Testimony of Peter Van Valkenburgh to the Committee on Energy and Commerce U.S. House of Representatives on June 6, 2017

Summary: The key trend to identify in fintech today is the democratization of the tools and systems necessary to building a financial service or product as well as the democratization of access to those services and products. This democratization is occurring because of the development of *open blockchain networks*, which are internet-based systems, like Bitcoin and Ethereum, that (1) create a trustworthy and fully auditable record of financial (as well as non-financial) data, (2) create new scarce digital assets (sometimes called cryptocurrencies), and that (3) have an open or permissionless design such that anyone can interact with that data and those digital assets in order to manage their own finances or to build trustworthy and efficient tools that help others.

This permissionless innovation mirrors earlier trends in home computing and the internet. America was on the vanguard of those previous technological waves in part because Congress was not afraid to take action to ensure a light touch regulatory regime as compared with the rest of the world. Today, however, the U.S. is lagging rather than leading with respect to innovation because of a chaotic patchwork of state and federal financial services regulation.

Congress can restore America's competitive edge by encouraging the Office of the Comptroller of the Currency to offer federal "fintech charters." Such charters would help to create a unified national approach to the regulation of custodial open blockchain companies (those who hold other people's digital assets as fiduciaries). Congress should also consider

creating a federal safe harbor for non-custodial developers, users, and technologists (a similar safe harbor as was created for select internet businesses in the late 1990s).

Written Statement:

I am Peter Van Valkenburgh, Director of Research at Coin Center, an independent nonprofit focused on the public policy ramifications of digital currencies and open blockchain networks.[1] I am going to talk briefly about the nature of innovation in the fintech space, specifically open blockchain networks, and then explain why we need a unified federal approach to regulating some businesses in the space while also offering a safe harbor to others.

Briefly, an open blockchain network allows connected computers to reach a trustworthy agreement over shared data.[2] The connected computers could be owned by anyone in the world, and these networks are free to use and join. The shared data can relate to the movement of digital currency between users, identity credentials and attestations, or any other data for which agreement, auditability, and security are critical. Notable open blockchain networks include—the original—Bitcoin network for electronic cash, as well as follow on innovations such as Ethereum for smart contracts and identity applications, and Zcash for digital currency transactions where privacy and auditability is critical.

The most exciting aspect of open blockchain networks is that they are entirely open for experimentation. They are permissionless. There is no patent or copyright to license, no university or corporation from which to seek a job, no exclusive membership fee to pay. Anyone

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[1] Based in Washington, D.C., Coin Center is the leading non-profit research and advocacy center focused on the public policy issues facing cryptocurrency and decentralized computing technologies like Bitcoin and Ethereum. Our mission is to build a better understanding of these technologies and to promote a regulatory climate that preserves the freedom to innovate using permissionless blockchain technologies. We do this by producing and publishing policy research from respected academics and experts, educating policymakers and the media about blockchain technology, and by engaging in advocacy for sound public policy. *See* Coin Center, *Our Work*, https://coincenter.org/our-work.

[2] *See* Peter Van Valkenburgh, "What is 'Blockchain' anyway?" *Coin Center* (Apr. 2017) https://coincenter.org/entry/what-is-blockchain-anyway.

with a computer and an Internet connection can develop and share her own currency, her own financial contracts and strategies, her own vision of the future.

FinTech is no different than any other technology. It's about better tools at cheaper prices. Eventually, the tools become so cheap and so good that everyone can use them. The PC democratized computing, the web democratized news and entertainment, Google and Wikipedia democratized information, and now digital currencies and open blockchain networks are democratizing financial services.

This innovation is inevitable. What has yet to be determined is whether, as with the Internet and the PC before, the US will be at the vanguard of changes in financial technology, and whether those tools will be made, by design, to promote financial inclusion and to protect consumers. In other words, will America be a home for permissionless innovation (as a venture capitalist might ask) and will there be responsible innovation (as a regulator might ask)? Those aspirations are not irreconcilable, but they are also not guaranteed.

America pioneered home computing and the internet, in part, because of our deep cultural and constitutional reverence for free speech, and our willingness to allow new technologies to emerge unfettered and unrestrained. Wherever the dynamism of internet technologies was threatened because of outmoded regulations, Congress was not shy to act.

The internet we've come to know and love owes much of its existence to two laws passed by Congress in the late 1990s: the Communications Decency Act (CDA)[3] and the Digital

[3] 47 U.S.C § 230 (Congress found that the "rapidly developing array of Internet and other interactive computer services available to individual Americans represent[ed] an extraordinary advance in the

Millennium Copyright Act (DMCA).[4] The internet would probably still exist today if it wasn't for these laws, but it would be a very different, and likely less useful, tool, and—critically—it probably would not have been pioneered by US-based companies.[5]

Both the CDA and the DMCA were laws that created safe harbors for infrastructure-building innovators. These laws were not special treatment for internet businesses. They were limited and sensible clarifications of existing law that were necessary because several businesses emerging online at the time didn't fit neatly into traditional legal buckets. These laws didn't protect copyright pirates or muckraking slanderers, they protected and gave legal certainty to the companies that built the new information highways through which mountains of legal and illegal content would inevitably travel. Internet safe harbor laws followed a sensible and pro-innovation pattern: regulate certain uses of the technology but not the technology itself. That ethos made the U.S. a global leader in the internet revolution.

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availability of educational and informational resources to our citizens" and made it the policy of the United States "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." The law protected "providers of interactive computer services" from state civil and criminal liability stemming from the retransmission of information that originated from another content provider. Thus a video hosting site, such as Youtube, would not be liable under state defamation law for hosting a slanderous video uploaded by someone else. The creator of the video is liable but Youtube is in a safe harbor).

[4] 17 U.S.C § 512. This law provided a similar safe harbor for persons retransmitting user-generated content as the CDA but with respect to copyright liability. "A service provider shall not be liable for monetary relief, or, except as provided in subsection (j), for injunctive or other equitable relief, for infringement of copyright by reason of the provider's transmitting, routing, or providing connections for, material through a system or network controlled or operated by or for the service provider, or by reason of the intermediate and transient storage of that material in the course of such transmitting, routing, or providing connections." *Id.* That insulation from liability was contingent on implementation of notice and takedown program, wherein the service provider would remove copyrighted content from their service if a copyright holder gave them appropriate notice of the infringing material.

[5] *Cf.* Sarah Laskow "Google vs Brazil: Why Brazil heads up Google's list of takedown requests" *Columbia Journalism Review* (Apr. 2013) http://archives.cjr.org/cloud_control/brazilian_takedown_requests.php (Google has struggled with employees being arrested while in or visiting Brazil merely because the company's search results may link to true but controversial information about brazilian politicians. There is no carve-out for third-party liability—as the CDA is in the US— in Brazil.).

But today we are following not leading. A young innovator dreaming of building the financial infrastructure of the future would be well-advised to leave the U.S. Not because she should try and avoid justifiable consumer protections, or do it on the cheap in a foreign state that will look the other way, but—instead—because simply determining what the U.S. regulatory landscape demands from her is a herculean undertaking. Indeed, between 53 states and territories and several independent federal regulators. It's a task that would be much simpler if she was in the UK and could ask one regulator, the FCA, for an opinion.[6]

In order to reestablish the U.S. as a leader, we need to rationalize the chaos of financial services regulation. The state-by-state approach to money transmission licensing, in particular, jeopardizes not only permissionless innovation but also responsible innovation. Custodial businesses who can lose, steal, or otherwise fail to protect their customer's digital assets should

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[6] The US approach to regulating financial technology stands in sharp contrast to the recent approach taken by UK regulators. In March of 2015, Her Majesty's Treasury, seeking to "create a world-leading environment for the development of innovative payments and financial technology" crafted a plan for digital currency regulation that included public funding, standard setting, and regulatory clarifications. Specifically the plan called for: (1) Clarification and application of anti-money laundering regulation to digital currency exchanges to prevent criminal use. (2) Training, resources, and legislation to ensure that law enforcement bodies can effectively address criminal activity conducted with digital currency. (3) Cooperation from the British Standards Institute and the digital currency industry to develop a set of best practices for consumer protection that does not impose an extreme regulatory burden on players in the space. (4) Creation of a research initiative with leading institutions within the UK to study digital currencies and increase public funding for digital currency research to £10 million. *See* HM Treasury, *Digital currencies: response to the call for information* (Mar. 2015) *available at* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/414040/digital_currencies_response_to_call_for_information_final_changes.pdf. One year later, UK authorities have matched that encouraging talk with real action. The UK Financial Conduct Authority ("FCA") now makes it easy and quick for innovative startups and entrepreneurs to comply with appropriate consumer protection regulations and safely enter the market. Among other things, participants in the FCA's Innovation Hub receive from the regulator: A dedicated team and contact for innovator businesses, help for these businesses to understand the regulatory framework and how it applies to them, assistance in preparing and making an application for authorisation, to ensure the business understands our regulatory regime and what it means for them, and a dedicated contact for up to a year after an innovator business is authorised. *See* Financial Conduct Authority, *Innovator businesses: Project Innovate* (last accessed May 2016), https://innovate.fca.org.uk/.

be regulated for consumer protection, but states are not the optimal regulators of these services. Each individual state will generally be concerned only with the activities of licensed firms that touch their own citizens, rather than the systemic health and risk profile of the licensee as a whole. This is a particularly odd regulatory approach for businesses that, by virtue of the Internet, are almost assuredly global—and certainly interstate—in the scope of their operations.

To promote a more holistic approach, Congress should encourage the Office of the Comptroller of the Currency to offer federal "fintech charters" to custodial digital currency firms,[7] and Congress should also consider the creation of a new federal money transmission license that can be an alternative to state by state licensing.[8]

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[7] The OCC has moved apace with its responsible innovation initiative and appears ready to begin entertaining charter applications, however several questions regarding the charter's potential application with respect to digital currency companies remain unresolved. *See* Peter Van Valkenburgh, "Comments to the Office of the Comptroller of the Currency on Exploring Special Purpose National Bank Charters for Fintech Companies" *Coin Center* (May 2016) https://coincenter.org/entry/comments-to-the-office-of-the-comptroller-of-the-currency-on-exploring-special-purpose-national-bank-charters-for-fintech-companies.

[8] Amazon, Apple, Google, Intuit, and Paypal have also asked Congress for a unified federal alternative to state money transmission licensing. In a letter to congress, their industry group, Financial Innovation Now, explained how state-by-state money transmission licensing is a major impediment to innovation in financial services here in the US: "Payment innovators currently must obtain and continually update money transmission licenses in nearly every state. Consumer protection is a critical part of payments regulation, but it makes no sense for different states to regulate digital money differently from one state to another, especially if that process significantly delays entry to market and prevents consumers and businesses in many states from having equal and consistently safe access to cutting edge payments technologies." They suggest that Congress should "[e]stablish an optional federal money transmission license,managed by the Treasury Department, that: 1) oversees application and licensing, safety and soundness, BSA/AML compliance; 2) incorporates a number of existing state money transmitter laws and Uniform Money Services Act requirements; 3) preserves the current state structure for those wishing state licenses; and 4) offers uniform federal law only for an applicant choosing a federal license." We agree with this approach. *See* Financial Innovation Now, *Letter to Chairman Crapo and Ranking Member Brown* (Apr. 2017) *available at* https://financialinnovationnow.org/wp-content/uploads/2017/04/fin-submission-crapo-brown-final.pdf

We also need a safe harbor modeled after the DMCA and CDA examples. A new blockchain safe harbor for non-custodial uses of digital currencies should be established to protect Americans developing open blockchain infrastructure. Fifty-three U.S. states and territories require "money transmitters" to get licensed before they open for business.[9] As discussed earlier, we believe it is reasonable to ask a custodian of other people's money (or digital currency) to seek a license or charter before they enter into that trusted relationship. We do not, however, believe that it is reasonable to mandate licensure from a technologist who helps build these networks but is not a custodian of other people's funds. To do so is to try to stop speeding by requiring costly licensing for highway construction personnel. It doesn't make sense and it'll only mean that fewer highways get built.

In nearly every state, the definition of "money transmission" is different, and in several states that definition could be interpreted to require non-custodial developers to license.[10] Crafting a unified exemption from licensing for non-custodial businesses and users in state law is essential to American competitiveness, but passing such a law in every state is not a scalable approach.[11] The Commerce Clause[12] empowers Congress to rectify just such a situation, where

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[9] *See* Thomas Brown, *50-STATE SURVEY: Money Transmitter Licensing Requirements* (last accessed May 2016) http://abnk.assembly.ca.gov/sites/abnk.assembly.ca.gov/files/50%20State%20Survey%20-%20MTL%20Licensing%20Requirements(72986803_4).pdf.

[10] *See e.g.*, Utah Code Title 7 Financial Institutions Act Chapter 25 *available at* https://le.utah.gov/xcode/Title7/Chapter25/7-25.html?v=C7-25_2015051220150512 where money transmission is defined as follows: "'Money transmission' means ... engaging in the business of ... transmitting money within the United States or to locations abroad by any and all means[.]" A definition as vague as this could easily be stretched to cover persons who help build financial networks but who do not hold or custody money on behalf of others.

[11] Both the Conference of State Banking Supervisors and the Uniform Law Commission have worked diligently to encourage uniformity among the states, however, progress is slow. For example, as of 2016, the Uniform Law Commission's Uniform Money Services Act has only been adopted by legislatures in

non-uniform and potentially anti-competitive state laws place unnecessary burdens on interstate commerce. To remain on the vanguard of permissionless innovation, America needs a safe harbor for non-custodial developers of open blockchain networks.

Open blockchain networks are new fundamental public infrastructure; they are the pipes for our future economy. We should want that infrastructure built here, without unnecessary impediments and with reasonable protections for consumers. Innovation can be both permissionless and responsible, but it will only happen in the U.S. if we take a unified national approach to regulating custodians and create a safe-harbor for non-custodial developers.

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nine states and territories. The UMSA was finalized in 2000. After 16 years it has only modestly remedied the issue of disparate standards for money transmission regulation across the several states. See Uniform Law Commission, Uniform Money Services Act (last accessed May 2016) http://www.uniformlaws.org/Act.aspx?title=Money%20Services%20Act.

[12] U.S. Constitution, Article 1, Section 8, Clause 3.