electronic Financial Transactions Act and the E-Commerce Consumer Protection Act, extend long-standing principles of consumer protection and disclosures to mobile payment systems by:

- Requiring payment service providers to use order forms that enable consumers to change or confirm orders before validation.
- Providing consumers with information about the seller, including dispute resolution mechanisms.
- Protecting consumers' personal information disclosed during the payment process.

These actions demonstrate a concerted effort by European and Korean authorities to expand existing regulatory frameworks to control the impact of technological developments on marketplace behavior.

United States

U.S. regulators have managed the effects of innovation primarily by expanding their own ability to cover nonbank financial services. In general, they have done this by streamlining state licensing and creating federal bank charters, which bring institutions into the existing regulatory framework; and third-party bank supervision, which allows regulators to supervise certain activities of institutions that partner with banks. These efforts broaden the

regulatory reach around emerging products and services—much like how the EU allows firms to transfer their authorizations and how Korea brought mobile payments under its banking regulations.

Nationwide Multistate Licensing System and Registry and Vision 2020

As discussed earlier, individual state regulators have licensing and regulatory responsibility for the banking and nonbank financial systems. Navigating the various regulatory frameworks can be cumbersome—and costly—for firms that work in multiple states.[47] To address this issue and improve state-level oversight of new products and services within the mortgage industry, the Conference of State Bank Supervisors and the American Association of Residential Mortgage Regulators in 2004 launched the Nationwide Multistate Licensing System (NMLS) and Registry. In 2008, the Secure and Fair Enforcement for Mortgage Licensing Act was signed into federal law, expanding and requiring use of the NMLS nationwide, allowing regulators to coordinate and share data, and giving consumers access to information about financial service providers.[48]

More recently, the bank supervisors conference released Vision 2020, which outlines specific goals for redesigning the NMLS, harmonizing multistate regulatory supervision, allowing nonbank institutions to offer financial services, and enhancing state oversight of new products and services.[49]

OCC Fintech Charter

In December 2016, the OCC proposed a "special purpose charter" to bring some nonbank financial technology companies into the bank regulatory system by making them national banks. The charter allows companies in this sector that operate in multiple states to be supervised and regulated exclusively by the OCC instead of by individual states and is intended to enhance consumer outcomes by providing uniform protections across states.

In some cases, however, providing a national charter to nonbank firms may increase consumer harm by exempting the companies from certain state regulations and usury laws.[50] Firms might be able to use the OCC charter to offer services that would otherwise be subject to strict state oversight under more lenient federal standards, potentially placing consumers in jeopardy.[51]

'De Novo' Charters Hint at Regulatory Shift

In addition to creating different charters, regulators can approve traditional charters for new institutions, or "de novo" charters, and thereby allow those institutions to offer banking services. Historically, the creation of banks is highly correlated with economic conditions. Specifically, the number of applications and approvals tends to increase when the economy is growing and decrease during downturns. But in the decade since the recession, this trend has been less prevalent than during past periods of economic expansion, indicating a shift in regulators' priorities away from encouraging traditional bank formation and toward bringing nontraditional financial services into the regulatory framework for banks.

From 2000 to 2007, a period of economic expansion, federal regulators received 1,600 new charter applications and approved 75 percent of them; during the downturn from 2008 to 2010, regulators received only 140 applications and granted just 20 percent.[*] The challenging economic conditions at the time made it difficult for applicants to develop viable business plans, which explains much of the decline in the application and approval rates.[†] But as the economy recovered, the number of banks entering the market remained

Continued on next page

extraordinarily low; only three banks received a charter out of a mere 10 applications, from January 2011 to July 2016.[‡] And although the FDIC has taken some steps to encourage bank formation,[§] efforts by the Office of the Comptroller of the Currency to issue charters to financial technology firms signal a growing interest in bringing innovative services and products into the banking system.

It remains unclear whether regulators will focus strictly on innovative technologies (like mobile phone applications) or also encourage new types of companies to obtain bank charters—such as Walmart, which abandoned a 2007 effort to get a charter after regulators balked but has since joined with Green Dot to offer prepaid debit cards and other retail financial services.[||] What is evident, however, is that the flood of emerging technologies and products into the market is affecting U.S. regulators' interest in traditional banks.

* Martin J. Gruenberg (chairman of the Federal Deposit Insurance Corp.), testimony before the U.S. House Committee on Oversight and Government Reform (July 13, 2016), https://www.fdic.gov/news/news/speeches/spjul1316.html.

† Ibid.

‡ Federal Deposit Insurance Corp., "De Novo Banks: Economic Trends and Supervisory Framework," *Supervisory Insights* 13, no. 1 (2016): 3–8, https://www.fdic.gov/regulations/examinations/supervisory/insights/sisum16/si_summer16.pdf; Robert M. Adams and Jacob P. Gramlich, "Where Are All the New Banks? The Role of Regulatory Burden in New Charter Creation," Federal Reserve Board of Washington (2014), 2, https://www.federalreserve.gov/econresdata/feds/2014/files/2014113pap.pdf; Arnold & Porter Kaye Scholer LLP, "The Reemergence of De Novo Bank Charters," Oct. 4, 2017, https://www.arnoldporter.com/en/perspectives/publications/2017/10/the-reemergence-of-de-novo-bank-charters.

§ Martin J. Gruenberg, chairman of the Federal Deposit Insurance Corp., "Strategies for Long-Term Success" (remarks presented at the FDIC Community Banking Conference, Arlington, VA, April 6, 2016), https://www.fdic.gov/news/news/speeches/spapr0616.html.

|| Sheila C. Bair, chair of the Federal Deposit Insurance Corp., "Decision of Wal-Mart to Withdraw Bank Application," news release, March 16, 2007, https://www.fdic.gov/news/news/press/2007/pr07023.html; Hiroko Tabuchi and Jessica Silver-Greenberg, "Walmart Prepares to Offer Low-Cost Checking Accounts," *The New York Times*, Sept. 23, 2014, https://www.nytimes.com/2014/09/24/business/finding-a-door-into-banking-walmart-to-offer-checking-accounts.html; Walmart Inc., "Walmart Introduces Walmart Pay," news release, Dec. 10, 2015, http://news.walmart.com/news-archive/2015/12/10/walmart-introduces-walmart-pay.

Third-party supervision

Sometimes nonbank financial service providers will collaborate with a bank to offer a new product. In these cases, regulators can bring nonbank financial providers, or third parties—and their innovative products—under the existing regulatory structure for banks through a process called third-party supervision. This system expands regulators' supervisory responsibility and can help control the effects of nonbank innovations by subjecting them to the same scrutiny as bank products. In January 2017, the OCC revised its guidance to banks on partnerships, particularly with respect to online businesses known as marketplace lenders,[52] to implement third-party supervision, making these lenders subject to the same risk-management standards as the banks with which they partner. In 2016, the FDIC issued similar guidance, supplementing its 2015 marketplace lending supervisory framework.[53]

This guidance illustrates the challenge of enabling nonbank companies to partner with banks. Such collaborations pose special risks to consumers and the banking system because, while banks must operate within a well-developed regulatory regime, nonbanks are not subject to the same oversight.

> Bank compliance with consumer protection laws is enhanced by the supervisory relationship with regulators, which nonbanks—even though subject to many of the same laws—do not have. Without regular examinations, nonbanks that have consumer protection lapses are usually dealt with only after some harm has already occurred."
>
> —Rob Nichols, president and CEO, American Bankers Association, Feb. 18, 2016

Concern over certain risks to the market and consumers by nonbank providers has led regulators to prevent banks from partnering with those unsupervised entities. For example, alarm about the exploitative nature of payday loans has led regulators to essentially bar banks from partnering with nonbank loan companies in recent years. Now, however, regulatory agencies may be reversing course in order to bring more nonbank firms under regulatory control.[54] In February 2018, for instance, the OCC dropped a 2002 order that prevented payday lender ACE Cash Express from partnering with national banks. The more that nonbank companies have access to the banking system, the more regulators will need to act to ensure legal compliance and prevent consumer harm.

Suspension of regulatory barriers

One goal of market regulation is to ensure a safe marketplace for consumers, but such regulations can place a burden on participants and may deter smaller firms from entering the market. An increasingly popular approach to regulating emerging business practices while enabling market access is to allow companies to experiment with products in a modified regulatory framework, either in a controlled testing environment or through regulatory relief whereby agencies suspend certain regulations for novel business practices. This allows regulators to observe a product's effect on consumers and engage with new market participants regarding products that do not fit neatly into the existing regulatory structure.

International regulatory 'sandboxes'

In 2015, international regulators began employing regulatory "sandboxes"—formal testing programs that feature relaxed regulations and special enhanced consumer protections—which allow companies and regulators to test and observe new products and services in the marketplace. Several governments, including Australia, Hong Kong, Indonesia, Malaysia, Singapore, Thailand, Abu Dhabi, and the U.K., have embraced the sandbox approach, beginning with the U.K. in 2015. Although these efforts are mostly in their nascent stages and the empirical evidence on their effectiveness is scant, they do offer a window into regulators' attempts to balance promotion of innovation with consumer safety.

Ensuring innovation

When well-implemented, the sandbox model allows regulators to grant innovators access to the market while preventing established firms from exploiting the testing regime to avoid product safety standards. To that end, many governments, including Abu Dhabi, Hong Kong, and Singapore, note that their sandboxes are not intended to circumvent legal and regulatory requirements,[55] and most frameworks include a "novelty standard" to ensure that tested products do not replicate any already offered in the marketplace.

For example, the U.K.'s framework states that sandbox entrants must be "novel or significantly different to existing offerings."[56] Thailand and Singapore also take steps to ensure that similar products are not subject to different regulations.[57]

Protecting consumers

Many sandboxes include explicit protections that enable consumers to try the pilot technologies while reducing the risk of harm. In most cases, these measures include disclosures to alert consumers that they are using a product that operates in a testing environment, safeguards to protect consumers' funds and information if the company fails, and dispute resolution procedures.

Table 1

Sandbox Testing Models Promote Innovation and Protect Consumers

Examples of regulatory approaches

U.K.	Malaysia	Australia
Retail consumers should not bear the risks of a tested product so the FCA [Financial Conduct Authority] can consider limiting the testing to "sophisticated consumers" who have provided informed consent. Additional safeguards depend on the size, scale, and risks specific to the trial and may include extra disclosures to retail consumers.	Risks to consumers must be identified by applicants and appropriately addressed with safeguards, which may include providing disclosure to and acknowledgment from customers participating in the sandbox, limiting the number and type of consumers, and providing consumer redress.	Firms must disclose their participation in the sandbox as an unlicensed entity, provide a channel to compensate clients for losses or damages, and set up a dispute resolution system that enables consumers to settle complaints outside of the formal legal system.

Sources: U.K. Financial Conduct Authority, Bank Negara Malaysia, Australian Securities and Investments Commission regulatory guidance

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Promoting innovation in the U.S.

U.S. regulators have employed many of the same outreach and amendment strategies as their colleagues abroad, but their measures to promote new technologies, products, and services have tended to lack the coordination evident in international practice. Although regulators at the federal and state levels have taken steps to enable innovation in the financial sector,[58] unlike those of their international peers, these efforts are largely uncoordinated across jurisdictions, creating inconsistencies across the financial system that can expose consumers to unnecessary risks.

Most measures to provide regulatory relief to emerging companies and products are in their infancy, limited in power or scope, and have yet to demonstrably encourage creation of consumer-friendly products. Only one prominent piece of legislation to create a nationally coordinated regulatory sandbox has been introduced in Congress in recent years. The Financial Services Innovation Act of 2016, which did not reach a vote and has not been reintroduced, would have created a system to reduce regulatory barriers to new products. However, while the legislation might have produced a more coordinated process for business, it did not include the substantial consumer protections required in other countries.[59]

In March 2018, Arizona enacted H.B. 2434, which created the first regulatory sandbox for financial services innovation in the U.S.[60] and includes several consumer protection measures similar to international models. For example, the act includes disclosure requirements for products in the sandbox and requires firms to identify risks to consumers and implement necessary safeguards. The sandbox, which will be administered through the state attorney general's office, delegates regulatory responsibilities to relevant state agencies. Although it is too early to know whether this program will adequately protect consumers—and while the influence of this program may be limited because it applies only to entities that reside and operate in Arizona—its novelty highlights the need for a larger national strategy to promote financial innovation.

Project Catalyst No-Action Letter Policy

In the absence of a nationally coordinated strategy, federal regulators have used a variety of tools to foster innovation. For instance, the CFPB launched Project Catalyst in 2012 to encourage firms to develop consumer-friendly products.[61] As part of the project, the bureau initiated a program of no-action letters (NALs) in 2016 to promote collaboration between regulators and financial services companies by exempting certain products from enforcement actions if firms present them to the bureau before bringing them to market.[62]

The focus on innovation is what distinguishes the CFPB's NAL policy from those of other regulators. Whereas the FTC, SEC, OCC, Internal Revenue Service, and Treasury Department's Financial Crimes Enforcement Network use similar policies for existing products,[63] the CFPB program requires service providers to establish that their products are not already on the market.[64] However, the bureau's policy has been relatively ineffective at bringing novel products to market. The CFPB has issued only one NAL since 2016. That letter went to online lender Upstart on Sept. 14, 2017, and provided a three-year exemption for that firm's nontraditional underwriting model for "thin-file" applicants (those with little or no credit history) with unsecured credit.[65] Some analysts have criticized the program for not providing sufficient protection against enforcement actions, which may explain the low participation.[66] By contrast, other agencies have issued hundreds of NALs each year.[67]

Conclusion

The regulators reviewed in this paper typically approach financial innovation in three ways: creating outreach programs to help firms navigate the regulatory landscape and support transparency about new products and services, changing the regulatory framework to respond to the effects of emerging technologies, and suspending the barriers facing firms entering the market to promote innovation. Around the globe, these regulators use similar strategies to develop outreach programs and change regulatory frameworks.

However, while regulators abroad have found ways to promote innovation through nationally coordinated strategies that prioritize protecting consumers, U.S. efforts have been stymied by fragmented institutional frameworks that do not adequately establish regulatory priorities or address consumer needs across the financial system.

Innovation has always been a part of the financial system and has historically gone hand in hand with advances in regulatory practice. As U.S. regulators consider how best to respond to emerging financial products and services, the examples set forth by international regulators suggest that the approach should be guided by efforts not only to encourage innovation generally but to do so in a coordinated way that prioritizes advances that address gaps in the marketplace and protects consumers. A strategy driven by shared goals across jurisdictions will become increasingly important as regulatory sandboxes and other programs to test or promote financial innovation continue to gain popularity.

Endnotes

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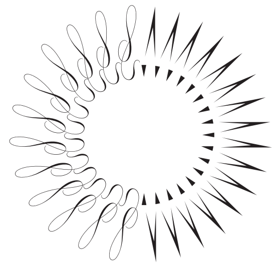

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