Financial Economists Roundtable

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Statement on Crypto Assets

Crypto Assets Require Better Regulation

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The Financial Economist Roundtable (FER) is a group of senior financial economists who have made significant contributions to the finance literature and seek to apply their knowledge to current policy debates. The Roundtable focuses on microeconomic issues in investments, corporate finance, as well as financial institutions and markets, both in the U.S. and internationally. It aims to create a forum for intellectual interaction that promotes in-depth analyses of current policy issues in order to raise the level of public and private policy debate and improve the quality of policy decisions.

FER was founded in 1993 and meets annually. Members attending an FER meeting discuss specific policy issues on which the FER may adopt statements. When the FER issues a statement, it reflects a consensus among at least two-thirds of the attending members, and all the members who sign it support it. The statements are intended to increase the awareness and understanding of public policy makers, the financial economics profession, the communications media, and the public. FER distributes its statements to relevant policy makers and the media. This statement is the outcome of the FER's discussion at its annual meeting, which took place on July 14-16, 2018, in Toronto.

We signatories to this statement believe that regulators should take a more proactive approach to the oversight and regulation of crypto asset markets. In cryptocurrencies, the lack of investor protection in trading markets has led to abusive practices that negate the potential benefits of these innovations. The current response has been ad hoc at best. We recommend that financial regulators develop a coordinated international regulatory response to ensure that illegal and manipulative activity simply does not move across jurisdictional borders. As the potential implementation of blockchain technology moves outside of the cryptocurrency space and into financial services more generally, regulators must better understand the potential implications of this technology to transform financial markets.

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Crypto Assets Require Better Regulation

Statement of the Financial Economics Roundtable

The exponential rise and volatility in the price of Bitcoin, the most widely-used cryptocurrency to date, has heightened investor interest in cryptocurrencies and crypto assets more broadly. These assets have attracted a growing number of investors in many countries but also have been used to facilitate a wide range of illicit activities, even espionage against the United States. In some incidents of fraud, legitimate participants in crypto asset markets have incurred substantial losses, which has raised the issue of whether more effective regulatory oversight of crypto markets is needed, and, if so, what kind of regulation and by whom.

In response to this growth of crypto assets, the Financial Economist Roundtable ("FER"), at its annual meeting on July 16, 2018, discussed the potential benefits and risks associated with crypto asset markets. While the views of individual FER members about specific issues raised by our discussion often differed from one another, the consensus is that financial regulators need to be more pro-active in addressing abusive activities in crypto asset markets, such as fraud, money laundering, illicit drug activity, and price manipulation. Many of the abuses associated with crypto asset markets have been exacerbated by the conflicts and gaps that exist in the current regulatory structure and by ad hoc regulatory responses.

A key FER recommendation is that financial regulators must work together to develop a coordinated international regulatory response to abuses in crypto asset markets. We also propose, in the final section of this Statement, several immediate regulatory goals that should be used in developing such a coordinated regulatory response.

Potential Benefits of Crypto Assets

A crypto asset is a digital asset designed to work as a medium of exchange and a store-of-value that typically uses distributed ledger technology (often called a *blockchain*), which enables all participants to transact with each other without the need of a central, coordinating, entity (such as a bank or clearing house). The blockchain ledger contains a history of all verified financial transactions and controls the creation of additional units.[1] In contrast, sovereign fiat money is controlled by a central authority (central bank) and transferred through regulated financial institutions (banks).

Proponents of the use of crypto assets suggest that they may reduce transactions costs by eliminating the need for centralized, coordinating entities, and they may provide an alternative store-of-value that provides protection from expropriation by governments. Furthermore, blockchain technology has the potential to enable the unbanked and underbanked to create their own financial alternatives in an efficient and scalable manner.[2] Other potential benefits are rapid confirmation of transactions and a reduction in counterparty risk.

Potential Risks and Costs of Crypto Assets

[1] The remainder of this Statement discusses only cryptocurrencies associated with distributed ledger technology. The blockchain is one type of distributed ledger technology. Blockchains may be "public" or "private." The Bitcoin cryptocurrency is an example of the use of a public blockchain. Issues associated with public blockchains have raised public policy concerns that are the focus of this Statement. Private blockchains are used by companies in supply chain management and record-keeping. As the FER believes (as do many others) that the market should be left to sort out the security and cost-effectiveness of private blockchains, we do not discuss them in this Statement.
[2] See https://cointelegraph.com/news/how-blockchain-is-banking-the-unbanked

Cryptocurrencies also may aid bad actors when used as a method of payment. Unlike cash whose transfer can be bulky, cryptocurrencies can easily move across borders with the push of a button.

For example, cryptocurrencies have been used as a method of payment for the purchase of illegal drugs, such as on the online black market Silk Road, which the FBI shut down in October 2013.[3] In 2017 U.S. Department of Justice Drug Enforcement Administration issued a report concluding "…virtual currencies, such as Bitcoin, enable transnational criminal organizations (TCOs) to easily transfer illicit proceeds internationally."[4] On July 12, 2018, Special Counsel Robert Mueller, in an Indictment charging twelve Russians with unlawfully interfering in the 2016 U.S. elections, alleged that more than $95,000 in Bitcoins "facilitate[d] the purchase of infrastructure used in their hacking activity."

Although one asserted benefit of using cryptocurrencies is their anonymity, they may not be fully anonymous. For example, because Bitcoin is issued and traded on a blockchain that provides a complete public history of transactions, authorities may be able to identify wrongdoers using Bitcoins by tracing their illicit transactions. Such traces may not have been possible had those transactions been carried out with cash.[5] Also, not all cryptocurrencies use a public blockchain.

Additional concerns have been raised about Initial Coin Offerings and the issuance of ICO tokens backed by cryptocurrencies.[6] The offering documents ("White Papers") for ICOs have often included misleading and inadequate disclosures. Investors cannot easily distinguish between legitimate issuers and those who seek to profit by using fraudulent disclosure, which creates what economists call a "lemons problem" and results in risky or "bad" crypto assets poisoning the market for good or legitimate ones.

The trading of some crypto assets also has led to price manipulations (such as "pump and dump" schemes) and cyberattacks against holders or custodians of crypto assets, both of which have resulted in significant investor losses and a loss of investor confidence. On May 23, 2018, the Commodities Futures Trading Commission (CFTC) and the Department of Justice (DOJ) jointly announced they were investigating allegations of manipulation through "spoofing" and "wash sales" at two minor virtual currency exchanges. On June 8, 2018, the CFTC asked four exchanges whose prices are used as benchmarks for Bitcoin futures -- Bitstamp, Coinbase, itBit, and Kraken – for information related to this investigation.[7]

Numerous high-profile hacks of trading venues that function as both custodians of, and dealers in, crypto assets also have cost investors millions of dollars of losses both in the United States and other countries. The Bitcoin Exchange Guide lists all major cryptocurrency hacks from 2011 through 2017, including the infamous hacking in Japan of Mt. Gox in 2014, at one point the world's leading Bitcoin exchange.[8] Cryptocurrency holders lost nearly $1 billion in 2018.[9] Many of these thefts appear to have occurred through exchanges or custodians, rather than through the cryptocurrencies themselves. Bitcoin's blockchain has never been hacked or otherwise compromised.

Partially in response to these problems, some crypto asset firms have voluntarily submitted to regulatory oversight. For example, in June 2018, Coinbase bought an SEC-registered broker-dealer, Keystone Capital,

[3] See https://en.wikipedia.org/wiki/Silk Road_(marketplace)
[4] See https://www.dea.gov/docs/DIR-040-17_2017-NDTA.pdf, p. vii.
[5] See https://coincenter.org/entry/understanding-bitcoin-s-role-in-the-russia-investigation
[6] Most references to ICOs in the media and in many blogs about crypto assets treat them as assets, when in fact ICO is an acronym for Initial Coin Offering, which is a *process*. The tokens issued in exchange for cash or crypto currencies are the actual assets.
[7] A recent analysis by Bloomberg suggests that the case for manipulation may be weaker than it has appeared in the press. See https://www.bloomberg.com/view/articles/2018-06-15/bitcoin-manipulation-study-is-less-than-it-seems
[8] See https://bitcoinexchangeguide.com/top-cryptocurrency-theft-hacks/
[9] See https://blockexplorer.com/news/biggest-cryptocurrency-hacks-2018/.

that runs an alternative trading system, thus enabling Coinbase to make a market in crypto assets. Coinbase also has licenses in at least 37 states and is authorized by the SEC to trade ICO tokens that are classified as securities.[10]

In March 2018, Praetorian Group filed a registration statement with the SEC to issue crypto tokens (PAX) structured to meet the SEC's test of a "security" so its tokens would benefit from SEC approval. Unlike a traditional IPO sold through an investment bank, PAX tokens will be sold exclusively on Praetorian's website (praetoriangroup.io). Investors will be able to purchase the tokens using Bitcoin, Ethereum, and Litecoin. The company anticipates that PAX tokens will be traded on cryptocurrency secondary exchanges, including DEX, Binance, Bittrex, Liqui, Poloniex, and Krakenas, as well as some Japanese exchanges.

***U.S. Regulatory* Responses**

Financial Regulators have responded in different ways to these problems.

ICOs: The SEC has gradually moved toward treating many, if not most, tokens issued by ICOs as securities, subject to SEC disclosure rules applicable to security offerings. More specifically, in July 2017 an SEC report on "DAOs" (Decentralized Autonomous Organizations using blockchain technology) indicated that the SEC would employ the "Howey" test to decide whether an ICO token is a security or an "investment contract." (See *SEC v. W.J. Howey.*[11]) One criterion of this test is that an ICO token (or any other crypto asset) is a security if it *carries an expectation of profit* rather than just being a useful item or having utility (such as club membership).[12]

The Commission also launched the website HoweyCoins.com to warn investors about the risks of investing in tokens issued through ICOs. The website provides a mock-up of a fictional token and "White Paper," and educates investors on red flags that may signal fraud. The FER supports these regulatory actions and urges financial regulators in other countries to provide similar information to investors in their countries.

In September 2018, the federal district court for the eastern district of New York ruled in *United States v. Zaslavskiy* that ICOs may be treated as securities, therefore making issuers potentially liable for criminal sanctions, if the court finds the offering to constitute securities fraud.[13] On the same day as the *Zaslavskiy* decision, the SEC settled charges against an "ICO Superstore," TokenLot, for not registering as a broker-dealer in connection with the sale of its digital tokens.[14] Also in September 2018, the Financial Industry Regulatory Authority (FINRA), which oversees securities broker-dealers filed a complaint against a cryptocurrency promoter alleging securities fraud and the illegal distribution of an unregistered cryptocurrency.[15]

Derivatives on Crypto Assets: In December 2017, the CFTC, which regulates all futures contracts and futures exchanges in the U.S., authorized the Chicago Mercantile Exchange and the Chicago Board Options Exchange (CBOE) to begin trading cash-settled futures contracts on a Bitcoin index. (At this writing, the Commission is considering whether to authorize trading of Futures on an Ethereum index). The December

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[10] See https://www.bloomberg.com/news/articles/2018-07-16/coinbasehttps://www.bloomberg.com/news/articles/2018-07-16/coinbase-says-it-has-green-light-to-list-coins-deemed-securities

[11] 328 U.S. 293 (1946).

[12] See https://www.sec.gov/litigation/investreport/34-81207.pdf

[13] Memorandum & Order, 1:17-cr-00647-RJD-RER (E.D.N.Y.), ECF No. 37 (Sept. 11, 2018).

[14] See Securities Act Release No. 10543, Exchange Act Release No. 84075, Investment Company Act Release No. 33221, Administrative Proceeding File No. 3-18739, ¶ 2 (Sept. 11, 2018).

[15] See http://www.finra.org/sites/default/files/Ayre_Complaint_091118.pdf.

2017 decision signals the CFTC's intention to treat crypto assets like any other commodity or financial contract on which futures can be written.[16] Among other CFTC regulations, exchanges are required to establish daily margin requirements on futures contracts to reduce counterparty risk.

Crypto Currency Exchanges: In 2014, the New York Department of Financial Services, which regulates money transmitters operating in New York, proposed rules for granting a BitLicense to entities that enable exchanges between cryptocurrencies and fiat currencies. These rules became effective in 2015.[17] The FER believes that all Crypto Currency Exchanges should be subject to regulation wherever they reside, whether in other U.S. states or other countries.

Money Laundering: The Treasury Department, through its FinCEN arm, now oversees money laundering and other illicit activities, including those facilitated by cryptocurrencies.[18]

Taxation: Recent IRS rulings make clear that crypto asset transactions are taxable just like transactions in any other property.[19] Other countries also are beginning to do this.

Congressional Responses: In the wake of the disclosure that some Russian persons and entities used Bitcoin to finance the hacking of the 2016 U.S. elections, the House held a Hearing on July 17, 2018, to discuss the role of cryptocurrencies.[20] A blockchain caucus in the House now convenes regularly to discuss policy issues related to blockchain technologies.[21] Two bills, with bipartisan backing, to create a special regulatory structure for cryptocurrencies also have been introduced in the House this year.[22]

International Regulatory Responses

While financial regulators in all major countries (including the United Kingdom and the European Union) are studying crypto asset markets and appear to believe that some regulation is needed, few have settled on a coherent regulatory response to either cryptocurrency or crypto asset markets.[23] Three countries that have are China, Japan, and South Korea, which have taken different regulatory approaches. China prohibits its citizens from owning cryptocurrencies, including Bitcoin, but encourages experimentation with blockchain technology. This approach may be best summarized by the comments of the Deputy Governor of China's central bank who said: "The only thing to do is to sit by the riverbank and wait for Bitcoin's corpse to float past."[24]

At the other extreme is Japan, which takes a more liberal approach. Its "Virtual Currency Act," enacted in 2017, declares that cryptocurrencies are a legal means of payment. The Japanese financial services authority also has granted licenses to eleven crypto exchanges subjecting them to regulatory oversight, with the objective of reducing fraud and preventing another hacking incident like the infamous Mt. Gox episode.[25]

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[16] The CFTC has issued a white paper entitled "Backgrounder on Oversight of and Approach to Virtual Currency Futures Markets" that outlines the agency's regulatory approach. See https://www.cftc.gov/Bitcoin/index.htm

[17] See https://www.dfs.ny.gov/legal/regulations/bitlicense_reg_framework.htm

[18] See https://www.fincen.gov/news/news-releases/fincen-issues-guidance-virtual-currencies-and-regulatory-responsibilities

[19] See https://www.irs.gov/newsroom/irs-reminds-taxpayers-to-report-virtual-currency-transactions

[20] See https://financialservices.house.gov/calendar/eventsingle.aspx?EventID=403735

[21] See https://www.congressionalblockchaincaucus.com/

[22] See https://www.rollcall.com/news/congress/house-bills-revisit-regulation-cryptocurrencies.

[23] See https://bitcoinmagazine.com/articles/cryptocurrency-regulation-2018-where-world-stands-right-now/

[24] Quoted in *The Economist*, January 20, 2018, p. 65.

[25] See https://www.wired.com/2014/03/bitcoin-exchange/

South Korea initially took a liberal approach to the regulation of crypto assets but later proposed banning cryptocurrencies in January 2018. Subsequently, the government rescinded that proposal, declaring that cryptocurrency trading accounts must be registered in the real names of traders and that capital gains taxes must be paid on sales of cryptocurrencies. The government, however, is stillconsidering a ban on the issuance of tokens through ICOs.

In addition to individual country responses, several international regulatory bodies are attempting to develop a coherent framework to regulate the issuance and trading of crypto assets. The Financial Stability Board (FSB), an international group of major countries headquartered in Switzerland, issued a report to the G20 concluding that, while the volume of crypto assets is still small relative to official government monies (around one percent), the FSB "will identify metrics for enhanced monitoring of the financial stability risks posed by crypto assets and update the G20 as appropriate."[26] The International Organization of Securities Commissions (IOSCO) has pointed to the growing use of ICOs to raise capital as an area of concern and has issued a statement to members discussing the risks associated with ICOs and the various approaches taken by the regulatory bodies of member states.[27] These international initiatives are a promising step towards developing a global regulatory response to the growth of crypto asset markets.

Recommendations

The FER recommends that financial regulators in all countries should work together to develop a coordinated international regulatory response to the growth of crypto assets markets. A regulatory response that transcends national borders is needed to thwart the use of cryptocurrencies for illegal activities, such as drug dealing and money-laundering, and to protect cryptocurrency users from fraudulent and manipulative schemes that threaten the integrity of crypto asset markets.

More immediate regulatory goals should be:

- Ensure that regulation does not impede legitimate and innovative uses of cryptocurrencies and blockchain technology.

- Eliminate the current uncertainty about the applicability of securities laws to crypto assets both in the U.S. and other countries. Regulators should decide which crypto tokens issued through Initial Coin Offerings qualify as securities and are subject to disclosure requirements at the time of offering.

- Ensure that institutions that enable exchanges between cryptocurrencies and fiat currencies have cutting-edge security technologies to protect against hacking and the theft of crypto assets. Currency exchanges also should be subject to minimum capital requirements and be required to perform customer background checks.

- Ensure that entities that provide both exchange services and customer margin accounts have strong incentives to confirm that customers have the financial resources to meet margin requirements should asset values decline significantly.

- Require that crypto asset exchanges provide regular tax reports to tax authorities and to customers that describe all trading activities, like the reports that U.S. brokers and mutual fund companies now provide in their IRS Form 1099B reports. Such reports would reduce costs for legitimate

[26] See https://www.fsb.org/wp-content/uploads/P180318.pdf
[27] See https://www.iosco.org/news/pdf/IOSCONEWS485.pdf

crypto-asset investors and assist world-wide law enforcement in tracking and penalizing money-laundering and other illicit activities.

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