

## Regulating Crypto Assets: Securities and Commodities

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### Memorandum

**TO:** Research Assistant  
**FROM:** Managing Director, Bipartisan Policy Center  
**RE:** Policy platform on the regulation of digital assets

### Introduction

The past few years have seen a surge in the adoption of crypto asset technologies. Labeled with various names, including “virtual assets,” “digital tokens,” “digital coins,” “digital currencies,” “cryptocurrencies,” “convertible virtual currencies,” crypto assets have been widely debated by institutional investors and retail consumers alike. Hundreds of new start-ups have proposed business models utilizing distributed ledger technology. Even legacy financial institutions like Fidelity,<sup>1</sup> Mastercard,<sup>2</sup> Visa,<sup>3</sup> and JP Morgan<sup>4</sup> have acknowledged the benefits of new technologies like blockchain. Most famously, Facebook announced its controversial proposal for a new digital currency that would replace all currency as a global medium of exchange.<sup>5</sup>

Retail investors embraced crypto assets long before financial institutions.<sup>6</sup> At its peak in January 2018, the total market cap of all crypto assets was a record high \$800 billion, equaling a tenth of the value of all gold in the world. But the volatility soon after was stunning; just a few months later the market spiraled down to \$250 billion.

<sup>1</sup> About Us - Fidelity Digital Assets, (last visited Jan. 16, 2020), <https://www.fidelitydigitalassets.com/about-us>.

<sup>2</sup> Mastercard Blockchain to Bring Visibility to Food Systems, Oct. 27, 2019, <https://newsroom.mastercard.com/press-releases/mastercard-blockchain-to-bring-visibility-to-food-systems/>.

<sup>3</sup> Visa Goes Live With Blockchain-Powered Business Payments Service, Jun 11, 2019, <https://www.coindesk.com/visa-goes-live-with-blockchain-powered-business-payments-service>.

<sup>4</sup> J.P. Morgan Global, Blockchain And Distributed Ledger, (last visited Jan. 16, 2020), <https://www.jpmorgan.com/global/blockchain>.

<sup>5</sup> Mike Isaac and Nathaniel Popper, *Facebook Plans Global Financial System based on Cryptocurrency*, N.Y. Times, June 18, 2019, <https://www.nytimes.com/2019/06/18/technology/facebook-cryptocurrency-libra.html?module=inline>.

<sup>6</sup> CoinMarketCap Global Charts, (last visited Nov. 4, 2019), <https://coinmarketcap.com/charts/>.

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The same enthusiasm that accelerated market growth attracted numerous bad actors as well; the amount of cryptocurrency stolen or scammed in 2018 rose to \$1.7 billion.<sup>7</sup> Crypto assets created generous wealth for early adopters, but brought sweeping losses to newer holders.

To maintain secure growth of the marketplace, participants are calling for the development of proper financial, legal and technological infrastructure. U.S. regulators — unlike other countries — have not banned the trading of crypto assets, but instead have sought comment from companies and investors to develop critical regulatory oversight. Just as federal, state and international regulators together secure the financial system, they must maintain a safe and fair infrastructure for the transfer of digital assets.

Currently, the U.S. does not have a comprehensive regulatory policy to treat digital assets. Instead, a mix of federal, state and local laws and regulations overlap additional layers of rules from self-regulated organizations (SROs) and internal company compliance procedures. The complexity and lack of clarity has chilled experimentation and dissuaded many financial technology start-ups and companies from pursuing innovations in this space.

The numerous government agencies responsible for stabilizing the crypto asset marketplace include the Federal Reserve, the Internal Revenue Service (IRS), and the Treasury Department's Financial Crimes Enforcement Network (FinCEN). However, the Securities and Exchange Commission (SEC) and the Commodities Futures Trading Commission (CFTC) have been two of the most active regulatory agencies.

Still, gaps remain. Some have argued that regulators will be unable to maintain adequate oversight due to insufficient jurisdictional authority and have proposed that Congress step in to bolster agencies' authority and provide clarity. The most topical issue for the marketplace is still the trading of securities and commodities crypto assets and some experts estimate that more than \$1 trillion in Bitcoin transactions were cleared in 2018.<sup>8</sup>

The Bipartisan Policy Center (BPC) is concerned about the widespread adoption of digital asset technologies because the current regulatory environment is insufficiently equipped to protect participants such as consumers and retail investors, who are most susceptible to fraud and volatility.<sup>9</sup> As you know, the BPC is a Washington, DC-based think tank dedicated to fostering bipartisanship. BPC reconciles the policy positions of advocates, corporations, and policy experts to design proposals and solutions for Congress.

Our team would like to draft a smart reform package that presents clear guidance to Congress and financial regulators on how best to treat the crypto asset industry. We need your help to brief our team on the industry and relevant considerations before we begin drafting. Your research will be critical to ensuring our team presents a fair and accurate policy proposal.

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<sup>7</sup> Gertrude Chavez-Dreyfuss, *Cryptocurrency thefts, scams hit \$1.7 billion in 2018*, Reuters, Jan. 29, 2019,

<https://www.reuters.com/article/us-crypto-currency-crime/cryptocurrency-thefts-scams-hit-1-7-billion-in-2018-report-idUSKCN1PN1SQ>.

<sup>8</sup> Marsh and McLennan Cos., FireEye, Circle, Report | Crypto-Assets, *Crypto-Assets and Blockchain Technology On the Brink of Legitimacy?*, Jan. 2019, <https://www.fireeye.com/content/dam/fireeye-www/partners/pdfs/rpt-marsh-fireeye-crypto-paper.pdf>.

<sup>9</sup> Ted Knutson, *Elizabeth Warren Lays Into Crypto*, Oct 11, 2018,

<https://www.forbes.com/sites/tedknutson/2018/10/11/elizabeth-warren-cryptocurrency-is-easy-to-steal/#235486801249>.

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## Assignment

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Please prepare a presentation that provides an overview of the crypto asset industry and the regulatory perimeters of the SEC and CFTC. Your briefing should present the benefits and costs of crypto asset technologies and outline all the relevant considerations Congress should examine.

The memorandum below offers some background information on the crypto asset industry, the current regulatory regime, and recent Congressional developments. I have also listed a set of briefing questions that can frame your presentation. Finally, an appendix with additional readings will guide your analysis; while you are free to complete additional research, all information you need is included in these readings.

In your presentation, please make sure to consider all relevant parties including consumers, investors, startups and legacy financial institutions.

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## Crypto Asset Industry

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### *Origins of Crypto Assets*

To understand crypto assets, one must first understand the origins of cryptocurrency. In 2009, pseudonymous software developer Satoshi Nakamoto created Bitcoin, the first cryptocurrency to be widely used. Initial adoption was driven by a variety of characters including internet architects, anarchists, futurists, encryption experts, government skeptics and, later, criminals. Early adopters were often fueled by anti-establishment sentiment that sought financial independence from government systems and instability. By combining pre-existing technologies—cryptography, peer-to-peer networking, and distributed ledger technology—in a unique way, these cryptocurrencies did not require a central government or institution to maintain the system or ensure its accuracy. While we will not explore all the technologies, for your background Appendix 1 explains the fundamentals of blockchain and Appendix 2 the crypto classifications.

The basics of distributed ledger technology (DLT) are simple to understand. Though the technology is more complex, for our purposes you need only understand the fundamentals. The term DLT refers to a method of creating a shared, immutable and chronological record of transactions. Simply described, it is a database that allows multiple sites—countries or institutions—to access and write onto a continuous ledger.<sup>10</sup> Think of it as an always-accessible record of transactions where every user must agree to the recording of each new transaction. Once the transaction is verified and recorded onto the ledger, no participant can meddle with its history. A type of DLT called blockchain, uses cryptography to allow each participant on the network to write on the ledger in a secure way.<sup>11</sup> While readings in the appendices below dive deeper into specific technologies that underpin blockchain (i.e. public and private key cryptography, hashing, digital signatures), the most important feature of DLTs is the elimination of a

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<sup>10</sup> Richard Brown, *Distributed Ledger Technology: beyond block chain*, UK GOVERNMENT OFFICE OF SCIENCE (2016), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/492972/qs-16-1-distributed-ledger-technology.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/492972/qs-16-1-distributed-ledger-technology.pdf).

<sup>11</sup> Steven Norton, *CIO Explainer: What Is Blockchain?*, WALL ST. J. (Feb. 2, 2016), <https://blogs.wsj.com/cio/2016/02/02/cio-explainer-what-is-blockchain/>.

central authority. You'll often read that blockchains are "decentralized." Many crypto assets do not have a central institution, unlike fiat currencies which are controlled by a central bank, or credit and debit cards managed by card network companies like Visa, Mastercard, etc. Positively, there are no barriers to entry and anyone is able to install the requisite software, exchange fiat currency for Bitcoin, and begin transacting without the permission of a private bank or government institution. Users together keep copies of the ledger, verify new transactions, and issue new currency. Theoretically, users can trust that the system remains secure and fair without a central authority. Realistically, intermediaries are often hacked<sup>12</sup> and systems can be compromised.<sup>13</sup> Yet regulators are not able to identify an institution to audit or punish for wrongdoing.

Soon after Bitcoin, other developers began creating alternative cryptocurrencies that used distributed ledger systems including Ripple, Tezos, Ethereum, Zcash and others. All were different versions of the same underlying technology: a decentralized payment system that could automatically generate new currency and verify new transactions. After the successful launch of these cryptocurrencies, many recognized an application of distributed ledgers to other types of assets and transactions beyond fiat currency. New "tokens" were invented to represent products or services (e.g., Basic Attention Token, OX). Other cryptocurrencies, known as stablecoins, were designed to be pegged to traditionally inviolate currencies like the U.S. dollar or gold. Some systems used tokens to represent ownership of real estate, intellectual property rights, or products in a supply chain. This process of converting a real-world asset or value into a digital representation became known as "tokenization" where each type of token mapped back to the data of a particular kind of asset. And because DLT ensures all transactions and trading of the token were immutable and accurate, users are assured that the "token," a digital representation of a gift card, a painting, some currency, a bond, etc., cannot be forged or questioned.<sup>14</sup>

### ***Costs and Benefits of a Crypto Asset Industry***

Allowing for financial players to tokenize and use crypto assets presents a number of benefits. Because tokens can be traded on secondary markets of the issuer's choice, tokenization provides liquidity. Transacting with tokens is also often faster and cheaper than traditional markets for the same assets, because parts of the exchange process are automated and fewer intermediaries are needed. Trading tokens is also more transparent, because the ledger is an open record of ownership and token holders' rights and legal responsibilities are known and embedded in the token. Barriers to entry are low, so tokenization opens trading to a broader range of buyers and sellers. Finally, tokenization allows for fractional ownership; because tokens are highly divisible, investors can purchase representations of small percentages of the underlying assets.<sup>15</sup>

But widespread tokenization and use of crypto assets would also create significant obstacles, especially for regulators. Security regulations are technology agnostic; rules apply to tokenized assets based on how the token is used and not on the underlying technology. Rules that restrict token creation, use, and sales

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<sup>12</sup> Davey Winder, *How Hackers Stole \$1B From Cryptocurrency Exchanges In 2018*, FORBES (Dec. 31, 2018),

<https://www.forbes.com/sites/daveywinder/2018/12/31/how-hackers-stole-1b-from-cryptocurrency-exchanges-in-2018/#7bff86c74d87>.

<sup>13</sup> Michael MacDonald, *Investigation of Quadriga cryptocurrency debacle turns up only \$28 million in assets*, FINANCIAL POST (May 13, 2019),

<https://business.financialpost.com/technology/blockchain/investigation-of-quadrigacx-cryptocurrency-debacle-turns-up-28-million-in-assets>.

<sup>14</sup> Stephen O'Neal, *Tokenization, Explained*, COINTELEGRAPH (Jun. 2, 2019), <https://coingeography.com/explained/tokenization-explained>.

<sup>15</sup> Deloitte, *The tokenization of assets is disrupting the financial industry*, INSIDE MAGAZINE, Issue 19, Part 2, <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/lu-tokenization-of-assets-disrupting-financial-industry.pdf>.

would prevent the free movement of these tokens and undermine the accessibility and liquidity benefits described above. At the same time, without clear rules or guidance from regulators, the crypto asset industry is vulnerable to hacking and scams that could harm investors and hamper the token economy. Market manipulation has the potential to run rampant; both the SEC and CFTC have charged dozens of entities for misinformation and fraud. The U.S. Justice Department has initiated a criminal probe pertaining to crypto manipulation.<sup>16</sup>

At the same time, many are concerned with the technological and governmental infrastructure of a crypto asset industry. Linking tokens permanently to the underlying asset represents a dilemma many developers are working to solve. While many supply chain tokenization projects claim to provide users with tokens that represent items in a supply chain (i.e. food, diamonds, interests in funds, etc.) proof that a specific token is connected to a specific real-life asset is challenging. Separately, issues with governing the crypto asset industry, including designating final arbiters of disputes, developers to maintain the technology, custodians for storing tokens, and intermediaries who can ensure settlement of trades have yet to be resolved.

Financial institutions are also obligated by anti-money laundering and know-your-customer rules to report suspicious activity to regulators. But in a token economy, business interactions can be anonymous and hidden. A safe and functioning crypto asset industry will require advances in technology, revised rules and standards, and new operational measures in order for companies to comply. As described in further detail below, the current regulatory regime does not sufficiently address these issues.

### ***Ready for Regulation: Classifying Crypto Assets***

To understand the set of regulations that would apply to the crypto asset industry, we must first understand the relevant factors. As tokenization grew in popularity, thousands of different types of tokens were created, and many argued that crypto assets were not subject to regulation because they were new financial instruments that did not fit conventional statutory definitions. In recent years, regulators have noted that financial regulations are technology-agnostic; revolutionary digital ledger technology does not preclude regulation of digital assets. Instead, the nature of the digital asset-related activity was a key factor in determining requirements.<sup>17</sup>

As a result, categorizing the different use cases for crypto assets has become critical. Early thought leaders taxonomized various tokens using existing definitions of “commodity,” “security,” and “currency,” while others have created new categories like “utility token,” “payment tokens,” “asset token,” etc.<sup>18</sup> Courts and regulators used similar descriptions and underlying principles to define various categories of assets

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<sup>16</sup> Matt Robinson and Tom Schoenberg, *U.S. Launches Criminal Probe into Bitcoin Price Manipulation*, BLOOMBERG (May 24, 2018), <https://www.bloomberg.com/news/articles/2018-05-24/bitcoin-manipulation-is-said-to-be-focus-of-u-s-criminal-probe>.

<sup>17</sup> *Leaders of CFTC, FinCEN, and SEC Issue Joint Statement on Activities Involving Digital Assets*, U.S. Sec. and Exch. Comm. Public Stmt. (Oct. 11, 2019), [https://www.sec.gov/news/public-statement/cftc-fincen-sec-joint-statement-digital-assets#\\_ftn4](https://www.sec.gov/news/public-statement/cftc-fincen-sec-joint-statement-digital-assets#_ftn4).

<sup>18</sup> *What are the different types of cryptocurrency?*, EXODUS, (last visited Jan. 22, 2020), <https://support.exodus.io/article/1084-what-are-the-different-types-of-cryptocurrency>; *CryptoAsset Classifications, Basic Attention Tokens (BAT)*, INTELLIGENT TRADING FOUNDATION (last visited Jan. 22, 2020), [https://intelligenttrading.org/guides/cryptoasset-classifications/#utility-tokens-basic-attention-tokens-\(bat\)](https://intelligenttrading.org/guides/cryptoasset-classifications/#utility-tokens-basic-attention-tokens-(bat)); Adam Haeems, *What is a crypto-asset?*, BABB, Medium.com (Apr. 27, 2020), <https://medium.com/babb/what-is-a-crypto-asset-1f0fcc517887>.

they encountered.<sup>19</sup> None of these classifications have been deemed the official definition by Congress. Agencies drafted their own definitions and drew their own regulatory perimeters.

Carefully distinguishing the various types of crypto assets is critical because regulatory treatment of a particular crypto asset depends on how it is defined. A different set of regulations and agencies will apply differently to alternate definitions of crypto assets.

Generally, most definitions to date distinguish between three types of crypto assets. First, currency or exchange tokens are the most recognizable crypto assets, like Bitcoin and Ethereum, used as a means of payment. Second, utility or consumer tokens represent use of or access to a blockchain-based application or service. For example, users of Siacoin can use the tokens on a blockchain network solely to purchase and sell storage space. For our purposes, we focus on the third category: asset-backed tokens, which are tokens pegged to real-world units of value. Specifically, our focus is on tokens that are related to securities and commodities.<sup>20</sup> For more clarity, you'll need to read SEC and CFTC guidance on definitions of these crypto assets available in Appendices 3 and 4.

## SEC, CFTC and Congress: Regulating and Legislating Crypto Assets

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To recommend a detailed policy proposal for the SEC and CFTC, we must understand their respective regulatory boundaries. We can then decide whether we should recommend that the boundary be expanded, contracted, supplemented, or clarified.

Various companies began using tokenization to create coins that represented access to services and products of the company. Companies would issue the tokens much like a company issued shares. Though the tokens typically did not represent actual ownership in the company, investors would purchase these tokens because they were likely to rise in value as the company developed its product and because they could later be sold on a secondary market. Companies would initiate a new blockchain using the underlying protocol of various cryptocurrencies and then send the tokens directly to a buyer's digital wallet with their address or through a crypto exchange.

The Initial Coin Offering (ICO) craze was a headline-grabbing new option for raising capital. The first token sale was held by Mastercoin in July 2013.<sup>21</sup> Ethereum raised approximately \$2.3 million with a token sale in 2014. The surge in ICOs occurred in 2017 when a new web browser called Brave generated over \$35 million in under thirty seconds. The average amount of funding rose to hundreds of millions of dollars and,

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<sup>19</sup> Crypto Law Corner: Descriptions of "Crypto Assets", WINSTON AND STRAWN LLP (2019),

<https://www.winston.com/images/content/1/5/v2/159397/Crypto-Law-Corner-Description-of-Crypto-Assets.pdf>.

<sup>20</sup> ABA IDPPS Jurisdiction Working Group "Digital and Digitized Assets: Federal and State Jurisdictional Issues" (Mar. 2019).

Section 2(a)(1) of the Securities Act of 1933 and Section 3(a)(10) of the Securities Exchange Act of 1934 defines the term "security" as "any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement, collateral-trust certificate, preorganization certificate or subscription, transferable share, investment contract, voting-trust certificate, certificate of deposit for a security, fractional undivided interest in oil, gas, or other mineral rights, any put, call, straddle, option, or privilege on any security, certificate of deposit, or group or index of securities (including any interest therein or based on the value thereof), or any put, call, straddle, option, or privilege entered into on a national securities exchange relating to foreign currency, or, in general, any interest or instrument commonly known as a 'security', or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing." [Emphasis added].

Even if an instrument is not considered on its face a "security" because it does not take the form of a stock, bond, etc., the definition of "security" contains a "catch-all" term—namely, "investment contract"—that will include instruments with the same substantive features of financial instruments expressly named as securities in the definition.

<sup>21</sup> Laura Shin, *Here's The Man Who Created ICOs And This Is The New Token He's Backing*, FORBES (Sep. 21 2017),

<https://www.forbes.com/sites/laurashin/2017/09/21/heres-the-man-who-created-icos-and-this-is-the-new-token-hes-backing/#1ee981441183>.



by November 2017, there were over 50 offerings every month. Overall, ICOs raised over \$5 billion in 2017 for nearly 800 deals.<sup>22</sup> For companies, the amount of funds involved were typically much greater than funds generated from a crowdfunding campaign and allowed companies greater creative latitude in their business models.

But even amidst the heady environment of loose investing, many voiced their wariness of ICOs and the likelihood that these unregulated offerings would be penalized. As crowdfunding attorney Amy Wan noted in her 2017 post: “*If it walks like a duck and quacks like a duck, its [sic] probably a duck.*”<sup>23</sup> In other words, although tokens may not represent ownership in the same way as traditionally regulated securities, the form and function of these crypto assets would nonetheless be subject to federal securities laws. Indeed, the SEC in subsequent years created a Cyber Unit and filed dozens of enforcement actions and cease-and-desist orders against companies for fraud and for using ICOs for the unregistered raising of funds.

### **SEC Jurisdiction**

In order to regulate crypto assets, the SEC must have proper jurisdiction and authority. The Securities Act of 1933 grants the SEC authority to regulate only those assets that are deemed securities. Many ICO issuers have claimed that their tokens are not considered “securities,” and are therefore not subject to SEC oversight. Due to the varying characteristics and types of crypto assets, whether a particular crypto asset is a “security” is a fact-intensive inquiry that must be applied on a case-by-case basis.

The SEC Chairman and staff members have stated that the Commission will apply the test and standards formulated by the well-known Supreme Court case *SEC v. W.J. Howey Co.*, which renders the offering of a token as a security-offering subject to the Securities Act.<sup>24</sup> The test has four prongs: is there (1) an investment of money, (2) in a common enterprise, (3) with the expectation of profit, (4) from the managerial efforts of others.<sup>25</sup> See Appendix 8 for examples of its application. Relevant factors include the manner in which the token is offered or distributed.<sup>26</sup> If a token is deemed a security, then its offering must comply with securities law requirements, including registration requirements, cybersecurity requirements, and requirements for policies that prevent fraud and market manipulation. Additionally, any exchange, intermediary trading, or handling is also subject to securities laws.

Using this standard, the SEC has pursued a number of avenues for regulation. The SEC first applied the *Howey* test to digital assets in 2017, finding that the sale of Decentralized Autonomous Organization digital tokens (“DAO tokens”) was an unregistered security offering.<sup>27</sup> Since this first pursuit of a cryptocurrency company, the SEC has brought dozens of enforcement actions against individuals and

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<sup>22</sup> *Blockchain Startups Absorbed 5X More Capital Via ICOs Than Equity Financings In 2017*, CBINSIGHTS (Jan. 18, 2018), <https://www.cbinsights.com/research/blockchain-vc-ico-funding/>.

<sup>23</sup> Amy Wan, *Why Your Initial Coin Offering Is Probably Regulated By Securities Law*, CROWDFUND INSIDER (Mar. 6, 2017), <https://www.crowdfundinsider.com/2017/03/96598-initial-coin-offering-probably-regulated-securities-law/>.

<sup>24</sup> *SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946).

<sup>25</sup> *Id.*, 298-300.

<sup>26</sup> William Hinman, *Digital Asset Transactions: When Howey Met Gary (Plastic)*, (speech, San Francisco, CA, Jun. 14, 2018), <https://www.sec.gov/news/speech/speech-hinman-061418>.

<sup>27</sup> *SEC Issues Investigative Report Concluding DAO Tokens, a Digital Asset, Were Securities*, U.S. SEC, AND EXCH. COMM. PRESS RELEASE (Jul. 25, 2017), <https://www.sec.gov/news/press-release/2017-131>.

companies for a broad swathe of securities law violations, including fraudulent activity, failure to register a token offering, and improper touting of an offering.<sup>28</sup>

In December 2017, SEC Chairman Jay Clayton issued a statement explaining that a vast majority of ICOs are structured as securities offerings because investors bought tokens solely to profit from a later rise in value of the token, which derived from the company's business model.<sup>29</sup> The SEC next applied *Howey* to digital assets in *Munchee Inc.* and concluded that the ICO was an unregistered securities offering because the tokens were marketed as an investment in the company.<sup>30</sup> A summary of the actions can be found in Appendices 8 and 12.

Surprisingly, the SEC's William Hinman, Director of the Division of Corporation Finance, stated that a crypto asset at first deemed a security can "over time, become something other than a security."<sup>31</sup> Bitcoin and Ethereum, he noted, were no longer securities because the *Howey* tests second prong was not satisfied: the network was sufficiently decentralized and could exist without a "common enterprise." His speech became the beginnings of a framework for determining whether a consumer token sale is exempt from securities laws, though questions remain (discussed below). For a comprehensive explanation of the SEC's current treatment of crypto assets, see Appendices 10, 11 and 12.

Similar to regulation over issuances of securities, the SEC also has jurisdiction over financial securities and derivatives market intermediaries, like exchanges and trading platforms, to protect investors and prevent fraud and manipulative trading practices. However, most new crypto intermediaries have failed to register with the SEC. For more information, please see Appendix 13. There are currently over 200 cryptocurrency exchanges operating throughout the world.<sup>32</sup> To date, only one entity has registered its ICO with the SEC and no exchanges or trading platforms are currently registered with the SEC.

### ***CFTC Jurisdiction***

If a crypto asset is not deemed a security, then it may fall under the jurisdiction of the Commodities Futures Trading Commission (CFTC). Established in 1974, the CFTC oversees the U.S. derivatives market. To understand how crypto assets can apply to derivatives markets, you must understand some basic plumbing of the derivatives market.

Derivatives are contracts whose value derives from an underlying commodity. The commodities markets are expansive and include everything from agricultural commodities, like wheat and corn, to metals and energy, like gold and gasoline. Today, commodities also encompass securities, foreign currencies, interest rates and other financial assets. Derivatives are contracts between two parties that commit both to an exchange of cash, goods or securities in the future for a pre-settled price. No payment is required upfront, but the contract allows for swift remedial action in the event of a default.

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<sup>28</sup> Cyber Enforcement Actions: Digital Assets/Initial Coin Offerings, U.S. SEC, (last visited Jan. 22, 2020), <https://www.sec.gov/spotlight/cybersecurity-enforcement-actions>.

<sup>29</sup> Chairman Jay Clayton, Statement on Cryptocurrencies and Initial Coin Offerings, U.S. SEC (Dec. 11, 2017), <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11>.

<sup>30</sup> See *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*, U.S. SEC (Dec. 11, 2017), <https://www.sec.gov/litigation/admin/2017/33-10445.pdf>.

<sup>31</sup> Hinman, *supra* note 26.

<sup>32</sup> CoinMarketCap, Exchanges — All, (last visited Jan. 22, 2020), <https://coinmarketcap.com/>.



In this way, derivatives allow traders in various commodities to manage their risk. Since commodity prices fluctuate and market participants cannot predict the price of a commodity at the time the supply chain requires it, a company uses derivatives to hedge its commodity exposure. A beer company might lock in the price of wheat so that regardless of future increases or decreases in price profits remain stable. Derivatives enable enterprises to run large-scale operations without bearing the commensurate large-scale risks. Farmers, manufacturers, producers, municipalities, pension funds, etc. all rely on derivatives trading to hedge risk and participate in the market.<sup>33</sup> The most common forms of derivatives are futures, forwards, options, and swaps.

As allowed by the 1963 Commodities Exchange Act (CEA) definition of a “commodity,” — which paints a broad brush — CFTC deemed cryptocurrencies to be “commodities.” In May 2018, the agency published guidance asserting its jurisdiction over virtual currency derivative transactions. “Bitcoin and other virtual currencies are properly defined as commodities,”<sup>34</sup> the CFTC noted, and a court later agreed.<sup>35</sup>

It’s important to note that the CFTC can regulate derivative products involving a commodity, but has limited power in regulating the “cash market” or “spot market” for the commodity itself.<sup>36</sup> For example, while the CFTC has jurisdiction over wheat futures contracts, it has less power to regulate the trading of wheat itself. Applied to crypto assets, this means that the CFTC can regulate derivative products derived from cryptocurrencies—like futures or options contracts based on Bitcoin and Ethereum—as well as the firms providing derivatives custody or advisory services. But the CFTC has restricted jurisdiction over the buying and selling of Bitcoin and Ethereum itself.

Similar to the SEC, the CFTC has actively pursued crypto asset companies that failed to comply with regulatory requirements.<sup>37</sup> The CFTC has also actively brought enforcement actions against fraud and manipulation in cryptocurrency spot markets.<sup>38</sup> In response, some firms have sought direct approval to allow cryptocurrency derivatives trading on their platforms to avoid punitive enforcement actions for failing to register with the CFTC. Bitcoin futures trading was launched by the Chicago Board Options Exchange (CBOE) and the Chicago Mercantile Exchange (CME) during the peak of the crypto bull market in December 2017, though the CBOE stopped adding new contracts in March 2019.<sup>39</sup> Institutional exchange LedgerX received approval from the CFTC to allow the trading of regulated swaps and options contracts on its platform. To further efforts to prevent fraud in the marketplace, the CFTC issued a policy of offering monetary rewards for information regarding “pump-and-dump” schemes.<sup>40</sup> See Appendices 16, 17 and 18 for a comprehensive explanation of the CFTC’s current treatment of crypto assets.

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<sup>33</sup> *In Defense of Derivatives: From Beer to the Financial Crisis*, CATO INSTITUTE (SEPTEMBER 2015).

<sup>34</sup> *ABA Digital and Digitized Assets: Federal and State Jurisdictional Issues*, ABA IDPPS JURISDICTION WORKING GROUP (MARCH 2019).

<sup>35</sup> *CFTC v. My Big Coin Pay, Inc.*, 334 F. Supp. 3d 492 (D. Mass. 2018).

<sup>36</sup> The CFTC regulates the swaps and futures markets, and retains general enforcement authority to police fraud and manipulation in cash or ‘spot’ commodities markets, *see, e.g.*, 7 USC §§ 6c(a), 9, 12(a)(5), 15; 17 CFR § 180.1.

<sup>37</sup> *See* Latham & Watkins, *CFTC Brings Significant Enforcement Action Against Online Cryptocurrency Exchange*, Client Alert No 1980 (Jun. 20, 2016), [www.lw.com/thoughtLeadership/CFTC-brings-significant-enforcement-action-against-online-cryptocurrency-exchange](http://www.lw.com/thoughtLeadership/CFTC-brings-significant-enforcement-action-against-online-cryptocurrency-exchange).

<sup>38</sup> *See, e.g.*, CFTC Release PR7714-18, *CFTC Charges Multiple Individuals and Companies with Operating a Fraudulent Scheme Involving Binary Options and a Virtual Currency Known as ATM Coin*, CFTC (Apr. 18, 2018), [www.cftc.gov/PressRoom/PressReleases/7714-18](http://www.cftc.gov/PressRoom/PressReleases/7714-18).

<sup>39</sup> Elijah Bradley, *Derivatives in Crypto, Explained*, COINTELEGRAPH (Jul. 10, 2019), <https://cointelegraph.com/explained/derivatives-in-crypto-explained>.

<sup>40</sup> *Customer Advisory: Beware Virtual Currency Pump-and-Dump Schemes*, CFTC, (last visited Jan. 20, 2020), [https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/customeradvisory\\_pumpdump0218.pdf](https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/customeradvisory_pumpdump0218.pdf).

## **Congress**

An absence of guidance from regulators has spurred actions on numerous fronts in Congress. The number of entities lobbying on blockchain issues almost tripled from a dozen in the fourth quarter of 2017 to 33 a year later.<sup>41</sup> Most are asking Congress and agencies to provide greater clarity around the jurisdictions and powers of the SEC and CFTC. In July 2019, SEC Chairman Clayton and CFTC Chairman Christopher Giancarlo testified before the Senate Banking Committee and noted that the regulators were still unsure whether their agencies had sufficient authority over the cryptocurrency markets.

A number of efforts illuminate options for Congress. First, seven Congressmen penned a letter to the Director of the National Economic Council requesting that the Administration hold a forum on blockchain technologies, and support innovation and development of blockchain as an emerging technology.<sup>42</sup> Though the letter had no specific recommended actions, it noted that the current regulatory environment was stifling innovation, and that the United States should engage with the private sector, academia, and policymakers to research and promote blockchain technologies.

A faction of lobbying groups, Senators and other advocates believe cryptocurrencies should not be regulated under the SEC and should instead fall under the CFTC and Federal Trade Commission. Action was taken by Congress in 2018 when the Token Taxonomy Act, proposed in the House of Representatives in 2018, and re-introduced in 2019, sought to amend the Securities Act of 1933 and the Securities Exchange Act of 1934 “to exclude digital tokens from the definition of a security.” Each would have exempted cryptocurrencies from securities law and proposed that the SEC offer tax-related changes for those doing transactions with cryptocurrency.

## **Problems with the Existing Regulatory Regime**

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It is obvious that both the SEC and CFTC have been active enforcers of securities and commodities laws in their pursuit of fraudulent and manipulative behavior. However, solely regulating through enforcement actions and cease-and-desist letters is not sustainable, nor the most effective use of resources. Inadequacies remain in the current system, as discussed below.

### ***Lack of clarity in current laws***

Although the SEC has attempted to provide clarity through numerous enforcement actions and lawsuits, determining whether a cryptocurrency is a security and how to apply the *Howey* test remains a developing area in federal securities regulation. For example, SEC Director Hinman noted that tokens deemed securities may no longer qualify as securities, but it remains unclear when this shift occurs and when the SEC makes this determination. Second, companies remain confused as to whether token sales conducted outside the U.S. fall under the SEC’s jurisdiction. And third, because the SEC has stated that Bitcoin and Ethereum are not securities, under current law a trading platform that trades only these crypto assets would not be required to register. However, if an exchange offers trading of other currencies, as many do,

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<sup>41</sup> Theodor Meyer, *Inside the blockchain lobbying boomlet*, POLITICO (Mar. 18, 2019), <https://www.politico.com/newsletters/politico-influence/2019/03/18/inside-the-blockchain-lobbying-boomlet-549283>.

<sup>42</sup> Amy Davine Kim, Chief Policy Officer, Chamber of Digital Commerce, *Seven U.S. Members of Congress Urge Administration to Support Blockchain Technology*, CHAMBER OF DIGITAL COMMERCE (May 24, 2019), <https://digitalchamber.org/seven-u-s-members-of-congress-urge-administration-to-support-blockchain-technology/>.

how should it be required to register with the SEC? Will such an exchange be required to bifurcate its operations? These questions generate confusion, weakens investor protection, and stifles innovation.

Similarly, although the CFTC has proactively brought enforcement actions against companies for failure to comply, its jurisdiction is also limited. Though the CEA definition of “commodities” broadly encompasses many types of crypto assets, the CFTC has limited jurisdiction over the “cash market” for the commodity. But the trading of Bitcoins for other crypto assets or cash is the most active type of transaction in the industry, and therefore the most susceptible to volatility and deceit. Though the CFTC is allowed to enforce against fraud and manipulation in cash markets and bring certain types of actions, it cannot set sorely needed standards.

### ***Jurisdictional conflicts between the SEC and CFTC***

Whether a particular crypto asset falls squarely into legal definitions of securities and commodities remains a difficult question to answer. If a crypto asset is labeled a commodity under the CEA definition, the more complicated question is whether the crypto asset is also labeled a security. The CFTC has jurisdiction over certain segments of the *securities-based derivatives* markets, but the SEC is responsible for oversight and regulation of the *cash* markets. In other words, since the CFTC has taken the position that Bitcoin and Ether are commodities under the CEA, the CFTC has jurisdiction over any derivative—a swap, future, other option, etc.—that uses Bitcoin or Ether as underlying commodities.

It's the same application of jurisdiction to derivatives of other commodities like grain, oil, etc., and the SEC has not challenged the CFTC's position. But most trading of cryptocurrencies current takes place on the cash markets, and the SEC would be responsible for the trading of Bitcoin and Ether for cash. Uncertainty remains as to how the SEC and CFTC would allocate jurisdiction for Bitcoin and Ether and how other crypto assets will be classified.

### ***Inapplicability of current rules to digital assets***

Today's regulations serve the current financial infrastructure, but the rise of cryptocurrency as an asset class questions foundational assumptions. Though we take for granted the security and trust guaranteed by exchanges, intermediaries, and parties today, these assumptions do not apply perfectly to a digital asset infrastructure.

For one, our current system for trading assumes a secure way of holding, moving, and protecting our assets. But digital-only assets depend on infrastructure that does not directly align with the traditional financial model. An oft-cited example is “custody.” Traditional methods for custodying assets like cash, securities, and objects are modelled off traditional paper-and-safe approaches in banking. Any institutional investor holding more than \$150,000 in assets to place these assets under control of a “qualified custodian” that stores assets in designated accounts for safe keeping until needed.

To ensure that assets are secured and not prone to misuse, misappropriation, or financial insecurity like insolvency or financial reverses, security rules require custodians to comply with disclosure rules and surprise audits. SEC rules define custody as “holding, directly or indirectly, client funds or securities, or

having any authority to obtain possession of them.”<sup>43</sup> But traditional custodians are not naturally equipped to safely store digital assets.

First, custody rules require custodians to legally own or physically hold customers’ assets and maintain them free of lien at a good control location. But digital asset ownership does not parallel physical possession; storage relies on a private key infrastructure and possession of a digital asset can distinguish between types of storage (i.e. cold vs. hot), methods for identity verification (i.e. biometrics, access password, etc.), and assurances of exclusive control.

Second, traditional rules around “finality,” “clearing,” and “settlement” of asset transfers also do not perfectly parallel transfers of crypto assets. Finality is the assurance that a transaction cannot be altered, reversed, or cancelled after completion. But finality on a blockchain or digital ledger can be gradual, not instantaneous, because it takes time for transactions in blocks to be confirmed.<sup>44</sup> Similarly, legal transfer requires third parties to perform clearing and settlement activities. Clearly defining these requirements in the context of crypto assets will allow businesses to comply with regulations and maintain the safety of their networks.

And finally, the technology required to handle digital assets would require significant technological enhancements for traditional custodians. In recent years, few companies have succeeded in providing wallet storage solutions that process, manage, and hold tokens in compliance with securities rules.<sup>45</sup>

Financial institutions seeking exposure to crypto assets are also subject to regulations that discourage illicit activity. Existing anti-money laundering (AML), know-your-customer (KYC) and combatting the financing of terrorism (CFT) laws allow regulators to track suspicious activity. Businesses would need to articulate to regulators the nature of their crypto asset activities, reasons for the activity, and how the business is managing risk exposure. But some tokens build anonymity into an infrastructure that doesn’t provide the required transparency without sophisticated tools. Tokens like Monero and Dash, for example, offer less transparency of transacting parties than Bitcoin or Ethereum. Some companies offer anonymity through “washing” or “tumbling” services that obscure the provenance of transactions.<sup>46</sup> These services disrupt conventional risk-assessment rules and regulations.

## Briefing

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This memo has given you a broad overview of the relevant players and costs that attend the benefits of widespread adoption of crypto assets. The Appendices below include many articles that will help you build

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<sup>43</sup> 17 CFR 275.206(4)-2(d)(2).

<sup>44</sup> Binance, *Finality*, Binance Academy, <https://www.binance.vision/glossary/finality>.

<sup>45</sup> Rachel Wolfson, *Custodial Solutions Are Latest Innovation In Cryptocurrency Ecosystem As Seen By Coinbase And Others*, Forbes. (Sep 20, 2018), <https://www.forbes.com/sites/rachelwolfson/2018/09/20/custodial-solutions-are-latest-innovation-in-cryptocurrency-ecosystem-as-seen-by-coinbase-and-others/#3e3d9572171c>.

<sup>46</sup> Mixers and tumblers services mix tokens from different transactions and provide new tokens to clients. These services obfuscate sending and receiving addresses and trails to the original source, thereby improving the anonymity of transactions.

a more extensive understanding. Not every reading is required for you to build a strong presentation, but these materials will allow you to attain a strong understanding of topics you choose to spotlight. Please review these materials and get ready to brief the BPC policy team.

In particular, the Managing Director is eager to hear your thoughts on the following:

- What is distributed ledger technology? What is blockchain technology? What is a crypto asset?
- What is the current state of the crypto asset industry?
  - What are the various use cases and types of crypto assets?
- How do existing legal definitions delineate crypto assets?
  - What types of uses should be considered securities?
  - What types of uses should be considered commodities?
  - What are some use cases that are difficult to classify and categorize?
- What are the regulatory perimeters of the SEC and CFTC?
  - How does the SEC and CFTC enforce against fraud and manipulation in the marketplace?
  - Given these regulatory perimeters, why do certain crypto asset use cases create conflict between the SEC and CFTC?
- What are the concerns regulators and legislators should consider when formulating a policy?
  - Who are the relevant players affected by a crypto asset regime?
  - What are the costs and benefits of crypto asset technology?
  - What are policy considerations BPC should highlight? (i.e. responsible innovation, minimize fraud, protect consumers and investors, regulatory clarity, etc.)
- What is our final recommendation for Congress?
  - Should we ask Congress to clarify the classification of crypto assets? What sorts of tokens and their uses should be classified as securities? As commodities? How will these definitions change the regulatory boundaries of the SEC and CFTC?
  - Should we dissuade Congress from federal action and instead recommend retaining power with state regulatory and legislative bodies? (i.e. state Bitcoin Licenses, etc.)
  - Should we encourage agencies to coordinate on specific topics? Are there any, other than state and local regulatory bodies or standard-setting groups, that are better equipped to address?

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## Appendices

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### Background

1. [LINK ONLY] A Reuters Visual Guide Blockchain Explained, <http://graphics.reuters.com/TECHNOLOGY-BLOCKCHAIN/010070P11GN/index.html>
2. Crypto Classification: Security vs. Commodity, HACKERNOON, <https://hackernoon.com/crypto-classification-security-vs-commodity-decf2d78c4a1>
3. IMF, “FinTech Notes: Regulation of Crypto Assets” (Provides a strong summary of the risks of crypto assets, and the current regulatory landscape. Though long, it is helpful to read the entire report carefully, as it can give you a very adequate understanding of the landscape.)
4. Compliance Monitor, “A path for consumer tokens – the SEC and CFTC analysis” (With deeper analysis than the IMF report, this paper then dives deeper into the role of the SEC and CFTC in regulating crypto assets. Provides a strong primer to the relevant legal issues you need to address in your briefing.)

### SEC

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5. What is an ICO?, Investopedia, <https://www.investopedia.com/news/what-ico/>
6. Silicon Valley is obsessed with ICOs — here’s why, Vox.com, <https://www.vox.com/2017/9/19/16243110/initial-coin-offering-ico-explained-what-is-money-bitcoin-digital-currency>
7. Intro to Tokenized Assets and Security Tokens, <https://hackernoon.com/tokenized-assets-security-tokens-and-stos-ae72dc0e275e>
8. Howey Test, What Is the Howey Test?, Findlaw.com, <https://consumer.findlaw.com/securities-law/what-is-the-howey-test.html>
9. Samuel Falkon, “The Story of the DAO—Its History and Consequences”, Medium.com, <https://medium.com/swlh/the-story-of-the-dao-its-history-and-consequences-71e6a8a551ee>

#### Enforcement Actions

10. The DAO Report, “Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO.” <https://www.sec.gov/litigation/investreport/34-81207.pdf>
11. Munchee, In the matter of Munchee Inc.: Cease and Desist <https://www.sec.gov/litigation/admin/2017/33-10445.pdf>



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12. Public Statement: Statement on Digital Asset Securities Issuance and Trading <https://www.sec.gov/news/public-statement/digital-asset-securities-issuance-and-trading>
13. Guidance by the SEC, Framework for “Investment Contract” Analysis of Digital Assets (April 3, 2019) [https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#\\_edn1](https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#_edn1)
14. Public Statement Leaders of CFTC, FinCEN, and SEC Issue Joint Statement on Activities Involving Digital Assets <https://www.sec.gov/news/public-statement/cftc-fincen-secjointstatementdigitalassets>

## CFTC

### Background

15. CFTC Chairman Christopher Giancarlo on Regulating Crypto, Andreessen Horowitz interview <https://a16z.com/2019/09/17/cftc-chairman-crypto-christopher-giancarlo-crypto-regulatory-summit/>

### Statements/Guidance

16. CFTC Chairman Confirms Ether Cryptocurrency Is a Commodity, <https://www.coindesk.com/cftc-chairman-confirms-ether-cryptocurrency-is-a-commodity>

### Enforcement Actions

17. MY BIG COIN PAY, INC. et al. [https://www.cftc.gov/sites/default/files/2018-10/enfmybigcoinpayincmemorandum092618\\_0.pdf](https://www.cftc.gov/sites/default/files/2018-10/enfmybigcoinpayincmemorandum092618_0.pdf)

### *Proposals and Considerations for Policy Recommendations*

18. Tim Massad, Former CFTC Commissioner, “It’s Time to Strengthen the Regulation of Crypto-Assets,” (March 2019) (print) [69 pages] (Provides well-evidenced examples of current regulatory gaps in crypto asset regulation. Though much of the introduction can be skipped if you have a strong understanding of crypto assets based on readings above, this reading adequately summarizes the relevant issues, describes the strengths and weaknesses of current SEC and CFTC regulatory perimeters, and suggests potential solutions that you can analyze.)
19. ITIF, “A Policymaker’s Guide to Blockchain,” Principles to Advance Blockchain [60 pages] (Provides example use cases for crypto assets to help round out your understanding of the industry, and provides additional policy considerations you can address in your briefing. There is no need to read the entire report. Pages 29 to 37 are most relevant.)
20. “Silicon Valley Is Into Bitcoin. It Wants to Keep Washington Out,” The Wall Street Journal, April 19, 2018 <https://www.wsj.com/articles/cryptocurrency-firms-investors-seek-exemption-from-sec-oversight-1524130200?mod=e2twp>

21. CNBC, Crypto industry leaders warn Congress: Figure out regulation, or watch innovation leave the US, Sept. 25, 2018 <https://www.cnbc.com/2018/09/26/crypto-leaders-to-congress-figure-out-regulation-or-innovation-leaves.html>
22. Deloitte, “The tokenization of assets is disrupting the financial industry. Are you ready?” <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/lu-tokenization-of-assets-disrupting-financial-industry.pdf>

### **Political Environment**

23. Congress Questions The SEC On Libra, Cryptocurrency And “The Whole Blockchain Phenomenon” <https://www.forbes.com/sites/jasonbrett/2019/09/28/congress-questions-the-sec-on-libra-cryptocurrency-and-the-whole-blockchain-phenomenon/#3c50b93d5135>

### **Optional**

24. “Descriptions of ‘Crypto Assets,’” Winston & Strawn, LLP <https://www.winston.com/images/content/1/5/v2/159397/Crypto-Law-Corner-Description-of-Crypto-Assets.pdf> (Provides a summary of the most recent and relevant financial regulatory agency complaints, announcements, guidance, and memos for reference if you desire to complete additional research.)