

# From The Sandbox To The Cloud

A REPORT FROM THE INSTITUTE FOR FINANCIAL MARKETS

## How FinTech Regulation Is Evolving Globally

**THE SECOND ANNUAL DC FINTECH WEEK 2018** was held over four days in November to touch on a wide variety of topics that influence the global fintech and financial services sector. The global policy forum, founded by Professor Chris Brummer, and hosted by Georgetown University Law Center's Institute of International Economic Law (IIEI), International Monetary Fund (IMF) and The Institute for Financial Markets, featured more than 90 speakers across the fintech space including U.S and international regulators, legal experts, economists, academics and fintech executives.

During the event the discussions and debates covered a variety of fintech-related concerns and the impact innovation could have on global markets, policy and ultimately regulations. This report focuses on the final day of the conference and continues the IFM's ongoing Smart Regulation report series. (You also can read our prior Smart Regulation reports, "The Dawn of Crypto Regulation" and "New Rules Of The Road.") Fintech Week discussion focused on three topics: regulatory sandboxes, regulatory competition among jurisdictions and the role that the cloud plays in this space.



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## An Introduction

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The disparity among global regulators, in terms of fintech regulation and engagement, is wide and varied. In general, there are a number of approaches regulators and participants are taking to provide more structure and confidence in these markets. But where some jurisdictions have moved fairly quickly and with clear structure such as Gibraltar, Malta and Singapore, others are grappling with the role regulators should or can play in this space.

In some respects, the fintech, and more specifically the crypto and blockchain space faces serious questions from a regulatory point of view. Should regulators be engaged with the fintech community through sandboxes or other initiatives? And if so, just how engaged should they be in assisting firms but not choosing winners and losers in the fast moving competition. And finally, if the cloud is the platform on which almost all new technology is built — what role do cloud services play and just how responsible or involved should they be for the content, services and functionality of the customers they serve.

Indeed, the fintech space is a multi-layered environment that often falls outside of today's regulatory boundaries. As such, it is forcing regulators, legal professionals, investors and the fintech community itself to think about the best ways to ensure the benefits and security markets want, yet still allow for the massive wave of innovation, creativity and opportunity that will serve the market in new ways.

Below is a recap of the three sessions from the November 8, 2018 event in Washington, DC, which followed sessions earlier in the week at Georgetown Law and IMF Headquarters.

- How to Build a Regulatory Sandbox
- Making or Taking Innovation? Regulatory Competition and the Race for Fintech Dominance
- Security and Resiliency in the Cloud



## How to Build a Regulatory Sandbox

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**Regulatory sandboxes are increasingly discussed as a possible tool in assisting officials to foster technological innovation in a safe and responsible manner, while staying true to their mandates. Just what this means in the U.S. context remains, however, a subject of debate. Here is a look at regulatory innovation and their attendant risks, opportunities and trade-offs.**

### MODERATOR:

- **Arthur W. Hahn**, Counsel and Global Co-chair, Financial Services Practice, Katten Muchin Rosenman LLP & Trustee, The Institute for Financial Markets

### PANELISTS:

- **Daniel Gorfine**, LabCFTC Director and Chief Innovation Officer, U.S. Commodity Futures Trading Commission
- **Kavita Jain**, Director, Office of Emerging Regulatory Issues, Financial Industry Regulatory Authority
- **Brian Knight**, Director, Innovation and Governance Program, Mercatus Center, George Mason University
- **Margaret C. Liu**, Senior Vice President, Legislative and Deputy General Counsel, Conference of State Bank Supervisors

**What is the definition and purpose of a fintech sandbox? The simplest initial answer is, "It depends."**

For regulators and market participants, coming up with the purpose and guidelines for a fintech sandbox isn't so easy. To start, agencies need to determine what the fintech sandbox aims to do. And that triggers any number of questions. Is it encouraging and speeding up innovations so customers can access new services that have been green lighted by regulators? If so, does a company in the sandbox gain an advantage over another firm that does not? And in the U.S., might a state regulator offer advice that is perfectly legal in that state, yet run afoul of state, federal or international rules? If so, will they go to the legal mat to help such a firm? And, who is qualified to enter and work in a fintech sandbox?

That is a load of questions for regulatory agencies today, and to be sure, the answers vary. Brian Knight, director, Innovation and Governance Program, Mercatus Center at George Mason University put a general framework

around it. “The regulatory sandbox is a limited scope, limited time, regulated environment where an entity can work in conjunction with its regulator to experiment in an environment where its regulatory requirements are modified,” Knight said, adding that it may include modified: licensing requirements, conduct requirements and liability.

Perhaps a broader foundation on which to build a sandbox came from Kavita Jain, director, Office of Emerging Regulatory Issues at the Financial Industry Regulatory Authority (FINRA), who argued a sandbox “should do no harm.” And in that respect, the liability issue is a problem that sandboxes need to address from the start. In other words, should consumers be compensated if they are financially harmed by a “sandbox tested and approved product?”

“I think consumers should be made whole if there is any harm,” Jain said. “Is it okay if the consumer loses \$1,000 or \$100 Generally speaking, as a regulator, I’d say the investor has to be made whole. So if we’re testing new products, we need to make sure they are tested within those guardrails.”

“Landing on a clear purpose of a regulatory sandbox is key,” Jain said.

“There is a risk of picking winners and losers and that gets back to the underlying purpose of the sandbox,” said Margaret C. Liu, senior vice president, legislative and deputy general counsel at the Conference of State Bank Supervisors. “Are you trying to solve a problem or do you have a gap in regulation where they don’t fit into an established regulatory regime? Or has there been a public policy decision made to attract these innovators? Those are very different sets of motivations.”

Knight added that a regulatory sandbox should not be an advantage for one firm over a competing company.

“You don’t want a regulated sandbox to be an easy button to winning the competition,” Knight said. “On the other hand, to the extent that the sandbox is valuable to the company that is working with the regulator and the regulator is saying “tweak this, change that” and let’s get you to compliance, that is the potential competitive advantage.”

Knight said some transparency should be disseminated to the public without giving away proprietary information or the firm’s “secret sauce.”

### **The Question Is Why?**

While it is important to figure out just what a regulatory sandbox is and should be, the other critical question is why one is needed. Countries and local agencies can reason that there are great benefits to be gleaned from learning what is happening in the fintech world. But the fact is, for various jurisdictions, there is a competitive element to it that encourages firms to work with regulators to help create the next wave of innovation that transforms the US and global financial marketplace.

Another driver for regulatory involvement, sandboxes or otherwise, is that the pace of innovation is happening faster than at any time before. Daniel Gorfine, LabCFTC director and chief innovation officer at the U.S. Commodity Futures Trading Commission (CFTC), said the reasons for engaging the fintech community are fairly straight forward.

Computing power has risen substantially and the cost of leveraging such technology has plummeted. Cloud services provide infrastructure at a fraction of the cost that hardware would cost today. And the cloud-based services offered by the Amazons, Googles and Azures of the world are expanding as well. All of this means adoption and scalability can occur much faster and farther than in the brick-and-mortar days.

“You can have a great idea like Venmo and in very short order, be scaling up to handle billions of dollars in transactions,” Gorfine said. “And they did that on a national level. If a brick-and-mortar firm tried to do that, it may take decades to scale up and actually impact commerce on a national scale.”

What that means for regulators, Gorfine said, is that you “have to think about how you deal with a small start-up that is having that type of economic impact on the national economy.”

Given the wide scope of financial technology out there today—from payments to processes to data, trading and settlement—across any number of platforms, it is difficult for regulators to keep up with the companies, not to mention the underlying technology itself.

As such, regulators are looking for ways to keep up with technology, innovation and trends in the industry through various forms. The sandbox is one structure, but there are a number of variations being used. The CFTC’s approach differs from its UK counterpart, the Financial Conduct Authority. In its so-called FCA Innovate program, started in 2014, firms apply to get into the sandbox, also known as the “cohort model” and only a few are accepted. In July 2018, 29 firms were accepted out of 69 applications in its 4th cohort process.

The CFTC developed and launched LabCFTC in 2017 to promote fintech innovation and improve the quality of the markets. It also wants to accelerate fintech and regtech solutions that may help the CFTC itself. CFTC Chairman Chris Giancarlo, speaking at Fintech Week 2018, announced another initiative called “QuantReg,” aimed at making the agency more data driven with automated analysis in its policy decisions.

Another tool in the CFTC toolbox is “no action relief” which may help free up innovations and services that benefit the markets.

*“You can structure what a sandbox seeks to accomplish through no action relief. But our approach has been to have an open door to anyone who wants to come and point out ambiguity or friction in rules that may not have been contemplated for new business models. That’s the approach we have taken.”*

Daniel Gorfine, LabCFTC Director and Chief Innovation Officer, U.S. Commodity Futures Trading Commission

Meanwhile state regulators are taking a collaborative approach in addressing specific frictions in the regulatory environment. Liu noted that almost 20 U.S. state regulators recently moved to collaborate on the licensing

process for cross-state money transmitter rules. The goal is to roll it out to all 50 states, streamlining the process and lowering costs for non-bank fintech firms which had to fill out a separate form in every state money was transferred to.

“It’s about figuring out ways to modify some of the requirements and processes, so a company that wants to be a money transmitter will have less steps in that path,” Liu said. “That’s a step states are doing on their own. It is happening whether or not you are using the term sandbox.”

“Just as we don’t want incumbents arranging regulation to entrench their advantage, it also isn’t fair to say we are going to give a regulatory advantage to new firms at the expense of incumbents,” Knight said.

Gofine agreed, saying that “at some level, you want to be creating a level playing field.”

### State Level Sandboxes

The push by almost every U.S. state to attract new technology talent and start-ups led to the creation of the first state fintech sandbox in Arizona in March. It began accepting applicants in August 2018 and admitted its first participant in October, Omni Mobile Inc., a mobile payments platform.

Liu said the state legislation backing the sandbox, allows for some relief of certain licensing requirements. The sandbox, run by the Arizona state attorney general’s office, allows a wide variety of financial services technology firms to apply and use its sandbox.

Illinois also is considering a bill for a similar sandbox, run by the Illinois Secretary of Financial and Professional Regulation. The bill is still under consideration by the state legislature.

### Sandbox Dilemmas

And then there is the debate over whether regulatory sandboxes are a good idea at all. The New York State Department of Financial Services Superintendent Maria Vullo raised the debate level by saying “Toddlers play in sandboxes. Adults play by the rules. Companies that truly want to create change and thrive over the long-term appreciate the importance of developing their ideas and protecting their customers within a strong state regulatory framework.”

Vullo strongly opposed the Office of the Comptroller of the Currency’s decision to accept applications for national bank charters from nondepository fintech firms. She also took exception to the U.S. Treasury Department’s report, (More on this below) which recommended regulatory sandboxes as a way to promote innovation.

Separately, the Consumer Financial Protection Bureau (CFPB) created a new new Office of Innovation, to work with firms in cryptocurrencies, blockchain, microlending and peer-to-peer lending.

One of the questions is, once a company is in the sandbox, just how much transparency should there be from the regulator to the public? For some sandboxes there is testing of the product, a look at the viability of the product, marketing disclosures and then the decision by the entity itself as to whether it should move forward or

not. There also is ongoing reporting to the regulator during and after it exits. Knight said such reporting, however, does run the risk of violating the trust of the marketplace.

“For a sandbox to work, there has to be trust,” Knight said. “The regulator has to trust that the regulated entity is going to be regulated in good faith and in compliance with the rules. And the regulated entity has to trust, that by just putting themselves on a regulator’s radar, they are not just inviting (regulatory) trouble.”

Then there is the question of just how much information will be shared inside and outside the sandbox.

“The regulator ultimately has public accountability,” Liu said. “And in the sandbox, there is a bargain there between the regulator and the entity. The applicant wants a modification to facilitate bringing their product to the market. And I would posit that the regulator have even more visibility and information than traditional regimes. And the regulator has to be comfortable with that.”

In terms of granting relief to firms in the sandbox, it is critical that regulatory agencies share information with the public. And this is where things can get complicated. If a regulator finds some functionality in a fintech firm’s product that is beneficial to the marketplace, just how much information should be shared with the broader public? If it mentions that XYZ firm had a payment system that provides safe and secure transfers and also includes a fail-safe mechanism, just how much more detail should it disclose about that?

In Knight’s view, this is a delicate balancing act for regulators. If regulators green light a firm’s product function, are they tacitly giving them an advantage over a competitor? In other words, are firms that do not qualify or chose not to enter the sandbox at a disadvantage?

### The Highest Good

The question for sandboxes may also be the question for regulatory agencies in general—what are you trying to achieve? Of course, it differs for each regulator and each jurisdiction. But in Gofine’s opinion, the goal of the sandbox or similar initiative, is to identify certain problems or pain points in the regulatory system. If a regulator is trying to speed up registrations for a specific entity, perhaps it should look at the issue in a broader context. In this way, sandboxes could be extremely helpful in not only identifying problems but streamlining solutions across the regulatory structure.

“What you should be doing is asking, “How should we be thinking about processing all of our applications?” Gofine said. “Do we have the right notion of proportionality in our written requirements? Does it make sense and are we actually solving for our regulatory objectives for the rules we are putting in place for all our market participants.”

If sandboxes can do that, a new firm may ultimately change a marketplace and perhaps change regulators as well.





## Regulatory Competition and the Race for Fintech Dominance

**Intense competition for technological innovation is informing not only business strategies for participants in financial markets, but also regulatory policy in jurisdictions seeking to raise their profile as fintech hubs. Whether or not such jostling for technologists and entrepreneurs will result in a race to the “top” or “bottom”— is yet to be decided. Here is a look at the national, cross-border and global implications.**

### MODERATOR:

- **Gary DeWaal**, Special Counsel, Katten Muchin Rosenman LLP & Vice Chairman, The Institute for Financial Markets

### PANELISTS:

- **Douglas Arner**, Kerry Holdings Professor in Law, The University of Hong Kong
- **Hon. Albert Isola**, Minister for Commerce, Gibraltar
- **Peter Kerstens**, Advisor on Financial Technology and Cybersecurity to the Director General FISMA and Co-Chair of European Commission Fintech Taskforce, European Commission
- **Nydia Remolina León**, Legal Advisor for Innovation, Digital Transformation and Policy Affairs, Grupo Bancolombia
- **Sharon Yang**, Acting Deputy Assistant Secretary for International Financial Markets, U.S. Department of the Treasury

The relationship between regulators and fintech firms, particularly those in the digital asset space, has been shifting in recent months. Gone are the days when regulators were simply trying to figure out just what the technologies and products were, not to mention, how best to oversee them. What has evolved since is a mixed bag of regulatory approaches to the fintech space—with some regulation being assigned to different segments of the market, some taking a hands off approach and others creating a new structure aimed at creating a community of quality firms.

In the view of Peter Kerstens, advisor on financial technology and cybersecurity to the director general of FISMA and co-chair of European Commission Fintech, there has been a decided change in attitude among global regulators, especially toward digital assets.

“Many regulators around the world and across Europe believe that the word innovation is a dirty word,” Kerstens said. “When you talk to them, they think this is financial alchemy. But in the past year or so, we’ve seen a shift from a rather skeptical position towards a much more positive attitude.”

In Kersten’s view, the change comes from the realization that fintech innovation can improve markets. Also, in the case of the European Commission, one of its mandates is to promote innovation among its member countries.

That also has been the view of Gibraltar, the British territory, and first authority to publish proposals to regulate initial coin offerings in early 2018. The move was driven by the rise of ICOs globally and the need for a regulatory structure for that market.

“Good regulation will actually encourage innovation but in the same way that institutional firms can trust it,” said Albert Isola, minister for commerce of Gibraltar.

He said the rise of ICOs in 2017 led many mainstream investors to pull away from those markets because they simply could not trust them. Isola said he was not against investors or firms participating in the token space, but said “if they fail, let them fail for the right reasons, not because someone stole or scammed money from them.”

In Gibraltar regulators were concerned that without regulation, bad behavior would go unchecked. And secondly, government officials also saw an opportunity to create a regulatory framework to build trust in the ICO market. With that goal, the government set out to create rules for the ICO space that included: corporate governance, capital requirements and security rules. Since enacting its ICO rules, Gibraltar has attracted 40 applicants with two firms approved so far.

“We don’t pretend to be a light touch,” Isola said. “We want quality firms to come to us.”

### Striking Balance

Creating a balance between encouraging innovation, especially in the digital asset space, and building sufficient regulations around it, is a task many governments are grappling with. In the case of the European Commission, it announced in March 2018 an “Action Plan” to make Europe the global hub for fintech. To do so, the EC created a platform so licensed firms could operate in every EU jurisdiction, thus building what it calls a “Capital Markets Union,” or single market for consumer financial services.

Such ideas are being touted around the globe today, in an effort to embrace and encourage fintech firms to stay local, build their businesses and address needs nationally, if not globally. The Global Financial Innovation Network, announced in August 2018 with 11 financial regulators is one such effort.

But collaboration on fintech regulation calls for regulatory agencies to think about oversight in a different way. For starters, the methodology applied to firms by regulators will be key. Secondly, regulatory differences across agencies is another major issue. And how state, national and international agencies harmonize rules will also be a key to enabling the kind of scale and impact many firms are targeting.

Nydia Remolina León, legal advisor for innovation, digital transformation and policy affairs at Grupo Bancolombia, said one example of the challenge for some regulators can be found in Mexico, which set its own fintech regulation policy. The good news is Mexico has taken a principles-based approach to fintech regulation. The bad news is that its licenses are categorized for crowdfunding, cryptocurrencies and payments firms.

“Most of these firms are entrepreneurs and they change the activity for which they are trying to provide to the market. So first they have to apply for one license and then they might have to apply for another license. That’s a big question.”

**Nydia Remolina León, Legal Advisor for Innovation, Digital Transformation and Policy Affairs, Grupo Bancolombia**

In Gibraltar, agencies began by thinking about how to regulate the token space and decided it would focus on those who use the blockchain. As such, the category was wide enough that it captured the types of participants it wanted to regulate.

“What we wanted to see was real quality firms willing to be regulated in Gibraltar and give them the regulatory framework that they were seeking,” Isola said, adding that it did so 25 years earlier for remote/online gaming.

Kerstens said one of the challenges for regulators is they only use the regulations that are established. Bending and creating new rules is a difficult and critical task.

“They use the tools they have and project the rules upon any reality in front of them, and ask “Does it fit, or doesn’t it fit?” Kerstens said. “For most regulators, if it doesn’t fit, they say “you are not allowed to do it or it is not our responsibility.”

In some respects, the fintech space and the products produced may fall under existing rules and laws. But in other instances, it may require a more principles-based approach, where regulators are looking at more “functional investment and the types of risk that are associated for buyers and investors,” said Douglas Arner, Kerry Holdings professor in law at The University of Hong Kong.

“This is something we’re starting to see with Mexico and a range of other jurisdictions that are starting to think, how can we go back and look at what our systems are for and try to deal with some of these embedded terminologies,” Arner said.

## Finding Harmony

For anyone in the financial markets today, regulatory harmonization is among the top issues. Given the newness of recent fintech innovation, there are some calling for a new round of harmonization among regulators. Exactly how that will work, what it will cover and what the broader goal of fintech regulation should be is a difficult and daunting task.

Arner said it makes sense in certain areas that are global in nature. But there are some drawbacks as well.

“If you try to regulate something too early, you can have a restrictive impact on the market,” Arner said. “We’re trying to work out, what works best. But there areas we already have harmonization.”

In the area of anti-money laundering (AML) for example, rules can be applied to new technologies such as token issuance. Another area is in cybersecurity, where global regulators and industry participants have been focused for some time on standards and cooperation.

And many of the innovations entering the market are aimed at improving existing processes or markets in some way. For those products and services that are new to existing global financial markets, there may be a call for regulatory equivalence, harmonization or recognition.

“Digital finance by definition needs harmonization,” Kerstens said. “You can harmonize at a high level of regulatory intensity and also a low level. At this stage, there is no global consensus as to the level of regulatory intensity that is required.”

To date, there is little evidence the G20 will step in and establish a global initiative on financial technology regulations. Ultimately, we may be in a new era of products that fall outside the current securities and derivatives regulatory structure. For Isola, this is the whole point of Gibraltar’s bold move into its token regulation initiative.

“It is creating new opportunities,” Isola said. “And I don’t believe you can use the rulebook that you have for traditional financial services in this space. I think it’s about requiring a new toolkit to give them the ability to regulate this new sector that differs in the way we did in the past.”



## Security and Resiliency in the Cloud

**Financial institutions are increasingly leveraging cloud technology in the hopes of better serving and protecting their customers. But unlike traditional outsourcing in the financial sector, many cloud services are standardized and provided globally, even as domestic authorities maintain local oversight. Here, we explore the implications of fragmented oversight for security and resiliency in the cloud.**

**(THIS PANEL WAS HELD WITH CHATHAM HOUSE RULES.)**

It's not a news flash that the cloud is taking over much of the data storage and perhaps key functions of the financial services industry. But the enormous push into cloud services raises key questions about how regulators and firms are dealing with a new data and operations structure.

The regulatory environment for banks using technology and storage was largely set about 20 years ago. Back then, banks used technology centers offered by large computer and tech companies such as Hewlett-Packard or IBM, to handle the data and functions of its services in a person-to-person relationship with long-term deals. With Amazon Web Services (AWS) and other cloud services, it has shifted that to a one-to-many business model with far more flexibility for customers. That cloud business model has created some mismatches with regulators, who are sometimes having a hard time adjusting to the new structure.

The July 2018 U.S. Treasury report is the best effort yet in addressing why the regulatory environment needs to change in the fintech space, especially for cloud services. Today's banks and others are dealing with regulations and outsourcing requirements that have been retrofitted for cloud computing. That has left very little flexibility for regulators tasked with monitoring bank operations in the cloud. As such, regulators are often given antiquated checklists that are not always relevant nor applicable. Some regulators' checklists are from 2004, two years before Amazon Web Services was even launched.

To address the issue, AWS is pushing for changes with US and global regulators on how they monitor and regulate activity on the cloud, security standards, audit standards, resiliency and other issues. AWS also has created a

working group to engage regulators about how best to address cloud services issues in the financial markets.

### Setting Standards

One of the issues regulators and the industry are working on, is figuring out areas that may affect firms across multiple jurisdictions including: cybersecurity, data localization issues, resiliency and fallback capabilities. As financial technology continues to evolve, it will be important for regulators to establish what they want to achieve with cloud regulation. And from there, regulators need to come up with relevant checklists and audit points that cover the relevant items and set some standards for the cloud.

From one panelist's perspective, regulators doing audits are "in an unfortunate situation because the checklist they have is the checklist that they have. They're not going to get in trouble for sticking with the checklist. But they may get in trouble for deviating from the checklist."

Large institutions themselves are trying to determine their own technology priorities and needs. So while start-ups are firmly and exclusively in the cloud, banks and financial institutions are still managing massive legacy infrastructure. By some estimates, traditional banks spend 85 percent of their IT budgets on maintaining old technology. About 10- to 15-percent is spent on existing projects and just 5 percent is spent on R&D.

One view expressed was, is if regulators can update their oversight of cloud technologies, banks may ultimately become more innovative as well. "I view cloud as the basic infrastructure baseline that allows banks to do what they are supposed to do, which is building better tech-oriented services in a more tech oriented way," the panelist said. "You're not going to do that if you are spending 85 percent of your IT budget on a creaky old mainframe." He further added, "One possible trend for banks going forward then, would be to examine all of their parts, focus on what they do well and outsource the rest."

From AWS's perspective, the company works with customers to provide guidance on numerous audit protocols. Beyond that, it has continued to engage regulators globally and held more than 200 meetings with 120 to 130 regulators around the world. The company also has hosted seminars to bring regulators together to identify and upgrade requirements and checklists, and create higher bars for the financial industry.

### Critical Mass

The massive move across all industries into the cloud is welcomed by banks for the services and potential innovation they offer. But there are some agencies that worry about so-called concentration risk—meaning that AWS, Google Cloud and Azure may themselves be systemically important institutions, given the amount of data stored and running on their servers.

Cloud service providers have tried to deal with the issue of risk by analyzing the various aspects such as: data concentration, geographic location of the data, back-up solutions across time zones domestically and internationally, redundancy and multi-national regulation of such information. There are also public concerns

over contagion within the cloud, but as one panelist said, cloud services may provide a “more meaningful improvement than what financial institutions can do on their global IT platforms.”

Ultimately, cloud service providers and regulators are working toward more updated standards and policies. How those get addressed is still somewhat fragmented, but there’s no doubt that cloud will continue to play a more prominent role in the financial services and financial regulatory landscape.

### **U.S. Treasury Department’s 4th Report**

The U.S. Department of the Treasury issued its fourth report, A Financial System That Creates Economic Opportunities Nonbank Financials, Fintech, and Innovation in July 2018.

The report identifies more than 80 recommendations that are designed to:

- Embrace the efficient and responsible use of consumer financial data and competitive technologies;
- Streamline the regulatory environment to foster innovation and avoid fragmentation;
- Modernize regulations for an array of financial products and activities; and
- Facilitate “regulatory sandboxes” to promote innovation.

It also includes some agenda items and notes that the vast majority of computing needs by banks could be driven by the cloud.

Whether Treasury can forge some changes is the big question. The department is looking for collaboration with the private sector and pull different parties together to address some of these key issues.

This report was written and produced by Jim Kharouf of John Lothian Productions for the IFM.

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