Briefing Paper

CATO INSTITUTE

Center for Monetary and Financial Alternatives

June 25, 2018 | Number 1

Should Cryptocurrencies Be Regulated like Securities?

By Diego Zuluaga

- The rise of ICOs has raised the question of whether cryptocurrencies are securities.
- Regulating cryptocurrencies as securities would affect who can buy, hold, deal in, and keep custody of cryptocurrencies, and require varying disclosures.
- Regulatory uncertainty is chilling innovation and increasing volatility in cryptocurrency markets.
- Regulators should provide clarity on how cryptocurrencies fit within existing laws by adopting a framework that makes a distinction between functional cryptocurrencies, such as bitcoin, which are not securities, and promises of cryptocurrencies, which may in some cases be securities.
- Securities regulations should only apply to promises of cryptocurrencies that are marketed as investments and tradable on secondary markets before they are functional: those that meet the Howey test legal precedent for determining a security.

In less than a decade, cryptocurrencies have moved from the fringes of financial market activity to a $300 billion asset class traded on exchanges and owned by mainstream investors.[1] The technology underlying Bitcoin and Ethereum has spawned more than 1,600 new platforms designed to compete with established providers.[2]

Yet a great deal of regulatory uncertainty still surrounds cryptocurrencies. An unresolved question that has recently gained prominence with the advent of ICOs (initial coin offerings) is whether new issues of cryptocurrency are disguised securities offerings operating outside of applicable laws.[3] For example, one former regulator from the Commodity Futures Trading Commission (CFTC) has suggested that the second-most-popular cryptocurrency, Ethereum, is a security to which securities regulations should apply retroactively.[4] However, this view has been recently contradicted by a top official at the Securities and Exchange Commission (SEC), who stated that the decentralized nature of the Ethereum network means its cryptocurrency does not fit the established definition of a security.[5]

Whether cryptocurrencies are securities affects who can buy and hold them, who can deal in them and keep custody of them, and what disclosure laws pertain to them. An overzealous application of securities laws to cryptocurrencies could raise barriers to investor access and capital formation, which would have a chilling effect on the development of cryptocurrency technology and markets. As a sitting regulator recently warned, cryptocurrencies' many novel features can lead policymakers to focus excessively on their potential harm rather than on their likely benefits.[6]

A clear, reasonable, and appropriate definition of what qualifies as a security would allow the market for cryptocurrencies to develop while also enabling securities regulators to properly fulfill their mission to protect investors; maintain fair, orderly, and efficient markets; and facilitate capital formation.[7]

Diego Zuluaga is a policy analyst at the Cato Institute's Center for Monetary and Financial Alternatives.

This paper discusses how cryptocurrencies fit established regulatory practice as well as the negative consequences of excessive regulation of cryptocurrencies. It puts cryptocurrency volatility in the context of business and regulatory uncertainty. Finally, it proposes a framework to provide greater regulatory certainty to market participants and enable the growth of this new technology while fulfilling the policy objectives of the relevant regulatory agencies.

HOW CRYPTOCURRENCIES WORK

Bitcoin, the world's first cryptocurrency, is the basis of a decentralized payments network.[8] Traditionally, a payment going from A to B has required a central intermediary to collect the funds from A and pass them on to B. Bitcoin has no such intermediary, relying instead on profit-seeking users to confirm transactions. In exchange for using their computing resources to help verify that a transaction is truthful, these users (called "miners") receive a transaction fee and newly generated bitcoins.[9]

Other cryptocurrencies use variations of this peer-to-peer incentive system to make exchange possible without a central counterparty. The crucial feature these currencies share is their reliance on a scarce digital token to carry out transactions and reward miners for validating them. Bitcoin is the token of the Bitcoin network, ether is the token of the Ethereum network, and so on. All cryptocurrencies are digital tokens.

Another feature common to cryptocurrencies is the use of a blockchain: a public ledger that contains the history of all transactions made in a cryptocurrency. The term blockchain refers to the fact that the ledger is a chain of transaction blocks, each validated by a miner.[10] This ledger is immutable and available to all users of the cryptocurrency, which makes fraud more difficult and increases trust in the network.[11]

Digital tokens such as cryptocurrencies enable transactions to take place without intermediaries. They are the means for transferring funds between users and the reward that other users get for maintaining a truthful ledger in the form of the blockchain.

There is no telling to what extent decentralized networks such as Bitcoin and Ethereum will displace established intermediaries. Skeptics of blockchain technology argue that high transaction fees and long processing times make the Bitcoin payment system less efficient than PayPal or Visa.[12] At any rate, regulation should not pick one technology over another but should instead let the competitive process determine which mode of transaction processing wins.

NEW TOKEN ISSUES: THE INITIAL COIN OFFERING

An initial coin offering, or ICO, is the exchange of funds for the promise of a digital token for future delivery. Those issuing the promise are typically developers who will use the funds to create an application on which the token will be useful. ICOs raised $7.1 billion in the first four months of 2018.[13]

The promise to deliver a digital token in the future is distinct from the token itself, as regulators, including SEC chairman Jay Clayton, have recognized.[14] An analogy with traditional commodity markets can illustrate the difference: a contract whereby a coffee farmer promises the future delivery of coffee beans in exchange for money today is clearly distinct from the coffee beans themselves, once harvested and delivered.[15]

WHY CRYPTOCURRENCIES ARE NOT SECURITIES

In congressional testimony, the SEC chairman recently acknowledged that Bitcoin does not meet the definition of a security.[16] Commissioner Brian Quintenz from the CFTC has also on several occasions spoken in support of the idea that cryptocurrencies, once in existence, are not securities but commodities.[17] At the SEC, the director of corporation finance, William Hinman, expressed a similar view about ether in a June 14, 2018, speech, arguing that it is not a security in its present state, "putting aside the fundraising that accompanied [its] creation."[18]

The question is not merely of scholarly interest; how it is answered will determine (a) which investors can buy and hold cryptocurrencies, (b) who can deal in and keep custody of cryptocurrencies, and (c) what disclosure and registration requirements cryptocurrency issuers must meet.

In general, it is understood that offering securities involves greater regulatory and compliance costs. Whereas firms have the option of privately offering securities as a way to reduce registration and disclosure requirements, such an offering is closed to investors with less than $1 million in net worth, or less than $200,000 in annual income.[19]

It is indeed difficult to justify a securities designation for Bitcoin, Ethereum, and other cryptocurrencies currently in circulation, as they fail to meet the definition of securities established by legal precedent. The 1946 Supreme Court ruling in *SEC v. Howey* defined a security as a contract involving (1) an investment of money (2) in a common enterprise (3) with the expectation of profits (4) from the efforts of others.[20]

As we have seen, Bitcoin and Ethereum are decentralized peer-to-peer networks. Buying bitcoin or ether may be an

investment of money. It may even involve an expectation of profits if the intention of the buyer is to hold the cryptocurrency rather than to use it to buy goods and services.

However, one would be hard pressed to argue that a cryptocurrency network is a common enterprise when the roles and intentions of its users are so varied.[21] The profits from holding and using cryptocurrencies, moreover, do not accrue from the efforts of others but rather from the cryptocurrencies' usefulness on the network. Those who most obviously profit, namely the miners, do so from their own efforts at validating transactions.

In addition to the legal concern that cryptocurrencies fail the Howey test, the application of securities laws to cryptocurrency markets would harm their growth. Notably, it would preclude ordinary people from enjoying the benefits of holding and transacting in cryptocurrencies. Designating ether a security, as Gary Gensler, former CFTC chairman, has suggested doing, would also create substantial uncertainty on its own because many blockchain projects rely on the Ethereum network to function.[22]

ARE ICOS SECURITIES?

ICOs can allow startups to raise capital from investors or future customers. In certain circumstances, the promises of future tokens issued in an ICO may therefore meet the definition of a security.

The SEC has found that some recent token issues did meet the Howey test. In a report released in July 2017, it ruled that tokens issued by The DAO, a decentralized investment fund operating on the Ethereum platform, were in fact securities. The DAO operated as an investment platform, its tokens granting "holder[s] voting and ownership rights [. . .] proportional to the amount of ether transferred."[23]

In December, the SEC announced that the Munchee token was also a security.[24] Munchee, a restaurant review application in development at the time, had claimed that its tokens did not meet the Howey test because the tokens were meant to be used by restaurants and their patrons only and not as an investment vehicle. However, the SEC decided that, because Munchee's marketing materials highlighted the tokens' future appreciation and secondary trading, a broader clientele might be enticed to acquire them with a "reasonable expectation" of profit. Furthermore, the SEC noted that Munchee marketed principally to prospective investors rather than to potential reviewers.

The DAO and Munchee rulings offer insight into the circumstances that may lead the SEC to regard an ICO as an unregistered securities offering. However, these rulings concern only two cases among an estimated 586 ICOs between May 2017 and April 2018.[25] Absent further evidence and statements about the remaining ICOs, the DAO and Munchee enforcement actions are aberrations rather than the norm. Indeed, it is puzzling that the SEC chairman has repeatedly claimed that all ICOs he has seen are securities.[26] If that is the case, enforcement actions against ICO issuers may be expected to increase in the future.

Those two rulings do, on the other hand, highlight the present uncertainty associated with digital token issues. In the absence of a federal policy, the state of Wyoming has sought to provide greater clarity by exempting new tokens that can be exchanged for goods and services and are not marketed as investments from state securities regulation.[27]

Yet one state's actions, however timely and desirable, can have only a small effect when cryptocurrencies are traded across state and national borders. Furthermore, even if more states undertook measures similar to Wyoming's, the prospect of a more restrictive policy from federal regulators would perpetuate policy uncertainty, as federal regulation could preempt lighter state-level regimes.

Existing cryptocurrencies are unlikely to meet the Howey test. Subjecting them to extensive disclosures and registration, as required by securities laws, would not only be inappropriate but also would hamper the growth of blockchain technology. Conversely, some ICOs may qualify as securities under certain circumstances. Clarifying what those circumstances are would have a number of benefits, including reducing price volatility induced by the lack of a stable regulatory framework for cryptocurrencies.

HOW UNCERTAINTY INCREASES CRYPTOCURRENCY VOLATILITY

Large fluctuations in the price of cryptocurrencies have prompted some to claim that token pricing is irrational.[28] Yet business and regulatory uncertainty is at least partly responsible for the volatility observed in cryptocurrency markets.

Because cryptocurrencies are a recent phenomenon, their market value is subject to significant short-term changes in light of new information. For example, depending on one's assumptions about the share of the global remittance market that the Bitcoin payment system might claim in the future, one bitcoin could be worth anywhere between $200 and $20,000.[29] For comparison, the price of bitcoin as of mid-June 2018 was $6,700.

Rumors and announcements of changes in regulatory policy also affect cryptocurrency prices. For instance, when

reports began to circulate that Chinese regulators would shut down the country's cryptocurrency exchanges, the price of bitcoin declined by 10 percent within a day.[30] A price decline of similar magnitude followed the official announcement of a ban five months later.[31]

Cryptocurrencies are a new and promising technology, the benefits of which remain little understood and hotly disputed. Policy uncertainty and ambiguous statements by financial regulators further complicate an assessment of the risks and rewards that ownership of this asset class can bring.

Yet, the answer is not to clamp down on cryptocurrencies. Volatility, as long as it is not caused by fraudulent or illegal market behavior, is not a regulatory concern. Rather, the goal of regulators should be to provide confidence in the stability of the regulatory framework by defining how cryptocurrencies fit within existing rules. Such regulatory certainty need not come at the expense of the accessibility of blockchain technology to firms and individuals.

A CLEAR FRAMEWORK FOR CRYPTOCURRENCY OVERSIGHT

A crucial way in which policymakers could increase regulatory certainty for cryptocurrencies is by enshrining in policy the distinction between *functional* cryptocurrencies and *promises to deliver* cryptocurrencies.

Under this framework, cryptocurrencies already in circulation would qualify as commodities. For contracts promising the future delivery of a cryptocurrency, regulators should distinguish between the following:

- Contracts marketed as investments and tradable on secondary markets before the associated applications are functional;
- Contracts marketed as advance purchases of a commodity not tradable before the launch of the application and for which buyers would be refunded if the application failed to launch.

Contracts that meet the first set of criteria would appear to pass the Howey test and would therefore qualify as securities. Contracts that fit the second set of criteria would be closer to forward contracts because they would involve the physical delivery of the cryptocurrency to the contract buyer when the application became functional. They therefore would not qualify as securities.[32]

CONCLUSION

Policymakers' concerns about fraudulent practices in cryptocurrencies can be addressed without shutting down this promising new asset class or subjecting it to onerous securities registration requirements. A balanced approach would avoid chilling innovation and putting cryptocurrencies out of the reach of retail buyers and startups.

Regulators can achieve their objectives by designating existing cryptocurrencies, such as bitcoin and ether, as commodities and by clearly describing the circumstances under which contracts for future cryptocurrencies will meet the Howey test. This framework would be consistent with legal precedent and with recent statements by the relevant agencies. It would also ensure that the technology associated with cryptocurrencies will survive to deliver the benefits that many people think it will bring.

NOTES

1. As of mid-June 2018, the total market capitalization of cryptocurrencies was $292.9 billion. See Coin Market Cap, "Top 100 Cryptocurrencies by Market Capitalization," https://www.coinmarketcap.com.

2. For a list of current applications using this technology, see State of the Dapps, "The Curated List of 1,519 Decentralized Apps," https://www.stateofthedapps.com.

3. Jay Clayton, "Opening Remarks at the Securities Regulation Institute," U.S. Securities and Exchange Commission (SEC), January 22, 2018, https://www.sec.gov/news/speech/speech-clayton-012218.

4. Annaliese Milano, "Everything Ex-CFTC Chair Gary Gensler Said about Cryptos Being Securities," *CoinDesk*, April 24, 2018, https://www.coindesk.com/ex-cftc-chair-gary-gensler-on-tokens-securities-and-the-sec/.

5. William Hinman, "Digital Asset Transactions: When Howey Met Gary (Plastic)," remarks at the Yahoo Finance All Markets Summit: Crypto, June 14, 2018, https://www.sec.gov/news/speech/speech-hinman-061418.

6. Hester Peirce, "Beaches and Bitcoin: Remarks before the Medici Conference," SEC, May 2, 2018, https://www.sec.gov/news/speech/speech-peirce-050218.

7. For background on the mission of the SEC, the primary U.S. securities regulator, see SEC, "What We Do," June 10, 2013, https://www.sec.gov/Article/whatwedo.html#intro.

8. For additional details, see Satoshi Nakamoto, "Bitcoin: A Peer-to-Peer Electronic Cash System," https://bitcoin.org/bitcoin.pdf.

9. Andreas M. Antonopoulos, *Mastering Bitcoin: Programming the Open Blockchain*, 2nd ed. (Sebastopol, CA: O'Reilly, 2017).

10. Antonopoulos, *Mastering Bitcoin: Programming the Open Blockchain*.

11. For a comprehensive discussion of the historical and economic role of ledger technologies, see Chris Berg, Sinclair Davidson, and Jason Potts, "Ledgers," *SSRN Electronic Journal* (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3157421.

12. Ryan Vlastelica, "Why Bitcoin Won't Displace Visa or Mastercard Soon," *Marketwatch*, December 18, 2017, https://www.marketwatch.com/story/why-bitcoin-wont-displace-visa-or-mastercard-soon-2017-12-15.

13. See the *CoinDesk* ICO Tracker, a database to "track and analyze the blockchain token sale and initial coin offering (ICO) movement as it grows and expands," at https://www.coindesk.com/ico-tracker/.

14. Nikhilesh De and Mahishan Gnanaseharan, "SEC Chief Touts Benefits of Crypto Regulation," *CoinDesk*, April 5, 2018, https://www.coindesk.com/sec-chief-not-icos-bad/.

15. Peter van Valkenburgh, "Framework for Securities Regulation of Cryptocurrencies," *Coin Center*, January 4, 2017, https://coincenter.org/entry/framework-for-securities-regulation-of-cryptocurrencies.

16. Gerelyn Terzo, "SEC: ICO Tokens Should Be Regulated as Securities, Not Bitcoin," *Yahoo Finance*, April 27, 2018, https://finance.yahoo.com/news/sec-ico-tokens-regulated-securities-205650102.html.

17. See Jerry Brito, "CFTC Commissioner: Tokens That Start as Securities May 'Transform' into Commodities," *Coin Center*, October 20, 2017, https://coincenter.org/link/cftc-commissioner-tokens-that-start-as-securities-may-transform-into-commodities; and Gabriel T. Rubin, "CFTC Official Urges SEC to Clarify Ether's Status," *Wall Street Journal*, May 14, 2018, https://www.wsj.com/articles/cftc-official-urges-sec-to-clarify-ethers-status-1526328264.

18. Hinman, "Digital Asset Transactions: When Howey Met Gary (Plastic)."

19. Thaya Brook Knight, "Your Money's No Good Here: How Restrictions on Private Securities Offerings Harm Investors," Cato Institute Policy Analysis No. 833, February 9, 2018.

20. *SEC v. Howey* Co., 328 U.S. 293 (1946), https://supreme.justia.com/cases/federal/us/328/293/case.html.

21. Peter Van Valkenburgh, "Framework for Security Regulation of Cryptocurrencies," *Coin Center Report* (2016): 46–47, https://coincenter.org/entry/framework-for-securities-regulation-of-cryptocurrencies.

22. The Ethereum network allocates computing power to other decentralized applications, which require compatible tokens to function on the network. One of the most common Ethereum token standards is the ERC20 token, which is used by 487 different applications according to Etherscan, https://etherscan.io/tokens.

23. SEC, "Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO," July 25, 2017, https://www.sec.gov/litigation/investreport/34-81207.pdf.

24. SEC, "In the Matter of Munchee Inc., Respondent: Order Instituting Cease-and-Desist Proceedings Pursuant to Section 8a of the Securities Act of 1933, Making Findings, and Imposing a Cease-and-Desist Order," December 11, 2017, https://www.sec.gov/litigation/admin/2017/33-10445.pdf.

25. See *CoinDesk* ICO Tracker.

26. Terzo, "SEC: ICO Tokens Should Be Regulated as Securities."

27. Wyoming H.B. No. 0070, Sess. of 2018 (2018), http://www.wyoleg.gov/2018/Digest/HB0070.pdf.

28. Alan Greenspan, former Federal Reserve chair, is among them; see Sujha Sundararajan, "Greenspan Likens 'Irrational' Bitcoin to Revolutionary War Currency," *CoinDesk*, December 7, 2017, https://www.coindesk.com/greenspan-likens-irrational-bitcoin-to-revolutionary-war-currency/.

29. Chris Burniske and Arthur B. Laffer, "Bitcoin: A Disruptive Currency," white paper, ARK Invest Research, New York, August 1, 2015, https://cdn2.hubspot.net/hubfs/533155/1_Download_Files_ARK-Invest/White_Papers/Bitcoin-Disruptive-Currency-ARKInvest.pdf.

30. Josiah Wilmoth, "Bitcoin Price Crashes Below $4,000 as China Bitcoin Ban Rumors Intensify," *Altcoin News*, CCN, September 13, 2017, https://www.ccn.com/bitcoin-price-crashes-4000-china-bitcoin-ban-rumors-intensify/.

31. Helen Partz, "Bitcoin Dips below $7k amidst News of China's Full Ban of Cryptocurrency Exchanges," *Cointelegraph*, February 5, 2018, https://cointelegraph.com/news/bitcoin-dips-below-7k-amidst-news-of-chinas-full-ban-of-cryptocurrency-exchanges.

32. Jerry Brito, Houman Shadab, and Andrea Castillo, "Bitcoin Financial Regulation: Securities, Derivatives, Prediction Markets, and Gambling," *Columbia Science and Technology Law Review* 16 (2014): 164. "Forwards are non-standardized, do not trade on an exchange, and, perhaps most importantly, are intended by the parties to physically deliver the commodity as opposed to a cash settlement."

CATO INSTITUTE

The views expressed in this paper are those of the author(s) and should not be attributed to the Cato Institute, its trustees, its Sponsors, or any other person or organization. Nothing in this paper should be construed as an attempt to aid or hinder the passage of any bill before Congress. Copyright © 2018 Cato Institute. This work by Cato Institute is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.