INFORMATIONAL HEARING OF THE ASSEMBLY COMMITTEE ON BANKING AND FINANCE AND SELECT COMMITTEE ON TECHNOLOGICAL ADVANCES

VIRTUAL CURRENCY BUSINESSES: THE MARKET & REGULATORY ISSUES

Thursday, October 17, 2019, 10:00 a.m.

RIO HONDO COMMUNITY COLLEGE CAMPUS INN 3600 WORKMAN MILL ROAD WHITTIER, CA 90601



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Informational Hearing of the Assembly Committee on Banking and Finance and Select Committee on Technological Advances

Virtual Currency Businesses: The Market and Regulatory Issues

Thursday, October 17, 2019, 10:00am

Rio Hondo Community College, Whittier, CA

<u>Agenda</u>

- 1) Welcome and Opening Remarks
 - a) Assembly Member Monique Limón, Chair, Assembly Banking and Finance Committee
 - b) Assembly Member Ian Calderon, Chair, Select Committee on Technological Advances
- 2) The Business Perspective
 - a) Ally Medina, Executive Director, Blockchain Advocacy Coalition
 - b) Brian Brooks, Chief Legal Officer, Coinbase
 - c) Stuart Alderoty, General Counsel, Ripple
- 3) The Consumer Perspective
 - a) Rainey Reitman, Chief Program Officer, Electronic Frontier Foundation
 - b) Suzanne Martindale, Senior Policy Counsel & Western States Legislative Manager, Consumer Reports
- 4) The Regulatory Perspective
 - a) Manny Alvarez, Commissioner, Department of Business Oversight
 - b) Keith Rowley, Uniform Law Commissioner
- 5) Public Comment

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Joint Informational Hearing Assembly Banking and Finance Committee Assembly Select Committee on Technological Advances

Virtual Currency Businesses: The Market and Regulatory Issues

Thursday, October 17, 2019 10 am, Rio Hondo Community College, Whittier, CA

1. **Hearing Goal.** The goal of this hearing is to provide information to members of the Legislature about (1) the emerging industry of businesses that facilitate the exchange, transfer, and storage of virtual currencies and (2) regulatory issues related to the industry. Since the introduction of Bitcoin in 2009, computer programmers have developed thousands of different virtual currency users. Although some virtual currency business activity is subject to a combination of existing state and federal laws, a lack of regulatory clarity and adequate protections for users of virtual currencies may negatively affect businesses, consumers, and investors in California.

Topics that will be discussed during the hearing include:

- An overview of the virtual currency industry and how existing laws impact companies in the industry,
- Potential risks to consumers or investors due to negligent, fraudulent, or unscrupulous actions by virtual currency businesses,
- Guidance from the Commissioner of Business Oversight related to the pros and cons of establishing a new regulatory framework specific to virtual currency business activity and issues the Legislature may consider when designing such a framework,
- A summary of the model regulatory framework adopted by the Uniform Law Commission (ULC) and discussion of the process for how the ULC reached their conclusions.

The Committees will hear from industry representatives, consumer organizations, state regulatory officials, and policymakers associated with the ULC.

2. What is virtual currency? A virtual currency is a digital representation of value that is not issued or backed by a government or central bank. Virtual currencies are a form of electronic money and serve one or more of the traditional functions of money: a medium of exchange, a unit of account, and a store of value. Unlike the US dollar, virtual currencies are not considered legal tender¹, but private parties may agree to use a virtual currency to facilitate an economic exchange.

Virtual currencies are created by either a centralized issuer, a decentralized protocol, or a hybridization of the two models. Under centralized issuance, a single entity has the ability to

¹ A legal tender is a medium of exchange that is legally approved as a mechanism to repay a debt.

create units of the virtual currency and serves as the record keeper for transfers of the virtual currency between parties. In the centralized issuance model, users of a virtual currency must trust the issuer to manage the creation and record keeping processes in a manner that supports the currency's effectiveness as a medium of exchange and store of value.

Bitcoin and many other virtual currencies are created and tracked via a decentralized protocol, rather than the centralized issuance model that prevails in the world of fiat money.² The most commonly used technology that underpins decentralized virtual currencies is distributed ledger technology, or DLT. DLT is essentially a decentralized database that is managed by multiple parties within a network. When a new transaction occurs, whether the creation of a new unit of virtual currency or the transfer of an existing unit of virtual currency between parties, DLT notifies all members of the network about the new transaction by updating the ledger. Blockchain is the most well-known type of DLT and is the technology that underpins Bitcoin.

In the decentralized model, users do not need to trust a single entity to manage the virtual currency. Instead, DLTs rely on consensus algorithms that are designed so that network participants must arrive at an agreement when adding new transactions to a ledger. The ledger is visible to all parties in the network and is secured by sophisticated cryptography,³ which ensures that a unit of virtual currency cannot be simultaneously used by multiple parties.

The Bitcoin source code was released by a pseudonymous individual or group in 2009, and Bitcoin is regarded as the first successful decentralized virtual currency. The blockchain technology that underpins Bitcoin is designed to address longstanding problems in computer science related to consensus protocols and double-spending of a digital asset or currency. While Bitcoin is the most popular virtual currency, there are more than 2,000 virtual currencies currently available on trading platforms.⁴ Many of these *altcoins*, or alternatives to Bitcoin, rely on adaptations of the technological breakthroughs contained in the Bitcoin source code

3. **How do businesses participate in virtual currency markets?** Developed markets for virtual currencies typically rely on businesses that serve as intermediaries between users. In theory, decentralized virtual currencies, like Bitcoin, do not require intermediaries to exchange, transfer, or store units of virtual currencies. In practice, however, transactions between users can be facilitated more safely and more conveniently by using trusted intermediaries, similar to how the banking system evolved to provide intermediary services in the fiat-denominated economy.

² Fiat money is often used interchangeably with legal tender. Fiat money is currency that has been established as money by government decree or law. The US dollar, euro, and Mexican peso are examples of fiat money.

³ Cryptography refers to techniques for securing communications through the use of codes.

⁴ <u>https://coinmarketcap.com/all/views/all/</u>

Businesses that serve virtual currency users provide a combination of services that fall in three general categories: transfer, exchange, and storage.⁵

- Transfer refers to an activity where a business takes funds or value from one end of a transaction and delivers those funds or value to a designated person on the other end.
- Exchange refers to transferring an amount of virtual currency in exchange for an agreed upon amount of fiat currency, or vice versa. Exchange also includes transferring one type of virtual currency for a different type of virtual currency at an agreed upon rate.
- Storage refers to receiving and safekeeping virtual currency on behalf of someone else. Storage is analogous to a bank accepting funds on deposit. Virtual currency storage is often facilitated by the use of a digital wallet that makes transferring or exchanging virtual currency more convenient for users.
- 4. What is the current regulatory landscape for virtual currency businesses? Virtual currency business activity is relatively new, and it is often unclear how existing state and federal laws apply to such activity. Many virtual currencies have a combination of properties that straddle multiple regulatory areas, including laws that govern securities, commodities, and money transmission, which further complicates the application of laws to virtual currency business activities.

A lack of regulatory clarity can harm businesses and users. Businesses may invest resources in developing services that ultimately could be deemed unlawful by state or federal regulators. Users may have trouble identifying legitimate businesses from illegitimate ones without a state or federal licensing authority's stamp of approval.

Policymakers may also be concerned about important policy objectives that can be undermined by unregulated virtual currency business activity. Virtual currencies allow users to transfer large amounts of value over long distances while masking the identities of both the sender and receiver, which raises significant concerns about money laundering, tax evasion, and terrorist financing.

Currently, there is neither a comprehensive regulatory approach from the federal government, nor a widely adopted approach at the state level. Instead, a patchwork of existing laws are applied, not always uniformly, by various federal and state regulators based on factors including the technological design of a virtual currency and the way a virtual currency is used.

⁵ Businesses may offer additional services related to virtual currencies that do not fall neatly under any of these three categories, such as derivate trading products.

Federal

Existing federal law provides both the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) with partial jurisdiction over virtual currency businesses.

SEC jurisdiction applies when a unit of virtual currency is considered a security. The legal standard that defines a security is a four-pronged test: there must be (1) an investment of money, (2) in a common enterprise, (3) with the expectation of profit, (4) from the managerial efforts of others. When deemed a security, the SEC authority is most often related to Initial Coin Offerings (ICOs) and trading activities, which subjects a virtual currency business to requirements related to registration, cybersecurity, and implementing policies to prevent fraud and market manipulation.

CFTC jurisdiction applies when a virtual currency product is a derivative of a commodity. Units of virtual currency that are deemed not to be securities may be subject to commodities law. For example, Bitcoin does not meet the definitional requirements of a security, but it is considered a commodity by the CFTC. Exchanges involving fiat currency to Bitcoin are not under CFTC jurisdiction, but a derivative product based on Bitcoin, such as a futures contract that states a ratio in US dollar to bitcoin, is subject to CFTC enforcement.

Congressional interest in virtual currencies increased in 2019 upon Facebook's announcement that it intends to develop a virtual currency named Libra in conjunction with major companies in the financial services industry. Both the House Financial Services and Senate Banking Committees held hearings about Facebook's plan in July 2019. During those hearings, both Republican and Democratic legislators voiced concerns due to Facebook's failures in protecting consumer data. Facebook's announcement has led some Members of Congress to introduce legislation to bar large technology companies from providing financial services.⁶ A comprehensive approach from Congress related to virtual currency business regulation, however, does not appear to be imminent.

States

There is not a uniform approach to the regulation of virtual currency businesses at the state level. All states, except Montana, have laws that regulate money transmitters, but such laws vary between states and state regulators differ in their interpretations of whether and in which cases state money transmission laws apply to virtual currency businesses. The following examples shed light on the range of state actions in this space.

⁶ https://www.cnn.com/2019/07/15/tech/facebook-libra-ban-draft/index.html

- New York: New York attempted a comprehensive approach to regulating virtual currency businesses with the introduction of BitLicense in 2014. The state financial regulator, New York State Department of Financial Services (DFS), issued a regulation that requires companies to have a license prior to engaging in specified activities, including virtual currency transmission, storing virtual currency on behalf of others, issuing a virtual currency, and performing exchange services. To obtain a license, companies must pay a \$5,000 application fee, maintain sufficient capital as determined by DFS, and have an anti-money laundering program and cybersecurity program, along with a list of other requirements common in the financial services industry. Due to these requirements, some virtual currency companies have decided to exit the state and deny service to New York customers.⁷ Twenty-one companies have received a BitLicense since its inception.
- *California:* The state's Money Transmitter Act (MTA) does not expressly address virtual currencies or virtual currency business activity. The Department of Business Oversight, who enforces the MTA, has not released comprehensive official guidance on the applicability of the MTA or other state laws on virtual currency business activity. Rather, DBO responds to specific requests from companies on a case-by-case basis and posts a redacted version of its response letters on its website.
- *Wyoming:* Wyoming has emerged as the most business-friendly state for virtual currency businesses. The Legislature passed and the Governor signed an express exemption for virtual currencies from the state's Money Transmitter Act in 2018. The state also exempted certain virtual currency tokens from state securities laws, but the impact of such an exemption is muted by federal laws that may take precedence.
- 5. What risks to consumers and users of virtual currencies exist in the market today? Adoption of virtual currencies by American consumers is low, with industry-sponsored surveys indicating that 5-10% of respondents own a virtual currency.⁸⁹ Research indicates that only 1% of virtual currency transactions involve a merchant,¹⁰ which means that virtual currencies are rarely used as a form of payment for goods or services. The same study showed that nearly 90% of transactions involved an exchange, indicating that the predominant motivation for users to purchase a virtual currency is speculation that it will increase in value relative to other assets.

Although virtual currencies may be seldom used for purposes beyond speculation, policymakers have an interest in protecting users from fraudulent and criminal activities. In 2014 the federal Consumer Financial Protection Bureau (CFPB) issued a consumer advisory that cautioned consumers about risks posed by virtual currency.¹¹ The CFPB warned against hackers and fraudulent schemes, as well as price volatility and transaction costs compared to traditional

⁷ <u>https://www.coindesk.com/bitlicense-refugees-kraken-shapeshift-ceos-talk-escape-new-york</u>

⁸ https://www.bitcoinmarketjournal.com/how-many-people-use-bitcoin/

⁹ https://cointelegraph.com/news/11-of-americans-own-bitcoin-major-awareness-increased-since-2017

¹⁰ https://www.latimes.com/business/la-fi-bitcoin-rally-blockchain-speculation-20190531-story.html

¹¹ <u>https://files.consumerfinance.gov/f/201408_cfpb_consumer-advisory_virtual-currencies.pdf</u>

payment methods. The CFPB also warned consumers that virtual currency businesses do not provide the level of protections that consumers expect from banks and credit unions.

Examples of large hacks or fraudulent schemes include:

- Mt. Gox, \$487 million Mt. Gox was a Tokyo-based exchange platform that was the world's largest Bitcoin exchange prior to its failure in 2014. Hackers infiltrated the company's network in 2011 and began skimming bitcoin from electronic wallets. When the security breach and theft was announced in 2014, hackers had stolen 850,000 bitcoin, which was valued at \$460 million at the time, and about \$27 million in cash held by the company. Mt. Gox filed for bankruptcy and liquidated in 2014. A portion of the stolen funds were recovered, and the legal process of partially refunding users is still ongoing.
- Coincheck, \$530 million Coincheck is a Tokyo-based exchange platform. In January 2018 the company was hacked and lost \$530 million worth of users' virtual currencies. The company initially stated that it did not have funds to cover the losses, but later committed to refunding users. Japan's financial regulator was involved in assessing the company's capacity to issue the refunds.
- Bitfinex, \$72 million Bitfinex is a Hong Kong-based exchange platform. In August 2016 the company announced that nearly 120,000 bitcoin were drained from user accounts by hackers, reflecting a value of \$72 million at the time.
- iFan and Pincoin, \$660 million A Vietnam-based company called Modern Tech was allegedly behind two fraudulent Initial Coin Offerings (ICOs) for start-ups iFan and Pincoin. ICOs are a way for tech startups to raise capital from investors, similar to the Initial Public Offering, or IPO, that makes a company's stock publicly available for purchase. Modern Tech allegedly packed up its offices in Ho Chi Minh City and disappeared in 2018 after raising \$660 million from investors.
- 6. What is the Uniform Law Commission and how do they propose regulating virtual currency business activity? The Uniform Law Commission (ULC) has worked for the uniformity of state laws since 1892. It is a non-profit unincorporated association, comprised of state commissioners on uniform laws from each state, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands. There is only one fundamental requirement for the more than 300 uniform law commissioners: that they be members of the bar. The state uniform law commissioners come together as the ULC for one purpose—to study and review the law of the states to determine which areas of law should be uniform. The commissioners promote the principle of uniformity by drafting and proposing specific statutes in areas of the law where uniformity between the states is desirable.

In July 2017 the ULC adopted the Uniform Regulation of Virtual-Currency Businesses Act after an extensive stakeholder process and multiple rounds of drafting, review, and amendments. The act defines several key terms that govern whether a company's activities would be subject to regulation, including definitions of virtual currency, virtual currency business activity, control, exchange, store, and transfer. The act proposes a licensing framework for companies with virtual currency businesses activity greater than \$35,000 annually, with specified exceptions. The licensing framework establishes criteria for approval of a license application, provides examination and enforcement authority to a state regulatory agency, mandates disclosures and other protections for users, and mandates compliance programs and policies.

The ULC framework has been introduced in five state legislatures, but no state has adopted it yet.

7. Additional Resources.

Massad, Timothy G., Brookings Institute, *It's Time to Strengthen the Regulation of Crypto-Assets*. March 2019. <u>https://www.brookings.edu/wp-content/uploads/2019/03/Economis-Studies-</u> <u>Timothy-Massad-Cryptocurrency-Paper.pdf</u>

Van Valkenburgh, Peter, Coin Center. *The Need for a Federal Alternative to State Money Transmission Licensing*. January 2018. <u>https://coincenter.org/files/2018-01/federalalternativev1-1.pdf</u>

Van Valkenburgh, Peter, and Jerry Brito. Coin Center. *State Digital Currency Principles and Framework*. March 2017. <u>https://coincenter.org/files/2017-</u>03/statevirtualcurrencyprinciplesandframeworkv2.0.pdf

С

Virtual Currency Hearing Testimony

I'm Alexandra Medina, Director of the Blockchain Advocacy Coalition. The BAC was formed over a year ago after a group of mid size blockchain and virtual currency companies in the state realized that there was no organized effort to engage with policymakers in the 5th largest economy in the world on behalf of the blockchain community. Last year we supported the passage of SB 838 and AB 2658 as small but meaningful steps towards acknowledging the impact of the blockchain industry in CA and starting to develop policy around that.

I've provided a FAQ sheet about CA's blockchain industry. It's by no means exhaustive, but it's a high level view of what the industry looks like both here and abroad. We currently have 734 blockchain companies in this state. That's a number that surprised me because last year in August we had only 315. That sounds like healthy industry growth until you compare it globally. The number of blockchain businesses globally increased from 2017 to 7370 in the same time frame. We've actually lost ground in the state. Last year the US had 27.2% of the global market share and CA accounted for 11.7% of that. Currently the US has 25.9% and CA just under 10%. If you look at the chart I've provided this is a continuation of a trend, we've lost marketshare since 2012. We have a significantly smaller marketshare in CA than in any other technology industry I looked at. Most hover around 20% and we are down to half that. The point I'm trying to hammer here is that CA has a much smaller amount of the blockchain industry than we should being the home of Silicon Valley and Silicon Beach. And more concerningly, we are consistently losing that industry.

Most of you are familiar with the concept of Bitcoin and probably Facebook's Libra and perhaps even the businesses the other panelists up here represent. But here are some other examples of how this technology is used in California: Propy streamlines real estate transactions on blockchain, Civic is creating secure identity platforms, IBM and Sweetsense teamed up to create a platform for farmers in areas with overdrafted aquifers to trade water.

The vast majority of blockchain businesses in this state are not extremely large and well funded. Nearly ²/₃ of them have 10 or fewer employees. Only 47 of the 734 have more than 50 employees. These companies have a median funding amount of 2.5 million, according to Crunchbase. The average company has a median funding amount of 4.5 million. So why are we losing blockchain companies as a nation and a state? Pretty simple- it's the regulatory uncertainty.

A Morgan Stanley report indicated the greatest predictor of where a business chooses to locate is regulatory clarity. We do not have clarity here. There are 4 definitions of cryptocurrency at a federal level. SEC sees some as securities, the CFTC has claimed commodities, the treasury considers them a currency and the IRS taxes them as...a property. In addition to obtaining necessary federal MSB licenses companies that wish to engage all US customers must seek comply with individual licensing requirements in all 50 states.

To obtain licenses at a federal level and then in every state requires an inordinate amount of a start ups resources. And some of those individual state requirements are extremely onerous. The most infamous one being New Yorks' 2015 BitLicense. In the first 3 years the New York issued a mere 5 licenses. They make the DMV look expeditious. Headlines sprung up about the "Great Bitcoin Exodus". Many companies left New York rather than devote resources to languishing in a regulatory bottleneck. Washington state many businesses left after the passage of SB 5031 in 2017. The key issues cited were bond and data collection requirements.

When blockchain businesses leave our state or country they mostly go to a handful of other countries. Singapore is a popular destination for california companies to register in. The Singaporean government is working to attract blockchain companies and investment. Their taxation agency is proposing to remove the 7% goods and services tax from cryptocurrency transactions that function or are aimed to function as a medium of exchange. They issued a set of guidelines last November that clarified regulations that pertain specifically to digital assets representing securities or derivatives contracts.

Switzerland similarly differentiates between types of tokens, creating 3 categories: payment, utility, and asset tokens. They have attracted many companies with this framework and recently awarded the first banking license to a crypto company. Neither country has lax standards and both still have strict kyc/aml requirements, but the clarity of the regulatory framework is attractive for businesses.

In April of this year Texas released guidance for virtual currency companies stating that cryptocurrencies as currently implemented cannot be considered money or monetary value under their Money Services Act. It goes on to clarify which sorts of business might be considered a money transmitter. For example: Exchange of cryptocurrency for sovereign currency through a third-party exchanger is generally money transmission but clarifies that bitcoin atms that facilitate a sale or purchase of Bitcoins by the machine's operator directly with the customer would be exempt.

Colorado, Montana and Wyoming- a state that's really trying to get a crypto market going- have all defined consumptive or utility tokens as exempt from state securities law. This is a step toward the structures Singapore and Switzerland have enacted.

I applaud Asm. Calderon's commitment to understanding and engaging on blockchain issues in the legislature. The language he has proposed in AB 1489 came from the Uniform Law Commission's Supplemental Act. However, the same language has faced roadblocks in Nevada, Hawaii and Oklahoma.

The goal of creating a streamlined, reciprocal licensing system across states is admirable. Reducing the amount of individual states that a company needs to apply for would reduce costs and encourage mid-size companies to stay in the US. Even if it did pass in all 4 states it would do little good to the industry here and as currently written and could accelerate the loss of the blockchain businesses. Here are some issues I'd ask the committees to consider when discussing virtual currency regulation:

- 1. If a company already has a lenders license or MTL in this state would they also have to apply for this even if their license covers the scope of their business? That should be clarified to remove redundancy.
- 2. Should the state consider defining digital assets based on their function and regulate them separately as other states and countries have done?
- 3. Are wallet to wallet transactions or bitcoin atm transactions as detailed in the Texas guidance captured unintentionally under this framework?
- 4. Are the surety bond and personal wealth requirements prohibitive to small businesses? I know there is the 35k exemption but that's just extremely low for a state like California. I do not know who would even take advantage of that.
- 5. Are the data requirements tailored to increase consumer protection rather than create a potential security risk?

D

TESTIMONY OF BRIAN P. BROOKS CHIEF LEGAL OFFICER, COINBASE GLOBAL, INC. BEFORE THE ASSEMBLY JOINT HEARING, BANKING AND FINANCE AND SELECT COMMITTEE ON TECHNOLOGICAL ADVANCES

October 17, 2019

Leader Calderon, Chair Limon, and Committee Members:

My name is Brian Brooks and since September 2018 I have served as Chief Legal Officer of Coinbase Global, Inc. I am pleased to have the opportunity to appear before you to discuss the structure of the virtual currency market, the regulatory structure currently in place to protect investors and consumers from potential risks, and our views on the Uniform Law Commission's work in this area.

Coinbase Background

Before addressing the Committee's specific areas of interest, please permit me to address the perspective Coinbase brings to the discussion. Among other businesses, Coinbase, which is headquartered in San Francisco, is the largest virtual currency trading platform in the United States. We have more than 30 million accounts for more than 14 million distinct customers who collectively have traded more than \$150 billion in cryptoassets. Our investors include not only well-known Silicon Valley names such as Andreesen Horowitz and DFJ, but also traditional banks and securities firms such as the New York Stock Exchange and the Japanese bank MUFG. Coinbase has more than 800 employees, the majority of them based in California and the remainder based in offices in Portland, Chicago, New York, London, Dublin, and Tokyo.

While we are best known as a platform for buying and selling virtual currencies, we are also the largest custodian of cryptoassets in the world, with over \$20 billion in assets under custody. Our stablecoin, which is built on blockchain technology but whose value is backed 100 percent by U.S. dollar balances held in FDIC-insured bank deposit accounts, is one of the 25 most widely traded virtual currencies in the world, with almost \$475 million in circulating supply and daily transaction volume of over \$150 million. We have pioneered a number of innovations designed to make it easier for everyday customers to access, use, and earn returns on virtual currency holdings, including paying rewards on our stablecoin balances, creating a "staking" platform that allows our customers to earn a rate of return on their proof-of-stake tokens, and other products that make cryptocurrency safer, more valuable, and easier to use.

Market Structure

The market structure of the cryptocurrency market is relatively straightforward.

The manufacturers of the product in this market are referred to as *project developers* or *asset issuers*. At present there are more than 2,000 cryptocurrencies in circulation globally. These tokens represent projects in a wide range of areas, ranging from tokens used to make purchases inside of video games to tokens used to power polling and prediction markets to tokens used in payments systems and lending platforms. It is important to remember that the core purpose of cryptocurrency is not investment returns or even necessarily financial transactions; the core purpose of cryptocurrency is to enable ledgers to be maintained for various purposes without the need for banks or other intermediaries that historically imposed costs and other frictions on the system. Some assets are referred to *security tokens* and are registered with the Securities and Exchange Commission like any securities, while others are not regulated as securities.

Asset issuers generally distribute cryptoassets either through *airdrops* (distributions of assets for free to large numbers of wallet addresses); *initial coin offerings* (often through a Simple Agreement for Future Tokens ("SAFT")), though these have become less common due to their potential for securities law compliance issues; *initial exchange offerings*; or *Regulation D or other exempt offerings* under the securities laws.

Following the initial distribution of a particular cryptoasset, secondary trading occurs on **crypto exchanges** like Coinbase. Crypto exchanges maintain order books that match buy/sell orders for various asset pairs. Order books that match different pairs of crypto assets are referred to as **crypto-to-crypto** trades, while order books that allow exchanges of crypto assets and fiat currencies are referred to as **fiat-to-crypto** trades. Some crypto exchanges make **margin loans** to allow the purchase of limited amounts of cryptoassets subject to the exchanges' credit policies.

Participants in cryptocurrency transactions including both *retail and institutional investors* as well as users of cryptoassets for specific use cases. Coinbase alone has more than 14 million retail investors on its platform. In addition, institutional investment in crypto has been on the rise over the past several years and now includes Ivy League and other major university endowments, hedge funds and asset managers, mutual funds, and other significant institutions. Once an investor buys a particular token, the investor can hold it; can sell it on an exchange; can send it to another person on the original exchange or to a recipient on a different exchange; or can send it to a *private or user-controlled wallet* that is not associated with an exchange.

These investors and users must safeguard their *private keys* which allow them to access the cryptographic codes that represent their individual cryptoassets. These private keys can be custodied either in a *hosted wallet* typically maintained by a *custodian* which may also be an exchange (Coinbase is the largest custodian of cryptoassets in the world, as noted above), or in a *user-controlled wallet*. To provide custody to SEC-registered investment advisers, a custodian must meet the requirements of the SEC's *qualified custodian rule*.

Regulatory Structure

Contrary to popular belief, the cryptocurrency market is subject to a complex web of state and federal regulatory oversight.

At the federal level, investor protection oversight is provided by the Securities and Exchange Commission and the Commodity Futures Trading Commission. The SEC polices both compliance with the Securities Act of 1933, which imposes disclosure and other requirements on assets that qualify as "securities" under federal law, and the Securities Exchange Act of 1934, which imposes requirements on national securities exchanges and alternative trading systems. In addition, the SEC promulgates regulations that govern crypto custodians under the Investment Advisers Act. The SEC has used its authority to issue extensive guidance to asset issuers and crypto exchanges, and has brought a number of high-profile enforcement actions against asset issuers.

One key regulatory gap has been a lack of clarity concerning which specific tokens constitute securities under the Securities Act and related SEC guidance. To address this gap and operationalize case law and SEC guidance, Coinbase and seven other exchanges, investors, and custodians formed the Crypto Rating Council to assess the likelihood that any given token could be deemed to be a security under existing law. The founding members expect that the Crypto Rating Council will aid the SEC in allocating enforcement resources to those assets most likely to qualify as securities and away from other assets, and will also aid investors in understanding the legally safe areas of crypto.

The CFTC, in turn, regulates spot markets, margin lending, and derivatives, among other things. Like the SEC, the CFTC has issued extensive guidance on major crypto regulatory issues, and has also approved various innovative crypto products such as crypto futures markets.

Other federal regulators are also playing an active role in crypto markets. The Federal Trade Commission has brought enforcement actions under the consumer protection laws. The Treasury Department's Financial Crimes Enforcement Network has brought money-laundering and other actions against bad actors in the crypto sector.

At the state level, most states, including California, regulate certain cryptocurrency activities as money transmission activity requiring a money transmitter license. Some states impose separate licensure requirements on crypto exchanges that offer margin loans to their customers. A few states, most notably New York but also a few others, have crypto-specific legislation that licenses cryptocurrency trading activity separately from other money transmission activity. And a similarly small number of states have specific trust company laws that allow trust companies to serve as custodians of cryptoassets.

The theme that should emerge from this recitation is that crypto activity is far from un- or under-regulated; on the contrary, regulation of crypto activity is arguably more complicated than it needs to be, with overlapping and sometimes inconsistent regulation from state to state, the need to obtain multiple licenses to conduct crypto activity even within a single state, and a bizarre lack of reciprocity among the various states. What is needed is clarity and simplicity.

Coinbase believes that, in this complexity, there is an opportunity for California to lead. The opportunity is not in passing yet more layers of license requirements, but in creating a single charter for crypto companies that would allow such companies to operate within a single corporate entity that is supervised in a rigorous manner but without the ambiguity and complexity that characterizes the status quo. California could successfully compete with New York for crypto businesses if it solved a few discrete problems.

First, California could offer a single charter that simultaneously authorized the holder to trade, lend, and custody crypto assets. Currently, these activities require three different licenses in both California and New York.

Second, California could provide business-plan approval for its charter holders, allowing them, for example, to trade all crypto tokens, or all crypto tokens that do not constitute securities under federal law, or all tokens within other specified categories. Currently, New York's BitLicense requires licensees to seek individual approval for each new asset they propose to list -- meaning that the BitLicense itself is not sufficient conduct any crypto business until that individual business is approved separate from approval of the BitLicense itself.

Third, California could include lending powers in its crypto charter. Currently, to lend for margin purposes or other purposes, a company requires a separate consumer or commercial lending license. Since the supervisor of those licenses is the same as the supervisor for money transmission licenses, it makes little sense to require a separate license for each activityl

Fourth, California could authorize custody activities to be conducted inside of a single crypto charter instead of requiring a separate trust company license to conduct such activities. Again, since the same agency regulates both money transmission and custody, it makes little sense to require separate licensure for the two activities. Like New York has already done, California should specify that crypto custody is a fiduciary activity. That designation is important for purposes of complying with the SEC's qualified custodian rule.

We believe the power to consolidate all these authorities within one single, rigorously supervised charter is within the Department of Business Oversight's existing authority, and we thank Commissioner Alvarez for engaging with the industry on these ideas since he took office.

The Uniform Law Commission's Model Virtual Currency Business Act

Coinbase has appreciated the opportunity to comment on earlier drafts of the Uniform Law Commission's work. Some of our comments have been reflected in revisions to the most recent version. Among our most important concerns have been:

- As noted above, there is already significant state and federal licensure and regulation in this area. At a minimum, the Model Act needs to exempt companies currently operating under money transmitter licenses so as to avoid literally duplicative regulation of the same activity.
- The Model Act should allow licensees to maintain the value of customer crypto assets *in like crypto holdings*, without requiring that they be collateralized in fiat currency.
- The Model Act should regulate crypto activity separate and apart from UCC Article 8, since most crypto assets are not securities for any other purpose and application of a long-established commercial rule set designed for investment securities to non-securities could have unintended and unanticipated consequences both in the crypto market and in the securities market.

As noted above, we believe a better focus for California would be to adopt a clearer and more streamlined regulatory regime -- focused on a single charter for crypto activities that allows trading, lending, and custody to occur inside of a single charter -- that would position California favorably to compete with New York to be the hub of the crypto ecosystem. This is appropriate since much of the technology and many of the companies involved in this area were built here.

Thank for the opportunity to speak with you today. I look forward to answering your questions.

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TESTIMONY OF STUART ALDEROTY General Counsel of Ripple Labs, Inc. California State Assembly Committee on Banking & Finance and Select Committee on Technological Advances October 17, 2019

Chair Limón, Chair Calderon, and distinguished members of the Committee and Select Committee, thank you for the opportunity to appear before you today.

I am Stuart Alderoty and I am the General Counsel of Ripple.

Ripple is an enterprise blockchain company headquartered in San Francisco with actual products in commercial use. We are working with - not against - regulators, governments, and central banks throughout the world, to improve the way the world moves money. Ripple's global payments network includes over 200 customers across 40+ countries and six continents.

I joined Ripple in January after over three decades of practicing law in New York where I was a partner with a global law firm and where I held senior leadership positions - including General Counsel roles - with public financial institutions such as American Express, HSBC, and CIT Group.

It is our firm belief that having a clear regulatory approach to digital assets is important for innovation if this space is to flourish. Bringing industry participants, consumer advocates, and regulators together, as you have done today, is precisely what is needed to reach such an outcome. To that end, we believe there is no better place for this conversation to take place than here in California.

As the birthplace of Silicon Valley - and thus, many of the start-ups that lie at the heart of Americans' everyday lives, including Google, Apple, and Amazon - California understands well the promise (and challenges) that new technology can hold. The state's recently established Blockchain Working Group is but one example of how California is choosing to take a leadership role. Ripple is proud that its own Vice President of Global Tax and Chief Tax Counsel will serve as a member of that Working Group.

And leadership is so very necessary given the potential transformative impact that advances in these technologies - particularly in the payments space - can have, not only for citizens of California but worldwide. First, today's global payments system is slow, often taking days to complete. Indeed, the quickest way for me to send money cross-border is literally to place it in a suitcase, drive to the LA airport, and physically take it with me to the destination. Second, the process is expensive - on average globally, currency conversions and fees equal approximately 7 percent of the total sent. Finally, cross-border transactions are frequently fraught with execution risk and offer little communication or visibility to either the sender or recipient of funds.

Blockchain technology and digital assets promise to change this by enabling faster, cheaper, and more transparent payment systems. RippleNet was specifically developed to provide instant settlement and complete transparency in cross-border transactions. RippleNet's On-Demand Liquidity solution uses the virtual currency, XRP, as a bridge to facilitate fiat to fiat currency transactions and deliver these benefits at scale. We partner with banks and financial institutions, including payment providers, to remedy the fundamental shortcomings of cross-border payments by enabling interoperability between networks.

Importantly, these advances do not require us to displace fiat currency or compete with the central banking system. Rather, as mentioned, Ripple works with regulators, governments, and central banks globally to improve the way the world moves money.

What does this mean for California specifically? It is currently estimated that approximately 800 million people globally (or one in nine) are the recipients of funds sent home by migrant workers. As many of you are personally aware, California is home to multiple counties where migrant workers - who are employed in many industries ranging from agriculture to technology - comprise more than a third of your constituents, including Santa Clara, San Francisco, and San Mateo. Ripple's solutions are specifically designed so that banks, financial institutions and payment providers can help immigrants send money home cheaply and efficiently, where it can then be used to cover living essentials. Even where remittances represent a small portion of what migrants earn, these funds often represent "a lifeline" for millions of families worldwide.

To date, neither Congress nor U.S. regulatory agencies have established a clear regulatory framework for digital assets. This space is thus ripe for leading states, like California, to set out a workable policy that would provide an example for other lawmakers and regulators to follow. Any framework should start with a clear token taxonomy - meaning a clear and simple categorization of tokens defining whether a token is, for example, a security token (does the token represent a share of a company), or a utility token (does the token represent access to a particular service or reward), or a payments token that helps bridge payments and remittances, or perhaps a simple store of value like digital gold.

With that clear token taxonomy as a foundation, the industry, the public, and the regulators would then know which digital assets fall inside which "regulatory perimeter" - meaning, which existing laws apply to which token asset class. For example, which tokens are regulated under security laws and which under money transmitter laws, and how do privacy regulations and consumer protection laws apply? Any taxonomy should also retain some flexibility in recognition of the fact that digital assets can (and do) move between classifications over time as the technology and use cases evolve.

Taking steps along these lines - as the U.K., Switzerland, and Singapore all have recently done - will not only foster innovation and protect consumers, but allow California to continue to recruit new companies and promote emerging technologies that bolster its status as a world-class

destination for innovation, and the jobs and tax revenues such innovation creates. If not, there is a real risk, that we are already seeing, that this technology will simply move offshore.

California has already started the process of trying to provide direction through the introduction of AB 1489. We believe that further study of this legislation (and any amendments to it) will be helpful in moving the discussion forward in a productive way.

We believe these innovations are here to stay. To us, this is a timely and important dialogue and we appreciate the opportunity to take part in it with you.

Thank you.

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Assembly California Legislature

Assembly Committee on Banking and Finance

Informational Hearing of the Assembly Committee on Banking and Finance and Select Committee on Technological Advances

Virtual Currency Businesses: The Market and Regulatory Issues

Testimony of Rainey Reitman Chief Program Officer Electronic Frontier Foundation

October 17, 2019



Thank you for the opportunity to testify about the potential regulation of blockchain technologies in the state of California. I represent the Electronic Frontier Foundation, a non-profit civil liberties law and technology organization. Founded in 1990, EFF champions privacy, free expression, and innovation. We have over 30,000 dues-paying members. The majority of EFF's funding comes from these individual people, and that is because our mandate is to represent the concerns of technology users, both today's technology users and tomorrow's.

I am the Chief Program Officer of EFF, and I have written and spoken publicly about the civil liberties implications of blockchain technology and its potential regulation since 2011.

I am honored to speak with you about this issue today. As the California legislature considers potential regulation of blockchain, I would like to offer a few thoughts to help frame the conversation.

First, policymakers should note that the impetus behind blockchain technologies is one that seeks to empower consumers in financial systems where they have been historically and systematically disempowered and robbed of their privacy. In my role at EFF, I have been contacted by individuals and small businesses many times over the years who have had their financial accounts and payment systems restricted or shut down with little recourse, based on the whims of banking institutions rather than on the execution of laws. For example, Smashwords is one of the world's most popular hubs for self-published authors, and pays all their authors through PayPal. PayPal shut down their entire account¹ because some of their romantic fiction—to be clear, books of fiction with no photos—was too risqué for PayPal's tastes. With companies like Wells Fargo fraudulently opening millions of accounts and Equifax exposing the sensitive data of over 148 million Americans, American consumers have more reason than ever to be wary of sharing their financial information. Many blockchain innovations seek to use technology to protect the privacy and security of consumer data—and to keep financial information away from corporations that have proven they cannot be trusted with it.

While blockchain technologies alone cannot resolve this disempowerment, technological advances such as blockchain may well prove part of long-term solutions that empower technology consumers. Policymakers should view many blockchain innovations as a technological partner in the regulatory fight to defend consumers against wrongdoing by financial companies.

Secondly, policymakers should know that the human rights of privacy and freedom of expression are heavily implicated by many of the potential regulations of blockchain technology. For example,

¹ Rainey Reitman, *Legal Censorship: PayPal Makes a Habit of Deciding What Users Can Read*, Electronic Frontier Found. (Aug. 21, 2018). Retrieved from <u>https://www.eff.org/deeplinks/2012/02/legal-censorship-paypal-makes-habit-deciding-what-users-can-read</u>.



EFF has pushed back against proposals that would prevent everyday technology users from protecting their financial transactions using privacy coins, or tokens that protect the privacy of their users.² We have also opposed proposals to regulate or ban the publication of open source software.³ Attempting to prevent consumers from accessing technology that protects their individual privacy or from publishing free software raises a host of human rights issues, in addition to being contrary to the free speech and privacy protections enshrined in the Constitution.

A blockchain is a distributed ledger—a database that stores multiple copies of data across many computers in a network.⁴ The first application of blockchain technology was Bitcoin. Bitcoin's promise was to revolutionize value as the Internet revolutionized information—to make it possible to send value across the globe digitally and securely, without needing a bank.

Traditionally, transferring values between parties required third parties like banks that maintained ledgers of transactions. Bitcoin cut out the multiple intermediaries that needed to update their ledgers and coordinate with each to process transactions, in favor of a single ledger that permanently records every transaction. That ledger is not maintained by a single entity, but rather stored and maintained by many computers working together in a network. ⁵ This "distributed

² "Privacy coin" is a general term used to refer to a range of different blockchain-based tokens that have built-in protections for transactional privacy. Using cryptography, these privacy coins are designed to publicly verify transactions while not revealing the identity of the sender, the receiver, or the transaction amount. Two well-known privacy coins are ZCash and Monero. J. Frankenfield, *Zcash*, Investopedia (Mar. 12, 2019). Retrieved October 14, 2019, from https://www.investopedia.com/terms/z/zcash.asp.; J. Frankenfield, *Monero*, Investopedia (Mar. 12, 2019). Retrieved October 14, 2019, from https://www.investopedia.com/terms/z/zcash.asp.;

³ Open source software is software that is published freely, so that anyone can make a copy, edit, or contribute to it. This so-called "free software" has been widely adopted and is now a primary, common form of expression for ideas that are implemented in software. Today, it is used widely across the Internet and Linux, the primary operating system used on Internet servers and which underlies the Android mobile operating system, continues to be maintained as a free software project contributed to by thousands of commercial companies, and tens of thousands of individual developers, volunteers, and academics. Read more about EFF's recent comments to HM Treasury describing the impact of banning the publication of open source software as part of blockchain regulation. Rainey Reitman, *EFF and Open Rights Group Defend the Right to Publish Open Source Software to the UK Government*, Electronic Frontier Found. (Aug. 16, 2019). Retrieved from https://www.eff.org/deeplinks/2019/06/eff-and-open-rights-group-defend-right-publish-open-source-software-uk-government.

⁴ The National Institute of Standards and Technology defines "blockchains" as "[i]mmutable digital ledger systems implemented in a distributed fashion (i.e., without a central repository) and usually without a central authority. At its most basic level, they enable a community of users to record transactions in a ledger public to that community such that no transaction can be changed once published." Dylan Yaga, et al., *Blockchain Technology Overview*, NAT'L INST. OF STANDARDS AND TECH. (Oct. 2018), available at <u>https://nvlpubs.nist.gov/nistpubs/ir/2018/NIST.IR.8202.pdf</u>.

⁵ "A blockchain can be public or private. In a public blockchain, anyone can create a public-private key pair and download a copy of the blockchain. . . . In a private blockchain, the membership of users on the



ledger" is called a "blockchain," because the ledger permanently and securely stores data by linking (or "chaining") blocks of data together through encryption.

The Bitcoin blockchain is a record of Bitcoin transactions,⁶ but there are many other applications of this distributed ledger technology. As the legislature thinks about regulation, it is vital to recognize that future innovation in this space might be using these distributed ledgers for purposes beyond what we typically think of when we think of financial services.

One example is Filecoin, which applies blockchain technology to file storage. The legislature may remember a few months ago when huge swaths of the Internet—including popularly used tools like Slack and Github—were unavailable for hours.⁷ That is because so much of the modern web are using a single service to store their data: Amazon Web Services. When an Amazon data center suffered an outage for several hours, multiple popular online platforms were unavailable to consumers. Filecoin seeks to decentralize file storage so that there is no single point of failure like the current system that is so heavily reliant on Amazon Web Services. Any one of Amazon's many smaller storage competitors or potentially even technically-minded individuals could offer storage through the same protocol, and the transactions made between application developers and these storage providers would be recorded on a blockchain.

While we cannot yet know how successful services like Filecoin will ultimately be, I offer it as an example of a blockchain project designed to serve consumer needs that are not met by modern tech companies, and that create a more decentralized—and therefore more resilient—web. As the legislature considers how to proceed, I urge you to keep front and center the interests of technology

blockchain is controlled. A blockchain can be permissioned or permissionless, which is independent of whether the blockchain is public or private. A permissioned blockchain is one in which the permission of a user is assigned to them. . . . In a permissionless blockchain, all users have equal rights, with any one able to download the full blockchain and have an opportunity to potentially add additional blocks." Chris Jaikaran, *Blockchain: Background and Policy Issues*, Cong. Research Serv., R45116 (Feb. 28, 2018).

⁶ The Bitcoin blockchain is the ledger that records Bitcoin transactions. Each "entry" in the ledger records a transaction, showing the "public key" (a string of numbers and letters similar to a username) of the user sending the Bitcoin and the user receiving the Bitcoin, the amount of Bitcoin being sent, and the time of the transaction. Each "public key" is associated with a "private key" (similar to a password) that enables the user associated with that public key to transfer the Bitcoin to other users. To "own" Bitcoin is simply to know the private key associated with a public key that has received Bitcoin.

⁷ J. Swearingen, *When Amazon Web Services Goes Down, So Does a Lot of the Web*, New York Magazine (Mar. 2, 2018). Retrieved October 14, 2019, from <u>http://nymag.com/intelligencer/2018/03/when-amazon-web-services-goes-down-so-does-a-lot-of-the-web.html</u>.; C. Newton, *How a typo took down S3, the backbone of the internet*. The Verge (Mar. 2, 2017). Retrieved October 14, 2019, from <u>https://www.theverge.com/2017/3/2/14792442/amazon-s3-outage-cause-typo-internet-server</u>.



users, especially those under-served by existing technology companies who may benefit from future innovation.

EFF has developed a set of guiding principles to help regulators balance the needs for innovation, consumer choice, and consumer protection.

To summarize these principles:

Principle 1: Regulation should not undermine privacy-enhancing innovation in this space. The right to privacy is enshrined in the United States Constitution, in international human rights law, and in California's own Constitution. This state has long been a leader in defending consumer privacy and a bellwether state for bringing new privacy protections to consumers. California must uphold these consumer protections in the cryptocurrency space, ensuring that new innovations to defend consumer privacy can flourish.

Principle 2: Regulation should not chill future technological innovation that will benefit consumers. Though the blockchain ecosystem is still relatively young, there are already well-established companies with the resources to hire expert counsel and compliance officers to navigate state, federal, and international regulations. We want to ensure that these early entrants do not establish themselves and then pull up the ladder behind them. In the technology sphere, when existing services do not serve the needs of consumers, innovative new products come along to try to give consumers better choices. We must ensure that new services can continue to be created to serve all consumers, and that we do not merely entrench the big companies of today. As regulators enter this space, they should ensure generous on-ramps to give new services the time to build their products and find their market before having to navigate onerous regulatory burdens.

One important piece of this is ensuring regulations are technologically neutral. Attempts to write laws to capture the technological details of one specific cryptocurrency could have massive and unintended impacts on the market, such as prioritizing one type of technical solution over others or driving innovation away from a particular method of doing something.

Principle 3: Regulation should focus on custodial services. Custodial services—those entities that hold and trade tokens on behalf of users—are most likely to abuse consumer trust. In fact, they have already developed a sordid history of fraud and sloppy security practices. These companies need to be held accountable to ensure that they cannot defraud consumers. Regulators should focus their energies on crafting regulation that holds these bad actors that offer custodial services to account.

This includes ensuring that any regulation protects individual miners, merchants who accept cryptocurrencies, and individuals who trade in cryptocurrency as consumers. Cryptocurrency miners merely confirm transaction and maintain copies of a blockchain, offering computing power



to keep the network healthy and functional. They do not offer direct services to consumers and should be neutral actors—verifying but not interrupting or prioritizing any transactions. At this stage in blockchain's development, there is no reason for regulators to put compliance or regulatory burdens on miners. Similarly, everyday merchants who are offering consumers new choices by accepting cryptocurrencies for purchases, and consumers who are experimenting with using cryptocurrencies for commerce should not be burdened by additional regulation at this time.

Principle 4: Any regulation should recognize the important role of decentralized exchanges and other decentralized technologies in empowering consumers. Centralization of control creates brittle digital systems where a single point of failure can shut down commerce or communication. Much of the strength of the modern web comes from its decentralization—and many of the problems we see in technology space are a result of a handful of big technology companies having undue control over much of our digital experience. Blockchain technologies were built to be resilient and decentralized, and future innovation that advances decentralization — including decentralized exchanges — should be protected.

Principle 5: Regulations should not punish those who merely write and publish code. EFF fought to establish, and several courts have recognized, that writing code is a form of expressing ideas, similar to other forms of communication like writing music or books and thus is protected by the First Amendment. Policymakers must ensure that regulations aimed at blockchain technologies do not prohibit the publication or distribution of code or otherwise require parties to obtain a government license before publishing or distributing their code.

Thank you for allowing me to share my thoughts with you today. I look forward to continuing the discussion.

ASSEMBLY COMMITTEE ON BANKING AND FINANCE, SELECT COMMITTEE ON TECHNOLOGICAL ADVANCES

Joint Informational Hearing

"Virtual Currency Businesses: The Market and Regulatory Issues"

October 17, 2019, 10:00 a.m. Rio Hondo Community College

Testimony of Manuel Alvarez, Commissioner California Department of Business Oversight

Introduction

Madam Chair Limón, Majority Leader, Calderon, and members of the committees & Rio Hondo community, I'm Manuel Alvarez, Commissioner of the California Department of Business Oversight a role to which I was appointed in May. Thank you for the opportunity to participate in this hearing about virtual currency, an emerging, rapidly changing industry.

The Department of Business Oversight licenses and regulates over 360,000 individuals and entities that provide financial services in California. The Department licenses and regulates money transmitters, issuers of payment

instruments, and stored value cards. As of June 2019, the Department had 102 money transmitter licensees who had a total of over 48,000 agent locations in California. Banking, credit unions, securities, and commodities are the other areas regulated by the Department that may be impacted by the virtual currency industry.

The Committees have asked that I provide insight and expertise related to virtual currency. Specifically, you requested information on: 1) consumer complaints about virtual currency fraud; 2) how current laws apply to virtual currency businesses; 3) requests from virtual currency businesses for regulatory clarity; 4) the Department's views on the Uniform Law Commission model regulatory framework; and, 5) the policy tradeoffs or implementation challenges that the Legislature should consider when contemplating regulation in this space.

I will be offering the Department's perspective on these issues.

I. Consumer Complaints Related to Virtual Currency Fraud

When the Department receives complaints regarding virtual currency, they are reviewed by our Enforcement Division to determine if the Department has jurisdiction to investigate. If not then we refer the complaints to the Securities and Exchange Commissioner or another agency that may have jurisdiction.

Currently, there are approximately 15 investigations pending in the Department's Enforcement Division and year to date 2019 the Department has received 21 complaints, 16 of which are against the same exchange for customer service issues. In the past three years, the number of complaints the Department received regarding virtual currency fluctuated. Generally, complaints come in waves, based on the prices of well-known virtual currency, such as Bitcoin, and customer demand.

In 2018, we received 63 complaints related to virtual currency, most of which concerned customer service issues like delayed credit of deposits or delayed processing of transactions. This surge in complaints appeared to be related to the sharp run-up in demand for virtual currency around this time last year, worsening customer service response times. However, with respect to these particular complaints, the Department did not have jurisdiction to take action because they were customer service-oriented and not related to a violation of the securities or commodities laws.

In 2015, we issued a desist and refrain order against a company called US Fine Investment Arts, Inc. (USFIA) and three of the firm's executives alleging that they sold securities without a registration and misled investors in offering and selling the securities. The order requires USFIA and the officers to stop further violations. USFIA is based in Arcadia, CA. USFIA operated a multi-level marketing scheme that promised investors their money would be converted into Gemcoin a virtual currency. DBO settled in December 2018 when the company agreed to stipulate to the desist and refrain order. It was estimated the fraud victimized hundreds of Californians and thousands nationwide. The Department may have jurisdiction if one of our securities laws is being violated. For instance, a digital asset may be deemed a security if it is sold with the promise that the digital assets will gain value and the purchaser will get a profit in the future. Another example, if a sham crypto-exchange says a customer can buy bitcoin on their website but in fact they do not sell the bitcoin on the website, this is a fraud in the sale of the commodity.

When complaints are received related to consumer service issues or delays in processing of transactions where there is no intent to defraud, they may be referred to the California Attorney General's Office Consumer Law Section for review of unfair deceptive practices. If the complaint involves the securities or commodities law but we have no evidence the company is acting in California and no California complainant, then it is referred to the US Securities and Exchange Commission or the US Commodity Futures Trading Commission.

II. Application of Current State Laws

As of yet, the Department has not determined whether the buying and selling of virtual currency is covered under the Money Transmission Act or any other of the Department's laws.

The Money Transmission Act regulates 1) receiving money for transmission, 2) issuing stored value, and 3) issuing payment instruments. In order to regulate virtual currency under the Money Transmission Act, the Department would need to conclude that virtual currency is money or monetary value. To date, the

Department has not issued a formal order or legal opinion declaring any virtual currency to be a medium of exchange.

It is possible some transactions may fall under the Money Transmission Act. For example, stablecoin – a virtual currency pegged to the U.S. dollar – could be a form of stored value. Another example is an online "wallet" – a secure environment for long-term storage of virtual currency or fiat currency. But the Money Transaction Act would not apply to many other activities related to cryptocurrency. And a more comprehensive analysis of the various activities & attended risks may be warranted.

III. <u>Requests for Regulatory Clarity</u>

In 2018, the Department received 23 requests from virtual currency businesses seeking regulatory clarity. So far this year we have received 18 requests for clarity and currently, 5 of those requests are still pending.

If the Department identifies an aspect of the business that falls under the jurisdiction of the Money Transmission Act, we provide written guidance to the requestor about the need for licensure. When the business plan does not implicate activity falling under the Department's jurisdiction, we issue a letter to the requestor informing that the business model does not appear to require licensure at this time but that the Department continues to study the virtual currency market.

Our written response letters to requestors are redacted in order to protect businesses' proprietary information and then published on our website, so anyone wanting to do business in this area can see what the Department's position is. Our response letters indicate that the Department does not regulate the purchase and sale of virtual currency, such as through a Bitcoin ATM. Our responses are generally issued with the caveat that this is an evolving area of law and that the Department's position is subject to change at any time.

IV. Uniform Law Commission's Model Regulatory Framework

In 2017, the Uniform Law Commission created the Uniform Regulation of Virtual Currency Businesses Act to license businesses that 1) exchange virtual currencies for cash, bank deposits, or other virtual currencies; 2) transfer virtual currencies among customers; or 3) perform certain custodial or fiduciary duties. The model Act does not propose regulating virtual currency itself or owners of virtual currency.

The proposed model proposes some consumer protections and could provide certainty regarding what entities and activities are covered or not covered. The model act states to promote innovation, as the registration option for lower volume virtual currency activity is supportive of startup companies.

But, the Department has several concerns regarding the Uniform Law Commission's framework. First, any regulatory structure must be tailored to California's consumer protection needs – for example, the minimum net worth requirement of \$25,000 may not make sense across the board. By comparison, money transmitters must maintain tangible shareholders' equity of at least \$50,000, depending on their size. Second, this regulatory framework has not been enacted by any state and therefore is untested, which makes it difficult to anticipate how regulation will affect the virtual currency industry or consumers. Lastly, the virtual currency industry is evolving so rapidly that the model act may already be outdated or soon become outdated.

The Uniform Law Commission model is a good starting point for a regulatory framework for virtual currency businesses. But I think it's important to focus on opportunities we have to optimize existing laws and regulations so as to leverage the good work the department is already doing.

V. Policy Tradeoffs and Implementation Challenges

A predictable and scalable regulatory framework for virtual currency would pose benefits to all stakeholders in California, from consumers and investors, to the companies, on down to the Department as the regulator. Consumers and investors would enjoy increased confidence in their transactions knowing they are protected by appropriate law and regulation. Likewise, the Department and our regulated businesses would benefit by focusing our efforts on the important work of complying with a predictable set of expectations, rather than grousing about a dearth of clarity. Through all of this, California could help lead the way as an innovator in a nascent industry and may help stabilize some of the volatility associated with this asset class. There would, of course, be challenges. As it stands today, the Department has already observed several risks associated with virtual-currency activities. Some complaints that we have received over the years identify various implementationchallenges including duplicate transactions, processing delays, and incorrect tax forms or other documentation.

There are other fundamentally pernicious risks that would need to be mitigated. Such risks may include: 1) bad actors absconding with customer deposits; 2) lack of appropriate cybersecurity systems to prevent theft of customer funds); 3) lack of appropriate business continuity planning to account for the loss of persons who hold blockchain keys to transact company assets; and 4) obscure or undisclosed fees to consumers or investors.

The encouraging news is that such risks are addressable and the Department has, for sometime, been addressing similar risks across various industries and products. In the case of *this* emerging industry, I think the key is balance: It is important not to be so restrictive or prescriptive as to inadvertently stifle an emerging technology and industry out of California; but no so hands-off as to encourage strident actors that would take advantage of California consumers and investors. Also, important to consider the ways in which CA's existing regulations might be harmonized so as to better apply to this and other emerging industries.

As such, I think the first step in creating a sensible regulatory framework around a new industry is to define the industry itself on a first-principles basis:

- What are the distinct products and services that comprise it?

- What are the attendant risks of each type of product or service?
- And how could each attendant risk be addressed through enacting law or regulation?

For example, the features and risks of an "initial coin offering" – roughly speaking, a method of capital formation through a digital asset – may not be the same as those of a "stable coin," which is itself pegged to a stable currency or other asset.

After the industry and products that comprise it are cogently defined, then we might turn to the critical work of assessing existing laws and regulations for applicability. This would then help to identify legal or regulatory gaps that are tailored to the risks that a given type of cryptocurrency may pose to California consumers and investors.

Closing

In closing, I would like to thank the Committee for the opportunity to discuss the opportunities and challenges the Department sees with the cryptocurrency industry. So much of this innovation has been born here in California, and so many consumers, investors, and other stakeholders are in our state. The Department will be glad to offer our technical assistance on any policy consideration related to virtual currency.

Η

No	No	Maybe	No	Investors buying and selling on their own account.
No	Maybe	Yes	NO	Issuers of new decentralized cryptocurrencies.
NO	Maybe	Yes	Q	\$5,000 annually for customers
				Small businesses holding less than
				purposes.
No	Maybe	Maybe	No	personal/family/ or business
				cryptocurrency or holding it for
				Persons holding their own
No	No	Yes	No	without taking custody).
				(persons who facilitate exchange
				Decentralized exchange providers
No	Maybe	Maybe	No	Lighting node operators
No	No	Maybe	N	Full node operators
NO	Maybe	Maybe	N	Multi-sig wallet providers
No	No	Maybe	No	Software wallet developers
No	No	Maybe	No	Miners
No	Maybe	Yes	Yes	Custodial Exchanges
No	Maybe	Yes	Yes	Hosted Wallet Providers
				Who must obtain a license?
Businesses that engage in "the receipt of money or monetary value by any means in exchange for a promise to make the money or monetary value available at a later time or different location." But, the regulator has said that "cryptocurrencies as currently implemented cannot be considered money or monetary value under the Money Services Act."	Businesses that "receive money or monetary value in the United States for transmission within or outside the United States by electronic or other means." Regulator has never said publicly whether "monetary value" includes bitcoin or other cryptocurrencies.	Businesses that do any of the following: "receiving virtual currency for transmission," "transmitting virtual currency," "storing, holding, or maintaining custody or control of virtual currency on behalf of others," "buying and selling virtual currency as a customer business," "performing exchange services as a customer business," "controlling, administering, or issuing a virtual currency."	Businesses with "the power to execute unilaterally or prevent indefinitely a virtual currency transaction" on behalf of a customer.	How is the category of businesses that need licenses defined?
cryptocurrencies do not need liceses but exchanges handling fiat money as well as cryptocurrency do need licesnses.	cryptocurrency companies to get licensed. Unlike other states, the regulator has refused to either grant licenses to cryptocurrency companies or publicly say that licensing requirements don't apply.			
that businesses dealing only in	states, the text of the law may require	than a law and the text is completely different.	ULC. It has yet to pass.	
licensing law. The Texas regulator has said	53 other states and territories. As with several	Unlike the ULC model act, it is a regulation rather	introduced a model law from the	
Texas also has a money transmission	CA has a money transmission licensing law like	The Bitlicense was promulgated in NY in 2015.	California Assembly members have	Basic Info:
TX Money Transmission Law	CA Money Transmission Law	NY Bitlicense	CA AB-1489 (ULC Model Act)	Law or Regulation:

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THE UNIFORM REGULATION OF VIRTUAL-CURRENCY BUSINESSES ACT

- A Summary -

The Uniform Regulation of Virtual-Currency Businesses Act (URVCBA) provides a statutory framework for the regulation of companies engaging in "virtual-currency business activity." Virtual-currency business activity means exchanging, transferring, or storing virtual currency; holding electronic precious metals or certificates of electronic precious metals; or exchanging digital representations of value within online games for virtual currency or legal tender.

Under the URVCBA, "virtual currency" is a digital representation of value that is used as a medium of exchange, unit of account, or store of value and is not legal tender. This technologyneutral definition encompasses as many types of virtual currency as possible. The definition excludes merchants' rewards programs or equivalent types of values on online game platforms.

The URVCBA is unique because it offers a three-tiered structure. Tier one represents persons that are exempt from regulation under the Act. Tier two is for providers that must register with the state. The registration tier is for providers with virtual-currency business activity levels between \$5,000 and \$35,000 annually. The registration tier functions as a "regulatory sandbox" because it allows companies to focus on innovation and experimentation while they are in the early stage of business development. Businesses in the registration tier may operate as registrants for up to two years, so long as they remain under the \$35,000 threshold. Tier three, the full licensure tier, is for companies with virtual-currency business activity levels greater than \$35,000 annually.

An application for a license under the URVCBA must include information such as: (1) a description of the applicant's current business; (2) a description of the applicant's business for the previous five years; (3) a list of the money transmission licenses the applicant holds in other states; and (4) lawsuit and bankruptcy history of the applicant and the applicant's executive officers.

The URVCBA creates two methods for an enacting state to authorize reciprocal licensing under the Act. Either the enacting state can choose to participate in the Nationwide Multistate Licensing System and Registry or the state can authorize reciprocity on a bilateral or multilateral basis.

The Act also exempts some forms of businesses already regulated by the federal government or by the states from licensure and supervision under the URVCBA.

The URVCBA is the result of two years of drafting work and collaboration with representatives from the virtual currency industry, state and federal government, trade associations, financial services providers, and academia, among others.

For more information about the URVCBA, please contact Katie Robinson or Kaitlin Wolff at (312) 450-6600.

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WHY STATES SHOULD REGULATE VIRTUAL-CURRENCY BUSINESSES WITH THE URVCBA RATHER THAN MONEY TRANSMISSION STATUTES

The Uniform Regulation of Virtual-Currency Businesses Act ("URVCBA") is a superior method for states to regulate virtual currency businesses ("VCB") when compared to state money transmission licensing ("MTL") regulations.

URVCBA provides for certainty with regard to what entities and activities are covered.

The URVCBA is tailor made for VCB. It includes specific definitions that make it easy to determine what activity requires a license. MTL definitions are difficult to apply to VCB, which will cause uncertainty within the industry, stifle innovation and business development, and may result in costly legal challenges. For example, MTL regulations generally cover intermediaries that take possession or custody of customer funds. Given that virtual currency has no physical presence, it is difficult to know when an entity actually has possession or custody. The URVCBA, however, provides explicit rules for determining when an entity has sufficient control over virtual currency to trigger licensing requirements.

URVCBA provides superior consumer protection because it is tailored to virtual currency.

MTL regulations require an entity to maintain sufficient dollars to cover its obligations to consumers. When applied to virtual currency, that means consumers may receive dollars rather than the virtual currency in return from an intermediary. In contrast, the URVCBA requires licensees to hold virtual currency of sufficient type and amount to ensure that consumers get back exactly the amount and type of virtual currency entrusted to the licensee. The URVCBA also requires disclosures and other protections similar those required by MTL regulations, but again tailored to virtual currency users.

URVCBA avoids over inclusive regulation.

Application of MTL rules will result in over inclusive regulation, potentially covering individuals merely using virtual currency to make purchases, academics researching virtual currency and encryption technology and security, on-line games with a currency for internal game purposes, and merchant who issue points to repeat customers. The URVCBA provides for exemptions for personal, family and academic uses, certain online games and certain merchant rewards programs. The URVCBA prevents these uses of virtual currency, which pose no risk of potential loss or harm to consumers, from being swept into the regulatory scheme. Regulation under MTL statutes rather than URVCBA may open states to legal challenges on due process and other grounds.

URVCBA fosters innovation and business development.

The URVCBA recognizes that virtual currency is an emerging industry that states want to foster and support, not regulate out of existence. For this reason, the URVCBA provides for a *de minimis* exception for entities that engage in very small amounts of virtual currency activity. The Act also supports innovation and business creation by providing a registration option in lieu of full licensure for start-up companies that are in a development and testing phase. The URVCBA also makes state licensure competitive with federal regulation by creating a fast-track reciprocal licensing process with other states. The Conference of State Banking Supervisors has committed to supporting this reciprocal license framework in their Vision 2020 initiative.

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UNIFORM REGULATION OF VIRTUAL-CURRENCY BUSINESSES ACT AND UNIFORM SUPPLEMENTAL COMMERCIAL LAW FOR THE UNIFORM REGULATION OF VIRTUAL-CURRENCY BUSINESSES ACT

Frequently Asked Questions on the Relationship to Distributed Ledger Technology

March 5, 2019

The Uniform Law Commission finalized the <u>Uniform Regulation of Virtual-Currency Businesses</u> <u>Act</u> (the "URVCBA") in 2017 and the <u>Uniform Supplemental Commercial Law for the Uniform Regulation</u> <u>of Virtual-Currency Businesses Act</u> (the "Supplemental Act") in 2018. Since then, various questions have been raised as to how the URVCBA and the Supplemental Act relate to the development of distributed ledger technology, including "blockchains," and what risks, if any, the URVCBA and the Supplemental Act may pose to users of this technology. Below is a list of the questions frequently asked with responses.

Does the URVCBA regulate distributed ledger technology or virtual currency?

No. The URVCBA regulates those businesses that store, transfer, or exchange virtual currency for their customers, i.e., virtual currency custodians. The businesses that are subject to regulation in the enacting state generally do not include banks, broker-dealers, or other businesses that are already heavily regulated at the state or federal levels. The URVCBA regulates virtual-currency businesses whose virtual currency custodial activities are not already heavily regulated.

The URVCBA regulates neither distributed ledger technology nor virtual currency. Although distributed ledger technology is a primary means of verifying transactions in virtual currency, the URVCBA regulates the custodians, not the technology or the virtual currency.

What are the benefits of the URVCBA?

The URVCBA offers both more flexible licensing and pre-licensing "registration" of custodians than has existed under state "money transmitter" laws and enhanced protections for customers of the custodians. The URVCBA has numerous exclusions and exemptions that help achieve this flexibility and still afford protections for custodial customers. Among these are an absolute exemption for a business whose volume of activity falls below \$5,000 annually and a registration option for a business with a volume from \$5,000 to \$35,000 annually. Licensing is required only for a business whose volume exceeds \$35,000 annually.

Customer protection requirements for custodians include those relating to minimum capitalization, cybersecurity, disclosure, record-keeping, inspection and proper custody of customer assets that are designed to ensure that virtual currency customers have protections similar to those of customers of regulated banks, broker-dealers, and traditional money transmitters.

Will the URVCBA stifle innovation?

No. Given the low volume exemption and the low volume registration requirement discussed above, the URVCBA will assist virtual-currency businesses by providing room for testing, revision and growth.

Why does the URVCBA not address directly-held virtual currency?

The Uniform Law Commission understood from industry groups and other stakeholders that the regulation of the custodian function was the area requiring the most immediate attention. States had begun to enact their own bespoke regulatory schemes for the virtual-currency custodial function, driving up the costs of virtual currency transactions. The URVCBA provides a uniform set of rules for regulating the custodial function. If widely enacted, the URVCBA will address the concern of non-uniform regulation among the states while still providing prudent custodial oversight of virtual currency custodians.

What are the benefits of the Supplemental Act?

The Supplemental Act results in virtual currency held by custodians for customers being characterized under the Uniform Commercial Code (the "<u>UCC</u>"), enacted in all states, as "investment property" under Article 9 of the UCC and "financial assets" credited to a "securities account" in the indirect holding system under Article 8 of the UCC. This characterization has two immediate benefits:

- 1. Under the Article 8 rules, transfers of virtual currency to innocent purchasers for value are free of third-party property claims to the virtual currency, enhancing the liquidity of virtual currency and thereby enhancing its use as a payment method.
- 2. Under the Articles 8 and 9 rules, security interests in virtual currency held with a custodian may be perfected by "control" without necessity of the secured party perfecting the security interest by the filing of a financing statement, obtaining a release or subordination from any earlier filed conflicting secured party or monitoring the debtor/user for any change of location requiring the filing of a new financing statement. This method of perfection enhances the use of custodial held virtual currency as collateral for extensions of credit at a lower risk to the lender and lower cost to the borrower.

The Supplemental Act also contains various user protections further described below.

Will the URVCBA and the Supplemental Act encourage users of virtual currency to hold virtual currency through a custodian rather than directly?

The URVCBA Act and the Supplemental Act are agnostic on whether virtual currency is held directly by the user or is held indirectly through a custodian. If the user wishes to obtain the benefits of the URVCBA and the Supplemental Act, the user may hold the virtual currency through a custodian. But neither the URVCBA Act nor the Supplemental Act requires this or even encourages it. The choice between holding virtual currency through a custodian or directly is left to the marketplace.

Will the URVCBA Act and the Supplemental Act expose a user of virtual currency to the insolvency risk of the custodian?

The URVCBA contains minimum capital and other requirements designed to protect the user from the risk of the custodian's insolvency. The Supplemental Act incorporates the provisions of Article 8 of the UCC by

which, except in very limited situations, virtual currency held for users is not subject to the claims of the custodian's creditors.

Will the URVCBA Act and the Supplemental Act expose a user to the risk of misconduct by the custodian?

The URVCBA contains various record-keeping, reporting, inspection and similar requirements to minimize the risks of custodian misconduct. The Supplemental Act incorporates provisions of Article 8 of the UCC that require custodians to maintain enough virtual currency of each type to satisfy the entitlement of each user to virtual currency of that type. The Supplemental Act also prohibits the custodian from contractually lowering the standard of performance of its duties under Article 8.

Like any regulatory scheme, the URVCBA and the Supplemental Act cannot fully eliminate the risk of custodian misconduct any more than the regulation of banks, securities issuers, broker-dealers or other intermediaries can prevent that risk. But the safeguards of the URVCBA and the Supplemental Act are substantial and, again, do not require the use of a custodian but leave to the marketplace the decision by the user on how to hold virtual currency.

Will the Supplemental Act expose a user to the risk that its virtual currency has been repledged to a third party?

The Supplemental Act incorporates the provisions of Article 8 of the UCC that require the user's consent to any repledge of the virtual currency by the custodian for the custodian's own account. The Supplemental Act, in fact, goes beyond Article 8 by prohibiting the custodian from obtaining that consent.

If the Supplemental Act requires custodial held virtual currency to be treated, like custodial held securities, as a financial asset under Article 8 of the UCC, does that treatment suggest that virtual currency is a security under other law?

No. A specific provision of the Supplemental Act states that the treatment of custodial held virtual currency as a financial asset under Article 8 does not determine the treatment of virtual currency under other law.

If the URVCBA Act and the Supplemental Act do not address directly-held virtual currency or other commercial law rules affected by distributed ledger technology, how can the law be improved to fill that hole if it exists?

The Uniform Law Commission believes that the answer to this question requires study, especially in the context of the UCC. Of particular importance is the development of uniform statutory provisions, if any are needed, that not only provide the substantive law but also uniform choice- of-law rules that discourage conflicting outcomes and forum shopping among the states. The Uniform Law Commission and its UCC partner, the American Law Institute, have formed a study committee to look at these issues in a deliberative fashion. Further information concerning the work of the study committee may be obtained by contacting the Uniform Law Commission's Chicago office at (312) 450-6600.