

The Regulation of Virtual Currencies

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Overview

1. Introduction

- A. What is a Virtual Currency?
- B. Blockchain and Distributed Ledger Technology
- C. Bitcoin
- D. Ether
- E. XRP
- F. Other Virtual Currencies

2. *Regulating Digital Assets – The Key Issues*

- A. AML/KYC/Terrorist Financing
- B. Consumer Protection
- C. Monetary Policy
- D. Tax Evasion / Tax Treatment
- E. What Regulatory Regime Should Apply?

3. *United States Regulatory Treatment of Cryptocurrencies*

4. *Conclusion and Questions*

General Disclaimer

- The legal regimes referenced in this presentation are complex and arcane, and this presentation is intended to provide only an overview and summary of certain key elements of them; it is not intended to be a comprehensive description or be used as legal advice.
- Please feel free to interrupt throughout with questions/comments or to raise other topics not covered by the presentation.

1. Introduction

What are Virtual Currencies?

According to the European Central Bank (in October 2017):

digital representations of value which, despite not being issued by a central bank or another, comparable public authority, nor being ‘attached’ . . . to a fiat currency, are voluntarily accepted, by natural or legal persons, as a means of exchange, and which are stored, transferred and traded electronically, without a tangible, real-world representation

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What are Virtual Currencies?

Continued

Another definition (from Investopedia):

an electronic representation of monetary value that may be issued, managed and controlled by private issuers, developers, or the founding organization. Such virtual currencies are often represented in terms of tokens and may remain unregulated without a legal tender. Unlike regular money, it relies on a system of trust and may not be issued by a central bank or other banking regulatory authority. . . . They derive their value based on the underlying mechanism, like mining in cases of cryptocurrencies, or the backing by the underlying asset.

Virtual Currency Definition | Investopedia <https://www.investopedia.com/terms/v/virtual-currency.asp#ixzz5S3OM5bqo>

What are Virtual Currencies?

Continued

Another take (from the horse's mouth):

an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud, and routine escrow mechanisms could easily be implemented to protect buyers.

Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System (2009)

What are Virtual Currencies?

Continued

- Characteristics:
 - Issued only in electronic form
 - Not issued by a government
 - Can be transmitted on a “peer-to-peer” basis (*i.e.*, without the involvement of banks or other intermediaries)
 - Relies heavily on cryptography
 - Utilizes “blockchain” technology or “distributed ledger technology”

Blockchain/Distributed Ledger Technology

- Virtual currencies utilize “blockchain” or “distributed ledger technology” (“DLT”)
- A blockchain is a “**public**” **distributed ledger**
 - Anyone choosing (or permitted) to participate in the blockchain is able to access it
 - Every participant has a copy of the ledger and (in most cases) has a role in maintaining it
 - The ledger is (sort of) similar to a spreadsheet that everyone can access and (to the extent permitted) edit. The key difference is that the “ledger” (or spreadsheet) does not exist solely in any one place – any participant can have and propose edits to the “official” version
- **Blockchain is the technology that underlies most digital assets**

Why Use Blockchain?

- As originally conceived, a blockchain allows people who do not know or trust each other to engage in activities that would otherwise require a “trusted intermediary” to stand in the middle and play traffic cop
- It permits direct participation by anyone with a computer and the necessary understanding
- The design acknowledges that many participants may be – and some probably are – dishonest, but incentivizes them to take actions that reflect reality, and draws on the participation of many honest users to overcome those who act dishonestly
 - “The system is secure as long as honest nodes collectively control more CPU power than any cooperating group of attacker nodes.”

Other Virtual Currency Vocabulary

- **Tokens or Coins** – digital units created by or issued on a blockchain
- **Wallets** – digital storage devices for tokens
- **Custodians** – intermediary that provides a system for “storing” or protecting virtual currencies
- **Exchanges** – a multilateral matching venue on which to buy and sell tokens (in exchange for “fiat currency” or other tokens)

The First Virtual Currency: Bitcoin

- Bitcoin: A single purpose virtual currency blockchain
 - Created in 2009 and billed as a “peer-to-peer electronic cash system”
 - Serves only as a currency; there is no other functionality.
 - Being a “holder” of bitcoin means you have the private key (*i.e.*, the password) needed to send the bitcoin that resides in your wallet to any other wallet
 - Each Bitcoin is unique, and Bitcoin transactions are irreversible or “immutable”—you cannot undo a transaction once executed

Ether: The Fuel of the Ethereum Network

- “Ether” is a token that serves as “fuel” for the Ethereum blockchain
 - “Ether is a necessary element — a fuel — for operating the distributed application platform Ethereum. It is a form of payment made by the clients of the platform to the machines executing the requested operations. To put it another way, ether is the incentive ensuring that developers write quality applications (wasteful code costs more), and that the network remains healthy (people are compensated for their contributed resources).” (Ethereum Foundation, <https://www.ethereum.org/ether>.)
- Ether has become the virtual currency with the second largest market capitalization after bitcoin (about 1/5 that of bitcoin).

“XRP”: The Coin Issued by Ripple

- XRP is a coin issued by Ripple as the “digital asset for payments”
- It is the token used to carry out cross-border, cross-currency payments through the Ripple network
- It was issued by a single company, Ripple, for use in Ripple’s business, and does not use blockchain technology
- Ripple issued 100 million tokens, and has stated that it will not issue more
 - It currently holds a substantial proportion of the issued XRP in escrow
- Its market capitalization is slightly less than that of ether

Other Virtual Currencies (Examples)

Continued

1. Offshoots of Bitcoin

1. **Litecoin** – a spinoff of Bitcoin using a slightly different version of Bitcoin’s consensus protocol
2. **Bitcoin Cash** – a “fork” of the Bitcoin blockchain, re-designed to permit faster transaction speeds

2. Developed separately from Bitcoin

1. Some created specifically to serve as virtual currency, providing additional or other privacy features (*e.g.*, **ZCash and Monero**)
2. Some not specifically intended to serve as virtual currency, but have indeed been used as currency (*e.g.*, **EXP and Ether**)

3. Currencies that emphasize privacy and anonymize not just participants, but also wallets (*e.g.* **Monero**)

1. Coins may not be traceable to the wallet from which they were sent or themselves individually identifiable

2. Regulating Virtual Currencies—the Key Issues

- A. AML/KYC/Terrorist Financing*
- B. Consumer Protection*
- C. Monetary Policy*
- D. Tax Evasion/Tax Treatment*
- E. What Regulatory Regime Should Apply?*

AML/KYC/Terrorist Financing

- Transactions in virtual currency are executed across the internet – by people who need never have met
- To execute a transaction on a blockchain, you need an “address” or internet identity, and a related key or password, neither of which is necessarily tied to a specific real-world identity (“pseudonymity”)
 - In other words, the system can confirm that address X4do12j-df or CryptoGeekKing is executing a transaction by requiring the appropriate password or other credentials for that address
 - However, the system has no way of knowing that X4do12j-df or CryptoGeekKing is Ms. Jane P. Doe or Mr. John Q. Smith
- This means that regulators cannot easily identify who is executing a given transaction.

AML/KYC/Terrorist Financing

Continued

- The ability to execute transactions without using an intermediary, such as a bank, means that transactions using cryptocurrency can be completed without involving anyone that is subject to AML or KYC obligations
 - “Wallets” are merely software, housed on a user’s own system, that permit storage of the relevant key – they do not (necessarily) involve a third party or intermediary
- New analytic tools allow regulators and law enforcement to trace Bitcoin transactions
- However, cryptocurrencies offering a higher degree of anonymity are also gaining in popularity

Consumer Protection

- While Bitcoin and other cryptocurrencies have not become widely usable to make payments in most countries, they have become wildly popular as investments, including for retail
 - Ability to invest relatively small amounts without regard to sophistication or experience
 - Limited sources of “yield”, minimum investment amounts, regulatory restrictions on investments in risky assets, mistrust of traditional investment firms (and potentially other motivations) have made some investors hungry for options

Consumer Protection

Continued

- **As Investments:**
 - Dramatic fluctuations in the price of Bitcoin and other virtual currencies and rosy promises of high returns have resulted in large investor losses
 - Ability to transact via the internet, without involvement of regulated intermediaries, avoids the application of many consumer protection regimes
 - Internet-only distribution also facilitates simple fraud, pump-and-dump schemes, and other abuse transactions

Consumer Protection

Continued

- **As a Form of Payment**

- Lack of merchant acceptance and the technical complexity required for an individual consumer to use cryptocurrencies as a method of payment means that retail owners of cryptocurrency may have to store their cryptocurrencies with—potentially unregulated—custodians.
- Companies like Bitpay and Coinbase are trying to remedy this problem by creating a user-friendly interface
- Unregulated intermediaries and service providers, combined with the irreversibility of transactions using digital currencies, results in consumer vulnerability to scams

Consumer Protection

Continued

- Hacking and Security
 - Cryptocurrencies continue to be targeted by hackers.
 - Malware can be designed to steal from cryptocurrency wallets and compromise credentials (*e.g.* private keys) that allow owners to access and use the digital assets in their wallets

Monetary Policy

- Virtual currencies may pose challenges to governments in effectuating monetary policy
- Because they are not issued or controlled by central governments, crypto currencies do not necessarily respond to the mechanisms generally used by central banks

Tax Evasion/Tax Treatment

- The anonymous nature of cryptocurrencies and the lack of a centralized intermediary has the potential to facilitate tax evasion
- Determining the proper treatment of cryptocurrencies as either an investment (*i.e.*, a store of value) or payment (*i.e.*, a medium of exchange) for tax purposes has also been complex

What Regulatory Regime Should Apply?

- Virtual currencies often do not fit neatly into existing legal frameworks
- Transactions using cryptocurrencies are borderless, may have no identifiable “issuer” or underlying value, and key players are often located outside of regulatory jurisdiction
- Virtual currencies are also multifunctional, with the result that regulating them pursuant to rules designed to treat one type of asset results in regulatory gaps (*e.g.* your bitcoin wallet can function as a payment method, an investment, and a commodity all at once)

3. United States Regulatory Treatment of Cryptocurrencies

- A. Overview of Approaches taken by United States Regulators*
- B. Financial Crimes Enforcement Network (FinCEN)*
- C. United States Commodity Futures Trading Commission (CFTC)*
- D. State Money Transmitter Laws*
- E. State Regulation of Cryptocurrencies*
- F. The Federal Reserve (Fed)*
- G. United States Securities and Exchange Commission (SEC)*
- H. United States Internal Revenue Service (IRS)*

Overview of Approaches taken by U.S. Regulators

- **Commodity Futures Trading Commission (CFTC)** – Bitcoin and other virtual currencies are commodities
- **Securities and Exchange Commission (SEC)** – Guidance on when a digital asset is a security (*e.g.* some initial coin offerings)
- **Financial Crimes Enforcement Network (FinCEN), the enforcement arm of the United States Department of Treasury** – Digital assets can be money, for BSA and AML purposes (and money services business registration)
- **Internal Revenue Service (IRS), the United States federal taxing authority** – treatment of digital assets and virtual currency as property for purposes of taxing gains and losses
- **U.S. State regulators** – New York BitLicense and similar statutes and approaches of other regulators (including the Uniform Law Commission’s Uniform Regulation of Virtual-Currency Businesses Act), and Wyoming efforts to foster a virtual currency-friendly environment
- **Banking regulators** – multiple positions, with no unified position at this point on digital assets

Financial Crimes Enforcement Network (FinCEN) – *Virtual currency businesses could be money services businesses*

- FinCEN guidance confirms that, where virtual currencies are used or treated as “money”, money transmitter regulations will apply
 - “Money transmitter” means “a person that provides money transmission services, or any other person engaged in the transfer of funds”
 - The term “money transmission services” means the “[acceptance and] transmission of currency, funds, or other value that substitutes for [fiat] currency [from one person] to another location or person. . . .”
- Pursuant to FinCEN’s implementation of the Bank Secrecy Act and the USA PATRIOT Act, money transmitters must comply with registration, monitoring, reporting, and other requirements
 - Each money transmitter must implement and maintain an effective anti-money laundering program that is reasonably designed to prevent the money transmitter from being used to facilitate money laundering and the financing of terrorist activities

Financial Crimes Enforcement Network (FinCEN) – *Virtual currency businesses could be money services businesses*

Continued

- In addition, the money transmitter must:
 - maintain formal procedures and controls to monitor transactions,
 - collect and verify customer information,
 - report certain suspicious activities,
 - report transactions over \$10,000,
 - designate a compliance officer,
 - provide ongoing training for compliance employees,
 - ensure periodic independent review of its compliance program,
 - maintain proper recordkeeping, and
 - meet other bank secrecy act requirements

United States Commodity Futures Trading Commission (CFTC) – *Virtual currencies are commodities*

- September 2015 – CFTC found that Bitcoin and other virtual currencies are properly defined as commodities.
- Subjects derivatives—*i.e.*, futures, swaps and options—on virtual currencies like Bitcoin and Ether to oversight and regulation under the Commodity Exchange Act, allowing the CFTC to police the Bitcoin and virtual currency derivatives markets for abuses and high risks to the economy and public.
- The CFTC has emphasized that it will look beyond mere form to consider the actual substance and purpose of the activity in question when seeking to apply federal commodities laws and CFTC regulations.

United States Commodity Futures Trading Commission (CFTC) – *Virtual currencies are commodities*

Continued

- CFTC Enforcement
 - June 2016 – CFTC entered into a \$75,000 settlement with cryptocurrency exchange Bitfinex for “Offering Illegal Off-Exchange Financed Retail Commodity Transactions and Failing to Register as a Futures Commission Merchant”
 - September 2017 – CFTC filed a lawsuit against Nicholas Gelfman and his firm Gelfman Blueprint Inc., alleging a bitcoin Ponzi scheme
- The CFTC has prosecuted a few additional Ponzi schemes, which were notable in that some did not involve any (even fraudulent) offers or sales of a derivative and instead were schemes related solely to physical/cash bitcoin
- The CFTC continues to view the bitcoin spot market as it does any other commodity spot market, including oil, metals, and agricultural products – manipulation and fraud are prohibited
- May 2017 – CFTC launched LabCFTC to assist CFTC staff, policymakers and market participants in understanding the opportunities and risks posed by emerging FinTech technologies

United States Commodity Futures Trading Commission (CFTC) – *Virtual currencies are commodities*

Continued

- December 1, 2017 – Arrival of Bitcoin futures contracts:
 - The CFTC allowed the Chicago Mercantile Exchange Inc. (CME) and the CBOE Futures Exchange to list financially settled bitcoin futures contracts, after extensive discussions with the exchanges to make significant enhancements to contract design and settlement.
- May 21, 2018 – CFTC staff published an advisory to give exchanges and clearinghouses registered with the CFTC guidance for listing virtual currency derivative products.
 - Key expectations of the CFTC:
 - Enhanced market surveillance
 - Close coordination with CFTC staff
 - Large trader reporting
 - Outreach to member and market participants
 - Derivatives Clearing Organization risk management and governance

State Money Transmitter Laws – *Vary among the states*

- In contrast to the registration required under federal law, in the United States state law governs licensure.
- Although not uniform, every state (except Montana) requires licensing and/or registration of money transmitters based on definitions that largely (but not entirely) parallel the FinCEN definitions.
- One common thread is that state regulators can exercise extraterritorial jurisdiction—meaning any business offering services or soliciting the consumers of that state must satisfy the licensing requirements of that state.
 - This is true even if the business has no physical presence in that state.

State Money Transmitter Laws – *Vary among the states*

Continued

- Some states have published official guidance on whether and how their laws apply to digital currency businesses. For example,
 - **Texas**—Because cryptocurrency is not money under the Money Services Act, receiving it in exchange for a promise to make it available at a later time or different location is not money transmission. However, when a cryptocurrency transaction includes sovereign currency, then it may be a money transmission.
 - **Kansas**—Because cryptocurrencies as currently in existence are not considered “money,” they are not covered by the Kansas Money Transmitter law, and an entity engaged solely in the transmission of such currency would not be required to obtain a license. However, if sovereign currency is involved in the transaction, it may be considered a money transmission depending on how the transaction is organized.
- A failure to obtain a required state license or registration will also generally constitute a violation of the federal statute that gives FinCEN its jurisdiction.

Other State Regulation of Cryptocurrencies – *New York*

- New York Department of Financial Services

- June 2015 – NYDFS finalizes the BitLicense rules (23 NYCRR part 200)
- All persons that engage in “Virtual Currency Business Activity” must obtain a BitLicense
- “Virtual Currency Business Activity” means the conduct of any one of the following types of activities involving New York or a New York Resident:
 - receiving virtual currency for transmission or transmitting virtual currency, except where the transaction is undertaken for non-financial purposes and does not involve the transfer of more than a nominal amount of 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; or
 - controlling, administering, or issuing a virtual currency.

Other State Regulation of Cryptocurrencies – *New York*

Continued

- The development and dissemination of software in and of itself does not constitute Virtual Currency Business Activity
- Two exemptions from being considered a Virtual Currency Business for:
 - persons that are chartered under the New York Banking Law and are approved by the superintendent to engage in Virtual Currency Business Activity; and
 - merchants and consumers that utilize Virtual Currency solely for the purchase or sale of goods or services or for investment purposes.

Other State Regulation of Cryptocurrencies – *Wyoming*

- Wyoming is the only state to create a distinct asset class for digital tokens, separate from standard securities
- In March 2018, the Wyoming House of Representatives signed into law H.B. 70, known as the “Utility Token Bill”
- The bill allows virtual currency companies to qualify as utility tokens and exempts them from state security laws if the tokens and their issuers meet the following requirements:
 - The token is not marketed by its developers as an investment opportunity;
 - The token is able to be exchanged for goods and services; and
 - Developers have not agreed to repurchase the tokens.

The Federal Reserve (Fed) – *Cryptocurrencies do not constitute legal tender*

- Former chair Janet Yellen, press conference, December 13, 2017
 - Bitcoin is “not a stable source of value” and is “a highly speculative asset.”
 - “At this time, bitcoin plays a very small role in the payments system.”
 - “It does not constitute legal tender.”
 - “The Fed doesn’t really play any regulatory role with respect to bitcoin, other than assuring that banking organizations that we do supervise are attentive, that they are appropriately managing any interactions they have with participants in that market, and appropriately monitoring anti-money laundering, bank secrecy act responsibilities that they have.”
 - “I still see the financial stability risks from it as limited.”

The Federal Reserve (Fed) – *Cryptocurrencies do not constitute legal tender*

Continued

- Governor Lael Brainard, speech, May 2018
 - “[W]e will continue to monitor cryptocurrencies as they evolve, with particular vigilance for any signs of growing materiality to the broader financial system.”
 - “[T]here is no compelling demonstrated need for a Fed-issued digital currency.”
- Vice Chairman Randy Quarles, speech, November 2017
 - “[F]rom the standpoint of analysis the ‘currency’ . . . is not backed by other secure assets, has no intrinsic value, is not the liability of a regulated banking institution, and in leading cases, is not the liability of any institution at all. Indeed, how to treat and define this new asset is complicated.”
 - “More serious financial stability issues may result if they achieve wide-scale usage.”
- Now-Chair Jerome Powell, remarks at an event at the Economic Club of New York, June 2017
 - Reportedly said that he has “nothing against bitcoin, nothing against, you know, private currencies . . . [they are] associated with money laundering and those sorts of issues, but we’re not broadly opposed or supportive of alternative currencies.”
 - Powell has expressed the need for “standardization and interoperability across different versions of [Distributed Ledger Technology]”

The United States Securities and Exchange Commission (SEC) – *A digital asset is sometimes a security*

- The DAO Report
 - On July 25, 2017, in an investigative report (the “DAO Report”), the SEC determined that DAO (short for “Decentralized Autonomous Organization”) Tokens were securities under the “*Howey Test*.”
 - The US Supreme Court case of *SEC v. Howey* established the following elements in assessing whether a contract was a security:
 - An investment of money,
 - in a common enterprise,
 - with an expectation of profits,
 - predominantly from the efforts of others.

The United States Securities and Exchange Commission (SEC) – *A digital asset is sometimes a security*

Continued

- Because the SEC is dedicated to protecting *investors* from fraudulent practices, its enforcement/regulatory authority is focused on fraudulent sales of “securities” that are harmful to consumers and not on cryptocurrencies used as a form of currency to purchase goods and services.
 - In the context of ICOs, the SEC has pursued a number of enforcement actions focused on prosecuting fraudulent practices that are harmful for investors.
 - Much discussion has been had regarding whether bitcoin and other virtual currencies would be viewed by the SEC as subject to the SEC’s authority.
- In June 2018, Director of the SEC’s Division of Corporation Finance, Bill Hinman, explicitly stated that Bitcoin and Ether are not securities.
 - However, many, but not all, ICOs are securities

The United States Securities and Exchange Commission (SEC) – *A digital asset is sometimes a security*

Continued

- Summary of Hinman Factors to Assess Whether a Digital Asset Transaction Is a Securities Transaction
 - Is there a centralized group or person developing and promoting the asset, so that purchasers of the asset are investing in an enterprise?
 - Are the tokens being issued to fund the development of the enterprise?
 - Are purchasers “investing,” that is, seeking a return?
- “Central to determining whether a security is being sold is how it is being sold and the reasonable expectations of purchasers.”

The United States Securities and Exchange Commission (SEC) – *A digital asset is sometimes a security*

Continued

- Summary of Hinman’s Non-exhaustive List of Contractual or Technical Ways to Structure Digital Assets so that They Function More Like a Consumer Item and Less Like a Security:
 - Is token creation commensurate with meeting the needs of users or, rather, with feeding speculation?
 - Are independent actors setting the price or is the promoter supporting the secondary market for the asset or otherwise influencing trading?
 - Is it clear that the primary motivation for purchasing the digital asset is for personal use or consumption, as compared to investment?
 - Is the asset marketed and distributed to potential users or the general public?
 - Are the assets dispersed across a diverse user base or concentrated in the hands of a few that can exert influence over the application?
 - Is the application fully functioning or in the early stages of development?

United States Internal Revenue Service (IRS) – *Virtual currencies are property*

- i. The IRS issued guidance in March 2014 that bitcoin would be treated as property
- ii. Thus, gains and losses on bitcoin (and any other virtual currency deemed to be a commodity) transactions must be reported and are taxable by law, just like transactions in any other property
- iii. In late 2017, the IRS persuaded a federal judge to require Coinbase, a San Francisco-based digital-currency wallet and platform with about 20 million customers, to turn over customer information.

4. Conclusion and Questions

SULLIVAN & CROMWELL LLP