

FinTech Webinar Series: Bitcoin and Other Virtual Currencies

September 26, 2013

Attorney Advertising

WILMERHALE® 

WILMER CUTLER PICKERING HALE AND DORR LLP®



Speakers



Katrina Carroll
Counsel
WilmerHale



Daniel Casto
Senior Associate
WilmerHale



Russell Bruemmer
Partner
WilmerHale

Agenda

- What is Virtual Currency?
- Bitcoin
- Regulatory and Law Enforcement Concerns
 - U.S. Treasury Department's Financial Crimes Enforcement Network (FinCEN)
 - DOJ
 - Internal Revenue Service (IRS)
 - Commodity Futures Trading Commission (CFTC)
 - Securities and Exchange Commission (SEC)
 - Other Regulators
 - Congress



Part 1

WHAT IS VIRTUAL CURRENCY?



Currency Definitions

- Real Currency
 - “The coin and paper money of the United States or of any other country that [i] is designated as legal tender and that [ii] circulates and [iii] is customarily used and accepted as a **medium of exchange** in the country of issuance.” 31 CFR § 1010.100(m).
- Virtual Currency
 - “A **medium of exchange** that operates like a currency in some environments, but does not have all the attributes of real currency. In particular, virtual currency does not have legal tender status in any jurisdiction.” (FinCEN Guidance 2013-G001)
- Convertible Virtual Currency
 - Virtual currency that either has an equivalent value in real currency, or acts as a substitute for real currency. (FinCEN Guidance-2013-G001)











Virtual Currency Models

- **Centralized Virtual Currency**
 - The currency has a centralized repository and administrator.
 - To obtain centralized virtual currency a purchaser will transfer real currency to an entity that will then credit the purchaser's account with virtual currency.
- **De-Centralized Virtual Currency**
 - There is no central repository or single authority responsible for managing the currency.
 - Generally, de-centralized currency may be obtained by purchasing it on the open market or by completing specific tasks that aid operation of the currency.



Categories of Currency

Real Currency	Virtual Convertible Centralized	Virtual Convertible Decentralized
USD 	<i>Royal Canadian MintChip</i>	<i>Bitcoin</i> Litecoin
EUR 	Amazon Coins PPCoin	Namecoin Terracoin
CAD 	Freicoins	Feathercoin
AUD 		
JPY 		
BRL 		
RUB 		
CNY 		



Virtual Currency as Legal Tender

- MintChip is a virtual form of Canadian Dollars issued by the Royal Canadian Mint. MintChip is still in the research and development phase.
 - MintChip is intended to allow people to pay each other directly using smartphones, USB sticks, computers, tablets, and clouds. Transactions are “peer-to-peer” so no clearing is required and no personal information is required to be attached to the transaction.
 - The Royal Canadian Mint held a contest for software developers to create applications utilizing MintChip. The prize for first place was \$50,000 in gold bullion. The winner of the competition developed the “MintWallet” which is backed up by a cloud hosted peer-to-peer network which offers a convenient way to send and receive cash. A user can send funds via the internet, Near Field Communication, or QR code.
- A similar system could face obstacles under existing laws governing the issuance of legal tender currency in the United States. As a result, Congressional action might be necessary prior to the implementation of a similar system in the United States.



Part 2

BITCOIN



Bitcoin: Decentralized Virtual Currency

- There are many virtual currencies, but the most popular and well-known is a decentralized currency known as Bitcoin (BTC).
- BTC is an ***open-source peer-to-peer system*** and is not underwritten by a government or central authority. Instead, it is based upon a cryptographic scheme that aims to provide security, privacy, and trust in the currency by recipients.
- The Bitcoin Ecosystem originated from software released in January 2009 and is thought to have been invented by an unknown programmer or group of programmers who go by the pseudonym “Satoshi Nakamoto.” The BTC software is now maintained by volunteer open-source community.



Why Trust Bitcoin?

- Without a central repository or trusted administrator, why should any person accept BTC? BTC is designed to address three challenges to BTC authenticity:
 - 1) Is this BTC really from the payor?
 - BTC's include a digital signature with payor identification (similar to those used to authenticate typical Internet transactions)
 - 2) Is the payee receiving a “real” BTC?
 - BTC's must contain data meeting certain mathematical rules. The data is easily validated as meeting the rules, but fabricating this data requires immense computing power.
 - 3) Has the payor used the same BTC to pay another payee?
 - The BTC data contains a history of its use, so payees can easily validate that the BTC has not been used multiple times by the same payor.



Creating/Mining Bitcoin

- The BTC protocol will only allow 21 million BTC to be created. There are approximately 11 million now in circulation.

- A BTC is created by a process known as “mining.” The following steps are involved in mining BTC:
 1. New transactions are broadcast to all nodes (aka computers).
 2. Each node collects new transactions into a block.
 3. Each node works on solving a difficult algorithm for its block.
 4. When a node solves the algorithm, it broadcasts the block to all nodes.
 5. BTCs are successfully collected or "mined" by the receiving node which solved the algorithm.
 6. Nodes accept the block only if all transactions in it are valid and not already spent.
 7. Nodes express their acceptance of the block by working on creating the next block in the chain, using the hash of the accepted block as the previous hash.
 8. Repeat process (occurs approximately every 10 minutes).

Obtaining Bitcoin

- BTC can be obtained by mining, but mining is resource intensive and impractical for most people.
- BTC has traditionally been purchased by using a BTC exchange.
 - Typically BTC exchanges do not accept credit cards or PayPal due to concerns regarding chargebacks. As a result, purchasers of BTC must make purchases by linking with their bank accounts or other payment processors with limited risk of customer refunds.
- The price of BTC is determined based upon the supply and demand on BTC exchanges. Each BTC exchange operates as its own marketplace, there is not necessarily a direct link between the price of BTC on each exchange.
- Note: You may buy fractions of BTC because BTC is divisible into smaller sub-units. Currently, a BTC may be divided down to 8 decimal places (known as a “Satoshi”).



Transferring Bitcoin

- BTC may be transferred through a computer or smartphone without any intermediate financial institution. BTC is virtual, but there are physical representations of BTC that merely contain a BTC address and private key embedded securely inside.
- BTC transactions are processed by BTC miners. Each transaction is broadcast across the BTC network and is added to the BTC ledger. The ledger works through the use of a distributed timestamp server. When a new BTC block is created it will have the history of the transactions embedded in the block's history (the "BTC Chain"). The timestamp will keep the BTC from being spent more than once.
- BTC works by majority consensus. The BTC Chain that is the longest should be the legitimate chain and determines the legitimate ownership of BTC. The protocol results in the network accepting the longest chain and once it is accepted the network automatically works to extend it.
- The mining process was designed to prevent the double spending problem. The timestamp in the BTC Chain keeps the BTC from being spent more than once.



Bitcoin Accounts & Private Keys

- BTC payments are made to BTC addresses which are made up of numbers and letters. These are akin to bank account numbers. A Bitcoin address looks something like this: “15VjRaDX9zpbA8LVnhrCAFzrVzN7ixHNsC” and may be created as needed. A BTC may only be accessed if the user knows both the address and private key.
 - The safekeeping of the BTC address and private key is integral.
- BTC cannot actually be “stored” like cash in a bank since they are merely the combination of an address and a private key used to create the address and necessary to decrypt it.
- Several BTC wallets exist where BTC’s may be stored.
- No BTC wallet is insured like bank or credit union deposits. Further, there is no Securities Investor Protection Corporation (SIPC) protection like found in the securities industry.



Part 3

REGULATORY AND LAW ENFORCEMENT CONCERNS



Reasons for Government Scrutiny

- Senators Schumer (D-NY) and Manchin (D-WV) have asked the DOJ and Drug Enforcement Administration (DEA) to shut down an online black marketplace known as the Silk Road, but thus far the federal government has been unable to disable it. BTC is used as the exclusive currency on the Silk Road. The Silk Road operates behind software called TOR that allows users to mask their identity.
- BTC has been used to transfer funds out of countries that have instituted exchange controls.
 - Following the Cyprus government's high taxes on bank deposits and strict currency exchange controls, Cypriots flooded into the BTC market in April 2013, causing the price of BTC to double in the course of a week.
 - BTC has become popular in Argentina as a result of high inflation and the government's ban on the purchase of dollars. The Peso price of BTC is calculated by using the dollar rate on a BTC exchange and multiplying it by the black market USD-Argentine Peso exchange rate.



Gov't Oversight: Who's in the Mix Today?

- US Treasury Department's Financial Crimes Enforcement Network (FinCEN)
- State regulators
- State Attorneys General
- DOJ



FinCEN Guidance

- On March 18, 2013, FinCEN issued guidance (FIN-2013-G001) clarifying the applicability of Bank Secrecy Act regulations to virtual currencies (“FinCEN Virtual Currency Guidance”). The guidance covers "users," "administrators," and "exchangers" of virtual currency. The guidance provides the following definitions:
 - A user is a person who obtains virtual currency to purchase goods or services.
 - An exchanger is a person engaged as a business in the exchange of virtual currency for real currency, funds, or other virtual currency.
 - An administrator is a person engaged as a business in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.



FinCEN Regulation

- If an entity is a Money Services Business (MSB) it must register with FinCEN. An MSB is defined as a person or entity that (i) is not an exempted financial institution and that (ii) performs activities including: (a) money transmission; (b) providing prepaid access; or (c) selling prepaid access. *See generally* 31 CFR § 1010.100(ff).
- FinCEN's regulations define the term "money transmitter" as 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 of currency, funds, *or other value that substitutes for currency* from one person **and** the transmission of currency, funds, *or other value that substitutes for currency* to another location or person by any means." 31 CFR § 1010.100(ff)(5)(ii)(A)-(F) (emphasis added).

Bitcoin Market Participants as MSBs

- A user who obtains convertible virtual currency and uses it to purchase real or virtual goods or services is not an MSB under FinCEN's regulations. Such activity, in and of itself, does not fit within the definition of "money transmission services" and therefore is not subject to FinCEN's registration, reporting, and recordkeeping regulations for MSBs.
- An administrator or exchanger that (1) accepts and transmits a convertible virtual currency or (2) buys or sells convertible virtual currency for any reason is a money transmitter under FinCEN's regulations, unless a limitation to or exemption from the definition applies.
- Market participants are not dealers in foreign exchange because virtual currency does not meet the criteria to be considered "currency" under the Bank Secrecy Act ("BSA") because it is not legal tender.

Minimum Requirements for AML Program

- Formal, written AML program
 - Officer
 - Independent testing
 - Training
- Transaction recordkeeping
- Currency Transaction Reports
- Suspicious Activity Reports



18 U.S.C. § 1960

- The U.S. government has criminalized unlicensed money transmitting:
 - “Whoever knowingly conducts, controls, manages, supervises, directs, or owns all or part of an unlicensed money transmitting business, shall be fined in accordance with this title or imprisoned not more than 5 years, or both”
 - In the context of 1960, the term “money transmitting” means “transferring funds on behalf of the public by any and all means including but not limited to transfers within this country or to locations abroad by wire, check, draft, facsimile, or courier”
- FinCEN and state licensing in jurisdictions that require it/where operating



Civil and Criminal Penalties

- **FinCEN:** Civil penalty of \$5,000 for each violation of BSA requirements, in an amount up to \$5,000 for each day a registration violation continues
- **States:** Varies by jurisdiction
- **DOJ:** Fines under Title 18, up to five years' imprisonment or both; civil and criminal forfeiture



E-Gold

- E-Gold was a virtual currency denominated in gold and other precious metals. E-Gold offered users the ability to transfer funds instantaneously.
- E-Gold was indicted under 18 U.S.C. § 1960 for engaging in money transmission without a license. In July 2008, E-Gold and its directors pleaded guilty in a plea arrangement and its assets were seized and liquidated.
- The founder of one of E-Gold's biggest exchangers went on to start Liberty Reserve.



Liberty Reserve

PRESS RELEASES



Manhattan U.S. Attorney Announces Charges Against Liberty Reserve, One Of World's Largest Digital Currency Companies, And Seven Of Its Principals And Employees For Allegedly Running A \$6 Billion Money Laundering Scheme

FOR IMMEDIATE RELEASE

Tuesday, May 28, 2013



Liberty Reserve

- The Department of Justice (DOJ), Secret Service, IRS, and US Immigration and Customs Enforcement announced the unsealing of a grand jury indictment of Liberty Reserve S.A. and seven of its executives for conspiracy to commit money laundering, conspiracy to operate an unlicensed money transmitting business, and the operation of an unlicensed money transmitting business. The investigation involved law enforcement action in 17 countries.
- Liberty Reserve was a Costa Rica-based virtual currency operator that provided users with the capability to transmit funds anonymously across the globe. Liberty Reserve did not perform Know Your Customer procedures on its users and was designed to help users anonymize the source of transferred and deposited funds.



Liberty Reserve

- By establishing an account, Liberty Reserve users were able to anonymously exchange Liberty Reserve virtual currency for real currency (and vice versa). The DOJ estimates that since 2006, Liberty Reserve processed 55 million transactions in an amount equal to approximately \$6 billion, much of which the DOJ asserts was derived from individuals and entities engaged in illicit activities.
- According to the DOJ, Liberty Reserve was a preferred method of payment on websites dedicated to the promotion and facilitation of illicit web-based activity, including identity theft, credit card fraud, online scams and dissemination of computer malware.



Liberty Reserve

- FinCEN issued a Notice of Proposed Rulemaking (NPRM) and a finding naming Liberty Reserve as a “primary money laundering concern” under Section 311 of the USA PATRIOT Act.
- Liberty Reserve is the first virtual currency provider identified under Section 311 and follows FinCEN’s recent use of the Section 311 authority against two Lebanese exchange houses.



USA PATRIOT Act Section 311

- Allows Treasury upon finding that a foreign jurisdiction, foreign financial institution, class of transaction, or type of account is “of primary money laundering concern” to apply, through regulation, any of the following:
 - Recordkeeping on and reporting of certain transactions;
 - Collection of information relating to beneficial ownership;
 - Collection of information relating to certain payable-through accounts;
 - Collection of information relating to certain correspondent accounts; and
 - Prohibition or conditions on the opening or maintaining of correspondent or payable-through accounts



Taxation of Bitcoin

- Canada's Revenue Agency issued a letter ruling indicating that users of BTC are obligated to pay taxes on transactions that are consummated using the currency. It is interesting to note that the Revenue Agency referred to BTC as a "commodity."
- The IRS has not issued rules directly governing BTC. However, on June 17, 2013, the GAO issued a report stating that the IRS should do more than provide basic, informal information to taxpayers about how their online activities could result in a tax obligations. The GAO recommended that: "To mitigate the risk of noncompliance from virtual currencies, the Commissioner of Internal Revenue should find relatively low-cost ways to provide information to taxpayers, such as the web statement IRS developed on virtual economies, on the basic tax reporting requirements for transactions using virtual currencies developed and used outside virtual economies." Virtual Economies and Currencies (GAO 13-516).



Taxation of Bitcoin

- The IRS has issued guidance on “Virtual World Transactions,” which the IRS defines as online gaming environments where players exchange goods and services in both the real and virtual worlds thereby creating a cyber-economy. The IRS stated “[i]f you receive more income from the virtual world than you spend, you may be required to report the gain as taxable income. IRS guidance also applies when you spend more in a virtual world than you receive, you generally cannot claim a loss on an income tax return [due to hobby loss rules].”
- Regardless of how income is received, the IRS generally considers it to be taxable. The IRS has signaled that is concerned about BTC’s possible use to evade taxation. The Director of the IRS division in charge of cyber threats recently stated that “The globalisation and digitalisation of our currencies is a significant emerging threat [...] It doesn't take much of a leap [to think] that these currencies would be used for tax evasion.”



Commodity Regulations

- The Commodity Exchange Act (“CEA”) and the CFTC define commodities to include “all other goods and articles...and all services, rights and interests...in which contracts for future delivery are presently or in the future dealt in.” Since BTC is a good or interest, and has a volatile market price that can support a futures contract, it is a commodity under the CEA and the CFTC’s rules.
- The CFTC has enforcement authority over commodity price manipulations. On a transactional level, the CFTC has jurisdiction over all option contracts that exercise into commodities, and commodity sales to retail market participants on a leveraged, margined or financed basis where delivery does not occur within 28 days.
- The CFTC also has jurisdiction over commodity futures and swaps (and options that exercise into futures or swaps). These instruments generally tie payments to a commodity’s price instead of its sale and actual delivery.
- CFTC jurisdictional transactions generally must be offered and executed on regulated markets or by registered dealers.



Commodity Regulations

- The CEA does not apply to spot transactions such as sales of BTCs on BTC exchanges with immediate or near-immediate delivery.
- The CEA generally does not regulate forward transactions. However, if a BTC sale (i) involves a purchaser that is not an eligible contract participant (ECP) under CEA section 1a(18), (ii) is margined, leveraged or financed by the offeror, and (iii) results in delivery of the BTC after 28 days, the transaction would be a retail commodity transaction under section 2(c)(2)(D) of the CEA.
 - ECPs are well capitalized entities or high net worth individuals. Retail commodity transactions must be executed on or subject to the rules of a CFTC-regulated designated contract market (DCM).
- In contrast to spot or forward contracts, purchasers and sellers may enter into contracts that are based on the price of BTCs, but without any intent to make or take delivery of BTCs. If a transaction is based on the price of BTCs, but buyers and sellers enter into the transaction without the intent to make or take actual delivery of BTCs, then the transaction will be treated as futures contract or a swap under the CEA.



Potential for SEC Regulation

- The Securities and Exchange Commission (SEC) has taken action against alleged ponzi schemes involving BTC.
 - In July 2013, the SEC brought action against the Bitcoin Savings and Trust, which it alleges to be a ponzi scheme. The allegation is that BST sold unregistered securities representing interests in a fund containing BTC. The SEC alleges that the proprietor of BST used proceeds to purchase personal items and to cover fund withdrawals from previous investors. Most interestingly, a federal magistrate judge recently found that BTC is a currency and that interests purchased with BTC may be securities.
- The CFTC's announcement that it is studying BTC may encourage the SEC to take more action.
 - As they have done in the past, the SEC and CFTC may challenge one another over jurisdiction.
 - BTC is sufficiently unique that both agencies have plausible arguments that they are entitled to regulate all or part of the BTC market.



Arguments for SEC Jurisdiction

- The SEC has jurisdiction over “securities.”
- Many different things can be classified as securities. BTC could be treated as a security under the federal securities law if it is:

1) Not a “currency” (exempted under 1934 Act); and

Even though Bitcoin is a medium of exchange and often referred to as a “virtual currency,” BTC might not ultimately be considered a currency under this portion of the securities laws since it is not legal tender. However, the previously discussed BST decision suggests that some courts may find it to be a “currency” under the securities laws, possibly making BTC exempt from SEC registration.

2) Either:

a) an “investment contract”; or

b) an “instrument commonly known as a ‘security.’”



Arguments for SEC Jurisdiction

- To determine if something is an “investment contract” you analyze it using the *Howey* three part test:
 1. Is there an investment of money?
 - This is very likely satisfied where investors exchange real currency for BTC.
 2. Is there a common enterprise?
 - This portion of the test is not clear cut. On one hand, BTC is decentralized and investors are largely unknown to one another. On the other hand, each investor’s fortunes are tied to the fortunes of the other investors. Anyone who holds BTC has a common interest in seeing its value increase.
 3. Is there an expectation of profits from the efforts of the promoter or a third party?
 - Increases in the value of BTC are not caused by the efforts of an individual investor, but rather by increases in demand, attributable to the efforts of third parties. However, the efforts of others do not necessarily determine profit from BTC. In fact, no efforts directly result in profit to the BTC ecosystem.



Arguments for SEC Jurisdiction

- Something is “an instrument commonly known as a ‘security’” if “the basic economic reality” of the transaction is “the subjection of the investor's money to the risk of an enterprise over which he exercises no managerial control[.]”
 - This is, essentially, the investment contract test without any requirement that the enterprise be “common.”
- Ultimately, the test for defining a security is deliberately vague and uncertain. Courts are instructed that “economic reality is to govern over form,” so the inquiry turns on individual judges’ assessments of the underlying economic reality.
 - Under certain circumstances scotch whiskey, self-improvement courses, cosmetics, earthworms, beavers, muskrats, rabbits, chinchillas, animal breeding programs, cattle embryos, fishing boats, vacuum cleaners, cemetery lots, coin operated telephones, health insurance, online Internet surfing ventures, master recording contracts, pooled litigation funds, and fruit trees have been determined to be securities.



Implications if Bitcoin is a Security

- If Bitcoin is ultimately regulated as a security, there will be a number of legal implications.
- Notably:
 - Unless the security is “exempt,” issuers are required to file a registration statement with the SEC, including a description of the security as well as audited financial statements. However, from a practical standpoint it would be difficult, if not impossible, to identify the issuer of BTC (as opposed to the issuer of a fund investing in BTC).
 - Even if BTC is eligible for certain exemptions from the filing of a full public registration statement there may be restrictions on resale.
 - The federal securities laws prohibit the offer or sale of unregistered securities. The purchaser of an unregistered security is entitled to rescission (cancellation) of the transaction, provided the purchaser seeks to do so with “reasonable diligence.”
 - Both the SEC and private plaintiffs may bring suit under Rule 10b-5 for any (i) fraudulent device, scheme, or artifice; (ii) untrue statement of material fact (as well as certain omissions of material fact); or (iii) fraudulent or deceitful act, practice, or course of business, in connection with the purchase or sale of any security.



CFPB

- The Consumer Financial Protection Bureau (CFPB) could assert jurisdiction over participants in the BTC industry.
 - The CFPB generally has jurisdiction over those who “engage[] in offering or providing a consumer financial product or service”
 - Under 12 U.S.C. § 5481, BTC exchanges and BTC wallets are offering a “consumer financial product or service” if they:
 - Transmit or exchange funds, or otherwise act as a custodian of funds for use or on behalf of a consumer;
 - Sell, provide, or issue payment instruments for consumers; or
 - Provide payments or other financial data processing products or services by any technological means.



Other Regulators

- Central Banks
 - If BTC becomes widely adopted it will limit the ability of central bankers to influence monetary policy

- State AG's
 - Consumer protection and concerns regarding criminal activity

- State Banking Regulators
 - Money transmission concerns



Congressional Interest

- The Senate Committee on Homeland Security and Governmental Affairs recently sent an inquiry to several federal agencies requesting any policies, guidance or procedures related to the treatment or regulation of virtual currencies and any minutes of interagency working groups involved in the development of any such policies.
- Senior members and staff of the House Financial Services Committee have privately expressed interest in BTC and are watching its development, but there are reportedly no plans by the committee's leadership to hold hearings.
- Pertinent staff on the House Agriculture Committee have been focused on the Farm Bill reauthorization, but have expressed awareness of BTC.
- The release of the GAO report on the taxation of virtual currencies may prompt interest from the Senate Finance Committee and House Committee on Ways and Means.



Questions?

Russell Bruemmer

+1 202 663 6804

Russell.Bruemmer@wilmerhale.com

Katrina Carroll

+1 202 663 6833

Katrina.Carroll@wilmerhale.com

Dan Casto

+1 202 663 6702

Daniel.Casto@wilmerhale.com

FinTech@wilmerhale.com