Testimony of Scott Kupor, Managing Partner, AH Capital Management & CNK Capital Management, House Agriculture Committee July 18, 2018

Chairman Conaway and Ranking Member Peterson, thank you very much for the opportunity to speak with the Committee regarding crypto technology and its implications for American technology innovation. I applaud this Committee for your efforts to take a closer look at what we believe is a foundational area of technology development, one that is critical to the health of our capital markets, entrepreneurship and the American economy.

By way of background, I am the Managing Partner for AH Capital Management, which manages approximately \$7 billion in venture capital funds focused principally on early-stage IT-related investments. We have been operating this business for just over nine years and some of the companies in which we have invested and with which you may be familiar include Facebook, Lyft, AirBnB, Instacart, Pinterest and Github. I am also the Managing Partner for CNK Capital Management, a registered investment adviser that manages a \$300 million venture capital fund dedicated solely to investing in crypto-related technologies.

Background on Cryptonetworks

I'd like to focus my time here today on what we believe is the foundational importance of crypto-related technologies and why we believe they make a compelling investment opportunity for the venture capital community.

In doing so, I think it's important to define the space precisely.

The public narrative around crypto-related technologies tends to focus primarily on two areas: (i) Bitcoin itself as a potential store of value and the high levels of volatility inherent in the price of Bitcoin and (ii) the proliferation of initial coin offerings (ICOs) to unaccredited, retail investors, many of which have been rightly criticized by the SEC as inconsistent with U.S. securities laws. While these are no doubt currently significant aspects of the industry, the almost exclusive public focus on these areas obscures the exciting technological innovation that drives our interest in cryptonetworks.

Specifically, we define the term "cryptonetworks" as:

- a new way to build "digital services,"
- where those services are "owned and operated" by a "community of network participants," rather than by a centralized corporation, and
- where the repository of activity on the network (i.e., the database) is decentralized and maintained by the community

What are "digital services"? They are simply internet-based applications, such as many of the ones we enjoy today – ride sharing, messaging, grocery delivery, enterprise applications, to name a few. We believe that developers will create a whole new set of digital services utilizing the

principles of cryptonetworks, many of which are likely beyond our imagination today but will also yield enormous consumer utility.

And what are those principles of cryptonetworks? That they are both owned and managed by the community that develops, maintains and utilizes the networks. This is distinct from the large digital services that we utilize today, where the ownership and management of those services are governed by a centralized corporation.

At first blush, this may sound crazy – that there may be value in community ownership and management of an asset that exceeds that of centralized corporate control? But, in fact, there is well-established precedent for this in the history of the technology industry.

First, is the open source software movement. This started in 1983 as a movement to create free software, led by an MIT researcher named Richard Stallman. Understandably, this was a radical concept at the time – that a community of developers would publish their software freely for others to modify and incorporate into various other open projects. But over time, this work morphed into the mainstream development of open source software, which today is the predominant method by which software is developed. Examples of open source software that have experienced widespread adoption include Linux, an operating system that governs most data center servers today and is a major component in virtually all smartphones and tablets, and Git, an open source software development system used by millions of software engineers globally.

Second, is the development of the very internet protocols that have given rise to the tremendous job and economic growth and consumer utility that we all currently enjoy from existing digital services. These protocols – which include, for example, SMTP (the protocol for email transmission), HTTP (the protocol to exchange structured text on the internet) and TCP/IP (the protocol for end-to-end data communication) – derived largely from academic or government-funded efforts and have been maintained in most cases by communities of academics and developers. They are "open" protocols in the sense that they are the well-established foundations on which many very exciting for-profit businesses have been built (e.g., Facebook, Amazon, Google), knowing that the protocols themselves cannot be changed by a centralized corporation.

Why should we care about this?

Because as the history of the internet has shown us, open protocols that are well-built and wellmaintained can become the building blocks on which massive consumer utility and economic growth can be built.

And why is that? Because for-profit enterprises are willing to take on all of the market risks of building a new company – and venture capitalists are willing to provide the funding for such endeavors – when they know that the foundations on which they are taking that risk cannot be changed at the whim of a centralized corporation.

In contrast, the technology world is also riddled with startup companies that have failed as a result of having taken on platform risk that depends on the rules of the road as defined by centralized, for-profit platforms (in contrast to open protocols). That's not because centralized, for-profit platforms are inherently bad, but rather because over time their economic incentives require that to remain viable as independent businesses they capture more of the gains associated with their proprietary platforms, often causing them to change the nature of the relationships they once encouraged with other companies who were in fact building on and improving their platform.

What does any of this have to do with cryptonetworks?

As we noted previously, cryptonetworks enable a new way for innovative developers to create new digital services without the attendant risk of building on centralized platforms. In many ways, cryptonetworks borrow from the nearly fifty years of history in the technology industry that enabled the initial internet protocol development and the open source movement; that is, the idea that communities of developers can share their work openly and properly govern a network without centralized authority. As my partner, Chris Dixon, has written about, cryptonetworks essentially replace the requirement to rely on trust from a centralized corporation with the requirement only that you trust the software itself to do what it has been built to do (and for which the fundamental code is open sourced for you to confirm on your own).

But, at the same time, cryptonetworks introduce a very powerful economic incentive that did not previously exist in the development of prior technologies – the presence of a token that creates a direct financial incentive for the community members to in fact develop and govern the networks appropriately. "Tokens" in the cryptonetworks world perform a series of functions: (i) they are the method of value exchange between network participants – that is, consumers "pay" for services using the token and sellers "receive" tokens in exchange for the services and (ii) they provide the financial incentive to reward developers and other maintainers of the network – that is, people may receive tokens for ensuring the authenticity of the transactions completed on the network.

The importance of regulation in cryptonetworks

Thus, the token plays a very important role in the functioning of cryptonetworks – it is the glue that binds the various players and provides the appropriate economic incentives for all market participants. And, recall that because all of the software in these networks is open sourced, meaning that anyone who wants to create a competing network can simply take all of the existing software and stand-up a rival network, the competitive incentives for the market participants are designed to be fair and responsive to the user community.

But, the token itself and the decentralized nature of many of these networks create a new set of challenges for regulators.

I want to first be very clear that we believe appropriate regulation in cryptonetworks is very important and we welcome the opportunity to work with you, other Members of the House and

Senate and the various agencies who are interested in creating a regulatory framework that both encourages innovation and protects consumers and well-functioning capital markets. There is an important role for the regulatory community to play and we believe that role is one of the reasons why the U.S. has long been a leader in the commercial development of so many breakthrough technologies.

In fact, the work that CFTC Chairman Giancarlo has done in setting up LabCFTC is a great example of how the regulatory community is trying hard to balance the needs of encouraging technological innovation with those of protecting consumers. Such collaborative engagement between regulators and innovators is precisely the type of activity that is required in such fastmoving markets as are cryptonetwork-related activities. Thank you as a Committee for your support and sponsorship in these initiatives.

Consistent with recent statements from the Director of Corporate Finance at the SEC, we believe that the regulatory nature of cryptonetworks varies with the stage of development of a particular project. Briefly, if a centralized sponsor is seeking to raise capital from investors prior to the functional realization of the network itself, the contract between the sponsor and investor is likely an "investment contract" and thus properly regulated under the U.S. securities laws by the SEC. The nature of the to-be-delivered tokens under that contract, however, may not be securities; they need to be evaluated using the same *Howey* test as do all potential securities.

As stated by the CFTC, some tokens are not securities. Once the network is functional and, in particular in cases where the network is decentralized, we believe that the nature of the tokens looks more like commodities than securities. This is because there is no centralized sponsor on whose efforts the value of the token is largely dependent. Rather, the tokens will have value that represents the utility of the service to its participants; the value will not be derived from the coordinated activities of a centralized sponsor.

Obviously, these are not easy determinations and will require the efforts of this Committee, among others, and the various regulatory agencies. But, we believe this framework is consistent with early pronouncements from both the SEC and the CFTC.

Regardless of the jurisdictional boundaries, we believe that investor protection, well-functioning capital markets and support for innovation should be the hallmark of the regulatory focus.

Summary

In summary, I would offer the Committee the following observations:

- The U.S. has long been a leader in technology, in large part due to a favorable regulatory and financial environment that has fostered risk taking and innovation.
- While we have enjoyed the fruits of this innovation in the form of economic growth, job growth and consumer utility stemming from many of the great technology companies of our time, we believe that cryptonetworks presents a new and exciting opportunity for us to continue on that trajectory.

- This is why you see venture capitalists and other financial professionals increasing their investment focus in this area. Just like other areas of technology development, our job is to provide risk capital to the areas of innovation that we believe can support long-term, self-sustaining enterprises. We believe cryptonetworks is one such area.
- But, to ensure that the U.S. continues to be the favored haven for such technological innovation, we need to develop a regulatory framework that encourages risk-taking and capital formation, provides clarity and certainty to market participants and protects individual investors and the integrity of the markets.

I thank you for your time and look forward to the opportunity to work with the Committee on this important topic.