

**Digital and Digitized Assets:
Federal and State Jurisdictional Issues**

Prepared By:

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PREFACE

This White Paper was prepared by members of the Jurisdiction Working Group of the Innovative Digitized Products and Processes Subcommittee (“IDPPS”) and their colleagues, who generously contributed substantial time and effort to this ambitious undertaking. The authors have sought to provide a comprehensive explanation of federal and state laws that may apply to the creation, offer, use and trading of digital assets in the United States, along with summaries of key initiatives outside the United States. The White Paper also recommends an analytic framework for considering potential issues of jurisdictional overlap between the Commodity Futures Trading Commission and the Securities and Exchange Commission under the separate federal statutes they each are responsible for administering.

IDPPS was established in March 2018 as a subcommittee of the Derivatives and Futures Law Committee of the Business Law Section of the American Bar Association. We have over 80 members, comprised of attorneys who work extensively in the areas of derivatives law and securities law, and related legal fields. We are organized into three working groups, which include, in addition to the Jurisdiction Working Group, a Blockchain Modality Working Group and an SRO Working Group.

IDPPS was formed with the following objectives:

- To educate ourselves, policy makers and the public about current issues raised by innovative digitized products and processes, such as cryptocurrencies, smart contracts and blockchain or other distributed ledger technologies;
- To identify and study emerging legal and regulatory issues and their implications for such products and processes;
- To study and understand how the Commodity Exchange Act framework and other statutory and regulatory frameworks may intersect, and identify areas of conflict or other issues that overlapping laws may create; and
- To make appropriate recommendations to address material issues identified.

We offer our appreciation and thanks to the members of the Jurisdiction Working Group and their colleagues who contributed to the drafting of this White Paper. We hope that the White Paper will prove to be a valuable resource for legal practitioners and others who are active in the digital asset arena, as well as for policy makers.

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DEFINED TERMS

A

AIF · alternative investment fund
AIFMD · Alternative Investment Fund Managers Directive
AMF · Autorite des Marches Financiers
AML · anti-money laundering
ASIC · Australian Securities and Investments Commission
ATS · alternative trading system

B

BaFin · Federal Financial Supervisory Authority in Germany
BCBS · Basel Committee on Banking Supervision
BIS · Bank for International Settlements
BitLicense · The license required to be obtained by the New York State Department of Financial Services regulations, for any person that is a resident of or located in, or has a place of business or is conducting business in, New York and is engaged in a virtual currency business activity.
Blockchain · a shared, immutable record of transactions, frequently referred to as a digital ledger
BSA · Bank Secrecy Act, as amended

C

Cboe · Cboe Global Markets, Inc.
CCP · central counterparty
CEA · U.S. Commodity Exchange Act, as amended
CFD · contract for differences
CFT · combating the financing of terrorism
CFTC · U.S. Commodity Futures Trading Commission
CME · Chicago Mercantile Exchange Inc.
CME Group · CME Group Inc., public company parent of CME
CPMI · Committee on Payments and Market Infrastructures
CPO · commodity pool operator
Cryptocurrency · same meaning as virtual currency; the two terms are used interchangeably in this white paper
CTA · commodity trading advisor

D

DAO · Decentralized Autonomous Organization
DCM · designated contract market
DCO · derivatives clearing organization
DFS · New York State Department of Financial Services
digital asset · an electronic record in which an individual has a right or interest; the term is also used generically to refer to both digital assets and digitized assets
digital asset funds · investment vehicles designed for the purpose of providing investors with investment exposure to digital assets
digitized asset · a physical asset for which ownership is represented in an electronic record
DLT · distributed ledger technology
Dodd-Frank · Dodd-Frank Wall Street Reform and Consumer Protection Act
DOJ · U.S. Department of Justice

E

ECP · eligible contract participant
EMIR · European Market Infrastructure Regulation
ESMA · European Securities Markets Authority
ETFs · exchange-traded funds
ETPs · exchange-traded products
EU · European Union
Exchange Act · U.S. Securities Exchange Act of 1934, as amended

F

FATF · Financial Action Task Force
FBOT · foreign board of trade
FCA · U.K. Financial Conduct Authority
FCM · futures commission merchant
FinCEN · U.S. Department of the Treasury’s Financial Crimes Enforcement Network
FINMA · Swiss Financial Market Supervisory Authority
FINRA · Financial Industry Regulatory Authority
FMA · New Zealand Financial Market Authority
FSA · Japanese Financial Services Agency
FSB · Financial Stability Board
FSC · Mauritius Financial Services Commission

I

IAA · U.S. Investment Advisers Act of 1940, as amended
IB · introducing broker
ICA · U.S. Investment Company Act of 1940, as amended
ICO · Initial Coin Offering
IOSCO · International Organization of Securities Commissions
IRS · U.S. Internal Revenue Service

K

KYC · know-your-customer

M

MAS · Monetary Authority of Singapore
MBC · My Big Coin
MFSA · Malta Financial Services Authority
MiFID · EU Markets in Financial Instruments Directive
miners · network participants that run a series of complex algorithms to verify the transaction, ensuring that it is valid and matches the blockchain’s history
MOU · memorandum of understanding
MSB · money services business

N

NAV · net asset value
NDF · non-deliverable forward
NFA · National Futures Association

O

OTC · over-the-counter

R

Ripple · Ripple Labs Inc.

RMG · Royal Mint Gold

S

SAFT · Simple Agreement for Future Tokens

SAR · Suspicious Activity Report

SDR · swap data repository

SEC · U.S. Securities and Exchange Commission

Securities Act · U.S. Securities Act of 1933, as amended

SEF · swap execution facility

SRO · self-regulatory organization

T

Token · Used to refer to both digital and digitized assets

U

ULC · National Conference of Commissioners on Uniform State Laws (also known as the Uniform Law Commission)

URVCBA · Uniform Regulation of Virtual-Currencies Businesses Act

V

Virtual currency · defined broadly to include any type of digital assets, with few exceptions such as digital units that are used on gaming platforms or digital units that are used as part of a customer rewards program

EXECUTIVE SUMMARY

Introduction

This White Paper summarizes the existing federal and state regulatory regimes governing digital assets in the United States, discusses the emerging issues that will affect digital asset markets and their participants, and outlines analogous efforts taken by international regulators and other national governments. Parts of the discussion are specific to a particular type of digital asset referred to as virtual currencies or cryptocurrencies, because they have received the most attention from U.S. and global regulators.

There is not a consistent set of terms used by regulators, market participants or others to describe assets that are represented on a blockchain platform. We have tried to use the terms “digital asset” and “token” interchangeably and consistently in this White Paper to refer generally to any such type of assets. As explained in Section 1, the term digital asset can also have a narrower meaning, differentiating electronic records that are themselves the asset from “digitized assets” that are electronic records of ownership of an underlying asset.

The growth of the digital asset market has been rapid and volatile. The total estimated market capitalization of virtual currency, a subset of digital assets, soared from \$17.7 billion at the end of 2016 to \$612.9 billion at the end of 2017, although it dropped to \$130.2 billion as of December 30, 2018.¹ While the size of the virtual currency market pales in comparison to the overall global economy,² sharp increases in the value of virtual currencies reflect the interest of a wide variety of market participants, including general retail investors.³

¹ *Global Charts: Total Market Capitalization*, COINMARKETCAP, <https://coinmarketcap.com/charts/> (query Total Market Capitalization table for dates: Dec. 30, 2018, Aug. 10, 2017, and Aug. 10, 2016).

² As a comparison, Apple Inc. alone commands a market capitalization of more than \$1 trillion. *See Apple hangs onto its historic \$1 trillion market cap*, CNBC, <https://www.cnbc.com/2018/08/02/apple-hits-1-trillion-in-market-value.html> (last updated Aug. 2, 2018, 4:11 PM); *see also Virtual Currencies: The Oversight Role of the U.S. SEC* (cont’d)

Multiple regulators are considering responses to this new area of commerce.⁴ The current issues that regulators must resolve generally fall into two categories. First, because digital assets are novel and in many ways unlike other regulated products, each regulator faces interpretative obstacles in determining whether—and to what extent—its existing statutory authority permits it to assert jurisdiction. Second, each regulator needs to manage possible jurisdictional overlaps with other regulators. In the United States, the CFTC, the SEC, FinCEN, the IRS, and state regulators such as the DFS have issued guidance or interpretations concerning digital asset products and market participants. Similarly in Europe, compliance obligations at both the EU and member state levels are expected to apply depending on the type of digital asset or virtual currency business. Each regulator and standard-setting body also needs to consider the cross-border implications of its respective regulations.

This White Paper addresses these themes in the following sequence: (1) factual background; (2) CFTC jurisdiction over digital assets, with an emphasis on virtual currencies; (3) potential SEC regulation of digital assets under the Securities Act and Exchange Act; (4) regulatory implications under other federal securities laws, specifically, the Investment Company

(cont'd from previous page)

and U.S. CFTC: *Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 115th Cong. 101, 102 (2018) (statement of J. Christopher Giancarlo, Chairman, CFTC) [hereinafter Giancarlo HUA Statement] (“Clearly, the column inches of press attention to virtual currency far surpass its size and magnitude in today’s global economy.”).

³ See, e.g., Andrew Arnold, *30% Of Millennials Would Rather Invest In Cryptocurrency: Here Are 3 Tips To Help You Do It Smarter*, FORBES (Jan. 7, 2018, 8:01 AM), <https://www.forbes.com/sites/andrewarnold/2018/01/07/30-of-millennials-invest-in-cryptocurrency-here-are-3-tips-to-help-you-do-it-smarter/#102c4fff7861>.

⁴ Jay Clayton & J. Christopher Giancarlo, *Regulators Are Looking at Cryptocurrency: At the SEC and CFTC We Take Our Responsibility Seriously*, WALL ST. J. (Jan. 24, 2018), <https://www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363> (stating that while the virtual currency market continues to evolve, it calls for regulators to monitor the market for “fraud and abuse”); see also *Beyond Silk Road: Potential Risks, Threats, and Promises of Virtual Currencies: Hearing Before the S. Comm. on Homeland Sec. and Gov’t Affairs*, 113th Cong. 48–62 (statement of Jennifer Shasky Calvery, Dir., FinCEN) (explaining various attributes of virtual currencies that make them attractive as a medium for illegal activity).

Act and the Investment Advisers Act; (5) issues created by jurisdictional uncertainty between the CFTC and SEC, and potential tools for resolving jurisdictional issues; (6) FinCEN’s regulation of digital assets; (7) international regulation of digital assets and blockchain technology; and (8) state regulation of digital assets. These sections lay out the varying and diverse approaches taken by federal, international and state regulators with respect to digital asset uses and markets as well as interpretative issues associated with each approach, given that digital asset markets are still in the early stages of development. As these sections together suggest, U.S. and international regulators likely will need to be both flexible and nimble.

Summary of Topics Covered

Section 1: Background on Digital Assets and Blockchain Technology

The first Section provides context by giving a high level primer on blockchain technology and digital assets in two parts. Section 1.1 explains the mechanics of blockchain and various applications of the technology. Section 1.2 distinguishes between digital assets (under the term’s narrower meaning) and digitized assets, different categories of digital and digitized assets, and how they function within a blockchain.

Blockchain Technology. Although the rise of blockchain (and related technology) occurred seemingly overnight, the technology’s roots date back at least several decades. In 1976, two Stanford University authors published a paper on cryptography discussing the concept of a mutual distributed ledger (albeit not using that particular term)⁵—the same concept that underpins today’s blockchain distributed ledger technology. A 1991 white paper expanded upon that concept to explore “computationally practical procedures for digital time-stamping of . . .

⁵ Whitfield Diffie and Martin E. Hellman, *New Directions in Cryptography*, 22 IEEE TRANSACTIONS ON INFO. THEORY 644–54 (1976), <https://ee.stanford.edu/~hellman/publications/24.pdf>. Cryptography, in turn, is the “study of ‘mathematical systems’ for solving two kinds of security problems: privacy and authentication.” *Id.* at 645.

documents so that it is infeasible for a user either to back-date or forward-date his document, even with the collusion of a time-stamping service.”⁶ Nearly three decades later, technological progress rendered these theoretical concepts a reality, giving rise to the modern blockchain.

Although blockchains differ in terms of configurations and users, one of the most popular and widely known uses of blockchain technology, bitcoin, made its debut in 2009.⁷ Blockchain technology requires the employment of complex calculations and powerful, expensive computers.⁸ Bitcoin provided an attractive entry point for new blockchain users, rewarding them with something of value (bitcoins) for participating in the blockchain process, thereby offsetting (and in some instances surpassing) costs associated with running the computers necessary to maintain the technology.⁹

As the virtual currency market continues to mature and evolve, additional uses for blockchain technology have been contemplated, including:

- financial services and investment services (*e.g.*, payment processing and money transfers; equity trading; energy futures trading and compliance);
- monitoring supply chains and tracking products, including food products;
- cybersecurity (*e.g.*, creating digital IDs through which users can authenticate and control their digital identities);
- copyright and royalty protection;
- digital voting;

⁶ Stuart Haber and W. Scott Stornetta, *How to Time-Stamp a Digital Document*, 3 J. OF CRYPTOLOGY 99, 99 (1991).

⁷ See Jon Martindale, *What is a blockchain?*, DIGITAL TRENDS, <https://www.digitaltrends.com/computing/what-is-a-blockchain/> (last updated Feb. 11, 2019, 2:36 PM).

⁸ *Id.*

⁹ See *id.*

- products to enable compliance in various legal contexts (*e.g.*, real estate, land, and auto title transfers; tax regulation and compliance; medical recordkeeping; wills or inheritances);
- a blockchain registry of smart contracts to verify, facilitate, or enforce worker contracts; and
- products that secure access to belongings (*e.g.*, using blockchain to grant service technicians access to a house, or a mechanic access to a car, to perform repairs).¹⁰

As Section 1.2 explains in greater detail, the varying applications of blockchain tokens are critical to the increasing variations of uses for digital and digitized assets, such as smart contracts.

As much as blockchain technology presents new opportunities to revolutionize various legal and business processes, the technology raises novel concerns regarding security, technological shortcomings, fraud, and confidentiality. These concerns, at least in part, have prompted regulators to attempt to better understand the digital asset market.

Digital and Digitized Assets. “Digital assets” and “digitized assets” are electronic records that are represented on an electronic ledger, including blockchain. Like blockchain technology, digital and digitized assets on a blockchain, also called “blockchain tokens,” have varying uses, including as a means of payment for goods and services, a key to get access to an application, an asset with a particular claim on the issuer, or a combination of multiple uses. None of these applications is explicitly defined by statute or regulation in the United States or other jurisdictions (with certain exceptions addressed below). The absence of uniform definitions creates obstacles for regulators in establishing what obligations should apply to the applications, as well as to market participants, such as virtual currency businesses or traditional businesses

¹⁰ Sean Williams, *20 Real-World Uses for Blockchain Technology*, THE MOTLEY FOOL (Apr. 11, 2018, 9:21 AM), <https://www.fool.com/investing/2018/04/11/20-real-world-uses-for-blockchain-technology.aspx>; see also Nolan Bauerle, *What Are the Applications and Use Cases of Blockchains?*, COINDESK (undated), <https://www.coindesk.com/information/applications-use-cases-blockchains/>; Srishti, *Uses of Blockchain Technology: Top 7 Industrial Cases*, ENGINEERING (Nov. 27, 2017), <https://engineering.ckovation.com/uses-of-blockchain-technology/>.

that offer blockchain tokens or virtual currency exchanges that convert and trade virtual currencies.

Section 2: Commodity Exchange Act and CFTC Regulation

The second Section provides an overview of the CEA provisions that may apply to digital assets and derivatives based on digital assets. The discussion focuses on virtual currencies and the CFTC's efforts to regulate or police those markets, and the issues raised by the CFTC's actions.

CFTC Regulation of Derivatives. Following an Introduction in Section 2.1, Section 2.2 summarizes the various derivatives products covered by the CEA, along with the CFTC's authority to regulate certain retail commodity transactions. It discusses how the CFTC's authority may extend to derivatives or retail transactions based on digital assets, in particular virtual currencies. The CFTC also has anti-fraud policing authority over cash commodity markets, but (putting aside "in scope" retail transactions) it does not have the authority to adopt regulations governing cash commodity markets. Determining whether the CEA will apply to derivatives or retail transactions involving digital assets hinges in large part on whether the digital asset is a "commodity" as defined in the CEA, and also on whether, if it is a covered "commodity," the digital asset could be sub-classified as a security.

CFTC Regulation of Virtual Currencies. Section 2.3 summarizes the CFTC's potential authority over virtual currencies or other digital assets as "commodities," and provides an explanation of the CEA's commodity definition (which covers items one would not expect under a common understanding of the term), the definition's potentially broad reach, and interpretative questions raised under the definition since the CFTC first formally asserted in 2015 that virtual currencies are commodities within its oversight. The CFTC's assertion of authority over virtual

currencies largely has been in the context of enforcement actions, where the CFTC generally seeks to combat fraud and manipulation. Because the CEA does not explicitly grant the CFTC jurisdiction over virtual currencies, whether (and to what extent) the CFTC has jurisdiction over the cash market for a virtual currency depends largely on whether the virtual currency is a “commodity” under the CEA, and on whether it is a security or a non-security commodity.

The CFTC’s assertion that all virtual currencies are “commodities” over which it has anti-fraud authority (which presupposes they are not securities) has faced challenges by defendants in civil enforcement cases. Some of those challenges raise significant questions about the scope of the CFTC’s authority over virtual currencies, as discussed in Section 2.3. Section 2.3 also discusses litigation over the meaning of the “actual delivery” requirement in the exclusion from the CEA provision imposing regulation on certain margined, leveraged or financed retail commodity transactions.

Allocation of Jurisdiction Between the CFTC and SEC. Putting aside whether a particular virtual currency (or other digital asset) is a security or a non-security commodity, it is useful to understand how federal law allocates jurisdiction between the CFTC and SEC over securities-based derivatives and hybrid securities with derivatives elements. Section 2.4 provides an overview of the current jurisdictional allocation between the two agencies.

Section 3: Federal Securities Regulation: Securities Act and Exchange Act

The third Section summarizes the application of federal securities laws and SEC regulations to digital assets. Section 3.1 analyzes whether the current definition of “security” in the Securities Act and Exchange Act may apply to digital assets. Section 3.2 discusses the regulatory implications for digital assets that are determined to be securities under the Securities Act and the Exchange Act.

Application of the Security Definition. Under the Securities Act and the Exchange Act, the SEC has statutory authority to regulate “securities” to protect investors from improper conduct (*e.g.*, manipulation, fraud, theft). Thus, similar to the CFTC’s jurisdiction over “commodities,” the SEC’s statutory authority to regulate digital assets relies on a determination that those assets fall within the definition of “security.” Also similar to the CFTC context, the definition of “security” covers a broad range of instruments, and also includes the catch-all term, “investment contract.” Because the Securities Act and the Exchange Act do not explicitly contemplate the treatment of digital assets and virtual currencies, whether a digital asset will fall within the scope of securities regulations often will depend on whether it is determined to be an “investment contract.” As Section 3.1 explains, in assessing whether an instrument is an “investment contract,” and, therefore, a “security,” the SEC primarily applies a four-part test the Supreme Court set out in *SEC v. Howey*—(1) an investment of money; (2) in a common enterprise; (3) with a reasonable expectation of profits; and (4) the expectation of profits is based upon the entrepreneurial or managerial efforts of others. Applying the *Howey* test necessarily invites questions as to how the particular characteristics of various digital assets fall within each element, as addressed below.

Securities Act and Exchange Act Compliance. Because certain digital assets are likely to be classified as “securities,” Section 3.2 outlines the regulatory obligations that would apply to the digital assets, and any applicable exemptions for parties transacting in digital assets. For example, the Securities Act, which generally addresses initial offerings of securities, requires issuers of securities to register the securities with the SEC or establish that the securities are exempt from registration. If none of the available exemptions apply to a securities offering, the Securities Act requires issuers to provide disclosures regarding both the security and the issuing

entity as part of the registration process. The SEC has anti-fraud authority over both exempt and non-exempt securities.

Section 3.2 also outlines the regulatory obligations that are set out in the Exchange Act, which establishes the regulatory regime for the secondary securities market. Specifically, the Exchange Act regulates financial intermediaries such as broker-dealers, exchanges, transfer agents, and clearing agencies. Financial intermediaries that perform any of these activities in the digital asset context may be subject to regulation under the Exchange Act. Depending on the activities of the entity, compliance with the Exchange Act may include obligations such as registration, capital requirements, reporting, disclosures, and filings of forms and policies with the SEC for approval.

Section 4: Federal Securities Regulation: Investment Company Act and Investment Advisers Act

Section 4 covers regulatory implications under two other federal securities statutes, the ICA and IAA in Sections 4.1 and 4.2, respectively.

Investment Company Act Compliance. Regulatory requirements under the ICA ultimately may apply to digital assets as the market continues to attract vehicles that invest in digital assets. Entities that are “investment companies” under the ICA are required to register with the SEC and also register their shares for sale under the Securities Act, unless an exemption is available. Investment companies also are subject to extensive regulation under the ICA. Section 4.1 outlines the bases on which an issuer of digital assets or a digital asset fund would have to register as an investment company under the ICA and the associated regulatory implications. As is the case with the Securities Act and the Exchange Act, applying the ICA regulatory regime to digital assets raises interpretative questions. For example, a person is an investment company if it is an “issuer” of a “security” and either holds itself out as investing

primarily in securities or invests a certain percentage of its assets in securities. While the Securities Act and the Exchange Act define these terms similarly, the definition of “security” for purposes of determining whether the issuer’s investments trigger investment company status can be broader than the Securities Act and Exchange Act definition of “security.” Section 4.1 also includes a discussion of issues that can arise if conventional investment companies, such as mutual funds and ETFs, invest in digital assets.

Investment Advisers Act Compliance. Persons providing advice with respect to digital assets may be “investment advisers” who are subject to regulation and potential registration requirements under the IAA or comparable provisions of state law, depending on whether the digital assets are considered securities for this purpose. Section 4.2 explains who might be regulated as investment advisers under the IAA and the regulatory implications for such persons. Similar to the ICA, applying the IAA to digital assets involves interpretative questions including whether a person engages in the business of “advising” others regarding a “security.” The definition of a “security” under the IAA is identical to the definition under the ICA.

Section 5: Potential Jurisdictional Overlap Between the CFTC and the SEC

While various federal and state regulators have issued guidance regarding digital assets, in particular with respect to virtual currencies, the question of whether, and to what extent, digital assets may be subject to the regulatory regimes of both the CFTC and SEC is of particular importance. Following an Introduction, Section 5.2 provides an overview of problematic issues with the current CFTC and SEC statutory schemes. Section 5.3 provides some explanation on how jurisdictional debates between the two agencies have been resolved in the past, as that may provide helpful precedent for how to resolve issues around digital assets. Section 5.4 describes the process for cooperation mandated as part of the Dodd-Frank Act as a mechanism for seeking

clarification on which agency has jurisdiction over novel products. Section 5.5 then examines potential tools to establish jurisdictional policies without new legislation, including each agency's exemptive authority and the Dodd-Frank prescribed process for cooperation.

Section 6: FinCEN Regulation

The sixth Section summarizes FinCEN's regulation of virtual currencies through its authority to regulate "financial institutions" under the Bank Secrecy Act (BSA), which focuses on combating persons and entities that engage in money laundering or terrorism financing. Section 6.1 summarizes the scope of FinCEN's regulatory authority under the BSA. The term "financial institution" under the BSA extends to entities including Money Services Businesses (MSBs). FinCEN has extended its authority to certain virtual currency businesses that it determined fall within the broad MSB definition.

Sections 6.2 and 6.3 detail the regulatory implications of falling within FinCEN's jurisdiction. For example, if a virtual currency business is deemed to be an MSB, it would incur compliance obligations such as registering with FinCEN, submitting to examinations by the IRS, and establishing an AML program. As Section 6.4 explains, like the SEC and CFTC, FinCEN has taken steps to regulate the virtual currency market, including enforcement actions against virtual currency market participants under its BSA authority.

Section 7: International Regulation of Digital Assets and Blockchain Technology

The seventh Section summarizes international regulations, directives, and guidance regarding virtual currency and other digital asset markets. Sections 7.1 and 7.2 detail European efforts initiated at both the EU level, including through EU legislation and ESMA guidance and statements, and the individual country level, including through legislation and guidance provided by national regulators. Section 7.3 summarizes approaches to virtual currency taken by

regulators in Asia and Australia. Section 7.4 outlines guidance on virtual currencies provided by international bodies such as IOSCO. Collectively, Section 7 describes a spectrum of approaches ranging from regulators who are skeptical of the benefits of virtual currencies to those who welcome and encourage the markets' development.

European Initiatives. As Section 7.1 explains, the characteristics of digital assets created and used in Europe determine whether—and to what extent—certain EU compliance obligations apply to those assets. MiFID II obligations will be triggered where digital assets are considered to fall within the MiFID II definition of “financial instrument,” which includes, among other items, transferable securities, money-market instruments, units in collective investment undertakings, and certain options, futures, forward rate agreements and swaps. Like the definitions of “security” and “commodity” in the United States, the financial instrument definition does not specifically enumerate digital assets or virtual currencies, so European authorities must determine whether the assets have characteristics sufficiently similar to the enumerated categories.

Additionally, EMIR risk mitigation requirements may apply to certain cleared and non-centrally cleared OTC derivatives transactions. Because EMIR requires that certain OTC derivatives transactions clear through a CCP, blockchain technologies that may be used to clear derivatives transactions covered by EMIR may need to comply with these requirements. To the extent EMIR requirements extend to OTC derivatives not cleared by CCPs, they also may impact blockchain technology used in connection with those derivatives.

Other obligations may apply to certain types of market participants as well. For example, the European Parliament and EU Council have amended the governing AML legislation to specifically cover cryptocurrency exchanges and custodial wallet providers.

As Section 7.2 outlines, regulators in the United Kingdom, Switzerland, France, Germany, Austria, Slovenia, and Malta have taken active steps to evaluate the evolving virtual currency market, examine how digital assets and blockchain technology may fall within existing regulations and directives, and in some instances implement new laws, regulations, or other initiatives. As described below, regulators in these countries have taken varying approaches, demonstrating the differing policy perspectives regarding the operation of virtual currency markets.

Asian and Australian Regulations. Unlike Europe, Asia has no larger regional body tasked with setting regulatory agendas. Accordingly, jurisdictional issues raised by the virtual currency markets are particularized to each individual country. Section 7.3 focuses on approaches taken by national governments in a number of Asian countries, including Japan, South Korea, Singapore, and China; it also addresses Australia's regulation of the virtual currency markets, as well as differences among these approaches.

The regulatory postures fall within two broader categories. First, Japan, South Korea, and Australia have taken proactive steps to regulate their cryptocurrency markets and thus have dynamic and increasingly nuanced regulatory regimes. These jurisdictions have embraced cryptocurrency and afforded it legal protection but, to varying degrees, have sought to regulate the inherent risks that cryptocurrency products pose to consumers, financial markets, the private sector, and payment systems. Of the jurisdictions in this category, Japan has the deepest history with cryptocurrencies and likely the most robust long-term infrastructure within which cryptocurrency providers and consumers can operate. South Korea similarly has sought to develop a strong regulatory regime that embraces the economic and innovative potential of cryptocurrencies while mitigating risks. Finally, Australia has recently begun to regulate its

otherwise generally open market and has done so largely to limit cryptocurrencies as a vehicle for financial crimes.

Second, Singapore and China have developed less nuanced regulatory regimes designed to create a clear and consistent approach. Singapore generally has embraced cryptocurrencies and sought to create a permissive environment for their operation. Consistent with that operating principle, Singapore appears to lightly regulate cryptocurrencies, and when it does regulate them, appears to do so in accordance with preexisting regulation. Conversely, in the past year, China largely has rejected the private cryptocurrency industry (although notably, it has not rejected virtual currencies or blockchain technology more broadly). As a result, China has taken a consistently restrictive posture towards cryptocurrency, and effectively has banned vital elements of the cryptocurrency industry in its jurisdiction.

As Section 7.3 explains, the approaches taken by regulators in Asia with respect to regulating *foreign* virtual currency market participants differ as well, but generally address two larger questions of (1) whether foreign entities will be permitted to participate in the respective markets and, (2) if so, how those entities should be regulated.

Global Guidance. As the virtual currency markets continue to expand, international organizations that are tasked with setting global standards for the regulation of industries related to banking, securities, or other financial markets have created initiatives to assess the virtual currency markets. Among those organizations are the following:

- The BIS, which is owned by 60 central banks worldwide and, among other initiatives, publishes research analyses and international banking and financial statistics in support of international policymaking. The BIS also hosts a number of committees, including the BCBS and the CPMI. The BCBS is a committee responsible for setting global standards

for the prudential regulation of banks as well as creating a forum to enable cooperation regarding banking regulatory matters. The CPMI is a committee that sets global standards in the areas of payment, clearing, settlement, and related arrangements. The CPMI is tasked with monitoring developments in these subject areas and, like the BCBS, serves as a forum for central bank cooperation in related oversight, policy, and operational matters;

- IOSCO, an international body composed of national securities regulators that develops and promotes adherence to internationally recognized standards for securities regulation;
- FATF, an inter-governmental body established to set standards for preventing money laundering, terrorist financing, and other related threats to the integrity of the international financial system; and
- The FSB, an international body that coordinates national financial authorities and international organizations in their efforts to develop regulatory policies and monitors and makes recommendations about the global financial system.

None of these international bodies have proposed to broadly restrict the virtual currency market; however, they have offered a spectrum of opinions, with some organizations expressing more concern regarding the risks posed by the virtual currency markets than others. Nevertheless, as Section 7.4 details, these international bodies have highlighted potential benefits that the virtual currency markets may provide and, in doing so, favored continued observation of the development of the market.

Section 8: State Law Considerations

Section 8 identifies key state regulators that also have asserted authority over virtual currency businesses. Section 8.1 summarizes the New York DFS regulations of virtual currency businesses and the requirement that those businesses register for a “BitLicense.” Section 8.2

summarizes an exemption from BitLicense regulations for virtual currency businesses that are chartered under New York Banking Law. Section 8.3 outlines an initiative started by New York regulators to gather additional information from major virtual currency businesses. Section 8.4 summarizes the efforts of other states in regulating the issuance of virtual currencies or tokens through ICOs.

BitLicense Requirements and Exemptions. Generally, virtual currency businesses are subject to the New York BitLicense regulations only if (1) the business involves a “virtual currency,” as that term is defined by the DFS regulations; (2) the business is engaged in a “virtual currency business activity”; and (3) no available exemptions apply. “Virtual currency” is defined broadly to include any type of digital assets, with a few exceptions such as digital units that are used on gaming platforms or as part of a customer rewards program. The DFS regulations also define what constitutes “virtual currency business activity” to include a number of activities such as storing, holding, or maintaining custody of virtual currency on behalf of others, issuing virtual currency, or buying and selling virtual currency.

Unlike the federal regulatory schemes, which were not created with virtual currency businesses in mind, the DFS BitLicense regime specifically addresses the existing virtual currency markets. The significant compliance requirements can be costly. Thus, a threshold question for a business that is subject to the BitLicense requirements is whether it qualifies for an exemption from the requirements. The BitLicense requirements do not apply to businesses that are using virtual currency solely for the purchase of goods and services or for investment purposes or that are chartered under New York Banking Law. As Section 8.2 explains, with respect to the latter exemption, while there are certain differences between compliance obligations set out by the New York Banking Law and the BitLicense requirements, complying

with the alternative regime does not provide exemptive relief from the primary BitLicense requirements.

Other State Regulation. State regulators have asserted jurisdiction over virtual currency businesses primarily in the context of money transmitter regulations, which apply to issuers of virtual currencies, and ICO regulations. With respect to money transmitter regulations, state regulators have attempted to balance their regulatory interests with a need for coordination to prevent unnecessary regulatory burdens. Specifically, the states have proposed, but not yet enacted, a uniform regulation for virtual currency businesses that could apply to each state. As Section 8.4 will explain, state regulators have taken a more varied approach to ICOs under existing securities laws. Additionally, the Appendix to this paper provides a 50-state survey of virtual currency regulations (as of January 23, 2019) that identifies what legislative or regulatory steps, if any, a state has taken with respect to the licensing or regulation of the virtual currency market.

SECTION 1. BACKGROUND ON DIGITAL ASSETS AND BLOCKCHAIN TECHNOLOGY*

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1. Blockchain Technology

(a) What Is “Blockchain”?

Blockchain is a shared, immutable chronological record of transactions, frequently referred to as a digital ledger, and a type of distributed ledger technology. Blockchain technology “makes it possible to create a digital ledger of transactions and share it among a distributed network of computers. It uses cryptography to allow each participant on the network to manipulate the ledger in a secure way without the need for a central authority.”¹¹ Each “block” in the chain represents a set of transactional records, which the “chain” component in turn links together via a “hash” function¹² that distills an original piece of information into a code that is

* The authors of Section 1 wish to thank Petal P. Walker and Twane Harris of WilmerHale for their substantial contributions to this Section.

¹¹ Steven Norton, *CIO Explainer: What Is Blockchain?*, WALL ST. J. (Feb. 2, 2016, 12:49 AM), <https://blogs.wsj.com/cio/2016/02/02/cio-explainer-what-is-blockchain/>.

¹² See Martindale, *supra* note 7.

recognizable and archived on the blockchain ledger.¹³

The concept behind the decentralized digital ledger is that it is seen to eliminate the need for a trusted third-party intermediary or central authority, such as a bank or government, to verify the transaction.¹⁴ Instead, blockchain participants themselves collectively verify proposed transactions in a peer-based verification system. When a blockchain participant wants to transact, network participants (often called “miners”) run a series of complex algorithms to verify the transaction, ensuring that it is valid and matches the blockchain’s history.¹⁵ Once the transaction is peer-verified by a miner, it is broadcast to other miners and added to the blockchain ledger.

Two types of blockchains exist: permissionless and permissioned chains. As the name suggests, permissionless chains allow anyone to participate, without vetting, whereas consortiums or administrators evaluate and determine each entity’s proposed participation in a permissioned chain.¹⁶ In both instances, blockchains use “smart contracts”—contracts that are coded to automatically execute contractual obligations (*e.g.*, direct payments, or impose penalties if certain conditions are not satisfied) via the blockchain without manual intervention.¹⁷

Unlike the central authority model (in which a single, trusted authority like a bank maintains a master copy of a ledger), all blockchain participants maintain identical copies of the same ledger. Every time a new block is created, information related to the transaction, including

¹³ *The Trust Machine*, THE ECONOMIST (Oct. 31, 2015), <https://www.economist.com/leaders/2015/10/31/the-trust-machine?AID=11873477&PID=2942700>.

¹⁴ See Martindale, *supra* note 7.

¹⁵ See Norton, *supra* note 11.

¹⁶ PRAKASH SNTHANA & ABHISHEK BISWAS, DELOITTE AND TOUCHE LLP, BLOCKCHAIN RISK MANAGEMENT 4 (2017), <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/risk/us-risk-blockchain-risk-management.pdf>.

¹⁷ *Id.*

a time stamp and the hash number of the previous block, is included. Blockchain advocates believe this technology renders the blockchain system less vulnerable to fraud.¹⁸ Tampering with a ledger maintained, monitored, and verified by multiple participants across the globe is conceived to be significantly more difficult than falsifying a ledger maintained by a single bank—perhaps by hacking into the bank’s recordkeeping system, for example. In addition, attempts to tamper with the blockchain are perceived to be immediately apparent, because the new hash associated with the proposed transaction will not match prior hashes in the chain, and the transaction thus should not be approved.¹⁹

(b) Cryptocurrency Trading Platforms and Points of Intersection with Fiat Currencies

Although some blockchain advocates suggest that cryptocurrencies may one day render fiat currencies obsolete, at present, the two are linked. Bitcoin, for example, may be purchased on exchanges or directly from others in the marketplace using fiat currency (transferred, *e.g.*, via credit or debit card payments, or wire transfer) or other cryptocurrencies.²⁰ Transacting in bitcoin (and similar cryptocurrencies) requires setting up a “wallet” to store the digital coins, such as an online wallet (which can be provided as part of an exchange platform or via an independent provider), a desktop wallet, a mobile wallet, or an offline wallet (such as a hardware device or paper wallet).²¹ A wallet, in whatever form, keeps the keys (a string of characters) and/or

¹⁸ This concept is explored in further detail below.

¹⁹ *The Trust Machine*, *supra* note 13. A hacker essentially would need to hack the entire blockchain, which would be extremely cumbersome to decipher.

²⁰ Noelle Acheson, *How Can I Buy Bitcoin?*, COINDESK, <https://www.coindesk.com/information/how-can-i-buy-bitcoins/> (last updated Jan. 26, 2018). Although this discussion references Bitcoin, we use Bitcoin by way of example only; similar processes are applicable to other blockchain technologies, though the types of processes of course differ for different blockchains.

²¹ *Id.* A paper wallet is an offline wallet—usually a “cold storage” device that does not make contact with the internet—typically printed on paper or plastic. It includes a public and private key printed together. Noelle Acheson, *(cont’d)*

passwords for the bitcoin safe. Losing these means losing access to the bitcoin.²²

After setting up a wallet, the next step involves determining how to purchase the bitcoin. Hundreds of cryptocurrency exchanges currently are operating and will buy and sell bitcoin on behalf of users, though individual user access may be limited, depending on geographical area.²³ Measuring by U.S. Dollar volume, Bitfinex currently is the largest bitcoin exchange, and Coinbase, Bitstamp, and Poloniex are other high-volume examples.²⁴ Given KYC and AML regulations, many exchanges require proof of identity for account setup, which can include a photo ID and proof of address.²⁵

Most exchanges charge fees and accept payment via credit card or bank transfer, and some also accept PayPal transfers.²⁶ Once the exchange receives payment (for the bitcoin purchase and any applicable fees), it will purchase the bitcoin on the user's behalf and automatically deposit the coin into the user's wallet on the exchange.²⁷ The user may then transfer the bitcoin to a different off-exchange wallet if desired.²⁸

Bitcoins also may be transacted off-exchange. Certain online platforms are available to assist bitcoin users in finding other individuals willing to exchange bitcoins for cash, or retail

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How to Make a Paper Bitcoin Wallet, COINDESK, <https://www.coindesk.com/information/paper-wallet-tutorial/> (last updated Jan. 29, 2018).

²² Acheson, *How Can I Buy Bitcoin?*, *supra* note 20.

²³ *Id.* These exchanges vary in terms of liquidity and security. *See id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

outlets at which cash may be exchanged for bitcoins.²⁹ Some bank branches also permit individuals to make cash deposits in exchange for bitcoins.³⁰ In addition, much like traditional cash ATMs, Bitcoin ATMs enable users to deposit cash in exchange for bitcoins (which in turn are deposited in the user's wallet and recorded on the blockchain after a cash deposit to the ATM).³¹ In each instance of purchase or sale, once the transaction is verified (by miners), the bitcoin transaction will be recorded on the blockchain.

Apart from the blockchain transactions themselves, miners of cryptocurrency networks generally do not measure the income they receive in terms of bitcoin (or other applicable cryptocurrency). Instead, they value their income in terms of fiat currency, converting their bitcoins (or other cryptocurrency) into the local fiat currency in the physical location of their mining operation.³² This is in part because fiat currencies typically are "stable and liquid," whereas the values of bitcoin and other cryptocurrencies can be volatile.³³

Banks also are exploring a means by which financial institutions would pay each other using collateral-backed cryptocurrency tokens, for which the banks would hold the collateral.³⁴ This system would entail banks issuing fiat currency on a blockchain.³⁵ As this discussion shows, the relationship between fiat currency and cryptocurrency is fluid, and blockchain transactions

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² Tim Swanson, *Why Bitcoin Needs Fiat (And This Won't Change in 2018)*, COINDESK (Jan. 4, 2018, 9:14 AM), <https://www.coindesk.com/bitcoin-still-needs-fiat-currency-wont-change-2018/>.

³³ *Id.*

³⁴ Michael del Castillo, *Is Blockchain Ready for Fiat? Why Banks See Big Promise in Crypto Cash*, COINDESK (Sept. 7, 2017, 11:25 AM), <https://www.coindesk.com/blockchain-ready-fiat-banks-see-big-promise-crypto-cash/>.

³⁵ *See id.*

frequently intersect with fund transfer systems for fiat currencies.

(c) Security Issues Associated with Blockchain

Because all participants have copies of the existing blockchain and transaction history, changing or removing a transaction from the ledger is difficult.³⁶ Advocates of the technology suggest that this feature makes blockchain significantly less susceptible to fraud risk.³⁷ That said, blockchain is not altogether immune to fraud, and it is subject to a number of security (and other) risks.

Risks associated with blockchain depend in part upon whether the chain is permissioned or permissionless. In the permissionless context, anyone can participate as a miner, so long as they meet the network's technological requirements. No other entity checks, such as KYC, are performed, so anyone acquiring the cryptocurrency traded on the blockchain may transact with any other entity on the blockchain.³⁸ This increases risks of money laundering and theft from a user's account. In addition, permissionless blockchains pose privacy and scalability risks.³⁹ In the permissioned context, these risks can be mitigated through monitoring by the administrator or consortium.⁴⁰

Both types of blockchains involve the use of smart contracts, which can be vulnerable to cyberattack and technology failures.⁴¹ Specifically, smart contracts rely on data from outside

³⁶ See Norton, *supra* note 11.

³⁷ See *id.*

³⁸ BLOCKCHAIN RISK MANAGEMENT, *supra* note 16, at 4.

³⁹ "Scalability" risks include risks associated with recording every transaction in the chain, which in turn may present security concerns.

⁴⁰ BLOCKCHAIN RISK MANAGEMENT, *supra* note 16, at 4.

⁴¹ *Id.*

entities called “oracles,” which feed data to the network. Oracles, in turn, may be subject to malicious attacks aimed at corrupting data transmitted to the blockchain.⁴²

Although blockchain technology provides transaction security (by protecting data stored in the blockchain ledger against tampering), it does not provide individual wallet or account security. Accordingly, individual wallets and accounts remain susceptible to risks like account takeover (for example, when bad actors steal private keys), which in turn can render digital assets irretrievably lost.⁴³ In addition, a malicious actor theoretically could take over more than 50% of network participant nodes, which in turn creates cybersecurity risks and threats to the larger blockchain.⁴⁴

Blockchain technology also includes risks associated with data confidentiality concerns. All blockchain participants may view the transactions in the ledger, and although transactions may be stored in a format that does not reveal personal details, network participants always will have access to some of the metadata, which in turn can reveal information about the type of activity and volume associated with the activity.⁴⁵

In sum, although blockchain technology holds great promise and has the potential to revolutionize a number of industries, it is not immune from risk and malfeasance. Participants should take care to understand the technology and associated risks, so that they can better protect themselves while still reaping the benefits of this promising new frontier.

⁴² *Id.* at 7.

⁴³ *Id.* at 5–6.

⁴⁴ *Id.* at 5.

⁴⁵ *Id.* at 6.

2. Digital Assets

(a) Digital and Digitized Asset Definitions

A “digital asset” is an electronic record in which an individual has a right or interest. The term does not include an underlying asset or liability unless the asset or liability is itself an electronic record.⁴⁶ In the words of SEC Director William Hinman, “the digital asset itself is simply code.”⁴⁷ Digital assets are distinguished from physical assets because the digital asset itself does not exist in physical form. For example, a bitcoin is a digital asset because it is an electronic record that is created and stored exclusively on the Bitcoin blockchain.⁴⁸

A “digitized asset” is an asset (which may be a security or a physical asset) the ownership of which is represented in an electronic record.⁴⁹ An example of a digitized asset would be an electronic record of the ownership of real estate stored on a digital ledger. The ledger may include an electronic record that contains all of the rights associated with ownership, although the asset itself—the real estate—exists apart from the electronic record. Utilizing the electronic record to record the ownership of the asset on the ledger makes the electronic record a digitized asset.

⁴⁶ See NAT’L CONFERENCE OF COMM’RS ON UNIF. STATE LAWS, REVISED UNIFORM FIDUCIARY ACCESS TO DIGITAL ASSETS ACT § 2(10) (2015), <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=112ab648-b257-97f2-48c2-61fe109a0b33&forceDialog=0>.

⁴⁷ William Hinman, Dir., Div. of Corp. Fin., SEC, 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>

⁴⁸ The “wallets” in which parties keep their bitcoins do not physically possess the bitcoin. Wallets maintain a party’s private key data in a location that is usually encrypted. See Noelle Acheson, How to Store Your Bitcoin, <https://www.coindesk.com/information/how-to-store-your-bitcoins/> (last updated Jan. 20, 2018).

⁴⁹ Phil Spiegel, *Digitizing Your Information Assets* (Oct. 25, 2011), <https://lac-group.com/digitizing-assets/>.

Digital and digitized assets are represented on an electronic ledger that is not necessarily a blockchain. Digital and digitized assets on a blockchain are commonly referred to as “blockchain tokens.” A blockchain token is “a digital token created on a blockchain as part of a decentralized software protocol.”⁵⁰

(b) Digital and Digitized Asset Classifications

Digital assets can take many different forms, which implicate the jurisdiction of different regulators and regulatory regimes. In the U.S., the different categories of applications have not been codified by federal statute or regulatory rulemaking.

In February of 2018, the FINMA set out its guidelines for ICOs, which included tokens defined by the intended underlying economic function of the token.⁵¹ This Section of the White Paper incorporates the FINMA token definitions for its analysis. It also, though, focuses primarily on U.S. law, so in many cases the conclusions reached will differ from those of FINMA when it makes jurisdictional classifications of token applications under Swiss law. The FINMA definitions refer to blockchain tokens, although conceptually the definitions may be equally applied to digital and digitized assets that are not transacted on a blockchain.

FINMA divides tokens into (1) Payment Tokens, (2) Utility Tokens, and (3) Asset Tokens. Some tokens fall under multiple token categories, and some tokens may be used in ways that were not intended at inception.

⁵⁰ COINBASE, COIN CENTER, UNION SQUARE VENTURES & CONSENSYS, A SECURITIES LAW FRAMEWORK FOR BLOCKCHAIN TOKENS 1, <https://www.coinbase.com/legal/securities-law-framework.pdf> (last updated Dec. 7, 2016).

⁵¹ FINMA, GUIDELINES FOR ENQUIRIES REGARDING THE REGULATORY FRAMEWORK FOR INITIAL COIN OFFERINGS (ICOs) (2018) [hereinafter FINMA GUIDELINES], <https://www.finma.ch/en/~media/finma/dokumente/dokumententcenter/myfinma/1bewilligung/fintech/wegleitung-ico.pdf?la=en>.

(1) Payment Tokens

“Payment [T]okens (synonymous with cryptocurrencies) are tokens which are intended to be used, now or in the future, as a means of payment for acquiring goods or services or as a means of money or value transfer. Cryptocurrencies give rise to no claims on their issuer.”⁵²

Bitcoin is the most widely used Payment Token. A bitcoin holder does not have a claim on any asset, foundation, or company. The value of a bitcoin is a function of the ability of the holder to trade the bitcoin for goods, services, other tokens, or fiat currency. The Bitcoin Foundation’s vision for Bitcoin is as a “globally accepted method of exchanging and storing value which will operate without the need for third parties.”⁵³ Bitcoin is accepted by some merchants in exchange for goods and services, although the vast majority of bitcoin transactions to date have been speculative.⁵⁴

(2) Utility Tokens

“Utility [T]okens are tokens which are intended to provide access digitally to an application or service by means of blockchain-based infrastructure.”⁵⁵

The Ethereum blockchain is a network upon which a host of applications can be developed. As of this writing, there are 2,327 decentralized applications on the Ethereum blockchain.⁵⁶ In order to transfer a token from one node on the Ethereum blockchain to another, a transaction must include the cryptocurrency “Ether” in addition to the token being transferred

⁵² *Id.*

⁵³ THE BITCOIN FOUND., THE BITCOIN FOUNDATION MANIFESTO 3 (2016), https://bitcoinfoundation.org/wp-content/uploads/2017/03/Bitcoin_Foundation_Manifesto.pdf.

⁵⁴ SYSTEMATIC INV. MGMT. AG, WHY BITCOIN IS NOT A CURRENCY BUT A SPECULATIVE REAL ASSET (2017), <https://www.simag.com/why-bitcoin-is-not-a-currency-but-a-speculative-real-asset/>.

⁵⁵ FINMA GUIDELINES, *supra* note 51, at 3.

⁵⁶ *DApp Statistics*, STATE OF DAPPS, <https://www.stateofthedapps.com/stats> (last visited Feb. 26, 2019).

between the parties to the transaction. This additional Ether is paid as an incentive to the node which validates the new block recording the transaction on the Ethereum blockchain and is often referred to as “gas.”⁵⁷ A transaction with insufficient gas to incentivize validators to validate the transaction will not be recorded on the blockchain, which means that Ether is necessary for a party to access the Ethereum blockchain. When used as gas, Ether is functioning as a utility token. Ether has also been used as a speculative store of value.

(3) Asset Tokens

“Asset [T]okens represent assets such as a debt or equity claim on the issuer. Asset tokens promise, for example, a share in future company earnings or future capital flows. In terms of their economic function, therefore, these tokens are analogous to equities, bonds or derivatives. Tokens which enable physical assets to be traded on the blockchain also fall into this category.”⁵⁸ Asset Tokens can be digital or digitized assets.

Under the FINMA definition, Asset Tokens that represent intangible assets are *digital* assets because they exist purely on the computer system. Asset Tokens that enable physical assets to be traded on the blockchain are digital representations of physical assets; therefore, they are *digitized* assets and not digital assets.

An example of a digital Asset Token is a token that entitles the holder to the smart contract initiated payout from an escrow account upon the occurrence of an event. A letter of credit which is paid to the token holder upon the default of a debtor would be a digital Asset Token.

⁵⁷ For a discussion of nodes, see *What are Ethereum Nodes and Sharding?*, BLOCKGEEKS, <https://blockgeeks.com/guides/what-are-ethereum-nodes-and-sharding/> (last visited Feb. 26, 2019).

⁵⁸ FINMA GUIDELINES, *supra* note 51, at 3.

An example of a digitized Asset Token is the RMG coin offered by the Royal Mint Bullion Company and traded on the blockchain.⁵⁹ The holder of one RMG token is entitled to 1g of gold stored in the Royal Mint’s vault. RMG holders “have full title to their gold at all times” and “may request physical delivery of their gold from The Royal Mint.”⁶⁰

(4) Hybrid Tokens

In some cases a digital asset may fit multiple definitions, such as a utility token that is necessary for the right to access a blockchain network but that is also used as a general means of payment or exchange for goods which are outside of the network. As an example, Ether functions as a Utility Token when used as gas and as a payment token when exchanged for goods.

(c) Digital and Digitized Asset Applications

The core innovation of blockchain technology—the trading of assets between peers with no trusted intermediary—has applications beyond virtual currency and can be applied to advance traditional industries as well as spawn new ones. Applications include (1) smart contract transactions and (2) peer-to-peer trading of digital and digitized assets.

(1) Smart Contract Transactions

A smart contract is “a set of coded instructions that execute automatically, without human involvement, when particular conditions are met. The fully automated nature of execution provides for self-enforcing automated trustworthiness with no counterparty risk of non-

⁵⁹ Helen Partz, *UK’s Gold Mint Launches Gold Backed Cryptocurrency*, COINTELEGRAPH (Jan. 31, 2018), <https://cointelegraph.com/news/uks-royal-mint-launches-gold-backed-cryptocurrency>.

⁶⁰ For more information, see THE ROYAL MINT, <https://www.royalmint.com/invest/bullion/digital-gold/> (last visited Mar. 8, 2019).

performance.”⁶¹ By automating the performance of contractual obligations, parties are able to perform with greater speed and certainty.

Smart contracts are seen to mitigate the risk of counterparty failure because the code will execute as written without any intervention by the parties. By placing their trust in the code, the parties assume the risk that the code has been written in a manner that accurately expresses their intentions, with the further risk of uncertainty as to who is accountable, or alternatively they have created mechanisms outside of the automated nature of the smart contract to allow for intervention if defects in the code are discovered. Although it is possible to have entire agreements executed solely using code, in present practice smart contracts typically leave the resolution of certain issues outside of the automated smart contract.

Smart contracts function efficiently when there is a predefined range of outcomes that can be objectively identified. In its smart contract primer, CFTC staff offered self-executing insurance, transportation rentals and credit default swaps as potential smart contract use cases.⁶² In these examples, there is an objectively determined event that must occur: the occurrence of an insurable event, receipt of funds to rent a bike, and a debtor default, respectively.⁶³ The occurrence of the objectively determined event induces the coded smart contract response, the payment of escrowed funds in the insurance and credit default swap examples, or the unlocking of a bike in the transportation rental example.⁶⁴

⁶¹ J. Travis Laster & Marcel T. Rosner, *Digital Stock Ledgers and Delaware Law*, 73 BUS. LAW. 319, 331 (2018) (footnote omitted).

⁶² LabCFTC, CFTC, A PRIMER ON SMART CONTRACTS (2018) [hereinafter SMART CONTRACT PRIMER], https://www.cftc.gov/sites/default/files/2018-11/LabCFTC_PrimerSmartContracts112718.pdf.

⁶³ *Id.* at 13–15.

⁶⁴ LabCFTC also offered a wealth of additional smart contract application examples, including supply chain management, trade clearing and settlement and data reporting and recordkeeping. *Id.* at 18.

(2) Peer-to-Peer Microgrid Trading of Digital and Digitized Assets

Microgrids are newly constructed electrical grids which, in some cases, are not connected to the main electrical grid and may be geographically isolated from the main grid, or in other cases can be integrated into the existing grid.⁶⁵ In blockchain enabled microgrid projects, energy producers, colloquially called “prosumers,” with a rooftop solar array or an interest in an off-site renewable energy project, are able to track and transfer electricity to their neighbors who are on the same microgrid.⁶⁶ The electricity is represented via a blockchain token, which can be tracked and transferred via a smart contract such that if a prosumer’s solar array generates more energy than it needs, the token is sold to a different customer on the grid that has not produced as much energy as it needs. The transactions themselves can be automated so that smart meters buy and sell the energy through automated smart contract transactions. The methods used for transacting energy over a microgrid can be applied to other peer-to-peer trading applications in which transactions are automated via smart contracts.

(d) Process for Issuing, Selling, and Trading Virtual Currency

The process used to create or issue a virtual currency has varied over time. The idea for bitcoin, widely recognized as the first virtual currency, was discussed in a white paper that was posted to a cryptography mailing list in 2008.⁶⁷ The first bitcoin specification and proof of concept was published in 2009.⁶⁸ By 2013, the price of one bitcoin had exceeded \$1,000.

⁶⁵ Allison Lantero, *How Microgrids Work*, DEP’T OF ENERGY (June 17, 2014), <https://www.energy.gov/articles/how-microgrids-work>.

⁶⁶ LO3 Energy is running a blockchain enabled microgrid pilot in Brooklyn. BROOKLYN MICROGRID, <https://www.brooklyn.energy/> (last visited Feb. 27, 2019).

⁶⁷ SATOSHI NAKAMOTO, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM, BITCOIN.ORG (2008), <https://bitcoin.org/bitcoin.pdf>.

⁶⁸ *Frequently Asked Questions*, BITCOIN.ORG, <https://bitcoin.org/en/faq#general> (last visited Feb. 27, 2019).

Capitalizing on the success of bitcoin, other virtual currencies were created and ICOs emerged as a way to raise money to fund early stage ventures. To complete an ICO, an offeror generally issued a white paper describing the virtual currency, its uses or advantages and its value proposition. The white paper would typically be published and publicly available on the offeror's website and would help facilitate the sale and distribution of the virtual currency to institutional and retail investors. Forbes reported that ICOs raised nearly \$6 billion in 2017.⁶⁹

On July 25, 2017, the SEC issued the DAO Report,⁷⁰ which makes clear that many virtual currencies fall within the definition of a security under the *Howey*⁷¹ test. In order to offer or sell securities in the United States, they must be registered or qualify for an exemption. Since the DAO Report, the SEC has engaged in numerous enforcement actions and offered public guidance to issuers in determining whether their virtual currency is actually a security.⁷²

After an ICO, additional quantities of a virtual currency can be created by miners that operate open-source software and solve complex mathematical problems to validate and log transactions on the publicly distributed ledger created using funds from the ICO. Virtual currencies can also be acquired or used in commerce as a medium of exchange (provided, of course, that both parties to a transaction are willing to use the digital asset as a means of payment) or purchased or sold through privately negotiated transactions or virtual currency exchanges.

⁶⁹ Adam Bergman, *This Is How ICOs Can Save the Financial Services Industry*, FORBES (June 14, 2018, 10:22 AM), <https://www.forbes.com/sites/greatspeculations/2018/06/14/this-is-how-icos-can-save-the-financial-services-industry/#448af0f364aa>.

⁷⁰ SEC, REPORT OF INVESTIGATION PURSUANT TO SECTION 21(A) OF THE SECURITIES EXCHANGE ACT OF 1934: THE DAO, Securities Act Release No. 81,207, at 11 (2017) [hereinafter DAO REPORT], <https://www.sec.gov/litigation/investreport/34-81207.pdf>.

⁷¹ *SEC v. W.J. Howey Co.*, 328 U.S. 293, 301 (1946).

⁷² Public Statement, SEC, Div. of Corp. Fin., Div. of Inv. Mgmt., and Div. of Trading and Mkts., Statement on Digital Asset Securities Issuance and Trading (Nov. 16, 2018), <https://www.sec.gov/news/public-statement/digital-asset-securities-issuance-and-trading>.

Virtual currency exchanges provide a mechanism for converting U.S. dollars and other traditional currencies into virtual currencies. These exchanges list currency pairs such as BTC/USD (bitcoin denominated in U.S. dollars) and ETH/USD (Ether denominated in U.S. dollars) and even cryptocurrency pairs like ETH/BTC (Ether denominated in bitcoin). As of March 4, 2019, the website cryptocurrencycharts.info indexed 230 virtual currency exchanges and indicated that over 60 of these exchanges had been used to execute a virtual currency transaction with the past 24 hours.⁷³ Prominent U.S.-based virtual currency exchanges include: bitFlyer USA, Inc.; Bitstamp USA Inc.; Bittrex, Inc.; Circle Internet Financial Limited (Poloniex LLC); Coinbase, Inc. (GDAX); Gemini Trust Company; itBit Trust Company; and Payward, Inc. (Kraken).

(1) Transferring Virtual Currencies

Virtual currencies may be traded over “centralized” exchanges or “decentralized” exchanges (as described below). For both centralized and decentralized exchanges, counterparty credit concerns are theoretically mitigated because properly drafted smart contract code will not allow for a party to perform on their transaction obligations without ensuring that the counterparty has the assets needed to concurrently perform on its reciprocal transaction obligations.

Centralized virtual currency exchanges hold custody of customer assets and operate order books that allow customers to purchase or sell digital assets at posted rates. Centralized exchanges typically purchase virtual currencies for their own account on the public ledger and allocate them to customers through internal bookkeeping entries while maintaining exclusive

⁷³ See *Cryptocurrency Exchanges/Markets List*, COIN.MARKET, <https://cryptocurrencycharts.info/markets/info> (last visited Mar. 4, 2019) for list of cryptocurrency exchanges.

control of the private keys. Under this structure, centralized exchanges collect large amounts of customer funds for the purpose of buying and holding virtual currencies on behalf of their customers with limited regulatory oversight. “A trade between two parties transacting using a [centralized exchange] is not necessarily recorded on the blockchain, and parties instead entrust the exchange to hold tokens on their behalf.”⁷⁴ Such settlement is said to occur outside the blockchain (*i.e.*, “off-chain”). By maintaining order books and custody of customer assets, centralized virtual currency exchanges provide similar services to those of centralized exchanges of more traditional commodities and securities. Coinbase, Kraken and Binance are examples of centralized virtual currency exchanges.

Decentralized exchanges are relatively new and provide a platform that allows users to transact directly with each other. The feature that is most characteristic of all platforms labeled “DEXs” is allowing users to maintain custody of their digital assets before and after transactions. Users can trade tokens from and to their own personal wallet address on the Ethereum (or other) blockchains.⁷⁵

As opposed to the centralized exchange keeping an order book, decentralized exchanges will frequently follow one of two approaches for discovery and matching open trading interests. “One is to implement a peer-to-peer system in which [buyers] and [sellers] discover each other and then negotiate and agree upon transaction details by communicating directly with each other. The other alternative is to use a smart contract or liquidity pool that does not necessarily list orders, but rather simply fills submitted orders algorithmically.”⁷⁶

⁷⁴ *An Overview of the Decentralized Trading of Digital Assets*, THE BROOKLYN PROJECT, § 3.2 (Nov. 15, 2018), <https://collaborate.thebkp.com/project/TL/document/9/version/10/> [Not compatible with Internet Explorer browser].

⁷⁵ *Id* § 3.1.

⁷⁶ *Id* § 3.3.

Once the buyer and seller have agreed to terms, the transaction is “submitted to the blockchain via a function call to the appropriate smart contract, [and] the transfer of tokens between parties is recorded on the blockchain by miners. Legal possession and ownership of the newly transferred tokens should, depending on jurisdictional nuances, likely pass once the transaction is mined, recorded to the blockchain, and the taker has control over the tokens. While in theory one might expect this to occur immediately upon submitting an order to the appropriate smart contract, in reality there may be delays due to network congestion. Users can attempt to have their transactions mined more quickly by agreeing to pay a higher gas fee to miners, which increases the miners’ incentive to mine that user’s transaction.”⁷⁷ Parties may also utilize this transaction mechanism to transfer virtual currency with no involvement from an exchange of any type.

Decentralized exchanges provide the software platforms whereby virtual currency buyers and sellers locate one another and provide infrastructure, which facilitates the transfer of the virtual currency; however, the receipt and custody of the virtual currency is entrusted to the user. Examples of decentralized exchanges include IDEX, Airswap and Paradex.

(2) Virtual Currency Pricing

At issuance, the pricing terms of a particular virtual currency are generally set forth in the white paper or offering document describing the ICO. An investor that purchases a virtual currency through an ICO may be able to use venture capital valuation methodologies to discern the price or value of a particular offering.

In the secondary market, the price of a virtual currency is based on the agreement of the parties to a transaction and their perception of the virtual currency’s value. Some have argued

⁷⁷ *Id* § 3.2.

that the intrinsic value of a virtual currency can be derived from the cost of mining the virtual currency.⁷⁸ In addition, certain virtual currencies may be used or redeemed for another product or services, in which case the price or value of such product or service could influence the price of the virtual currency. Many virtual currencies are susceptible to changes in sentiment and highly volatile.

Several financial service companies have launched virtual currency indices or market data services. For example, CME Group has established a Bitcoin Real-Time Index⁷⁹ and Intercontinental Exchange offers a cryptocurrency data feed.⁸⁰

(3) Virtual Currency Market Participants

Issuers of virtual currency may be distinguished by their level of decentralization. Bitcoin, widely regarded as the most decentralized cryptocurrency, arguably lacks any person or group of people who can be identified as an issuer or otherwise as a responsible party. Instead, the Bitcoin protocol developed by Satoshi defined how miners can create new bitcoins by performing specific calculations.⁸¹ These miners generally are not thought of as true “issuers,” as they do not have the ability to control the creation and distribution of new bitcoins; rather, they receive bitcoins as a reward for performing work for the network. Other forms of virtual currency, such as tokens, may be considered to have issuers as that term is commonly understood.

⁷⁸ See, e.g., Jason Bloomberg, *What is Bitcoin's Elusive Intrinsic Value?*, FORBES (June 26, 2017, 5:22 PM), <https://www.forbes.com/sites/jasonbloomberg/2017/06/26/what-is-bitcoins-elusive-intrinsic-value/#25238ee47194>.

⁷⁹ See *CME CF Bitcoin Reference Rate & CME CF Bitcoin Real-Time Index*, CME GROUP, <http://www.cmegroup.com/trading/cryptocurrency-indices/cf-bitcoin-reference-rate.html> (last visited Feb. 27, 2019).

⁸⁰ See *ICE Comprehensive Cryptocurrency Feed*, INTERCONTINENTAL EXCHANGE, <https://www.theice.com/market-data/connectivity-and-feeds/consolidated-feed/coverage-list/cryptocurrencies> (last visited Feb. 27, 2019).

⁸¹ See NAKAMOTO, *supra* note 67.

Buyers of virtual currencies have traditionally been individuals who are speculating on the value of virtual currency with their own money. The first non-retail buyers of virtual currencies were typically businesses that purchased virtual currencies for operations, such as cryptocurrency exchanges, payment providers, and similar businesses. Over time, buyers of virtual currency have become more institutionalized. As more sophisticated investors have begun to enter the space in recent years, there has been rapid growth in hedge funds and venture funds that are focused on cryptocurrencies. Autonomous Research LLP reports that there are 780 crypto funds with \$10 - \$15 billion in assets under management.⁸² However, individual investors have been key drivers of virtual currencies, with Coinbase, the primary exchange in the United States, reporting more than 20 million users on its platform.⁸³

(e) Unique Digital Asset Features

A fork is a split in the blockchain of a digital asset where two separate blockchains with a shared history are created. Forks can result from updates to the software that change the rules that determine whether a blockchain transaction is valid or not. If only some, but not all, users accept the updated rules, then a fork may occur. One version of the software may then accept one blockchain as the valid history while the other version accepts the other blockchain as the valid history.

The causes of forks may vary. Sometimes, the changes to the rules that trigger a fork are changes that are introduced during the normal process of updating software. If the changes are widely accepted, generally the updated blockchain will win and only one chain will survive.

⁸² *Crypto Fund List*, AUTONOMOUS RESEARCH LLP, <https://next.autonomous.com/cryptofundlist/> (last visited Feb. 27, 2019) (retrieved on Dec. 20, 2018).

⁸³ *About Coinbase*, COINBASE, <https://www.coinbase.com/about> (last visited Feb. 27, 2019) (retrieved on June 20, 2018).

Other times, a fork may be triggered by a conscious decision by some participants in the network to change the rules in a manner that is not accepted by all participants in the network. For example, some forks have occurred because users have had a difference of opinion regarding the future of the network. This kind of fork can result in the existence of two separate digital assets.

A well-known example of a fork is the split of Bitcoin Cash from Bitcoin. Prior to the Bitcoin Cash fork, some Bitcoin users advocated for an upgrade to the Bitcoin rules that would permit larger blocks to be accepted by the network. Many other Bitcoin users resisted this upgrade, believing that larger block sizes would make it more difficult to maintain a decentralized network. Ultimately, a group of users believing in the need for larger blocks decided to launch the Bitcoin Cash software and fork away from the Bitcoin network to pursue a blockchain with larger blocks.

SECTION 2. COMMODITY EXCHANGE ACT AND CFTC REGULATION

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1. Introduction

The CEA is a federal statute that focuses on regulating transactions and markets in derivatives, *i.e.*, contracts whose value derives from the value of a referenced underlying “commodity.” Congress determined it is in the public interest to regulate derivatives markets, with an emphasis initially on exchange markets for futures on agricultural commodities, because derivatives markets are closely related to the cash markets for the underlying commodities and thus can have implications for the cash markets. Derivatives are used by many businesses to manage price or other risks associated with their activities. Businesses may also price commercial merchandizing or other transactions by reference to the prices discovered in centralized derivatives markets, when those prices are considered reliable projections of future market value. The hedging and price discovery benefits that centralized derivatives markets provide are deemed to be in the public interest,⁸⁴ and much of the CEA framework is intended to protect the derivatives markets and related cash markets against manipulation, unwarranted price

⁸⁴ See 7 U.S.C. § 5. Over time, Congress expanded the public interest justification for regulating derivatives markets, to recognize the public interest benefits of market self-regulation and to protect financial integrity of transactions, protect against systemic risk and protect market participants from fraud and abusive sales practices.

distortions and, for derivatives on tangible commodities that settle by delivery at expiration, congestion in deliverable supplies of the underlying commodities.

The CEA grants the CFTC regulatory authority over certain categories of derivatives transactions, as well as over certain leveraged off-exchange retail transactions regardless of whether the transactions are derivatives. The scope of the CFTC's jurisdiction depends, in part, on whether the derivative or other transaction involves a "commodity." The CEA also vests the Commission with enforcement authority (but not rulemaking authority) with respect to fraud and manipulation involving cash market trading of commodities.

Notably, the CEA definition of "commodity" is broader than one might expect based on a common understanding of the term. Although there are significant issues surrounding the scope and interpretation of what the CEA definition encompasses, the definition is understood to cover securities, foreign currencies, and other financial assets, and is not limited to tangible (physical) commodities.

The CEA makes distinctions based on the type or classification of a commodity, which are relevant because the commodity classification can lead to different regulatory treatment under the statute. For example, CEA provisions allocate jurisdiction over derivatives that are based on a security or group or index of securities (or any interest therein or based on the value thereof) between the CFTC and SEC or jointly to the two agencies. As another example, the CEA provisions regulating off-exchange retail transactions differ based on whether the commodity is a foreign currency or another type of non-security commodity. Classification as an exempt commodity (non-agricultural commodities considered non-financial in nature) or excluded commodity (considered financial in nature) is relevant for whether transactions may qualify for exclusion from futures or swaps regulation as forward contracts.

Thus, threshold questions for determining whether and how the CEA could apply to a digital or digitized asset, and transactions in the asset, include (1) whether the asset is a “commodity,” as defined in the CEA, and (2) if so, how the asset is classified—in particular, whether it is a security. A digitized asset that represents a record of title to an underlying asset, *e.g.*, a token representing ownership of gold, is simply a form of electronic title document, where it is the classification of the underlying asset that is relevant. Digital assets where the token is itself the asset may be more challenging to classify as a security or non-security commodity, if the digital asset is (or aspires to be) a virtual currency or has some other type of utility function, but may also serve an initial capital raising purpose or have other characteristics associated with securities.

This Section focuses on a particular type of digital asset, virtual currencies, because the CFTC to date has been asserting jurisdiction primarily over virtual currencies among digital assets. At the same time, the same principles that the CFTC applies to virtual currency will likely apply to other digital assets.⁸⁵

The CFTC has asserted jurisdiction over virtual currency transactions in a variety of contexts, beginning with a settlement order entered into between the CFTC and Coinflip, Inc. in 2015.⁸⁶ The CFTC based its assertion of jurisdiction on the fact that virtual currencies are

⁸⁵ See, *e.g.*, CFTC, A CFTC PRIMER ON VIRTUAL CURRENCIES (2017) [hereinafter PRIMER ON VIRTUAL CURRENCIES], https://www.cftc.gov/sites/default/files/idc/groups/public/documents/file/labcftc_primercurrencies100417.pdf (“There is no inconsistency between the SEC’s analysis and the CFTC’s determination that virtual currencies are commodities and that virtual tokens may be commodities or derivatives contracts depending on the particular facts and circumstances.”).

⁸⁶ *In the Matter of Coinflip, Inc.*, CFTC No. 15-29, [2015-2016 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 33,538, at 77,854 (Sept. 17, 2015).

“commodities,” as that term is defined in the CEA, 7 U.S.C. § 1 *et seq.*⁸⁷ The CFTC’s position regarding its statutory authority over transactions involving virtual currencies has remained consistent in public statements made by CFTC Commissioners,⁸⁸ in a CFTC-proposed interpretation of the “actual delivery” exception to regulation of leveraged retail commodity transactions,⁸⁹ in CFTC staff guidance,⁹⁰ and in enforcement actions in both administrative and

⁸⁷ *Id.* at 77,855 (“Bitcoin and other virtual currencies are encompassed in the [commodity] definition and properly defined as commodities.”).

⁸⁸ In December 2014, then-Chairman Timothy Massad considered whether the CFTC had regulatory authority over virtual currencies in congressional testimony before the Senate Committee on Agriculture, Nutrition, and Forestry. There, Massad explained:

The CFTC’s jurisdiction with respect to virtual currencies will depend on the facts and circumstances pertaining to any particular activity in question. While the CFTC does not have policies and procedures specific to virtual currencies like bitcoin, the agency’s authority extends to futures and swaps contracts in any commodity. The CEA defines the term commodity very broadly so that in addition to traditional agricultural commodities, metals, and energy, the CFTC has oversight of derivatives contracts related to Treasury securities, interest rate indices, stock market indices, currencies, electricity, and heating degree days, to name just a few underlying products. Derivative contracts based on a virtual currency represent one area within our responsibility.

See The Commodity Futures Trading Comm’n: Effective Enforcement and the Future of Derivatives Regulation: Hearing before the U.S. S. Comm. on Agric., Nutrition & Forestry, 113th Cong. 55 (2014) (statement of Timothy Massad, Chairman, CFTC). CFTC Commissioners have subsequently reiterated this conclusion. *See, e.g.*, Giancarlo HUA Statement, *supra* note 2; J. Christopher Giancarlo, Chairman, CFTC, Keynote Address Before the ABA Business Law Section, Derivatives & Futures Law Comm. Winter Meeting, Naples, Florida (Jan. 25, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo63>; J. Christopher Giancarlo, Chairman, CFTC, Chairman Giancarlo Statement on Virtual Currencies (Jan. 4, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/giancarlostatement010418>; J. Christopher Giancarlo, Chairman, CFTC, Giancarlo Commends SEC Chairman Clayton on ICO Statement (Dec. 11, 2017), <https://www.cftc.gov/PressRoom/SpeechesTestimony/giancarlostatement121117>.

Notably, in a keynote address on March 7, 2018, CFTC Commissioner Brian Quintenz not only asserted the agency’s jurisdiction over digital asset derivatives, but also stated his support for an “independent, self-regulating body” for spot virtual currency transactions. Quintenz added that a self-regulatory organization for virtual currencies could “create uniform standards . . . reduce the possibility of regulatory arbitrage, and avoid duplicative regulation,” which would address the concern of multiple federal and state regulators (including the CFTC) having jurisdiction over spot virtual currency transactions. *See* Brian Quintenz, Keynote Address by Commissioner Brian Quintenz before the DC Blockchain Summit (Mar. 7, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opaquintenz8>.

⁸⁹ *See* Retail Commodity Transactions Involving Virtual Currency, 82 Fed. Reg. 60,335, 60,337 & n.37 (proposed Dec. 20, 2017) (interpreting 17 C.F.R. pt. 1); *see also infra* Section 2.2(c).

⁹⁰ *See, e.g.*, CFTC, CFTC BACKGROUNDER ON OVERSIGHT OF AND APPROACH TO VIRTUAL CURRENCY FUTURES MARKETS (2018), https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/backgrounder_virtualcurrency01.pdf; CFTC, CUSTOMER ADVISORY: UNDERSTAND THE RISKS OF VIRTUAL CURRENCY TRADING (2017),

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civil cases.⁹¹ In May 2018, CFTC staff published guidance which restated that “bitcoin and other virtual currencies are properly defined as commodities”⁹²—an interpretation that a federal court accepted just months earlier.⁹³ The CFTC also launched LabCFTC in May 2017, which is designed to promote fintech innovation in the markets under CFTC jurisdiction by providing a space for market participants to engage with the CFTC and potentially influence its future guidance and policy decisions over virtual currencies.⁹⁴

Nevertheless, without express statutory authority over digital assets such as virtual currency, the CFTC’s ability to regulate the virtual currency market necessarily depends on whether the particular virtual currency falls within the bounds of the CFTC’s existing jurisdiction under the CEA. In particular, much of the CFTC’s statutory authority hinges on the

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https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/customeradvisory_urvct121517.pdf; CFTC, CFTC BACKGROUNDER ON SELF-CERTIFIED CONTRACTS FOR BITCOIN PRODUCTS (2017), https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/bitcoin_factsheet120117.pdf.

⁹¹ See, e.g., *CFTC v. McDonnell*, 287 F. Supp. 3d 213 (E.D.N.Y. 2018); *In re BFXNA Inc.*, CFTC No. 16-19, [2016–2017 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 33,766 (June 2, 2016).

⁹² CFTC Staff Advisory No. 18-14, Advisory With Respect to Virtual Currency Derivative Product Listings (May 21, 2018), https://www.cftc.gov/sites/default/files/idc/groups/public/%40lrlettergeneral/documents/letter/2018-05/18-14_0.pdf.

In the advisory, CFTC Staff clarified its priorities and expectations with respect to new virtual currency products to be listed on a designated contract market or swap execution facility, or cleared by a derivatives clearing organization. The advisory is intended to aid these entities in “effectively and efficiently” complying with their statutory and self-regulatory responsibilities. In light of the “significant risks associated with virtual currency markets,” CFTC staff highlighted five key areas that require heightened attention when listing a new virtual currency contract on a SEF or DCM or clearing it through a DCO: (i) enhanced market surveillance, (ii) coordination with CFTC staff, (iii) large trader reporting, (iv) outreach to stakeholders, and (v) DCO risk management.

⁹³ See *McDonnell*, 287 F. Supp. 3d at 213.

⁹⁴ As part of these efforts, LabCFTC issued a primer on virtual currencies, which is an educational tool for the public, not intended to offer any guidance or policy positions of the CFTC. See PRIMER ON VIRTUAL CURRENCIES, *supra* note 85. In November 2018, LabCFTC issued a primer on smart contracts, which is intended to help explain smart contract technology and related risks and challenges. See A PRIMER ON SMART CONTRACTS, *supra* note 62. One month later, LabCFTC published a request for public comments on crypto-asset mechanics and markets to help inform the CFTC in overseeing cryptocurrency markets and developing regulatory policy. See Request for Input on Crypto-Asset Mechanics and Markets, 83 Fed. Reg. 64,563 (Dec. 17, 2018).

involvement of a “commodity.”⁹⁵ Given the CFTC’s longstanding interpretation that virtual currencies are commodities (implicitly, of the non-security type), many of the allegations in the CFTC’s civil cases are understandably based on CEA provisions relating to the CFTC’s jurisdiction over commodities.⁹⁶ Therefore, the question of whether virtual currencies are “commodities” is critical to the CFTC’s larger efforts to regulate virtual currencies and, in particular, to prohibit fraud and manipulation.

If a particular virtual currency is a commodity under the CEA definition, that triggers another important jurisdictional question: whether it is also a security. Although the CFTC has jurisdiction over certain segments of the securities-based derivatives markets, the SEC, not the CFTC, is responsible for oversight and regulation of the cash securities markets. The CFTC’s assertion of jurisdiction over virtual currency cash markets presupposes that virtual currencies are not securities.

The sections that follow explain the CFTC’s regulatory authority over derivatives markets and certain retail transactions; the history and scope of, and interpretive issues under, the CEA’s commodity definition, along with an examination of the CFTC’s classification of virtual

⁹⁵ The CFTC may have authority over a non-commodity virtual currency to the extent it is the subject of a swap. The CEA defines “swap” in a manner that is not limited to contracts based on a commodity. Some of the provisions of the swap definition expressly list many items in addition to “commodities” (see 7 U.S.C. § 1a(47)(A)(i), (iii)), and others do not reference “commodities” at all (see *id.* § 1a(47)(A)(ii), (iv)).

⁹⁶ See *Coinflip*, Comm. Fut. L. Rep. (CCH) ¶ 33,538, at 77,855 (CEA section 4c(b), which restricts “any transaction involving any commodity which is . . . an ‘option,’”); *BFXNA Inc.*, Comm. Fut. L. Rep. (CCH) ¶ 33,766, at 79,389–90 (CEA section 2(c)(2)(D), which governs “any agreement, contract, or transaction in any commodity that is entered into with . . . a non-eligible contract participant”); *McDonnell*, 287 F. Supp. 3d at 231; Complaint at 16, *CFTC v. My Big Coin Pay*, No. 1:18-cv-10077-RWZ (D. Mass. Jan. 16, 2018); Complaint at 15, *CFTC v. Gelfman Blueprint, Inc.*, No. 17-7181 (S.D.N.Y. Sept. 21, 2017) (CEA section 6(c)(1), which prohibits manipulative schemes and fraud “in connection [with any] contract of sale of any commodity in interstate commerce”); Complaint at 3, *CFTC v. Kantor*, Civil Action No. 18-cv-2247-SJF-ARL (E.D.N.Y. Apr. 16, 2018) (CEA section 2(e), which prohibits off-exchange retail transactions in swaps; CEA section 4d(a)(1), which prohibits soliciting or accepting orders, and accepting money, for commodity options or swap transactions without registration as a futures commission merchant). While the defendants in the initial administrative enforcement actions brought by the CFTC did not challenge the CFTC’s interpretation of the commodity definition, defendants in the pending civil actions are litigating whether the relevant virtual currency is a commodity. See *infra* Section 2.3(e)(2).

currencies as commodities over which it has authority; and allocation of jurisdiction between the CFTC and SEC.

2. Classification of Transactions Under the CEA

The CEA regulates many (but not all) types of derivatives transactions, along with certain retail transactions that are not necessarily derivatives. The CEA imposes requirements on organized markets and clearing systems, industry professionals, and market participants with respect to different classifications of transactions, with further distinctions based on the nature of the underlying interest. The CEA approach is piecemeal, in that it prescribes separate requirements with respect to (i) contracts for the sale of commodities for future delivery (“futures contracts”);⁹⁷ (ii) options on commodities;⁹⁸ (iii) options on futures contracts;⁹⁹ (iv) swaps;¹⁰⁰ (v) over-the-counter (“OTC”) transactions with retail customers involving foreign currencies;¹⁰¹ and (vi) transactions in commodities that are not foreign currencies or securities with retail customers that are entered into or offered on a margined, leveraged or financed basis, unless the transaction fits within an exemption.¹⁰²

Under this structure, the term “commodity” is one element that defines the CEA’s reach

⁹⁷ 7 U.S.C. § 2(a)(1). In addition to the categories identified in the text, the CEA has special provisions for regulating long term contracts involving precious metals, referred to as “leverage contracts,” but those contracts do not trade today and are not relevant for the analysis in this white paper. The leverage contract provisions are set out in CEA section 19, 7 U.S.C. § 23.

⁹⁸ *Id.* § 6c(b).

⁹⁹ *Id.* § 2(a)(1).

¹⁰⁰ *Id.*

¹⁰¹ *Id.* § 2(c)(2)(A)–(C).

¹⁰² *Id.* § 2(c)(2)(D).

over transactions and markets. Futures are defined by reference to commodities.¹⁰³ The term “commodity” is also used in the CEA’s swap definition, but in sequence with other descriptive terms for permissible underlying interests. Thus, the commodity definition is relevant for purposes of understanding the broad scope of the swap definition, but arguably does not act as a limiting definitional element.

This Section explains the contours of CFTC jurisdiction over derivatives and retail transactions, and how that jurisdiction could apply to transactions involving virtual currencies. It also describes commercial forward and spot contracts that are outside the scope of CFTC regulation (but not necessarily outside the scope of its anti-fraud and anti-manipulation authority).

(a) Classifications of Regulated Transactions

A derivative is a contract whose value derives from the value of an underlying interest, such as a physical commodity, an interest rate, the economic or financial consequences of the occurrence of an event, or a security. Derivatives may take a variety of forms, and may require settlement by delivery (if held to expiration or, in the case of an option, upon exercise) of the underlying interest (which may occur via transfer of title) or by a cash payment. Following is a high level summary of the definitions for the different types of derivatives covered by the CEA.

Futures. The CEA does not contain a definition for the terms “futures contract” or “futures.” The definitional elements are found in the CEA’s grant of jurisdiction to the CFTC to regulate futures under CEA section 2(a)(1). Under that provision, futures contracts are “contracts of sale of a commodity for future delivery.” The CEA does, though, define the term “future

¹⁰³ Conversely, as explained in Section 2.3(b) below, whether something is classified as a commodity for CEA purposes may depend on whether it is the subject of futures trading.

delivery” or, more accurately, what the term does not mean, for the purpose of excluding from regulation as futures commercial merchandizing contracts for deferred delivery of a commodity.

Swaps. The term “swap” is defined in CEA section 1a(47) and CFTC Rule 1.3. The definition is broad, and covers many types of derivative structures, specifically:

- Puts, calls, caps, floors, collars or similar options on the value of one or more interest rates or other rates, currencies, commodities, securities (but options on securities are also excluded from the definition), instruments of indebtedness, indices, quantitative measures, or other financial or economic interests or property of any kind;
- Contracts for any purchase, sale, payment or delivery (other than payment of a dividend on an equity security) that are dependent upon the occurrence, nonoccurrence or extent of occurrence of an event or contingency associated with a potential financial, economic, or commercial consequence (*i.e.*, event contracts or binary options);
- Executory contracts for the fixed or contingent exchange of one or more payments based on the value or level of one or more interest rates, other rates, currencies, commodities, securities, instruments of indebtedness, indices, quantitative measures, or other financial or economic interests or property of any kind, or any interest therein or based on the value thereof, and that transfers, as between the parties to the transaction, in whole or in part, the financial risk associated with a future change in any such value or level without also conveying a current or future direct or indirect ownership interest in an asset (including any enterprise or investment pool) or liability that incorporates the financial risk so transferred, including contracts that become commonly known as one of an enumerated list of contracts such as interest rate swaps, currency swaps, agricultural swaps or energy swaps;
- Contracts that are or in the future become commonly known to the trade as swaps;
- Security-based swap agreements that meet the definition of “swap agreement” under Section 206A of Gramm-Leach-Bliley Act,¹⁰⁴ a material term of which is based on the price, yield, value, or volatility of any security or any group or index of securities, or any interest therein; or
- Any combination or permutation of the foregoing types of contracts, including any option thereon.

¹⁰⁴ 15 U.S.C. § 78c note.

The definition also contains some exclusions. Notably, security-based swaps, options on securities or a group or index of securities, and forwards on securities where the transactions are intended to be physically settled are not swaps.

Options. The term “option” is defined as a contract that is “of the character of, or ... commonly known to the trade as, an ‘option’, ‘privilege’, ‘indemnity’, ‘bid’, ‘offer’, ‘put’, ‘call’, ‘advance guaranty’, or ‘decline guaranty.’”¹⁰⁵ The interest underlying an option could be a commodity, or another derivative, such as a futures contract or a swap. Under a typical option, the holder, or buyer, pays a premium for the right to require the counterparty, often called the “writer,” to sell a commodity or other underlying interest to the option holder at a fixed strike price, in the case of a call option, or to purchase the commodity or other underlying interest from the option holder at a fixed strike price, in the case of a put option. In either case, the option holder has an “exercise right” to decide whether to require its counterparty to buy or sell the underlying interest. That right, depending upon the contract terms, may be exercisable at any time through the term of the option, during a narrowly defined time period at expiration or under other terms. An option on a commodity may be structured to require settlement by payment of cash for the difference between the strike price and current market price, in lieu of an actual sale and delivery of the commodity between the parties.

(b) Primary Differences in CEA Regulation of the Different Types of Derivatives

Futures and Options on Futures. Futures and options on futures are grouped together for the same general regulatory treatment.¹⁰⁶ Futures and options on futures may only legally be traded on or subject to the rules of a futures exchange. The exchange must be registered with the

¹⁰⁵ 7 U.S.C. § 1a(36).

¹⁰⁶ See 17 C.F.R. pt. 33 (rules which the CFTC adopted pursuant to its plenary authority over options involving commodities, and which apply to options on futures).

CFTC as a DCM or, if the exchange is located outside the U.S. and has market participants located in the U.S., it may operate under the CEA regime as an FBOT. Transactions in futures and options on futures must be centrally cleared by a derivatives clearing house. If the clearing house is clearing transactions in futures or options on futures that are listed on a DCM, the clearing house must be registered with the CFTC as a DCO. The CEA does not impose any restriction on who may trade on a DCM or FBOT.

Absent an exemption, a person that provides market participants with access to the exchanges and to their associated clearing houses must register with the CFTC as an FCM, whereas a person that assists market participants in arranging futures or options on futures transactions but does not act as a clearing intermediary may instead register with the CFTC as an IB. A person that provides trading advice to others with respect to the advisability of trading futures or options on futures generally must, absent an exemption, register with the CFTC as a CTA, and a person that forms and operates pooled investment vehicles that invest in such products generally must, absent an exemption, register with the CFTC as a CPO.

Transactions in futures and options on futures are not reported to a data repository. Information on the transactions is captured by the exchanges and clearing houses.

Swaps. In contrast, swaps are not subject to an exchange-trading requirement and not all swaps must be submitted to central clearing. The CFTC has authority to designate certain types of swaps for mandatory clearing, in which case the transactions must (absent an exemption) be centrally cleared, and may also have to be executed on a trading facility that is registered with the CFTC as a SEF or a DCM. For swaps that have not been designated for mandatory clearing, counterparties may enter into transactions directly on a bilateral (*i.e.*, an OTC) basis, or may

voluntarily enter into transactions on a SEF or DCM if such a market is available. They may also voluntarily clear the transactions if a DCO is available that clears the type of swap.

To legally trade swaps on a SEF or bilaterally, a person must meet the definition of ECP set out in CEA section 1a(18) and CFTC Rule 1.3. If a person is not an ECP, the person is generally considered to be “retail.” A person is not required to be an ECP to enter into swaps on a DCM.

For cleared swaps transactions, a person that provides clearing access to swaps counterparties must be registered as an FCM. Firms that assist counterparties in arranging swap transactions but which do not act as clearing intermediaries may do so pursuant to IB registration. A person that provides trading advice to others with respect to the advisability of trading swaps generally must, absent an exemption, register with the CFTC as a CTA, and a person that forms and operates pooled investment vehicles that invest in such products generally must, absent an exemption, register with the CFTC as a CPO.

Persons that hold themselves out as dealers or regularly enter into swaps with counterparties for their own account may have to register with the CFTC as swap dealers, and persons with substantial swap exposures may have to register with the CFTC as major swap participants.

Swap transactions must be reported to an SDR, regardless of whether the transaction is submitted to clearing.¹⁰⁷

Commodity Options. The CEA grants the CFTC plenary authority to adopt rules regulating commodity options in CEA section 4c.¹⁰⁸ That authority does not extend to options on

¹⁰⁷ If a transaction is submitted to and accepted for clearing, the resulting termination of the original transaction must also be reported to the SDR, and the DCO must also report the novated trades replacing the original trade to an SDR.

a security or a group or index of securities or any interest therein or based on the value thereof.¹⁰⁹

Commodity options are also covered by the statutory swap definition described above, and may instead be regulated under the swaps regime. The CFTC has determined to regulate commodity options under the same general rules that apply to swaps, with the exception of options on non-financial commodities under the “Trade Options Exemption.”¹¹⁰

(c) Special Provisions for Regulating Retail Transactions Under the CEA

Retail Forex. The CEA contains special provisions in section 2(c)(2)(B) that permit and regulate OTC trading of foreign currency futures and options on futures by retail customers, *i.e.*, by persons that are not ECPs as that term is defined in CEA section 1a(18) and CFTC Rule 1.3. It also contains comparable provisions in CEA section 2(c)(2)(C) that regulate trading by retail customers of any type of agreement, contract or transaction in foreign currency, regardless of whether it could be classified as a futures or a swap, if done on a leveraged, margined or financed basis. The statutory provisions limit the persons that are permitted to engage in such trading with retail customers, certain of which are persons that are registered with the CFTC,

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¹⁰⁸ 7 U.S.C. § 6c(b).

¹⁰⁹ See *id.* § 2(a)(1)(C)(i)(I). The provision states that the CEA does not apply to options on securities or on any group or index of securities, or any interest therein or based on the value thereof. Such options are also excluded from the CEA “swap” definition in CEA section 1a(47). Such options are included in the definitions of “security” in the Exchange Act and the Securities Act, and are regulated by the SEC.

¹¹⁰ As defined in CFTC Rule 32.3, a trade option is a commodity option that:

(i) If exercised, must be settled physically, resulting in the sale and delivery of an exempt or agricultural commodity; and

(ii) Is entered into between (A) an offeree (buyer) that (i) is a producer, processor or commercial user of, or merchant handling the commodity or the products or by-products of the commodity (*i.e.*, it is a “commercial participant”) and (ii) is entering into the transaction solely for purposes related to its business as such, and (B) an offeror (seller) that is either a commercial participant entering into the transaction solely for purposes related to its business or an eligible contract participant as defined in the CEA and CFTC Rule 1.3.

CFTC Rule 32.3 excludes trade options from classification as swaps and imposes substitute “light touch” regulation on the parties to such transactions.

such as an FCM or a retail foreign exchange dealer.¹¹¹ They also authorize the CFTC to adopt rules for registering persons that act in the capacity of an IB, CTA or CPO with respect to retail forex. The CFTC Part 5 Rules govern the retail forex activities of such persons registered with it.

Notably, the ECP definitions in CEA section 1a(18) and CFTC Rule 1.3 place a high bar for individuals to qualify, with the consequence that many individuals will be considered retail. For an individual to be considered an ECP, he or she must have amounts invested on a discretionary basis in excess of \$10 million or in excess of \$5 million if the individual is entering into transactions to manage risk associated with assets owned or liabilities incurred, or reasonably likely to be owned or incurred by such individual.

Retail Commodity Transactions. CEA section 2(c)(2)(D) provides that agreements, contracts or transactions in commodities—other than foreign currencies or securities—entered into by or offered to retail customers (non-ECPs) on a leveraged, margined or financed basis must be regulated as or “as if” they are futures, unless covered by an exemption. As explained above, many customers who are individuals will be retail. Among other things, the “as if futures” requirement arguably means that a non-exempt transaction may only be executed on or subject to the rules of a CFTC-regulated exchange, and persons providing services in connection with non-exempt transactions may be covered by one of the CEA’s registration categories for professionals (FCM, IB, CTA or CPO).

The CFTC has taken the position that tokens that may serve as a means of payment for goods or services as “virtual” currencies are not the same as currencies, and thus that bilateral retail transactions in virtual currencies may not occur under the rubric of the CEA’s retail forex

¹¹¹ The retail forex activities of other permissible counterparties may be regulated by other federal regulators. For example, firms registered with the SEC as broker-dealers are permitted to trade retail forex, but only as permitted and regulated by the SEC. The SEC currently prohibits broker-dealers from trading retail forex, with the effect that firms that are dually registered as broker-dealers and as FCMs are prohibited from that activity.

framework and instead are subject to the retail commodity transaction provisions. That is significant because retail forex transactions are not subject to the same restrictions that apply to margined, leveraged or financed sales of commodities subject to CEA section 2(c)(2)(D).

As a threshold matter, the retail commodity provisions apply only when a party to the transaction is retail, *i.e.*, is not an ECP. There is a second element that must be present for a particular commodity sale transaction to be regulated under CEA section 2(c)(2)(D): whether the seller is offering or executing the transaction on a leveraged or margined basis, or the transaction is financed either directly by the seller or by a third party acting in concert with the seller. If the answer is no, then CEA section 2(c)(2)(D) is inapplicable, notwithstanding that the buyer is retail.

If both elements are present in a transaction (retail buyer; leveraged, margined or financed transaction), there are two important exceptions under which the transaction could nonetheless occur off a CFTC-regulated exchange (and without triggering potential FCM or other professional registration).

The first, which receives the most attention, covers a transaction in a contract for the sale of a commodity that results in “actual delivery” of the commodity within 28 days. There is some uncertainty as to how the actual delivery standard will apply to any leveraged, margined or financed sales to retail buyers of assets that the CFTC considers to be virtual currencies. The CFTC’s position on what constitutes actual delivery for virtual currencies is in a state of flux. In 2013, the CFTC issued an interpretation of the term “actual delivery.” The interpretation focuses on physical (tangible) commodities,¹¹² but the CFTC applied that interpretation to bitcoin in a later enforcement action against Bitfinex as an unregistered FCM. (Interestingly, and without

¹¹² Retail Commodity Transactions Under Commodity Exchange Act, 78 Fed. Reg. 52,426 (Aug. 23, 2013) (to be codified at 17 C.F.R. pt. 1).

explanation, the CFTC did not allege that Bitfinex operated illegally as an unregistered exchange.)

In December 2017, the CFTC proposed changes to its 2013 interpretation specific to “actual delivery” of virtual currencies.¹¹³ Consistent with its position in the Bitfinex enforcement matter, the CFTC expressed its view that, to fall within the exception for a transaction for the sale of a commodity that results in actual delivery within 28 days:

- The buyer must have the ability to take possession and control of the entire amount purchased and to use it freely in commerce (both within and away from any particular platform) not later than 28 days from the date of the transaction; and
- The offeror/seller, or a person acting in concert with the offeror/seller to provide the financing, may not retain any interest or control over any of the commodity purchased on margin, leverage, or other financing arrangement at the expiration of 28 days from the date of the transaction.

To date, the CFTC has not adopted final changes to the interpretation. In other contexts, the CFTC has taken a comparable position that arrangements to lock up a commodity as collateral for longer than 28 days for a loan whose proceeds were used to purchase the commodity runs afoul of the actual-delivery-within-28-days requirement.

The second exception from having to treat a contract for the sale of a commodity as or “as if” it were a futures contract applies when (i) the contract creates an enforceable delivery obligation between the seller and the buyer and (ii) the seller and the buyer have the ability to deliver and accept delivery of the commodity in connection with their respective lines of business. To date, the CFTC has declined to provide any interpretive guidance on this exception. The focus on the commercial nature of the parties and the transaction suggests that this exception

¹¹³ Retail Commodity Transactions Involving Virtual Currency, 82 Fed. Reg. 60,335 (proposed Dec. 20, 2017) (to be codified at 17 C.F.R. pt. 1).

is a counterpart to the forward contract exclusions discussed below that exclude commercial merchandizing transactions from regulation as futures or swaps.

(d) Commercial Forward Contracts and Spot Contracts

The CFTC is not authorized under the CEA to adopt rules regulating trading in the cash markets for physical (or nonfinancial) commodities, known as forward or spot contracts or transactions. And the SEC, not the CFTC, regulates initial offerings of securities and secondary market trading of securities. The CFTC, though, does have certain authority to monitor the cash market activities of users of the derivatives markets, combined with authority to impose recordkeeping requirements on such persons relating to their cash market activities. The CFTC also has authority to require hedgers to file certain reports regarding their cash market positions and commercial operations.

Notably, the CEA makes it unlawful to manipulate or to attempt to manipulate the prices of any commodity, and vests the CFTC with authority to take enforcement action against any person that engages in such conduct. The CEA also classifies manipulation and attempted manipulation as criminal felonies which may be prosecuted by the U.S. Department of Justice.

Commercial Forward Transactions. A forward contract under the exclusions is a commercial merchandizing contract between commercial parties, where delivery of a non-financial commodity (such as an agricultural, energy or metals commodity) is deferred for commercial reasons, the parties intend to make or take delivery of the commodity, and delivery routinely occurs. Forward contracts are excluded from regulation as futures pursuant to CEA section 2(a), in conjunction with section 1a(27), which provides that the term “future delivery” used in section 2(a) does not include “any sale of any cash commodity for deferred shipment or delivery.” The exclusion is not by its terms limited to forward contracts for non-financial

commodities, but it historically has been applied to, and interpreted in the context of, sales of physical or tangible commodities.

The CEA swap definition expressly excludes forward contracts on “non-financial commodities” (and on securities), provided the parties intend to physically settle the transactions, with the consequence that such contracts are excluded from regulation as swaps. When the CFTC adopted its swap product definition rules in August 2012, it stated that it would interpret the forward contract exclusions from the futures and swap definitions in a consistent manner.¹¹⁴

Spot Contracts. Spot contracts are commercial contracts for the sale of a commodity for delivery within two days, or such other short timeframe consistent with applicable market convention, under which the commodity is typically delivered. Spot contracts are generally outside the regulatory ambit of the CEA (apart from the anti-fraud and anti-manipulation provisions or potential application of the retail forex or retail commodity transaction provisions described above).

(e) CFTC Registration Requirements for Virtual Currency Market Participants

Market participants that are dealing in, or providing services related to, derivatives on a virtual currency may be required to register with the CFTC. The CEA establishes different registration categories based on a participant’s activities. The chart below summarizes the CEA registration categories.¹¹⁵

¹¹⁴ When it adopted the swap product definition rules, the CFTC also provided extensive interpretive guidance for determining whether contracts on non-financial commodities should be classified as excluded forward contracts. The analysis is fact intensive, based on the specific circumstances.

¹¹⁵ The registration requirements in this chart presume that the virtual currencies are not securities. If the virtual currency is a security, a market participant may have to register with the SEC or, in some cases, with both the CFTC and the SEC (for example, if the derivative is a futures contract on a virtual currency that is a security).

Registration Category	Registration Requirement
Swap Dealer (“SD”)	An entity that either (i) holds itself out as a dealer in swaps on virtual currencies; (ii) makes a market in swaps on virtual currencies; (iii) regularly enters into swaps in virtual currencies for its own account in the ordinary course of business; or (iv) engages in activities causing it to be commonly known as a dealer or market maker in swaps on virtual currencies, must register with the CFTC and become a member of the NFA, unless certain exceptions apply. For instance, a dealer is not required to register with the CFTC if the gross notional value of its swap dealing trades, combined with those of its affiliates, over the prior twelve months is below \$8 billion. ¹¹⁶
Major Swap Participant (“MSP”)	An entity that is not a SD but maintains a position in swaps on virtual currencies that is substantial enough that the entity’s default could have adverse effects on the financial stability of the U.S. banking system is required to register with the CFTC and become an NFA member. ¹¹⁷
Futures Commission Merchant (“FCM”)	An entity that (i) “engages in soliciting or accepting orders for” futures or swaps on virtual currencies, options on futures on virtual currencies, retail off-exchange foreign exchange contracts or swaps on virtual currencies; and (ii) in connection with those activities, accepts any money, securities or property or extends credit in lieu thereof to margin, guarantee or secure the resulting trades must register with the CFTC and become an NFA member, unless an exemption applies. ¹¹⁸
Introducing Broker (“IB”)	An entity that “engages in soliciting or accepting orders for” futures or swaps on virtual currencies but does not accept any money, securities or property from customers, or extend credit in lieu thereof to margin, guarantee or secure the resulting trades must register with the CFTC and become an NFA member, unless an exemption applies. ¹¹⁹
Commodity Pool Operator (“CPO”)	An entity that operates a commodity pool (<i>i.e.</i> , “any investment trust, syndicate, or similar form of enterprise operated for the purpose of trading in commodity interests”), or an investment trust, syndicate, or other pooled investment vehicle that invests in derivatives on virtual currencies, must register with the CFTC and become an NFA member, unless certain exemptions apply. ¹²⁰

¹¹⁶ 7 U.S.C. § 1a(49); 17 C.F.R. § 1.3.

¹¹⁷ 7 U.S.C. § 1a(33); 17 C.F.R. § 1.3.

¹¹⁸ 7 U.S.C. § 1a(28); 17 C.F.R. § 1.3.

¹¹⁹ 7 U.S.C. § 1a(31); 17 C.F.R. § 1.3.

¹²⁰ 7 U.S.C. § 1a(11); 17 C.F.R. § 1.3.

Registration Category	Registration Requirement
Commodity Trading Advisor (“CTA”)	An entity that advises others on trading in futures, swaps, and other derivatives on virtual currencies for compensation or profit must register with the CFTC and become an NFA member, unless certain exemptions apply. ¹²¹
Associated Person (“AP”)	An individual who solicits customers or supervises others who solicit customers on behalf of any of the registered entities above (other than SDs or MSPs) must register with the CFTC and become a member of the NFA. APs of SDs or MSPs are subject to a fitness screening. ¹²²

Any person registered in one of the foregoing capacities (with the exception of an AP of a swap dealer) must also become a member of the NFA.¹²³ NFA is a self-regulatory organization for industry professionals, created in 1976 pursuant to statutory authority.¹²⁴ It is registered with the CFTC as a “registered futures association,” and is subject to CFTC oversight. Members of NFA are bound by NFA’s rules, and subject to NFA’s self-regulatory oversight and disciplinary authority.¹²⁵

3. CFTC’s Treatment of Virtual Currencies as Commodities

(a) The CEA “Commodity” Definition

As the structure of the CEA illustrates, determining whether the CFTC has jurisdiction over transactions involving virtual currencies in large part turns on whether they fall within the

¹²¹ 7 U.S.C. § 1a(12); 17 C.F.R. § 1.3.

¹²² 7 U.S.C. § 1a(4); 17 C.F.R. §§ 1.3, 5.1(h)(2).

¹²³ See 17 C.F.R. §§ 3.2, 3.12. Individuals who are “principals” of a registered firm are also subject to fitness screening by NFA. As defined in CFTC Rule 3.1(a), 17 C.F.R. § 3.1(a), the term covers individuals who are in a position to exercise a controlling influence over activities of the firm that are subject to CFTC regulation, such as a board member, president, chief executive officer, chief operating officer, chief financial officer or head of a business division engaged in CFTC-regulated activities. It also covers individuals who (directly or indirectly) have a 10% or more financial or ownership interest in any class of the firm’s voting securities, or have contributed 10% or more of the firm’s capital.

¹²⁴ 7 U.S.C. § 21.

¹²⁵ NFA’s oversight can extend to the activities of members relating to digital assets. In that regard, NFA adopted an interpretative notice that took effect on October 31, 2018, which imposes disclosure obligations on FCMs, IBs, CTAs and CPOs regarding virtual currency derivative and underlying or spot virtual currencies.

CEA’s commodity definition, which defines the CEA’s reach over transactions and markets. The commodity definition includes two categories, one narrow and one that is potentially very broad: (i) an enumerated list of agricultural commodities; and (ii) “all other goods and articles, ... and all services, rights, and interests ... in which contracts for future delivery are presently or in the future dealt in” (with two limited exceptions).¹²⁶

The definition—which has not been amended since 2010¹²⁷—understandably does not expressly reference virtual currencies. The legislative history behind the commodity definition, however, provides insight as to whether the definition should be interpreted to contemplate including virtual currencies. The second, broad category of the commodity definition was added to the CEA in 1974, to grant the newly-created CFTC expansive authority over futures markets. By establishing a far more open-ended definition of “commodity,” Congress provided the CFTC substantial latitude to determine the scope of its authority through its interpretation of the flexible category. However, as illustrated by the CFTC’s recent attempts to combat alleged fraud in the virtual currency markets, the CFTC’s assertion of expansive authority over non-derivative markets generates interpretative issues as market participants seek clarity regarding the bounds of the CFTC’s authority.

(b) Evolution of the CEA “Commodity” Definition

Until 1974, Congress specified the bounds of commodity futures regulation through the narrow commodity definition, and expanded it over time on a commodity-by-commodity basis to regulate additional markets that Congress determined warranted regulation. Congress first

¹²⁶ 7 U.S.C. § 1a(9).

¹²⁷ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 721(a), 741(b)(10), 124 Stat. 1376, 1658, 1732 (2010).

enacted the Grain Futures Act in 1922¹²⁸ to regulate futures trading in “grain,” which was defined by the Act to mean “wheat, corn, oats, barley, rye, flax, and sorghum.”¹²⁹ In 1936, Congress replaced the Grain Futures Act with the CEA to address limitations from the use of the “grain” definition.¹³⁰ Congress replaced the term “grain” with “commodity” in an effort to make the CEA more generally applicable to any additional item that Congress later determined should be subject to futures regulation.¹³¹ The CEA also expanded the list of commodities (and, therefore, the Commodity Exchange Authority’s jurisdiction) to include cotton, rice, mill feeds, butter, eggs, and *Solanum tuberosum* (Irish potatoes).¹³²

Over the years, Congress expanded the coverage of the CEA by amending the commodity definition to add specified commodities such as “fats and oils, ... cottonseed meal, cottonseed, peanuts, soybeans, and soybean meal” and “frozen concentrated orange juice.”¹³³ Before Congress established the CFTC, however, the commodity definition covered only enumerated agricultural commodities.

The 1974 amendments reflected a notable departure from Congress’s traditional approach as the new definition of “commodity” not only retained a list of agricultural commodities but added a category of goods, articles, services, rights and interests that contemplated the CFTC’s exercise of jurisdiction over additional commodities without congressional action.

¹²⁸ Grain Futures Act, Act of Sept. 21, 1922, Pub. L. No. 67-331, 42 Stat. 998 (1922). The Grain Futures Act replaced the Future Trading Act, Act of Aug. 24, 1921, Pub. L. No. 67-66, 42 Stat. 187 (1921), which the Supreme Court found to be unconstitutional in *Hill v. Wallace*, 259 U.S. 44 (1922).

¹²⁹ 7 U.S.C. § 2 (1925).

¹³⁰ Act of June 15, 1936, Pub. L. No. 74-675, 49 Stat. 1491 (1936).

¹³¹ *Regulation of Grain Exchanges: Hearing Before the H. Comm. on Agric.*, 73rd Cong. 11 (1934) (statement of J.M. Mehl, Assistant Chief Grain Futures Admin., U.S. Dep’t of Agric.); *see also* H.R. REP. NO. 1522, at 2 (1934).

¹³² 7 U.S.C. § 2 (1934 & Supp. II 1936).

¹³³ Act of Jul. 23, 1968, Pub. L. No. 90-418, 82 Stat. 413 (codified at 7 U.S.C. § 2 (1964 & Supp. IV v. 1 1968)).

The current commodity definition maintains the revised structure set by Congress in 1974:

The term “commodity” means wheat, cotton, rice, corn, oats, barley, rye, flaxseed, grain sorghums, mill feeds, butter, eggs, *Solanum tuberosum* (Irish potatoes), wool, wool tops, fats and oils (including lard, tallow, cottonseed oil, peanut oil, soybean oil, and all other fats and oils), cottonseed meal, cottonseed, peanuts, soybeans, soybean meal, livestock, livestock products, and frozen concentrated orange juice, and all other goods and articles, except onions (as provided by section 13-1 of this title) and motion picture box office receipts (or any index, measure, value, or data related to such receipts), and all services, rights, and interests (except motion picture box office receipts, or any index, measure, value or data related to such receipts) in which contracts for future delivery are presently or in the future dealt in.¹³⁴

The breadth of the commodity definition is evidenced by the fact that Congress has carved out only onions and movie box office receipts from the commodity definition, in 1974 and 2010,¹³⁵ respectively.

The expanded commodity definition, while undoubtedly granting expansive authority over the commodity futures markets to the CFTC, unavoidably invites questions on the limits to the CFTC’s jurisdiction. This issue is most apparent in the context of novel products involving underlying interests that do not resemble the commodities enumerated in the statutory definition. Under the more expansive commodity definition, each novel product over which the CFTC exercises authority raises the question of whether the agency is extending its jurisdiction farther than Congress intended. This question is particularly relevant in circumstances where the agency is not exercising its authority in the futures or swaps market, over which the CFTC’s jurisdiction is plenary and clear,¹³⁶ but rather in the spot or cash market where the CFTC’s authority is

¹³⁴ 7 U.S.C. § 1a(9).

¹³⁵ Dodd-Frank Act, *supra* note 127, § 721(a), 124 Stat. at 1659.

¹³⁶ 7 U.S.C. § 2(a)(1).

limited to anti-fraud and anti-manipulation enforcement, or pursuant to its authority to regulate certain retail commodity transactions.

(c) Interpretative Issue Raised by the Commodity Definition: Does a Virtual Currency Require the Existence of Overlying Futures Contracts to Be Deemed a Commodity?

As virtual currencies are not any of the enumerated agricultural commodities, whether the CFTC has jurisdiction over transactions in virtual currencies depends (with limited exception¹³⁷) on whether they fall within any of the categories in the second portion of the definition—“goods and articles, ... [or] all services, rights, and interests ... in which contracts for future delivery are presently or in the future dealt in.” One interpretative question related to the treatment of virtual currencies under this portion of the commodity definition is whether a futures contract on a virtual currency must already exist for such virtual currency to be considered a “commodity.”

There are different ways to read the second category of the commodity definition. The first, and narrowest, approach to understanding this phrase is that only goods, articles, services, rights and interests on which a futures contract exists are “commodities” under the CEA. This reading necessarily makes the existence of futures trading on a commodity a prerequisite for the CFTC to assert its authority over something as a commodity. Accordingly, although the CEA definition contemplates futures contracts that are “in the future,” a commodity would not be deemed to be a “commodity” for purposes of the CEA definition until it was the subject of a futures contract.¹³⁸

¹³⁷ As explained above, CEA regulation of swaps is not limited to swaps on commodities.

¹³⁸ The definition’s “in the future” language could be read by reference to the definition’s establishment in 1974, such that Congress intended that the Commission’s jurisdiction not be limited by the futures contracts already in existence at that time but rather would extend to any commodity over which a futures contract was established thereafter.

A variation of this reading is that the futures trading element only qualifies “services, rights, and interests” and not “goods and articles.” If this interpretation applies, it is then necessary to determine whether a virtual currency is a good or article. If it is, futures trading is not a prerequisite to classifying the virtual currency as a commodity, but if it is instead a service, right or interest, the futures trading element is relevant.

Under a broad reading, the commodity definition encapsulates all goods, articles, services, rights and interests on which a futures contract exists as well as any other commodity that could be the subject of futures trading in the future.¹³⁹ Under this interpretation, the CFTC would have jurisdiction over a commodity so long as it is possible that the commodity could be the subject of a futures contract and would not necessarily require a futures market to exist prior to asserting its jurisdiction over that commodity.

Finally, the middle-ground approach is that there needs to be an overlying futures contract but not on the precise item as long as there is a futures contract on another item that belongs to the same category of commodity. As explained further below in Section 2.3(d)(2), the court in *CFTC v. My Big Coin Pay*¹⁴⁰ took this stance and held that the CFTC has enforcement jurisdiction over MBC, a virtual currency that has no overlying futures contract, because futures contracts do exist for bitcoin, and MBC and bitcoin belong to the same category of commodity.

Evaluating each interpretative approach through the lens of the legislative history of the commodity definition offers some additional insight, though not a clear answer as to how this condition should be understood. All four possible readings of the definition would seemingly be consistent with Congress’s intent in 1974 to end its longstanding approach to specifying the

¹³⁹ See CFTC, STATEMENT OF THE COMMISSION (2010), <http://www.cftc.gov/ucm/groups/public/@otherif/documents/ifdocs/mdexcommissionstatement061410.pdf>.

¹⁴⁰ *CFTC v. My Big Coin Pay, Inc.*, 334 F. Supp. 3d 492 (D. Mass. 2018).

bounds of commodity regulation through enumerating the commodities over which agency jurisdiction could be exercised. Even under the narrowest reading of the commodity definition, the interest underlying any futures trading that developed after 1974 would be included in the definition, thereby avoiding an outcome where expanding the CFTC's authority depended on congressional action.

The narrowest approach, however, would limit the CFTC's jurisdiction by tying the CFTC's authority directly to commodities that are already encompassed by futures trading. This outcome seemingly raises a concern similar to that which influenced Congress's first legislative approach because the CFTC's authority would again depend on congressional action to combat fraud and manipulation with respect to a commodity that was not yet subject to a futures contract. On the other hand, the original public interest justification for regulating futures markets is based on the interrelationship between futures markets and underlying cash markets, suggesting the narrowest approach is consistent with congressional intent.

Under the expansive reading of the definition, the CFTC would not be subject to this limitation, as it would be able to regulate an emerging commodity so long as a futures market could conceivably develop on that commodity. However, the expansive reading may create as many problems as it solves. Under this reading, the CFTC's anti-fraud and anti-manipulation authority could be read to capture *any* good, article, service, right or interest, including those that do not necessarily have any connection to the futures markets.¹⁴¹

The middle-ground approach avoids the untenable implications of the expansive reading, but it still begs the question of what items would be deemed to belong to the same "category" of

¹⁴¹ Press Release, Bart Chilton, Comm'r, CFTC, Statement on MDEX Application Regarding Box Office Receipt Contracts (June 14, 2010), <https://www.cftc.gov/PressRoom/SpeechesTestimony/chiltonstatement061410>.

commodity and thus subject to the CFTC's jurisdiction. That question could become more salient in the regulation of virtual currencies as different virtual currencies develop distinct characteristics. For example, virtual currencies may possess all or some of the characteristics of payment tokens, utility tokens, asset tokens, and hybrid tokens and the virtual currencies' characteristics may even evolve over time.

How these interpretative issues are resolved is important to the question of whether virtual currencies are subject to the CFTC's jurisdiction under the CEA. Only one virtual currency, bitcoin, is currently the subject of exchange-listed futures trading.¹⁴²

(d) Another Interpretative Question: If Virtual Currencies Are Commodities, What Type of Commodity Are They?

The CEA makes distinctions based on the type or classification of a commodity. It refers in various provisions to securities, foreign currencies, non-financial commodities, agricultural commodities, excluded commodities and exempt commodities, and includes definitions of the latter two classifications.

Classification of a virtual currency as a security or non-security is important, because the CEA and federal securities laws allocate jurisdiction over securities-related derivatives between (or jointly to) the CFTC and SEC, as explained more fully below. Thus, there is potential for conflicting assertions of jurisdiction over transactions in virtual currencies if the CFTC and SEC take different positions on whether a particular virtual currency is a security.

If a virtual currency is a non-security commodity, another important distinction is whether it could be considered a foreign currency. As explained above, the CFTC takes the

¹⁴² Futures are generally subject to an exchange-trading requirement. Thus, listing on a futures exchange is not an element of the futures contract definition, but a consequence that follows from classification of a contract as a futures contract. To the extent that futures trading is permitted to occur outside the exchange-trading requirement or occurs in disregard of that requirement, such trading could also provide a basis under the narrow interpretation for classifying the interests underlying such trading as commodities.

position that virtual currencies are not currencies, with the consequence that retail transactions involving virtual currencies could not operate under the more favorable CEA framework governing retail forex, and must instead be considered under the more restrictive provisions applicable to retail commodity transactions.

If virtual currencies are not considered to be foreign currencies, that also means that physical delivery swaps involving virtual currencies are outside the scope of the Treasury Department's determination to exclude deliverable foreign exchange forwards and foreign exchange swaps from the CEA's definition of "swap." Swap transactions that are covered by the Treasury determination would not be subject to swap regulations except for swap data reporting and business conduct standards applicable to swap dealers.¹⁴³

The distinction between excluded commodities and exempt commodities is also relevant to the extent that it is a proxy for distinguishing financial commodities from non-financial commodities.

The term "excluded commodity," added by Congress to the CEA in 2000,¹⁴⁴ means:

- (i) an interest rate, exchange rate, currency, security, security index, credit risk or measure, debt or equity instrument, index or measure of inflation, or other macroeconomic index or measure;
- (ii) any other rate, differential, index, or measure of economic or commercial risk, return, or value that is—
 - (I) not based in substantial part on the value of a narrow group of commodities not described in clause (i); or
 - (II) based solely on one or more commodities that have no cash market;
- (iii) any economic or commercial index based on prices, rates, values, or levels that are not within the control of any party to the relevant contract, agreement, or transaction; or
- (iv) an occurrence, extent of an occurrence, or contingency (other than a change in the price, rate, value, or level of a commodity not described in clause (i)) that

¹⁴³ 7 U.S.C. § 1a(47)(E)(iii)–(iv).

¹⁴⁴ Act of Dec. 21, 2000, Pub. L. No. 106-554, 114 Stat. 2763 (2000); *see also* H.R. REP. NO. 106-711, pt. 1, at 33 (2000).

is—

- (I) beyond the control of the parties to the relevant contract, agreement, or transaction; and
- (II) associated with a financial, commercial, or economic consequence.¹⁴⁵

The term “exempt commodity” means “a commodity that is not an excluded commodity or an agricultural commodity.”¹⁴⁶ This definition is thus a catchall category that includes energy interests and precious metals. Exempt commodities and agricultural commodities together generally cover commodities that are considered non-financial.

The regulatory implications of the excluded versus exempt commodity characterization is most notable where market participants are transacting in forwards or swaps based on virtual currencies. If virtual currencies are considered to be excluded commodities, the forward contract exclusions discussed above are probably not available, because the exclusion from the “swap” definition is by its terms limited to non-financial commodities, and the exclusion from the futures definition is typically read to apply to non-financial commodities.

The CFTC’s Trade Option Exemption, which excludes qualifying options from regulation as swaps, is by its terms limited to options on exempt or agricultural commodities, and thus would be unavailable for options on virtual currencies if the virtual currency is classified as an excluded commodity.¹⁴⁷

Virtual currencies defy easy categorization because of their diverse characteristics and evolving uses. In the simplest reading, the term virtual currency necessarily includes the term “currency,” which suggests that virtual currencies can be used as a means of payment and, as

¹⁴⁵ 7 U.S.C. § 1a(19).

¹⁴⁶ *Id.* § 1a(20).

¹⁴⁷ 17 C.F.R. § 32.3(a). Entities that qualify for the Trade Option Exemption still must comply with certain CFTC rules such as certain of the Part 23 rules for Swap Dealers and Major Swap Participants and the capital and margin requirements for Swap Dealers and Major Swap Participants. *See id.* § 32.3(c).

such, should be treated like a currency for regulatory purposes.¹⁴⁸ The CFTC nonetheless has declined to treat virtual currencies the same as currencies. Bitcoin and other virtual currencies also share characteristics with precious metals, which have historically been treated as exempt commodities, due to their intrinsic use and value.¹⁴⁹ Virtual currencies exist in limited supply, are often capable of delivery, and are capital goods used to produce other goods and services.¹⁵⁰ The CFTC has not yet definitively resolved the question of whether virtual currency is an excluded or exempt commodity.

When asserting that virtual currencies are commodities, though, the CFTC's statements to date suggest that it considers virtual currencies to be exempt commodities. For example, in *Coinflip*, the CFTC stated that "Bitcoin and other virtual currencies are distinct from 'real' currencies, which are the coin and paper money of the United States or another country that are designated as legal tender, circulate, and are customarily used and accepted as a medium of exchange in the country of issuance."¹⁵¹ Further, the CFTC seemingly suggested that virtual currencies are exempt commodities by considering whether the bitcoin options at issue in *Coinflip* were offered pursuant to the Trade Option Exemption under CFTC Rule 32.3.¹⁵² This apparent approach is consistent with public statements made by CFTC and SEC leadership

¹⁴⁸ Indeed, bitcoin, the leading virtual currency today, is already being used as a means of payment in some cases. See, e.g., Kenneth Rapoza, *Goldman Sachs Caves: Bitcoin Is Money*, FORBES (Jan.10, 2018, 11:15 AM), <https://www.forbes.com/sites/kenrapoza/2018/01/10/goldman-sachs-caves-bitcoin-is-money/>.

¹⁴⁹ See, e.g., *What is Ether*, ETHEREUM, <https://www.ethereum.org/ether> (last visited Mar. 1, 2019) ("Ether is a necessary element—a fuel—for operating the distributed application platform Ethereum.").

¹⁵⁰ Houman B. Shadab, *Regulating Bitcoin and Block Chain Derivatives*, Written Statement to the CFTC Global Markets Advisory Committee 5 (Oct. 9, 2014), https://www.cftc.gov/sites/default/files/idc/groups/public/@aboutcftc/documents/file/gmac_100914_bitcoin.pdf.

¹⁵¹ *Coinflip*, Comm. Fut. L. Rep. (CCH) ¶ 33,538, at 77,855 n.2.

¹⁵² *Id.* at 77,856 & n.5.

contrasting virtual currencies with traditional currencies.¹⁵³

In the consent order that the CFTC later entered into with Bitfinex, the CFTC similarly signaled that it may view virtual currencies as exempt, not excluded, commodities. The CFTC there referred to CEA section 2(c)(2)(D) when reasoning that the margined virtual currency transactions that were offered by Bitfinex did not qualify for an exception from CFTC jurisdiction over retail commodity transactions.¹⁵⁴ CEA section 2(c)(2)(D) is a provision that applies to retail commodity transactions, rather than the analogous retail foreign exchange transaction exception. By evaluating the legality of Bitfinex's virtual currency transactions by reference to the retail commodity provision rather than its retail foreign currency counterpart, the CFTC signaled that it may view virtual currency as an exempt commodity.

The CFTC made clear that its interpretation would apply to retail commodity transactions and would not apply to retail foreign currency transactions covered by CEA section 2(c)(2)(C) in its subsequent proposed interpretation and request for comment regarding how the "actual delivery" exception would apply to virtual currencies.¹⁵⁵ The CFTC explained that it considered virtual currencies to be "like many other intangible commodities that the Commission has recognized over the course of its existence (*e.g.*, renewable energy credits and emission allowances, certain indices, and certain debt instruments, among others). Indeed, since their inception, virtual currency structures were proposed as digital alternatives to gold and other

¹⁵³ Jay Clayton & J. Christopher Giancarlo, *Regulators are Looking at Cryptocurrency*, WALL ST. J. (Jan. 24, 2018, 6:26 PM), <https://www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363> ("But cryptocurrencies lack a fundamental characteristic of traditional currencies, namely sovereign backing. They also lack other hallmarks of traditional currencies, such as governance standards, accountability and oversight, and regular and reliable reporting of trading and related financial data. Significantly, cryptocurrencies are now being promoted, pursued and traded as investment assets, with their purported utility as an efficient medium of exchange being a distant secondary characteristic.").

¹⁵⁴ *In re BFXNA Inc.*, CFTC No. 16-19, [2016–2017 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 33,538.

¹⁵⁵ Retail Commodity Transactions Involving Virtual Currency, 82 Fed. Reg. 60,335 (proposed Dec. 15, 2017) (interpreting 17 C.F.R. pt. 1).

precious metals.”¹⁵⁶

Although the principal attributes of virtual currencies are important in determining how to categorize them under the CEA, it will also be important for the CFTC to consider how any future determination compares to statements it has already made or actions it has already taken. For example, if the CFTC determined that virtual currencies are excluded commodities because of their use as a medium of exchange and payment, such a determination would seem consistent with the CFTC’s prior conclusion that excluded commodities “generally are financial” whereas “exempt and agricultural commodities by their nature generally are nonfinancial.”¹⁵⁷ On the other hand, the CFTC would be tasked with reconciling its decision to put virtual currencies in the same “excluded” category as fiat currencies with prior CFTC statements (some of which we have described above), as well as current positions of agencies such as the IRS and FinCEN¹⁵⁸ that found virtual currencies to be dissimilar to fiat currencies, irrespective of their potential use as a payment medium.¹⁵⁹ The CFTC would also need to distinguish the main characteristics of virtual currency from other exempt commodities that similarly have intrinsic value in order to

¹⁵⁶ *Id.* at 60,337–38 (footnote omitted) (citing Further Definition of ‘Swap,’ ‘Security-Based Swap,’ and ‘Security-Based Swap Agreement’; Mixed Swaps; Security-Based Swap Agreement Recordkeeping, 77 Fed. Reg. 48,207, 48,233 (Aug. 13, 2012) (“Swap Definition Rule”) (discussing application of the swap forward exclusion to intangible commodities)).

¹⁵⁷ Swap Definition Rule, 77 Fed. Reg. at 48,232; *see also* Excluded Commodity, CFTC GLOSSARY, CFTC, https://www.cftc.gov/ConsumerProtection/EducationCenter/CFTCGlossary/glossary_e.html (last visited Mar. 1, 2019) (“Excluded Commodity: In general, the Commodity Exchange Act defines an excluded commodity as: any financial instrument such as a security, currency, interest rate, debt instrument, or credit rating; any economic or commercial index other than a narrow-based commodity index; or any other value that is out of the control of participants and is associated with an economic consequence. See the Commodity Exchange Act definition of excluded commodity.”).

¹⁵⁸ Both the IRS and FinCEN have interpreted virtual currencies to not be “currencies.” *See* I.R.S. Notice 2014-21, 2014-16 I.R.B. 938; FINCEN, FIN-2013-G001, APPLICATION OF FINCEN’S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES (2013), [hereinafter FIN-2013-G001], <https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf>.

¹⁵⁹ CFTC Staff Advisory No. 18-14, at 2 (May 21, 2018), https://www.cftc.gov/sites/default/files/idc/groups/public/%40rllettergeneral/documents/letter/2018-05/18-14_0.pdf (“The Commission interprets the term ‘virtual currency’ broadly, to encompass any digital representation of value that functions as a medium of exchange and any other digital unit of account used as a form of currency.”).

avoid calling into question whether other exempt commodities may fall within the excluded commodity category. Conversely, if the CFTC were to categorize virtual currencies as exempt commodities, it would need to go through a similar exercise. Further complicating the CFTC's task is the development of new types of virtual currencies that may operate like a traditional currency, such as "stablecoins" whose prices are tied to a fiat currency.

It is against this backdrop of the commodity definition—and the outstanding questions related to the scope and content of the definition—that the CFTC asserted its jurisdiction over virtual currencies. As the discussion below explains, having determined definitively that virtual currencies are commodities (implicitly as non-securities), the CFTC faces numerous challenges regarding its regulatory approach to them.

(e) The CFTC's Asserted Jurisdiction over Virtual Currencies as Commodities

Key regulatory consequences flow from the CFTC's determination that bitcoin and other virtual currencies are commodities, and of a type that are not securities. First, the CFTC possesses anti-fraud and anti-manipulation authority over such commodities in interstate commerce, so to the extent the CFTC finds fraud or manipulation occurring in connection with virtual currencies, it can take enforcement action. Second, the CFTC has full regulatory authority over derivatives on virtual currencies that are not securities, such as futures contracts. We discuss below the basis for the CFTC's critical determination that virtual currencies are commodities, challenges to that determination, and the responsive actions taken by the Commission.

(1) Basis for the CFTC's View That Virtual Currencies Are Commodities

The CFTC initially articulated its position that virtual currencies are commodities through administrative proceedings. However, in each of those matters the CFTC did not provide many, if any, supporting points to explain its reasoning or criteria for determining that virtual currencies were commodities. As explained below in Section 2.3(e)(2), it was not until

defendants challenged the CFTC’s asserted jurisdiction in civil actions that the Commission came forward with a more substantial explanation for its authority over virtual currencies.

In September 2015, the CFTC determined for the first time that “Bitcoin and other virtual currencies are encompassed in the [commodity] definition and properly defined as commodities” in its settlement agreement with Coinflip, Inc., a trading platform.¹⁶⁰ The Commission based that conclusion on two factors: (i) the statutory definition of commodity includes “all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in,” and (ii) the definition of a commodity is “broad.”¹⁶¹ But the consent order provides no additional, more specific explanation as to why bitcoin and virtual currencies fall within the “services, rights, and interests” commodity definition category. Under the terms of the order, Coinflip agreed to cease and desist from its conduct but was not required to pay a civil monetary penalty—a relatively rare occurrence in a CFTC enforcement action. Perhaps the CFTC refrained from imposing a civil monetary penalty because this was a “first of its kind” case, the CFTC’s first step in providing notice to the market of its assertion of enforcement authority over virtual currencies.

A week after the Coinflip settlement, the CFTC settled with TeraExchange, LLC, a registered SEF, regarding allegations that the SEF failed to prevent wash trading by publicizing the execution of non-deliverable forward contracts based on the value of the U.S. Dollar and bitcoin without disclosing that the trades were pre-arranged.¹⁶² The CFTC relied on its initial determination in *Coinflip*, stating in a footnote of its order, “Bitcoin is a commodity under

¹⁶⁰ *Coinflip*, Comm. Fut. L. Rep. (CCH) ¶ 33,538, at 77,855.

¹⁶¹ *Id.* (quoting 7 U.S.C. § 1a(9); citing *Bd. of Trade of City of Chi. v. SEC*, 677 F.2d 1137, 1142 (7th Cir. 1982)).

¹⁶² *In the Matter of TeraExchange LLC*, CFTC No. 15-33, [2015-2016 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 33,546, at 77,893–94 (Sept. 24, 2015).

Section 1a of the Act . . . and is therefore subject as a commodity to applicable provisions of the Act and Regulations.”¹⁶³ The order provided no further explanation or reasoning.

In June 2016, the CFTC settled with an online platform, Bitfinex, regarding allegations that Bitfinex engaged in illegal, off-exchange retail commodity transactions without registering as an FCM.¹⁶⁴ Bitfinex engaged in different activities than the defendants in the first two enforcement actions. Unlike the platforms in the first two settlement orders, which involved derivatives on virtual currencies, Bitfinex offered leveraged trading in virtual currencies, primarily bitcoin. Nevertheless, the CFTC—here too, relying simply on its previous *Coinflip* and *TeraExchange* orders—emphasized that “Bitcoin and other virtual currencies are encompassed in the definition and properly defined as commodities.”¹⁶⁵ According to the CFTC, Bitfinex’s platform constituted unlawful futures trading because it did not occur on a registered exchange.¹⁶⁶ Also, because Bitfinex directly accepted customer funds and trading orders, it allegedly should have registered with the CFTC as an FCM, but had not.

In September 2017, more than one year after the Bitfinex case, the CFTC filed its first virtual currency-related action in federal district court against Gelfman Blueprint, Inc. and its CEO, Nicholas Gelfman. The CFTC charged the defendants with one count of engaging in fraud by a deceptive device or contrivance, in violation of CEA section 6(c)(1) and CFTC Rule 180.1, by making written misrepresentations to their customers, by failing to disclose material

¹⁶³ *Id.* at 77,894 n.3.

¹⁶⁴ *BFXNA Inc.*, Comm. Fut. L. Rep. (CCH) ¶ 33,538, at 77,854–55.

¹⁶⁵ *Id.* at 77,855. The CFTC repeated its statements from *Coinflip* that the statutory definition of commodity includes “all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in,” and that the definition of a commodity is broad.

¹⁶⁶ See 7 U.S.C. § 2(c)(2)(D)(iii) (leveraged trading of commodities that does not meet the actual delivery exception will be treated as if the trading is of futures, which must occur on a registered exchange under CEA Section 4(a)).

information to them, and by misappropriating their funds.¹⁶⁷ The CFTC again asserted that virtual currencies are commodities, adhering to its initial position from administrative cases but similarly without much reasoning. In its complaint, the CFTC alleged in one sentence that, “Bitcoin and other virtual currencies are encompassed in the definition of ‘commodity’ under section 1a(9) of the Commodity Exchange Act”¹⁶⁸ In footnote 1 of the complaint, the CFTC defined “virtual currency” the same way it had done in the *Coinflip* order.¹⁶⁹

On October 12, 2017, Mr. Gelfman, acting *pro se*, filed a response to the CFTC’s complaint. In the response, he asserted that the CFTC lacks jurisdiction because “[b]itcoin and other virtual currencies are not commodities under Section 1a(9) of the Act.”¹⁷⁰ This answer was filed prior to the launch of two different exchange-traded bitcoin futures contracts in December 2017. On October 1, 2018, Mr. Gelfman’s argument was rendered moot, and the case was terminated, by the filing of a Consent Order for Permanent Injunction.¹⁷¹ In the “Findings of Fact” section of the Order, bitcoin was described as “a commodity in interstate commerce.”¹⁷² The “Conclusions of Law” section of the Order stated that “[v]irtual currencies such as [b]itcoin are encompassed in the definition of ‘commodity’ under Section 1a(9) of the Act, 7 U.S.C. § 1a(9) (2012).”¹⁷³ In addition to an injunction against committing future violations of the CEA, the Order directed Mr. Gelfman to pay \$492,064.53 in restitution and a civil monetary penalty of

¹⁶⁷ Complaint ¶¶ 81–90, *CFTC v. Gelfman Blueprint, Inc.*, No. 1:17-cv-07181-PKC (S.D.N.Y. Sept. 21, 2017).

¹⁶⁸ *Id.* at ¶ 12.

¹⁶⁹ *Id.* at ¶ 12 n.1.

¹⁷⁰ Answer at 13, *Gelfman*, No. 1:17-cv-07181-PKC (S.D.N.Y. Oct. 12, 2017), ECF No. 12.

¹⁷¹ Consent Order for Permanent Injunction, Civil Monetary Penalty, and Other Equitable Relief Against Defendant Nicholas Gelfman, *Gelfman*, No. 1:17-cv-07181-PKC (S.D.N.Y. Oct. 2, 2018), ECF No. 33.

¹⁷² *Id.* at 5.

¹⁷³ *Id.* at 9.

\$177,501.

Two federal courts have offered an analysis regarding how virtual currencies should be treated under the commodity definition. In *CFTC v. McDonnell*,¹⁷⁴ the CFTC alleged that the defendants purportedly solicited customers to provide advice on trading virtual currencies, but instead misappropriated the funds and provided no advice.¹⁷⁵ Mr. McDonnell, who also was not represented by counsel, did not expressly assert that virtual currencies were *not* commodities, but took the position that the CFTC “possessed no enforcement jurisdiction” to bring its complaint against him.¹⁷⁶ The CFTC interpreted McDonnell’s argument that the CFTC lacked “enforcement jurisdiction” as “suggesting that the Commission’s anti-fraud enforcement authority under Section 6(c)(1) of the [CEA] and Regulation 180.1 does not reach the virtual currency-related scheme alleged.”¹⁷⁷ In a pre-trial ruling, the court rejected Mr. McDonnell’s argument, explaining that the CFTC can regulate virtual currencies as commodities because (i) they are “‘goods’ exchanged in a market for a uniform quality and value”; (ii) they “fall well-within the common definition of ‘commodity’”; and (iii) they meet the CEA’s definition of commodities as “‘all other goods and articles . . . in which contracts for future delivery are presently or in the future dealt in.’”¹⁷⁸

Following a bench trial, the court ruled in favor of the CFTC and against Mr.

¹⁷⁴ *CFTC v. McDonnell* (*McDonnell I*), 287 F. Supp. 3d 213, 213 (E.D.N.Y. 2018).

¹⁷⁵ *Id.* at 229–30.

¹⁷⁶ Defendant’s Memorandum in Support of Motion to Dismiss at 2, *CFTC v. McDonnell*, No. 18-CV-00361 (JBW) (RLM) (E.D.N.Y. Feb. 15, 2018), ECF No. 18-2.

¹⁷⁷ Plaintiff’s Memorandum in Opposition to Defendant’s Motion to Dismiss at 6, *CFTC v. McDonnell*, No. 18-CV-00361 (JBW) (RLM) (E.D.N.Y. Feb. 26, 2018), ECF No. 20.

¹⁷⁸ *McDonnell I*, 287 F. Supp. 3d at 228 (alteration in original) (quoting 7 U.S.C. § 1a(9)).

McDonnell.¹⁷⁹ Citing to its earlier ruling, the court concluded that “[v]irtual currency may be regulated by the CFTC as a commodity” and that the CFTC’s “broad statutory authority . . . and regulatory authority . . . extends [*sic*] to fraud or manipulation in the virtual currency derivatives market and its underlying spot market.”¹⁸⁰ Later in the opinion, the court commented that bitcoin and Litecoin are virtual currencies and are commodities in interstate commerce.¹⁸¹ In addition to an injunction against committing future violations of the CEA, the Order directed Mr. McDonnell to pay \$290,429.29 in restitution and a civil monetary penalty of \$871,287.87.¹⁸²

The positions summarized above provide some support for the ultimate conclusion that virtual currencies are commodities but do not resolve many interpretative questions relating to the CFTC’s jurisdiction over virtual currencies. For example, although the *McDonnell* court agreed with the CFTC’s position, it did not rely on the same grounds that the agency had previously stated. The CFTC previously asserted in its administrative settlements that virtual currencies fall within the definition of commodity under the CEA as part of “all services, rights, and interests . . . in which contracts for future delivery are presently or in the future dealt in.”¹⁸³ Thus, there is an outstanding question regarding which of the “goods, articles, services, rights and interests” categories apply to virtual currencies. Further, while the *McDonnell* court concluded that virtual currencies fall within the commodity definition, the court’s reasoning stops short of addressing whether a virtual currency must already be subject to a futures contract in order to be a commodity. Resolving these issues will be critical in determining how far the

¹⁷⁹ *CFTC v. McDonnell (McDonnell II)*, 332 F. Supp. 3d 641 (E.D.N.Y. 2018).

¹⁸⁰ *Id.* at 651.

¹⁸¹ *Id.* at 723.

¹⁸² *Id.* at 727–728.

¹⁸³ 7 U.S.C. § 1a(9).

CFTC may go in exercising its authority over virtual currencies.

(2) Challenges to the CFTC’s Position That Virtual Currencies Are Commodities

While the CFTC has thus far successfully asserted that virtual currencies are commodities under the CEA, that view is far from settled. For example, the *Gelfman* defendants argued that virtual currencies are not commodities because, among other reasons, Congress has not categorized bitcoin and other virtual currencies as such and various agencies other than the CFTC have also asserted jurisdiction over virtual currencies.¹⁸⁴ Although the *Gelfman* court did not rule on that issue because the case was settled, the *McDonnell* court offers a plausible rebuttal to this challenge, stating that “[u]ntil Congress clarifies the matter, the CFTC has concurrent authority, along with other state and federal administrative agencies, and civil and criminal courts, over dealings in virtual currency.”¹⁸⁵

A second challenge focuses on the interpretive ambiguities in the commodity definition under the CEA. “Commodity,” as defined by the CEA, includes all goods, articles, services, rights, and interests “in which contracts for future delivery are presently or in the future dealt in.” Even under the narrowest reading discussed above, this definition covers bitcoin because it is currently the subject of futures trading on the CME and CBOE Futures Exchange. It remains unclear, however, whether the same is true for other virtual currencies for which no futures trading currently exists. As noted in Section 2.3(c) above, the commodity definition can be read in competing ways: the first interpretation would require the existence of an overlying futures contract for the CFTC to have jurisdiction over a particular virtual currency as a commodity; the second interpretation would only require the possibility that the virtual currency would be the

¹⁸⁴ Answer, *supra* note 170, at 13.

¹⁸⁵ *McDonnell I*, 287 F. Supp. 3d at 217.

subject of a futures contract in the future; and a third, middle ground interpretation would require that a futures contract exist on one of the virtual currencies as a category of commodity. The outcome of this interpretation carries significance, as the CFTC's authority over virtual currencies under the first interpretation would be far less clear unless and until other virtual currencies become subject to futures contracts.

The defendants in *CFTC v. My Big Coin Pay* urged the court to take the first approach and dismiss the case for lack of CFTC jurisdiction.¹⁸⁶ The case involves MBC, a virtual currency that is not bitcoin and has no overlying futures contract. The defendants argued that “[p]er the plain language of the CEA, intangible ‘services, rights and interests’ are only included in the CEA’s definition of the term ‘commodity’ if there are futures contracts traded on them.”¹⁸⁷ Because no futures contracts are traded on MBC, the defendants argued, it is not a commodity and the CFTC has no authority to bring the action.¹⁸⁸

Not surprisingly, the CFTC has supported the adoption of the second interpretive approach. In its administrative proceedings, the CFTC has consistently stated that “[b]itcoin and other virtual currencies” are properly defined as commodities—even though no futures contract existed on bitcoin or any other virtual currency when it first made that determination in September 2015.¹⁸⁹ In *My Big Coin Pay*, the CFTC provided additional justifications for that

¹⁸⁶ Complaint, *CFTC v. My Big Coin Pay, Inc.*, No. 1:18-cv-10077-RWZ (D. Mass. filed Jan. 16, 2018). On March 7, 2019, the Department of Justice filed an unopposed motion to intervene and stay discovery in the case pending resolution of a criminal case against the *My Big Coin Pay* defendants. See Unopposed Motion of the United States for Leave to Intervene and for a Stay of Discovery and Memorandum in Support, *CFTC v. My Big Coin Pay, Inc.*, No. 1:18-cv-10077-RWZ (D. Mass. filed Mar. 7, 2019), ECF No. 146.

¹⁸⁷ Defendants’ Memorandum in Support of Motion to Dismiss at 5, *CFTC v. My Big Coin Pay, Inc.*, No. 1:18-cv-10077-RWZ (D. Mass. filed May 5, 2018), ECF No. 69 (emphasis omitted).

¹⁸⁸ *Id.* at 6.

¹⁸⁹ See *Coinflip*, Comm. Fut. L. Rep. (CCH) ¶ 33,538.

position.

First, the Commission avoided the interpretive ambiguities and argued that MBC is a commodity regardless of whether there are futures contracts on it because it is a “good” or an “article” (a position first taken by the *McDonnell* court, not the CFTC). The Commission reasoned that the modifier “presently or in the future dealt in” applies “as a matter of syntax, punctuation, and grammar” only to “services, rights, and interests” in the definition of commodity.¹⁹⁰ The CFTC’s argument potentially carries far-reaching consequences. If the CFTC is correct, then it can regulate cash markets for any goods or articles regardless of whether those markets are, or ever could be, connected to a futures market. Congress, however, amended the CEA to add both the goods and articles and the services, rights, and interests clauses at the same time it added the modifier regarding futures contracts. That timeline, when combined with the delineation of CFTC jurisdiction under CEA section 2(a)(1) over futures contracts and the public interest justification for regulating futures markets,¹⁹¹ suggests that Congress did not intend to give the CFTC authority over commodities that would have no connection to a futures market.

Second, in the alternative, the CFTC argued that even if the modifying clause applied to goods and articles as well, MBC and other virtual currencies are commodities because “futures contracts on the functionally similar virtual currency [b]itcoin currently are ‘dealt in.’”¹⁹² The Commission reasoned that “Congress defined commodities under the Act categorically, not by

¹⁹⁰ Plaintiffs’ Opposition to Defendants’ Motion to Dismiss at 8–9, *CFTC v. My Big Coin Pay, Inc.*, No. 1:18-cv-10077-RWZ (D. Mass. filed May 18, 2018), ECF No. 70 (citing *Barnhart v. Thomas*, 540 U.S. 20, 21 (2003) (for the grammatical rule of the last antecedent under which a limiting clause is read to modify only the phrase it immediately follows)).

¹⁹¹ 7 U.S.C. § 2(a)(1).

¹⁹² Plaintiffs’ Opposition to Defendants’ Motion to Dismiss, *supra* note 190, at 10–11.

type, grade, quality, brand, producer, manufacturer, or form,”¹⁹³ and therefore the Commission has authority to regulate virtual currencies as a category of commodities given that bitcoin futures are being traded. The Commission also relied on *U.S. v. Valencia*, which rejected the argument that “West Coast gas” was not a commodity under the CEA because there was no futures contract for “West Coast gas.”¹⁹⁴ The court explained that “West Coast gas” was still a commodity because “natural gas, for delivery on the West Coast or otherwise, is a commodity” in general, natural gas is “fungible,” and “there is no evidence that West Coast gas could not in the future be traded on a futures exchange.”¹⁹⁵

While not cited by the Commission, the Fifth Circuit in *U.S. v. Brooks* similarly rejected the argument that only natural gas traded at Henry Hub is a commodity under the CEA because only natural gas traded at Henry Hub underlies the natural gas futures contracts traded on NYMEX.¹⁹⁶ The court instead held that natural gas generally is a commodity regardless of its location, because “the actual nature of the ‘good’ does not change.”¹⁹⁷

On September 26, 2018, the MBC court rejected the defendant’s argument made in a motion to dismiss, ruling that at least at the pleading stage of the case, the CFTC had alleged sufficient facts for the case to move forward.¹⁹⁸ In so ruling, the court took the middle-ground interpretive approach to the commodity definition and held that it was sufficient at the pleading

¹⁹³ *Id.* at 9.

¹⁹⁴ *United States v. Valencia*, No. CR.A. H-03-024, 2003 WL 23174749, at *8 (S.D. Tex. Aug. 25, 2003), *order vacated in part on reconsideration*, No. CRIM.A. H-03-024, 2003 WL 23675402 (S.D. Tex. Nov. 13, 2003), *rev’d and remanded*, 394 F.3d 352 (5th Cir. 2004).

¹⁹⁵ *Id.* at *8 & n.13.

¹⁹⁶ *United States v. Brooks*, 681 F.3d 678, 694 (5th Cir. 2012).

¹⁹⁷ *Id.* at 695.

¹⁹⁸ *CFTC v. My Big Coin Pay, Inc.*, 334 F. Supp. 3d 492 (D. Mass 2018).

stage of the case for the complaint to allege that My Big Coin is a virtual currency and that there is futures trading in a virtual currency, namely bitcoin.¹⁹⁹ The court characterized the CFTC’s argument in this way: “Pointing to the existence of [b]itcoin futures contracts, it argues that contracts for future delivery are ‘dealt in’ and that My Big Coin, as a virtual currency, is therefore a commodity”; the court then ruled that the text of the CEA supported the CFTC’s argument.²⁰⁰ The court observed that the CEA defines the term “commodity” generally and categorically, and “not by type, grade, quality, brand, producer, manufacturer, or form,” agreeing with the CFTC’s position that “Congress’ approach to defining ‘commodity’ signals an intent that courts focus on categories—not specific items—when determining whether the ‘dealt in’ requirement is met.”²⁰¹ Citing to the *Brooks* and *Valencia* cases, the court ruled that, “Taken together, these decisions align with plaintiff’s argument that the CEA only requires the existence of futures trading within a certain class (*e.g.*, ‘natural gas’) in order for all items within that class (*e.g.*, ‘West Coast’ natural gas) to be considered commodities.”²⁰² In his answer to the amended complaint, filed approximately six weeks after the denial of the motion to dismiss, defendant Randall Crater raised the following affirmative defense: “My Big Coin is not sufficiently related to [b]itcoin, the only virtual currency on which futures contracts are traded, to conclude that My Big Coin is a good, article, service, right or interest on which contracts for future delivery are dealt in, and, therefore, My Big Coin is not a ‘commodity’ as defined in the Commodity

¹⁹⁹ *Id.*

²⁰⁰ *Id.* at 496–497.

²⁰¹ *Id.* at 497.

²⁰² *Id.* at 498.

Exchange Act.”²⁰³

While instructive, these cases do not resolve the interpretive ambiguities in the commodity definition. At best, they suggest that, where there are enough similarities among components of a general commodity category and one component underlies a futures contract, the CFTC may properly regulate all of those components as commodities. That, in turn, raises the question of how similar virtual currencies must be before they may be grouped together as functional equivalents of bitcoin and thus fall under the commodity definition. As explained in Section 2.3(d) above and Section 2.4 below, virtual currencies may defy easy categorization and each may have unique features that render the analogy to natural gas at different locations inapposite.

(f) The CFTC’s Exercise of Anti-Fraud and Anti-Manipulation Authority over Virtual Currencies as Commodities

The CFTC is not authorized under the CEA to adopt rules regulating trading in the cash markets for commodities, known as forward or “spot” contracts or transactions. As a result, many virtual currency trading platforms operate outside of the CFTC’s jurisdiction.²⁰⁴ Although spot commodity markets are not directly subject to broader CEA compliance requirements such

²⁰³ Defendant Randall Crater’s Answer to the Amended Complaint at 9, *CFTC v. My Big Coin Pay, Inc.*, No. 1:18-cv-10077-RWZ (D. Mass. filed Nov. 9, 2018), ECF No. 113.

²⁰⁴ Giancarlo HUA Statement, *supra* note 2. In his testimony, Giancarlo clarified the CFTC’s jurisdiction over virtual currencies: while these assets are “commodities” under the CEA, current law does not provide any U.S. Federal regulator with regulatory oversight authority over spot virtual currency platforms operating in the United States or abroad. However, the CFTC does have enforcement authority to investigate through subpoena and other investigative powers and, as appropriate, conduct civil enforcement actions against fraud and manipulation in virtual currency derivatives markets and in underlying virtual currency spot markets. *Id.* Giancarlo stated that in contrast to the spot markets, the CFTC does have comprehensive regulatory oversight over derivatives on virtual currencies traded in the United States, including registration requirements and a host of requirements for trading and market surveillance, reporting and recordkeeping, business conduct standards, capital requirements, and platform and system safeguards.

as registration, reporting, and recordkeeping,²⁰⁵ the CFTC has authority under CEA section 6(c)(1)²⁰⁶ and CFTC Rule 180.1 to punish fraudulent practices and manipulation related to the commodities traded in those spaces.

CFTC Rule 180.1 states, in part:

Prohibition on the employment, or attempted employment, of manipulative and deceptive devices.

(a) It shall be unlawful for any person, directly or indirectly, in connection with any swap, or contract of sale of any commodity in interstate commerce, or contract for future delivery on or subject to the rules of any registered entity, to intentionally or recklessly:

(1) Use or employ, or attempt to use or employ, any manipulative device, scheme, or artifice to defraud;

(2) Make, or attempt to make, any untrue or misleading statement of a material fact or to omit to state a material fact necessary in order to make the statements made not untrue or misleading;

(3) Engage, or attempt to engage, in any act, practice, or course of business, which operates or would operate as a fraud or deceit upon any person; or,

(4) Deliver or cause to be delivered, or attempt to deliver or cause to be delivered, for transmission through the mails or interstate commerce, by any means of communication whatsoever, a false or misleading or inaccurate report concerning crop or market information or conditions that affect or tend to affect the price of any commodity in interstate commerce, knowing, or acting in reckless disregard of the fact that such report is false, misleading or inaccurate. Notwithstanding the foregoing, no violation of this subsection shall exist where the person mistakenly transmits, in good faith, false or

²⁰⁵ The CFTC, though, does have certain authority to monitor the cash market activities of users of the derivatives markets, combined with authority to impose recordkeeping requirements on such persons relating to their cash market activities. *See, e.g.*, 17 C.F.R. § 1.31.

²⁰⁶ 7 U.S.C. § 9(1) (“(1) Prohibition against manipulation. It shall be unlawful for any person, directly or indirectly, to use or employ, or attempt to use or employ, in connection with any swap, or a contract of sale of any commodity in interstate commerce, or for future delivery on or subject to the rules of any registered entity, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the Commission shall promulgate by not later than 1 year after July 21, 2010, provided no rule or regulation promulgated by the Commission shall require any person to disclose to another person nonpublic information that may be material to the market price, rate, or level of the commodity transaction, except as necessary to make any statement made to the other person in or in connection with the transaction not misleading in any material respect.”).

misleading or inaccurate information to a price reporting service.²⁰⁷

The CFTC's authority under CEA section 6(c)(1) and Rule 180.1 is similar to the SEC's anti-fraud authority under Exchange Act section 10(b)²⁰⁸ and SEC Rule 10b-5.²⁰⁹ One difference, however, is that the provisions in the CEA and CFTC Rule 180.1 do not restrict prohibited activities to those that are in themselves tied to a transaction.²¹⁰ CEA section 6(c)(1) and CFTC Rule 180.1 reach "all manipulative or deceptive conduct in connection with the purchase, sale, solicitation, execution, pendency, or termination of any swap, or contract of sale of any commodity in interstate commerce, or contract for future delivery on or subject to the rules of any registered entity."²¹¹

Nevertheless, the CFTC acknowledged some limits on its authority when finalizing CFTC Rule 180.1.²¹² The preamble to the rulemaking responded to commentators' concerns that

²⁰⁷ 17 C.F.R. § 180.1(a).

²⁰⁸ 15 U.S.C. § 78j ("It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce or of the mails, or of any facility of any national securities exchange . . . (b) To use or employ, in connection with the purchase or sale of any security registered on a national securities exchange or any security not so registered, or any securities-based swap agreement 1 any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors." (footnote omitted)).

²⁰⁹ 17 C.F.R. § 240.10b-5 ("It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange, (a) To employ any device, scheme, or artifice to defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.").

²¹⁰ See Prohibition on the Employment, or Attempted Employment, of Manipulative and Deceptive Devices and Prohibition on Price Manipulation, 76 Fed. Reg. 41,398, 41,399 n.6 (Jul. 14, 2011) (to be codified at 17 C.F.R. pt. 180) ("CFTC Manipulative Rule") ("Differences between the wording of Exchange Act section 10(b) and CEA section 6(c)(1) include, but are not limited to, the express prohibition of the 'attempt to use' any 'manipulative or deceptive device or contrivance' in CEA section 6(c)(1), and the absence of a 'purchase or sale' requirement in CEA section 6(c)(1).").

²¹¹ CFTC Manipulation Rule, 76 Fed. Reg. at 41,401 ("The Commission declines to adopt the request of certain commenters to interpret CEA section 6(c)(1) as merely extending the Commission's existing anti-fraud and anti-manipulation authority to cover swaps. Such an interpretation would be inconsistent with the language of CEA section 6(c)(1), as amended by section 753 of the Dodd-Frank Act.").

²¹² *Id.* at 41,405–06.

the language in the rule was so broad that it gave the CFTC limitless authority by offering examples of activities that would not be considered to be “in connection with” any swap, contract of sale of any commodity, or futures contract and, therefore, outside of the scope of the CFTC’s jurisdiction.²¹³ The preamble further stated that the CFTC expected its authority “to cover transactions related to the futures or swaps markets, or prices of commodities in interstate commerce, or where the fraud or manipulation has the potential to affect cash commodity, futures, or swaps markets or participants in these markets.”²¹⁴ On this point, the preamble concluded, “[t]his application of the final Rule respects the jurisdiction that Congress conferred upon the Commission.”²¹⁵

Recent CFTC civil cases highlight the potential issues raised when the CFTC seeks to exercise its anti-fraud and anti-manipulation authority in the context of virtual currencies and against the backdrop of its prior statements that its enforcement authority is tied to the CFTC’s overall jurisdiction under the CEA. In *CFTC v. Monex*, for example, a federal judge in the Central District of California held that the CFTC may exercise its enforcement authority under CEA section 6(c)(1) only when it can show both manipulative and deceptive conduct, even though “the plain language of § 6(c)(1) suggests that Congress intended to prohibit either

²¹³ See, e.g., *id.* (“In this regard, the Commission finds the Supreme Court’s decision in [*SEC v. Zandford*, 535 U.S. 813 (2002)] interpreting SEC Rule 10b-5’s ‘in connection with’ language particularly instructive. In its opinion, the Court gave the following example to highlight the limits of SEC Rule 10b-5 applicability: If * * * a broker embezzles cash from a client’s account or takes advantage of the fiduciary relationship to induce his client into a fraudulent real estate transaction, then the fraud would not include the requisite connection to a purchase or sale of securities. Likewise, if the broker told his client he was stealing the client’s assets, that breach of fiduciary duty might be in connection with a sale of securities, but it would not involve a deceptive device or fraud.” (second alteration in original) (footnote omitted) (citation omitted)).

²¹⁴ *Id.* at 41,401.

²¹⁵ *Id.*

manipulative or deceptive conduct.”²¹⁶ There, the defendants argued that CEA section 6(c)(1) only confers the CFTC anti-fraud jurisdiction where a particular commodity transaction manipulates or potentially manipulates the derivatives market.²¹⁷

In *McDonnell*, however, the court disagreed with the *Monex* decision, and allowed the CFTC’s case under CEA section 6(c)(1) to continue based solely on allegations of deceptive conduct. The *McDonnell* court, after “fully consider[ing] *Monex*,” held that CEA section 6(c)(1) “gives the CFTC standing to exercise its enforcement power over the fraudulent schemes alleged in the complaint.”²¹⁸

The *Monex* decision is currently on appeal before the United States Court of Appeals for the Ninth Circuit, and the outcome of that case will likely have a significant effect on the CFTC’s ability to police fraud in the virtual currency markets. In several cases, the CFTC is pursuing virtual currency frauds under CEA section 6(c)(1) and CFTC Rule 180.1 based on fraud alone.²¹⁹ If the Ninth Circuit upholds the district court’s decision, the CFTC, at least in the Ninth Circuit, would not be able to bring these types of cases against alleged virtual currency fraudsters absent proof of manipulation.

Similar to the defendants in *Monex*, the defendants in *My Big Coin Pay* argued that the CFTC could not rely on its anti-fraud and anti-manipulation authority because the legislative intent behind CEA section 6(c)(1) and the CFTC’s own explanation of CFTC Rule 180.1²²⁰ did

²¹⁶ *CFTC v. Monex Credit Co.*, 311 F. Supp. 3d 1173, 1186 (C.D. Cal. May 1, 2018), *appeal docketed*, No. 18-55815 (9th Cir. June 20, 2018).

²¹⁷ *Id.* at 1184–85.

²¹⁸ Order at 3, *CFTC v. McDonnell*, No. 1:18-cv-00361-JBW-RLM (E.D.N.Y. July 16, 2018), ECF No. 136.

²¹⁹ See, e.g., *McDonnell*; *Gelfman*; and *My Big Coin Pay*, *supra* note 96.

²²⁰ Defendants’ Memorandum in Support of Motion to Dismiss, *supra* note 187, at 16 (“The CFTC stated that the fears commenters had expressed in response to the Notice of Proposed Rulemaking that ‘the word “commodity” in
(cont’d)

not contemplate permitting the CFTC to punish individuals and entities for general fraud where there is no evidence of market manipulation.²²¹ Unlike in previous cases, the CFTC stated in its complaint that the prohibited activity was a misrepresentation about the virtual currency, MBC, itself and how MBC could be used by the consumer.²²² The defendants' argument in *My Big Coin Pay* mirrors some arguments made by others that the CFTC's interpretation of its CFTC Rule 180.1 authority is more expansive in the context of virtual currencies than it has been in the past because it reaches beyond fraud or manipulation related to derivatives markets.²²³

Notwithstanding these challenges, the CFTC declared a continuing interest in policing virtual currency market participants that fall within the bounds of CFTC jurisdiction.²²⁴ Notably, the CFTC and SEC Enforcement Directors released a joint statement regarding their respective enforcement programs:

When market participants engage in fraud under the guise of offering digital instruments—whether characterized as virtual currencies, coins, tokens, or the like—the SEC and the CFTC will look beyond form, examine the substance of the activity and prosecute violations of the federal securities and commodities laws. The Divisions of Enforcement for the SEC and CFTC will continue to address violations and to bring actions to stop and prevent fraud in the offer and sale of

(cont'd from previous page)

proposed Rule 180.1 “indicates that the rule will apply to virtually every commercial transaction in the economy” are *misplaced*.” (quoting CFTC Manipulation Rule, 76 Fed. Reg. at 41,401)).

²²¹ *Id.* at 15 (“The legislative history shows that these provisions were meant to combat fraudulent market manipulations—not the kind of garden variety sales puffery that the Amended Complaint alleges.”).

²²² Complaint, *supra* note 186, at ¶ 60.

²²³ See Geoffrey F. Aronow, *Is The CFTC Becoming The National Fraud Police? The CFTC Goes All In On Policing Fraud In Virtual Currencies*, FUTURES & DERIVATIVES L. REP., Mar. 2018, at 9 (“If the CFTC is, indeed, committed to policing fraud in the sale of virtual currency wherever the Commission may find it (with the exception of where the SEC may be able to act), the question becomes, how far is the CFTC now prepared to go in asserting broad authority to police fraud in the sale of commodities in interstate commerce?”).

²²⁴ See, e.g., *State of the CFTC: Examining Pending Rules, Cryptocurrency Regulation, and Cross-Border Agreements: Hearing before the U.S. S. Comm. on Agric., Nutrition & Forestry*, 115th Cong. *9–10 (2018) [hereinafter *State of the CFTC*] (statement of J. Christopher Giancarlo, Chairman, CFTC), https://www.agriculture.senate.gov/imo/media/doc/Testimony_Giancarlo_02.15.18.pdf (summarizing the CFTC's current civil enforcement actions, which not only include “fail[ure] to register” but also more general allegations of “fraud, market manipulation, and disruptive trading”).

digital instruments.²²⁵

This statement aligns with the CFTC’s position in its civil enforcement actions in 2018 as well as public statements made by CFTC Commissioners²²⁶ and staff²²⁷ that reiterated the CFTC’s commitment to punishing bad actors in the virtual currencies markets.

(g) The CFTC’s Exercise of Jurisdiction over Virtual Currencies as Retail Commodity Transactions

Classification of virtual currencies as commodities (of a type other than a currency or security) has implications for margined, leveraged or financed transactions in virtual currencies under the retail commodity provisions of CEA section 2(c)(2)(D). As explained above in Section 2.2(c), a transaction that is within the scope of the provision is treated as or “as if” it is a futures contract, but it may be excluded from that regulatory consequence if the transaction results in “actual delivery” of the commodity within 28 days. The meaning of “actual delivery” is open to debate.

In its enforcement action against Bitfinex, the CFTC took the position (consistent with its 2013 interpretation) that delivery of bitcoin purchased with borrowed funds to a private wallet where the coins were held for the benefit of the buyer but also as collateral for the loan did not

²²⁵ Press Release, CFTC, Joint statement from CFTC and SEC Enforcement Directors Regarding Virtual Currency Enforcement Actions, (Jan. 19, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/mcdonaldstatement011918> (emphasis added).

²²⁶ See, e.g., Brian Quintenz, Comm’r, CFTC, Remarks before the Eurofi High Level Seminar 2018 (Apr. 26, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opaquintenz11> (“From my perspective as a CFTC Commissioner, I think the area with the greatest need for enhanced regulatory certainty and oversight is the spot market. In that regard, the CFTC has undertaken an educational campaign to provide customers with information about cryptocurrencies and to warn about potential fraud in these markets. The CFTC’s Division of Enforcement has aggressively targeted deception and manipulation to ensure that innocent customers are not exploited by fraudsters. And with respect to jurisdictional considerations, the CFTC has been, and continues to be, in close communication with the SEC.”).

²²⁷ See, e.g., CFTC, CFTC BACKGROUNDER ON OVERSIGHT OF AND APPROACH TO VIRTUAL CURRENCY FUTURES MARKETS (2018), https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/backgrounder_virtualcurrency01.pdf.

constitute actual delivery, because the buyer did not have any rights to access or use the purchased bitcoin until released by Bitfinex following satisfaction of the loan.²²⁸ Because the transactions did not fall within the actual delivery exclusion, the CFTC determined that Bitfinex executed illegal, off-exchange transactions and also violated the CEA by acting as an unregistered FCM.

More recently, though, one federal court rejected the CFTC's position in the precious metals context, which has ramifications for virtual currencies and other financed commodities transactions where the purchased commodity stands as collateral for the loan. In *Monex*,²²⁹ the CFTC alleged that the defendants violated, among others, CEA sections 4(a) and 4d by offering precious metals off-exchange on a leveraged basis without registering with the Commission as an FCM.²³⁰ The defendants required that customers trading on a leveraged basis ("Atlas customers") deposit funds to serve as margin for their open trading positions; the defendants could also change the margin requirements at any time in their sole discretion, and could liquidate customers' trading positions without notice in certain cases. Under the account agreement between the defendants and Atlas customers, customers with open trading positions did not take physical delivery of the metals. Instead, the metals were stored in third-party depositories, subject to contracts between the defendants and the depositories. The customers could get physical possession of the metal only if they made full payment, requested actual delivery of specific physical metals, and had the defendants ship the metals to them.²³¹

²²⁸ *BFXNA Inc.*, Comm. Fut. L. Rep. (CCH) ¶ 33,538.

²²⁹ *Monex*, 311 F. Supp. 3d at 1173.

²³⁰ *Id.* at 1176–77.

²³¹ *Id.* at 1177–78.

Relying on the Eleventh Circuit’s 2014 decision in *CFTC v. Hunter Wise*

Commodities,²³² the CFTC argued that the actual delivery exception to its jurisdiction did not apply because “‘actual delivery’ only occurs once there has been a transfer of possession of and control over the purchased commodities.”²³³ In the CFTC’s view, the purported delivery in the defendants’ leveraged transactions was a “sham” because customer positions could be “liquidated any time and in [the defendants’] sole discretion, without notice to customers,” which “deprive[d] customers of all control and authority over any metals that underlie their trading positions.”²³⁴ The *Monex* court disagreed, finding that adopting the CFTC’s view would “eliminate the Actual Delivery Exception from the CEA” because all leveraged retail transactions of fungible commodities would involve at least some of the same alleged practices by the defendants.²³⁵ The court held that the defendants’ practice of delivering precious metals to third-party depositories within 28 days of their purchase by retail customers on margin fell within the actual delivery exception to the CFTC’s authority. The CFTC has appealed the decision to the Ninth Circuit.

4. Allocation of Jurisdiction over Transactions Between the CFTC and SEC

As noted above, the CEA “commodity” definition covers securities. Rather than exclude securities from the definition, Congress has allocated jurisdiction between the CFTC and SEC over derivatives based on securities or on a group or index of securities (or an interest therein or based on the value thereof), based in part on distinctions between exempted securities (as defined

²³² *CFTC v. Hunter Wise Commodities, LLC*, 749 F.3d 967 (11th Cir. 2014).

²³³ *Monex*, 311 F. Supp. 3d at 1180 (citation omitted).

²³⁴ *Id.* at 1181 (citation omitted).

²³⁵ *Id.*

in the Exchange Act) and non-exempted securities, and narrow-based or broad-based indices of non-exempted securities. As a result, derivatives on a virtual currency or other digital asset that is a “security” may nevertheless also be subject to CFTC jurisdiction, but the scope of the CFTC’s jurisdiction is more constrained than with respect to non-security commodities.

Securities where one or more payment components (*e.g.*, interest payments on a debt security) are linked in whole or in part to the value of a non-security commodity also raise issues of jurisdictional overlap, if the embedded commodity terms could be classified as a futures contract or another type of derivative on the commodity. The issuers of such hybrid instrument securities can control the design of the instruments to qualify for an exemption from CEA regulation under either a statutory exemption provided in CEA section 2(f) or an exemption provided in the CFTC’s Part 34 Rules. If the embedded terms relate to the value of a virtual currency, and the virtual currency is a non-security commodity, the issuer will have to qualify for one of the exemptions if it wants to avoid complicated issues of how (if even possible) to comply with CEA requirements, on top of federal securities laws requirements for initial offerings and secondary market trading of securities.

The security/non-security distinction is also important more generally for determining which agency has authority over the cash market trading activities in a digital asset. The SEC, not the CFTC, is responsible for protecting cash securities markets against fraud and manipulation. Thus, beyond determining whether a digital asset is within the scope of the CEA’s commodity definition, it is important to know whether the asset is a security or a non-security commodity.

The CEA and federal securities laws have been amended over the years since 1974 to address areas of competing or potentially competing jurisdictional claims between the CFTC and

SEC. The two agencies have also on occasion jointly resolved jurisdictional issues, and some of those agreements have been captured in the statutory amendments, notably the terms of the Shad-Johnson Accord adopted in 1983.²³⁶ The table at the end of this Section summarizes the current allocation of jurisdiction between the two agencies over trading in derivatives and in the assets underlying the derivatives.

The allocation scheme means, among other things, that if a virtual currency or other digital or digitized asset is a non-security commodity, DCMs (and FBOTs) may list futures and options on futures contracts on the token as a contract solely regulated in the normal course by the CFTC. If it is a security, though, then a futures exchange may only list futures or options on futures on the token or virtual currency as a “security futures product” under rules jointly developed and enforced by the CFTC and SEC.

Persons may also trade options on the token or virtual currency as a CFTC-regulated transaction. Transactions in options on a virtual currency that is a security, however, would be regulated by the SEC alone as securities.

Also, if a digital asset is a non-security commodity, then certain CEA and CFTC restrictions may apply to leveraged, margined or financed transactions in the commodity, under the retail commodity provisions in CEA section 2(c)(2)(D), described above, but those provisions do not apply if the asset is a security.

²³⁶ The Shad-Johnson Accord was added to the CEA as part of the Futures Trading Act of 1982, which was enacted in January 1983. It incorporated into the CEA (and the federal securities laws) the terms of an agreement reached between the respective Chairmen of the SEC and CFTC as to which agency would have jurisdiction over securities-related futures and options. Under the accord, the CFTC was given jurisdiction over futures and options on futures on exempted securities and broad-based indices of securities, and the SEC was given jurisdiction over options on all securities and all stock indices. Futures and options on futures on individual securities (other than exempted securities) and on narrow-based indices of securities (other than exempted securities) were banned, but that was intended to be temporary until the two agencies could agree on how to allocate jurisdiction. Congress tired of waiting for the CFTC and SEC to reach agreement, and lifted the ban in 2000.

Congress's allocation of jurisdiction to the CFTC and SEC described in the table below presupposes that the interest underlying a derivative is something that can neatly fit into either the security or the non-security commodity box. Bitcoin's status as a non-security commodity seems well-settled, based on the emergence of CFTC-regulated markets for bitcoin-based derivatives, regulated as futures and not security futures, or as swaps and not as security-based swaps, without any challenge from the SEC.

There can be uncertainty, though, on how to classify other virtual currencies, or other types of digital assets. Section 3 includes an analysis of whether the definition of "security" in the federal securities laws could apply to digital assets. Section 5 discusses the jurisdictional overlap issues and challenges created by uncertainty as to whether a digital asset is properly classified as a security or a non-security commodity.

Table: Allocation of Jurisdiction Between the CFTC and SEC

CFTC	SEC	CFTC-SEC Jointly
<i>Futures and Options on Futures</i>		
Futures and options on futures on non-security commodities. Futures and options on futures on: • A broad-based index of securities.ⁱ • An exempted security as defined in Exchange Act Section 3(a)(12).ⁱⁱ A foreign government debt security enumerated in SEC Rule 3a12-8.ⁱⁱⁱ		Futures or options on futures on the following, regulated as security futures products: • Any security other than an exempted security^{iv} or foreign government debt security enumerated in SEC Rule 3a12-8. • Any narrow-based index of securities other than exempted securities.^v Futures on exchange traded funds (ETFs) that passively hold non-security commodities such as gold, energy commodities or foreign currencies are regulated as security futures, but there is an issue whether the CFTC alone should have jurisdiction over these products as futures. The CFTC issued exemptions permitting futures on commodity-based ETFs to trade as security futures products instead of treating them as futures on non-security commodities that it alone would regulate.^{vi}
<i>Options</i>		
Options on non-security commodities—may be regulated as swaps or as trade options.^{vii}	Options on:^{viii} • Securities, without distinction between exempted or non-exempted. • Any group or index of securities, without distinction between broad or narrow-based or exempted or non-exempted securities, or any interest therein or based on the value thereof. Options on exchange traded funds (ETFs) that passively hold non-security commodities such as gold, energy commodities or foreign currencies are regulated as options on securities, but there is an issue whether the CFTC has jurisdiction	

CFTC	SEC	CFTC-SEC Jointly
	over such products as options based on the value of the underlying commodity. The CFTC has issued exemptions permitting such derivatives to trade on national securities exchanges, regulated as options on securities.^{ix} Options on foreign currencies when listed on a national-securities exchange (otherwise regulated by the CFTC).^x	
Swaps / Security-Based Swaps		
Swaps based on a non-security commodity, including options on a non-security-commodity Swaps based on: • A broad-based index of securities^{xi} or • An exempted security as defined in Exchange Act section 3(a)(12).^{xii} Options on securities or an index of securities are excluded from the swap definition and are regulated by the SEC.	Security-based swaps, <i>i.e.</i>, swaps based on: • Any security other than an exempted security or foreign government debt security enumerated in SEC Rule 3a12-8 or • Any narrow-based securities index.	Mixed swaps, <i>i.e.</i>, security-based swaps with a component based on the value of one or more interest rates or other rates, currencies, commodities, instruments of indebtedness, indices, quantitative measures, other financial or economic interest or property of any kind (other than a single security or narrow-based security index), or the occurrence, nonoccurrence or the extent of occurrence of an event or contingency associated with a potential financial, economic or commercial consequence not related to a single company or issuer.^{xiii}
Hybrid Securities		
	If the conditions for the exclusion in CEA section 2(f) or the CFTC Part 34 Rules are met, the SEC will regulate securities with one or more payments indexed to the value, level or rate of, or providing for the delivery of, one or more non-security commodities (hybrid instruments).	If the conditions for the exclusion in CEA section 2(f) or the CFTC Part 34 Rules are met, both agencies could potential assert jurisdiction over securities with one or more payments indexed to the value, level or rate of, or providing for the delivery of, one or more non-security commodities.
Cash Market Transactions		
Retail leveraged, margined or financed transactions in commodities that are not securities or foreign currencies. Retail leveraged, margined or financed transactions in foreign currencies offered by futures commission merchants or retail foreign exchange dealers.	Spot and forward transactions in securities. Retail leveraged, margined or financed transactions in foreign currencies offered by broker-dealers. (SEC currently prohibits such activity.)	

ⁱ The CEA does not define the term broad-based security index, but it does define the term narrow-based security index, in CEA section 1a(35). An index is narrow-based if: (i) it has nine or fewer component securities; (ii) it has a single component security that comprises more than 30% of the index weighting; (iii) its five highest weighted component securities comprise in aggregate more than 60% of the index weighting, or (iv) its lowest weighted component securities that compromise in aggregate 25% of the index weighting have an aggregate dollar value of average daily trading volume of less than \$50 million (or \$30 million if the index has 15 or more component securities). The CFTC and SEC have jointly adopted rules defining the methodology for applying the statutory criteria. See 17 C.F.R. §§ 41.11, 41.12. In addition, they have jointly adopted rules defining the criteria for an index comprised of debt securities to be classified as non-narrow, and have agreed, pursuant to joint orders, to apply alternative criteria for classifying a volatility index as non-narrow.

ⁱⁱ The term exempted securities is defined in Exchange Act section 3(a)(12). 15 U.S.C. § 78c(a)(12). For purposes of allocating jurisdiction over futures and options on futures over exempted securities, the CEA limits the term to the definition as in effect on the date of enactment of the Futures Trading Act of 1982, but excluding municipal securities. 7 U.S.C. § 2(a)(1)(C)(iv). The Exchange Act definition includes U.S. government securities and any securities designated as exempted securities by the SEC by rule or regulation. Exchange Act section 3(a)(12) refers to “government securities” as defined in Exchange Act section 3(a)(42). That definition covers, *e.g.*, securities that are direct obligations of the U.S. or whose obligations are guaranteed as to principal or interest by the U.S.

ⁱⁱⁱ The SEC, in Rule 3a12-8, has designated debt obligations issued by the governments of 21 countries as exempted securities for the purpose of permitting futures contracts on such instruments to trade on U.S. futures exchanges (*i.e.*, designated contract markets) under the CEA regulatory framework. 17 C.F.R. § 240.3a12-8.

^{iv} 7 U.S.C. § 2(a)(1)(D). The statutory provisions limit the securities underlying a security futures product to common stock “or such other equity securities” as the SEC and CFTC may agree. Pursuant to that authority, the two agencies issued orders permitting security futures on (1) American depositary receipts, [Joint Order Granting the Modification of Listing Standards Requirements under Section 6(h) of the Securities Exchange Act of 1934 and the Criteria under CEA Section 2(a)(1) of the CEA, Exchange Act Release No. 44,725 (Aug. 20, 2001), <https://www.sec.gov/rules/other/34-44725.htm>]; and (2) shares of exchange-traded funds, trust issued receipts and registered closed-end investment companies, [Joint Order Granting the Modification of Listing Standards Requirements Under Section 6(h) of the Securities Exchange Act of 1934 and the Criteria Under Section 2(a)(1) of the CEA, Exchange Act Release No. 46,090, 67 Fed. Reg. 42,760 (June 25, 2002)]. They also each adopted a rule permitting security futures on individual debt securities. 17 C.F.R. § 41.21; 17 C.F.R. § 240.6h-2.

^v 7 U.S.C. § 2(a)(1)(D).

^{vi} The first was issued in 2008, covering futures on a gold ETF that the OneChicago Exchange proposed to list. Order exempting the trading and clearing of certain products related to SPDR® Gold Trust Shares Exemption Order, 73 Fed. Reg. 31,981 (June 5, 2008) (“SPDR Exemption Order”).

^{vii} The swap definition in CEA section 1a(47) includes options on commodities (as well as options on “interest or other rates, currencies, . . . securities, instruments of indebtedness, indices, quantitative measures, or other financial or economic interests or property of any kind”). The CFTC also has separate plenary authority to regulate options involving commodities under CEA section 4c(b). As explained above, the CFTC regulates commodity options as swaps, with the exception of trade options.

^{viii} 7 U.S.C. § 2(a)(1)(C)(i)(I) provides that the CEA does not apply to options on securities or on any group or index of securities, or any interest therein or based on the value thereof. Such options are also excluded from the CEA “swap” definition in 7 U.S.C. § 1a(47). In contrast, such options are included in the definitions of “security” in the Exchange Act and the Securities Act.

^{ix} The first was issued in 2008, covering listed options on a gold ETF. SPDR Exemption Order, 73 Fed. Reg. 31,981.

^x 7 U.S.C. § 2(c)(2)(A)(iii).

^{xi} The CFTC’s jurisdiction over swaps on a broad-based securities index is circuitous, via cross-reference in the CEA swap definition to the broad definition of “security-based swap agreements” in Section 206A of the Gramm-Leach-Bliley Act (15 U.S.C. § 78c note) in conjunction with Exchange Act provisions limiting the scope of security-based swaps to swaps on a narrow index of securities and excluding such swaps from the security-based swap agreement definition. The Gramm-Leach-Bliley Act provision defines the term security-based swap agreement to mean “a swap agreement (as defined in Section 206A) of which a material term is based on the price, yield, value, or volatility of any security or any group or index of securities, or any interest therein.” This definition, and the related swap agreement definition, were added to the Gramm-Leach-Bliley Act as part of the CFMA amendments enacted in 2000 and thus pre-date the Dodd-Frank amendments. The elements of the Exchange Act definition of security-based swap covering index products are limited by their terms to indexes that are a “narrow-based security index.” 15 U.S.C. § 78c(a)(68)(A)(ii)(I), (III). The exclusion of security-based swaps from the separate definition of security-based swap agreement is set out in Exchange Act section 3(a)(78)(B), 15 U.S.C. § 78c(a)(78)(B).

^{xii} The CFTC’s jurisdiction over swaps on exempted securities comes about through an exclusion in the Exchange Act definition of the term security-based swap for swaps on exempted securities. 15 U.S.C. § 78c(a)(68); *see also* 7 U.S.C. § 1a(43) (cross-referencing the Exchange Act definition).

^{xiii} *See* Swap Definition Rule, 77 Fed. Reg. at 48,291 (“The category of mixed swap is described, in both the definition of the term ‘security-based swap’ in the [Securities] Exchange Act and the definition of the term ‘swap’ in the CEA, as a security-based swap that is also based on the value of 1 or more interest or other rates, currencies, commodities, instruments of indebtedness, indices, quantitative measures, other financial or economic interest or property of any kind (other than a single security or a narrow-based security index), or the occurrence, nonoccurrence, or the extent of the occurrence of an event or contingency associated with a potential financial, economic, or commercial consequence (other than an event described in subparagraph (A)(ii)(III) [of section 3(a)(68) of the Exchange Act]). A mixed swap, therefore, is both a security-based swap and a swap.” (second alteration in original) (footnote omitted)).

SECTION 3. FEDERAL SECURITIES REGULATION: SECURITIES ACT AND EXCHANGE ACT*

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The market for digital assets has grown rapidly in recent years, from a global market capitalization of nearly \$12 billion as of September 2016 to over \$100 billion as of December 2018—albeit down from a high of over \$800 billion in January 2018.²³⁷ At the same time, questions concerning the application of the federal securities laws to digital assets and the intermediaries that facilitate transactions in them have come into sharp focus. Enforcement cases relating to digital assets date from as early as 2013, but the SEC has only recently begun to delineate the application of its regulatory regime to this new asset class. The early SEC enforcement actions focused on run-of-the-mill fraud or other misconduct, where the digital nature of the instrument was not central to the case. For example, in 2013 the SEC charged an individual selling Bitcoin investments with running a Ponzi scheme in which new contributions of bitcoin by investors were allegedly used to cover the promised weekly 7% payments.²³⁸ A Bitcoin-related Ponzi scheme was also the subject of a 2014 case in which the SEC alleged that a Connecticut man purported to sell shares in a bitcoin mining operation, but in fact paid off

* This Section is current as of December 2018 and does not reflect subsequent developments. The authors of Section 3 wish to thank Ledina Gocaj and Adam Fovent for their substantial contributions to this Section.

²³⁷ *Global Charts: Total Market Capitalization*, COINMARKETCAP (last visited Dec. 12, 2018), <https://coinmarketcap.com/charts/>.

²³⁸ Press Release (No. 2013-132), SEC, SEC Charges Texas Man With Running Bitcoin-Denominated Ponzi Scheme (July 23, 2013), <https://www.sec.gov/news/press-release/2013-132>.

investors with new investors' funds.²³⁹ Similarly, in 2017, the SEC filed fraud charges against the founder of a purported bitcoin platform alleging that he raised money from investors by touting the backgrounds of non-existent senior executives and misrepresenting key facts about the company's operations.²⁴⁰ Although the underlying activities involved digital assets, these somewhat routine fraud cases did little to address the application of the federal securities laws to digital assets generally.

July 2017 marked the first time the SEC provided detailed guidance on the application of the federal securities laws to the issuance of digital assets in the absence of fraud allegations. In its Section 21(a) report concerning tokens issued by The DAO, a blockchain-based enterprise supported by the German corporation Slock.it UG, the SEC clarified that the agency would apply the traditional test outlined in *SEC v. W.J. Howey Co.*²⁴¹ to this new asset class to determine whether an instrument is an investment contract, and therefore a security.²⁴² Though refraining in that case from bringing enforcement charges, the SEC explained that the report was meant to:

caution the industry and market participants: the federal securities laws apply to those who offer and sell securities in the United States, regardless whether the issuing entity is a traditional company or a decentralized autonomous organization, regardless whether those securities are purchased using U.S. dollars or virtual currencies, and regardless whether they are distributed in certificated form or through distributed ledger technology.²⁴³

²³⁹ Complaint, *SEC v. Homero Joshua Garza*, Civil Action No. 3:15-cv-01760 (D. Conn. Dec. 1, 2015).

²⁴⁰ Press Release (No. 2017-123), SEC, SEC Files Fraud Charges in Bitcoin and Office Space Investment Schemes (June 30, 2017), <https://www.sec.gov/news/press-release/2017-123>; Complaint, *SEC v. Renwick Haddow, et al.*, Civil Action No. 17-cv-4950 (S.D.N.Y. June 30, 2017).

²⁴¹ 328 U.S. 293 (1946).

²⁴² DAO REPORT, *supra* note 70, at 11.

²⁴³ Press Release (No. 2017-131), SEC, SEC Issues Investigative Report Concluding DAO Tokens, a Digital Asset, Were Securities (July 25, 2017), <https://www.sec.gov/news/press-release/2017-131>.

Several months later, Munchee, a company that had developed an iPhone app for restaurant reviews, attempted to raise capital by selling its own digital asset, which the promoters said would in the future be accepted as payment by third parties and would increase in value.²⁴⁴ The SEC intervened before Munchee's ICO could be completed. Citing the DAO Report, the SEC concluded that Munchee's proposed issuance of tokens constituted an illegal securities offering and issued a cease-and-desist order.²⁴⁵ Alongside the order, Chairman Jay Clayton released a statement warning market participants that the SEC would continue to be proactive in overseeing this type of activity.²⁴⁶ In November 2018, the SEC again applied the *Howey* test in entering cease-and-desist orders against two ICO issuers, Paragon Coin, Inc.²⁴⁷ and Airfox.²⁴⁸

The SEC, however, has to date provided limited guidance on how it will apply the *Howey* test to the wider array of digital assets.²⁴⁹ Even less clear is how the requirements of the federal securities laws will be applied to intermediaries transacting in digital-asset securities. This Section aims to provide a roadmap of the open questions in this area. First, this Section describes

²⁴⁴ *Munchee Inc.*, Securities Act Release No. 10,445, Admin. Proc. File No. 3-18304¶2 (Dec. 11, 2017) [hereinafter *Munchee Order*], <https://www.sec.gov/litigation/admin/2017/33-10445.pdf>.

²⁴⁵ *Id.* ¶¶ 2838.

²⁴⁶ Jay Clayton, Chairman, SEC, Statement on Cryptocurrencies and Initial Coin Offerings (Dec. 11, 2017), <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11>.

²⁴⁷ *Paragon Coin, Inc.*, Securities Act Release No. 10,574, Admin. Proc. File No. 3-18897 (Nov. 16, 2018) [hereinafter *Paragon Order*], <https://www.sec.gov/litigation/admin/2018/33-10574.pdf>.

²⁴⁸ *CarrierEQ, Inc.*, Securities Act Release No. 10,575, Admin. Proc. File No. 3-18898 (Nov. 16, 2018) [hereinafter *Airfox Order*], <https://www.sec.gov/litigation/admin/2018/33-10575.pdf>.

²⁴⁹ The application of the *Howey* test to digital assets has not yet been considered in detail by the courts. Although it has been suggested that the SEC suffered a setback in its application of the *Howey* test to digital assets when Judge Curiel in the Southern District of California recently denied its application for a temporary restraining order, the decision was based on the narrow ground that the court could not yet make a determination under the *Howey* test on disputed issues of fact and without the benefit of full discovery. See *SEC v. Blockvest, LLC*, No. 18CV2287-GPB(BLM), 2018 WL 6181408 (S.D. Cal. Nov. 27, 2018). Courts have, however, generally accepted the application of *Howey* to digital assets. See, e.g., *Solis v. Latium Networks, Inc.*, No. 18-10255 (SDW) (SCM), 2018 WL 6445543 (D. N.J. Dec. 10, 2018); *U.S. v. Zaslavskiy*, No. 17-cr-00647-RJD, 2018 WL 4346339 (E.D.N.Y. Sept. 11, 2018); *Rensel v. Centra Tech, Inc.*, No. 17-cv-24500-JLK (S.D. Fla. June 6, 2018).

the primary legal test to determine whether a digital asset is an “investment contract” and therefore a security, as outlined by the Supreme Court in *Howey*, as well as its fact-intensive application to particular digital assets. The term “security,” as defined under the Securities Act and the Exchange Act, includes not only traditional “securities” such as stocks and bonds, but other instruments that fall into the catch-all category of “investment contracts.” The *Howey* test is therefore critical, as the federal securities laws will apply to a digital asset that is a “security.”

This Section then considers the implications for digital assets that are securities, laying out potentially applicable requirements under the Securities Act and the Exchange Act. Once it is determined that a particular digital asset is a security, a broad swath of federal securities laws and regulations may apply to its offer and sale, as well as to the intermediaries involved in transacting in these products. For example, digital assets that are securities must be sold only in offerings that comply with the registration and disclosure requirements of the Securities Act, unless the assets or sale qualify for an exemption. The SEC has focused on ensuring the protections of the Securities Act apply to ICOs, which, according to Chairman Clayton, are often simply “interests in companies, much like stocks and bonds, under a new label.”²⁵⁰ Under the Exchange Act, in turn, a determination that a digital asset is a security may implicate, depending on the activity, regulatory requirements applicable to securities broker-dealers, exchanges, alternative trading systems, transfer agents, or clearing agencies.

²⁵⁰ *Virtual Currencies: The Oversight Role of the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission: Hearing Before the Senate Committee on Banking, Housing, and Urban Affairs*, 115th Cong. 4 (2018) (Statement of Jay Clayton, Chairman, SEC) [hereinafter Clayton HUA Statement].

1. Digital Assets as Securities—The *Howey* Test

Due to the varying characteristics of digital assets, any analysis of whether a particular digital asset is a “security” is fact-intensive and must be applied on a case-by-case basis.²⁵¹ Securities Act section 2(a)(1) and Exchange Act section 3(a)(10) each define the term “security”; while the definitions differ slightly, courts do not draw meaningful distinctions between the meaning of the term under the two statutes.²⁵² Although the definitions of “security” capture a broad swath of instruments,²⁵³ most digital assets that are not specifically intended to be securities are only potentially captured by the catch-all term “investment contract.”

The analysis of whether an instrument is an “investment contract” is primarily based on the landmark 1946 Supreme Court decision in *Howey*. The case involved a company’s sale of 250 acres of citrus acreage to the public, along with a contract to service the groves and sell the produce for investors, while the proceeds of the sale would “help [it] finance additional development.”²⁵⁴ In holding that this transaction constituted an “investment contract”—and thus an illegal, unregistered securities offering—the Court laid out a four-part test that continues to

²⁵¹ See *Munchee* Order, *supra* note 244, at ¶ 35 (“Determining whether a transaction involves a security does not turn on labelling . . . but instead requires an assessment of the economic realities underlying a transaction.” (citation omitted)).

²⁵² See, e.g., *SEC v. Edwards*, 540 U.S. 389, 393 (2004); *Reves v. Ernst & Young*, 494 U.S. 56, 61 n.1 (1990).

²⁵³ Securities Act section 2(a)(1) defines “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 . . . 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.

See also 15 U.S.C. § 78c(a)(10).

²⁵⁴ *Howey*, 328 U.S. at 295.

underpin the modern interpretation of the term “investment contract.” Under the *Howey* test, an investment contract exists when there is:

- (i) an investment of money;
- (ii) in a common enterprise;
- (iii) with a reasonable expectation of profits; and
- (iv) the expectation of profits is based upon the entrepreneurial or managerial efforts of others.²⁵⁵

Importantly, this test requires that any particular asset satisfy each of its four elements based on a fact-specific analysis of each asset. The Supreme Court emphasized both in *Howey* and subsequent opinions that the test “embodies a flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits.”²⁵⁶ In the digital asset context, the SEC has repeatedly emphasized that it applies a facts-and-circumstances analysis to each individual token to determine whether it is a security.²⁵⁷ The SEC has also stressed that “form should be disregarded for substance,” and that the focus must be on the “economic realities underlying a transaction, and not on the name appended to it.”²⁵⁸

²⁵⁵ *Id.* at 301 (“The test is whether the scheme involves an investment of money in a common enterprise with profits to come solely from the efforts of others.”); see also *United Hous. Found., Inc. v. Forman*, 421 U.S. 837, 852–53 (1975) (expanding on *Howey* definition of an investment contract and holding that the “touchstone” of the test is “the presence of an investment in a common venture premised on a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others”).

²⁵⁶ *Edwards*, 540 U.S. at 393 (quoting *Howey*, 328 U.S. at 299).

²⁵⁷ See Clayton HUA Statement, *supra* note 250, at 37.

²⁵⁸ See DAO REPORT, *supra* note 70, at 11 (quoting *Tcherepnin v. Knight*, 389 U.S. 332, 336 (1967)); *United Hous. Found.*, 421 U.S. at 849; see also *Munchee Order*, *supra* note 244, ¶28 (quoting the same); Stephanie Avakian & Steven Peikin, Directors, SEC and CFTC Divisions of Enforcement, Joint Statement by SEC and CFTC Enforcement Directors Regarding Virtual Currency Enforcement Actions (Jan. 19, 2018), <https://www.sec.gov/news/public-statement/joint-statement-sec-and-cftc-enforcement-directors> (stating that “the SEC . . . will look beyond form, [to] examine the substance of the activity and prosecute violations of the federal securities . . . laws”).

The *Howey* test eschews any simplistic, one-size-fits-all application to digital assets. In a recent speech, the SEC’s Director of the Division of Corporation Finance, William Hinman, expressed his view that two of the most highly valued digital assets—bitcoin and Ether—are not securities under the *Howey* test.²⁵⁹ At the same time, and in an important departure from any prior SEC statements or analysis, Director Hinman emphasized that whether any particular digital asset is a security is not static and a digital asset that might have been sold in a securities offering can change its character over time and cease to be a security.²⁶⁰ The determination whether a digital asset is an investment contract at a particular time, therefore, will be unique not only to that digital asset but perhaps also to facts and circumstances at the time it is being sold or resold. This Section outlines the complex application of the four factors of the *Howey* test to digital assets.

(a) An “Investment of Money”

Perhaps the most straightforward element of the *Howey* test is the requirement that a party invest money in the enterprise. At a high level, this element requires the investor “to give up a specific consideration in return for a separable financial interest with the characteristics of a security.”²⁶¹ The Supreme Court has stated the consideration must be “tangible and definable.”²⁶² Government-issued “fiat” currency is plainly “specific consideration,” but the federal courts and the SEC in its DAO Report have stated that an investment of “money need not take the form of cash.”²⁶³ Specifically, in the DAO Report, the SEC determined that a purchase of DAO tokens

²⁵⁹ Hinman, *supra* note 47.

²⁶⁰ *Id.*

²⁶¹ *Int’l Bhd. of Teamsters v. Daniel*, 439 U.S. 551, 559 (1979).

²⁶² *Id.* at 560.

²⁶³ DAO REPORT, *supra* note 70, at 11 (citation omitted).

with payment made in Ether tokens, another digital asset, fulfilled this first element of the *Howey* test.²⁶⁴ Courts have similarly found that payment made in bitcoin, or other digital assets, may count as currency and therefore satisfy the “investment of money” prong of *Howey*.²⁶⁵

This element is more difficult in its application to those types of digital assets that are not initially sold in exchange for either fiat currency or digital assets, but are created through “mining.” As described in the table below, digital assets available on the market today can be acquired by a variety of methods, including mining. There are two primary types of mining: proof-of-work mining and proof-of-stake mining. For those digital assets that are created by proof-of-work mining, miners compete to resolve mathematical problems to validate transactions on the network in order to add new blocks to the blockchain. The first miner to solve the problem is rewarded by a new issuance of that digital asset. All bitcoins, for example, were and are initially created through mining alone, although non-miners can purchase bitcoin in secondary market transactions. Proof-of-work mining can be energy intensive and requires specialized, costly equipment to perform.²⁶⁶ Proof-of-stake mining is similarly a way to validate transactions on a blockchain, but rather than engaging in solving mathematical problems, holders of a particular digital asset compete to validate transactions by “staking” an amount of tokens they hold.²⁶⁷

²⁶⁴ *Id.* (citing *SEC v. Shavers*, No. 4:13-CV-416, 2014 WL 4652121, at *1 (E.D. Tex. Sept. 18, 2014)).

²⁶⁵ See, e.g., *Shavers*, 2014 WL 4652121, at *1; Complaint, *SEC v. Recoin Grp. Found., LLC*, No. 1:17-cv-05725 (E.D.N.Y. Sept. 29, 2017), <https://www.courtlistener.com/recap/gov.uscourts.nyed.407676/gov.uscourts.nyed.407676.1.0.pdf>.

²⁶⁶ See Jason Evangelho, *Mining 101: An Introduction To Cryptocurrency Mining*, FORBES (Mar. 13, 2018, 4:24PM), <https://www.forbes.com/sites/jasonevangelho/2018/03/13/mining-101-what-exactly-is-cryptocurrency-mining/#56942555a83a>.

²⁶⁷ See *Proof of Work vs Proof of Stake: Basic Mining Guide*, BLOCKGEEKS (last visited Dec. 12, 2018), <https://blockgeeks.com/guides/proof-of-work-vs-proof-of-stake/>.

A digital asset’s mechanism of creation may also change over time, further complicating the application of this first element of the *Howey* test. An amount of Ether, in contrast to bitcoin, was initially created and sold in exchange for bitcoin in a “presale” before the Ethereum network was fully developed and launched.²⁶⁸ Since the Ethereum network launched, however, new Ether can be created only through proof-of-work mining, although existing and newly mined Ether can also be purchased on the secondary market.

Table: Selected digital assets and form of acquisition²⁶⁹

Digital Asset	Form of Acquisition
Bitcoin (BTC)	Proof-of-work mining
Ether (ETH)	Proof-of-work mining*
Ripple (XRP)	Sale or giveaway
Bitcoin cash (BCH)	Proof-of-work mining
EOS	Sale
Litecoin (LTC)	Proof-of-work mining
Zcash (ZEC)	Proof-of-work mining**
Stellar Lumens (XLM)	Sale or giveaway
Cardano (ADA)	Proof-of-stake mining***
IOTA (IOT)	Sale

* Ether was initially available for purchase through a presale. Since then, all Ether must either be purchased by mining or on the secondary market.

** A small portion of mined ZEC automatically is allocated to the founders of ZEC, among others.

*** Cardano was initially sold at a presale. Since then, Cardano is issued through proof-of-stake mining.

²⁶⁸ Vitalik Buterin, *Launching the Ether Sale*, ETHEREUM BLOG (July 22, 2014), <https://blog.ethereum.org/2014/07/22/launching-the-ether-sale/>.

²⁶⁹ See Benjamin Wallace, *The Rise and Fall of Bitcoin*, WIRED (Nov. 23, 2011, 2:52 PM), https://www.wired.com/2011/11/mf_bitcoin/; Buterin, *Launching the Ether Sale*, *supra* note 268; Shawn Gordon, *What is Ripple*, BITCOIN MAGAZINE (last visited Dec. 12, 2018), <https://bitcoinmagazine.com/guides/what-ripple/>; OCFX Cryptoasset Rankings & Metrics: EOS, MESSARI.IO (last visited Dec. 12, 2018), <https://onchainfx.com/asset/eos> (Not compatible with Internet Explorer browser); Joe Liebkind, *Meet Litecoin, a Faster Bitcoin That Gamers Love*, MONEY (Jan. 19, 2018), <http://money.com/money/5108447/meet-litecoin-a-faster-bitcoin-that-gamers-love/>; OCFX Cryptoasset Rankings & Metrics: Stellar (XLM), MESSARI.IO (last visited Dec. 12, 2018), <https://onchainfx.com/asset/stellar> (Not compatible with Internet Explorer browser); OCFX Cryptoasset Rankings & Metrics: Cardano (ADA), MESSARI.IO (last visited Dec. 12, 2018), <https://onchainfx.com/asset/cardano> (Not compatible with Internet Explorer browser); OCFX Cryptoasset Rankings & Metrics: Iota (IOT), MESSARI.IO (last visited Dec. 12, 2018), <https://onchainfx.com/asset/iota> (Not compatible with Internet Explorer browser). Table excludes acquisition through secondary market purchases.

Whether miners give up “tangible and definable” consideration to obtain digital assets such as to satisfy the “investment of money” element of the *Howey* test has yet to be answered by the SEC or the courts, and the concept of mining does not fit neatly into this first element of the *Howey* test. Proof-of-work miners could be viewed, however, as giving consideration in the form of their labor or the opportunity cost of the resources (including substantial electricity cost) expended to mine the digital assets. Courts have determined that, in specific circumstances, giving up resources that one would otherwise have can be consideration sufficient to fulfill this element of the *Howey* test. For example, in *Uselton v. Commercial Lovelace Motor Freight, Inc.*, the Tenth Circuit held the investment-of-money element was fulfilled when employees contributed to a voluntary stock ownership plan at their company because the employees “contributed their legal right to a portion of their wages . . . in return for the right to . . . participate in [the employer’s] profit-sharing plan.”²⁷⁰ In contrast, the Supreme Court held this element was not met in an earlier case, *International Brotherhood of Teamsters v. Daniel*.²⁷¹ In *Daniel*, employees similarly received a pension plan from their employer as part of their compensation package, but the plan was both “noncontributory” and “compulsory,” meaning that “by definition, [the employee] ma[de] no payment into the pension fund. He only accept[ed] employment, one of the conditions of which [was] eligibility for a possible benefit on retirement.”²⁷² Exchanging labor for a perceived return may therefore sometimes fulfill this element of the *Howey* test, but not—as the *Daniel* court noted—when “[o]nly in the most

²⁷⁰ 940 F.2d 564, 575 (10th Cir. 1991).

²⁷¹ 439 U.S. 551, 558–562 (1979).

²⁷² *Id.* at 558.

abstract sense may it be said that an employee ‘exchanges’ some portion of his labor in return for these possible benefits.”²⁷³

Nonetheless, the *Daniel* and *Uelton* cases do not resolve the question for digital assets that are mined. In *Daniel* and *Uelton*, the employees were giving up a percentage of a guaranteed and predetermined salary. When proof-of-work miners expend computational power to mine for bitcoin, however, they are generally giving up the opportunity cost of their time and resources. The question of whether such opportunity cost is “tangible and definable” consideration is more difficult to answer. Thus, although the “investment of money” element will likely be straightforward for those digital assets that are sold in exchange for fiat currency or other digital assets, mining adds an element of ambiguity in determining whether this element of the *Howey* test is met. The different characteristics of proof-of-work versus proof-of-stake mining may also affect the analysis of this element, particularly if the stakeholders in proof-of-stake mining could be said to receive a financial benefit from the ownership of the digital asset, much as a shareholder would receive a dividend.

Another question that has yet to be answered by the SEC or the courts is whether a digital asset that was not a security upon initial issuance (for example, because it was mined rather than sold by an issuer) can become an investment contract by virtue of secondary market trading. For example, although bitcoin is mined in the first instance, it is subsequently purchased and sold in the secondary market. One argument that the purchase and sale in the secondary market do not alter the nature of the underlying asset would hold that a contract’s character is determined upon initial issuance, and no “investment of money” was made in return for the issuance. For example,

²⁷³ *Id.* at 560.

precious metals, such as gold or silver, are similarly purchased and sold in the secondary market but are not characterized as securities.

(b) A Common Enterprise

Broadly, the “common enterprise” element focuses on the ties among individual owners of the asset. Courts have defined two different methods for fulfilling this element: horizontal commonality and vertical commonality. Under either method, the analysis of the “common enterprise” element is closely related to the final element of the *Howey* test regarding the reliance by purchasers on the efforts of others in order to realize their profit.

(1) Horizontal Commonality

Courts requiring horizontal commonality look to whether there is “a pooling of investors’ contributions and distribution of profits and losses on a pro-rata basis among investors.”²⁷⁴ In a traditional example of horizontal commonality, the Third Circuit found this element to have been met when a trust’s “solicitation and membership materials stated that [the trust] would pool participant contributions to create highly-leveraged investment power that would yield high rates of return while protecting the investors’ principal contributions.”²⁷⁵ Similarly, the First Circuit held that this element was met when the operator of a “fantasy investment game” pooled participants’ funds into a single account.²⁷⁶

Applying this factor to digital assets is a fact-specific inquiry. The relevant factors to assess whether there is horizontal commonality between investors in a digital asset include whether a centralized entity supports the digital asset, whether investors’ assets are pooled in a

²⁷⁴ *SEC v. Infinity Grp. Co.*, 212 F.3d 180, 188 (3d Cir. 2000).

²⁷⁵ *Id.*

²⁷⁶ *SEC v. SG Ltd.*, 265 F.3d 42, 49–53 (1st Cir. 2001).

central location, and whether any entity controls those pooled assets. An analysis of bitcoin, in particular, draws out the most important considerations for this factor. Purchasers of bitcoin are a disparate, unaffiliated group.²⁷⁷ The open-source Bitcoin network permits a purchase of bitcoin to be registered on a public ledger and allows the owners of bitcoin to exchange value over the network. Because all bitcoin are initially mined, there are no assets to pool in the traditional sense. Further, there is neither a central account that holds any assets nor any third party that can be said to have control over any assets. Holders of bitcoin may share in the market value fluctuations of the digital currency on a pro rata basis, but that feature alone would not seem to fulfill the element of horizontal commonality.

This element is also emblematic of how the *Howey* analysis of a digital asset may evolve over time. Ether's origin, for example, differs from the purely decentralized nature of bitcoin and even from Ether's current state. Ether was first sold in a presale of 60 million units of the digital currency in 2014.²⁷⁸ Whether or not purchasers in the initial sale could be considered to have pooled assets, after the presale new Ether could be generated only by mining. Therefore, much like the case of bitcoin, today it is difficult to argue that assets are pooled by miners of Ether.

(2) Vertical Commonality

In those circuits that use the test of vertical commonality, courts look to whether the success of the investors is dependent upon the efforts of the promoters.²⁷⁹ The example of bitcoin illustrates the close ties of vertical commonality with the final element of the *Howey* test

²⁷⁷ For general background on bitcoin, see Reuben Grinberg, *Bitcoin: An Innovative Alternative Digital Currency*, 4 HASTINGS SCI. & TECH. L.J. 160 (2011), <http://www.cs.ucsb.edu/~rich/class/cs293b-cloud/papers/bitcoin.legal.pdf>.

²⁷⁸ Nathan Reiff, *What is Ether? Is it the Same as Ethereum?*, INVESTOPEDIA, <https://www.investopedia.com/tech/what-ether-it-same-ethereum/> (last updated June 14, 2018).

²⁷⁹ See, e.g., *SG Ltd.*, 265 F.3d at 49–50.

regarding reliance on the efforts of a third party. In fact, some circuits have rejected the use of the vertical commonality test on the basis that it collapses the second and final elements of the *Howey* test.²⁸⁰ For entirely decentralized networks such as the Bitcoin network, it is difficult to say that investors are dependent upon an identifiable third party. Investors in bitcoin are dependent upon the efforts of all of the participants in the Bitcoin network generally in order to sustain the network, but the association between the various, dispersed network participants does not fit the usual paradigm applied by the courts that presumes a construct involving investors, on one hand, and promoters, on the other.

Characteristics that are indicative of vertical commonality in any digital asset would include whether the developers or promoters of the asset hold a significant stake in the asset, such that they would be incentivized to support the value of the asset and third-party holders would expect them to do so.²⁸¹ Bitcoin, for example, would not possess these characteristics.²⁸² There is no identifiable promoter of bitcoin whose role, interests or motivations upon which other owners would depend.

Whether Ether exhibits commonality is a more difficult question due to the digital asset's more centralized origins. Nonetheless, the SEC staff seems to have concluded that "putting aside the fundraising that accompanied the creation of Ether,"²⁸³ there is no longer a central party with a sufficient continuing role to fulfill the elements of the *Howey* test. For digital assets where there was an identifiable promoter, such as with Ether in its early stages, factors such as the

²⁸⁰ See, e.g., *Revak v. SEC Realty Corp.*, 18 F.3d 81, 88 (2d Cir. 1994).

²⁸¹ See Hinman, *supra* note 47 (asking "Would purchasers reasonably believe such efforts will be undertaken and may result in a return on their investment in the digital asset?").

²⁸² See *id.*

²⁸³ *Id.*

evolution of the role of the promoter since the inception of the currency and the extent to which efforts by the promoter are still necessary for the functioning of the currency will affect the analysis.

(c) A Reasonable Expectation of Profit

The final two elements of the *Howey* test are the most complex of the four and also those most indicative of a digital asset's status as a security. The third element—a reasonable expectation of profit—is the “touchstone” of the Supreme Court's decisions defining a security.²⁸⁴ To assess whether there is an expectation of profit, courts have traditionally defined profit as that derived from “capital appreciation resulting from the development of the initial investment,” for example, as in “the sale of oil leases conditioned on promoters' agreement to drill [an] exploratory well.”²⁸⁵ Profit may also come from “a participation in earnings resulting from the use of investors' funds,” such as through “dividends on the investment based on [a] savings and loan association's profits.”²⁸⁶ Along these lines, the SEC determined that investors purchasing DAO tokens reasonably expected to earn profits because “the various promotional materials disseminated by Slock.it and its co-founders informed investors that the DAO was a for-profit entity whose objective was to fund projects in exchange for a return on investment.”²⁸⁷

Digital assets may attract investors seeking to profit from the investment, even though the assets also have credible, real consumptive uses that are independent of the expectation of profit.

²⁸⁴ *Forman*, 421 U.S. at 852.

²⁸⁵ *Id.*

²⁸⁶ *Id.*

²⁸⁷ DAO REPORT, *supra* note 70, at 11–12.

For example, some use bitcoin as a medium of exchange,²⁸⁸ and spending Ether is necessary for its owners to use the Ethereum network's smart contracts, which have broad practical applications such as permitting companies to share data securely or trigger the effectiveness of insurance policies.²⁸⁹

When considering the varying motivations of holders of an asset, courts have asked which of the uses is "incidental" to the other.²⁹⁰ Stated otherwise, the question for this element is whether "the purchase of a token looks a lot like a bet on the success of the enterprise and not the purchase of something used to exchange for goods or services on the network."²⁹¹ To draw out these different motivations for purchase, courts and the SEC have focused on the actions of the promoter (to the extent there is one), as well as on the behavior of purchasers.

Courts and the SEC will scrutinize any statements by the promoters promising a return on investment, as such statements would lead investors to expect profits.²⁹² In addition, the SEC might look to the characteristics of the investors targeted by promoters in order to ascertain whether there is a true consumptive use. Marketing and selling a digital asset to members of the general public might indicate that the promoters are marketing an item for its potential for profit, while marketing to groups that would be expected to use the digital asset for its consumptive

²⁸⁸ See Christine Armario & Fabiola Sanchez, *Venezuelans Seeing Bitcoin Boom as Survival, Not Speculation*, U.S. NEWS & WORLD REPORT (Dec. 13, 2017, 5:43 PM), <https://www.usnews.com/news/business/articles/2017-12-13/venezuelans-seeing-bitcoin-boom-as-survival-not-speculation>.

²⁸⁹ Michael del Castillo, *UBS to Launch Live Ethereum Compliance Platform*, COINDESK, <https://www.coindesk.com/ubs-launch-live-ethereum-platform-barclays-credit-suisse/> (last updated Dec. 12, 2017, 9:00 AM); Stan Higgins, *AXA Is Using Ethereum's Blockchain for a New Flight Insurance Product*, COINDESK, <https://www.coindesk.com/axa-using-ethereums-blockchain-new-flight-insurance-product/> (last updated Sept. 14, 2017, 12:49 PM).

²⁹⁰ See *SG Ltd.*, 265 F.3d at 54.

²⁹¹ Hinman, *supra* note 47.

²⁹² See, e.g., Brief of SEC In Support of the U.S. in Opposition to Defendant's Motion to Dismiss Indictment at 13, *U.S. v. Zaslavskiy*, 17-CR-0647 (RJD) (E.D.N.Y. filed Mar. 19, 2018).

uses would indicate the promoters recognize that consumptive use is a significant driver of the demand for the currency.²⁹³

Promoters may also reveal an intent to sell digital assets for investment purposes by, for example, selling the assets in increments that correlate with investment, not consumptive, uses. Conversely, promoters could “buil[d] in incentives that compel using the tokens promptly on the network, such as having the tokens degrade in value over time,”²⁹⁴ which would seemingly discourage long-term holdings of the assets and indicate that the promoters are seeking users, not investors.

Even when digital assets have purported practical uses, an important aspect of the inquiry for this element of the *Howey* test will be the extent of development and widespread application of those uses. The more proven, actual uses by current holders of the digital asset, the less likely it is that expectation of profit is a motivation of holders of the asset. On the other hand, where the digital asset being sold has only contemplated or speculated future uses, an argument that purchasers had consumptive, rather than investment, intent will be difficult to sustain. Indeed, in its recent cease-and-desist order against Paragon Coin, Inc. for conducting an unregistered securities offering,²⁹⁵ the SEC observed that while potential purchasers of Paragon’s PRG digital asset were told it could be used in the future to buy goods or services, “no one was able to buy any good or service with PRG before or during the offering other than pre-ordering Paragon merchandise.”²⁹⁶

²⁹³ See Hinman, *supra* note 47.

²⁹⁴ *Id.*

²⁹⁵ Paragon Order, *supra* note 247.

²⁹⁶ *Id.* at ¶ 22.

(d) The Entrepreneurial or Managerial Efforts of the Promoter or Other Third Parties

The final and frequently most important element of the *Howey* test asks “whether the efforts made by those other than the investor are the undeniably significant ones, those essential managerial efforts which affect the failure or success of the enterprise.”²⁹⁷ Traditionally, in separating securities from commodities, courts have asked whether the increase in value of the instrument purchased derives from the efforts of an identifiable third party or from general market fluctuations. For example, in *Noa v. Key Futures, Inc.*, the Ninth Circuit held that contracts for the sale of silver were not securities because purchasers did not rely upon the efforts of others to realize their profits: “[o]nce the purchase of silver bars was made, the profits to the investor depended upon the fluctuations of the silver market, not the managerial efforts of [the sellers].”²⁹⁸ Similarly, the Ninth Circuit, in *SEC v. Belmont Reid & Co., Inc.*, held that investors purchasing gold coins on a pre-payment basis were not relying upon the managerial efforts of the promoter because their profits depended upon “the world gold market” and not the skills of the promoters.²⁹⁹ The gold purchasers acted as ordinary buyers relying on the seller to deliver the goods that they purchased.³⁰⁰ In contrast, the Second Circuit in *Glen-Arden Commodities, Inc. v. Costantino* held that purchasers in whiskey warehouse receipts relied upon the managerial efforts of others because they “entrust[ed] the promoters with both the work and the expertise to make the tangible investment pay off.”³⁰¹ The promoters of the interests in the whiskey and casks—the

²⁹⁷ *SEC v. Glenn W. Turner Enters., Inc.*, 474 F.2d 476, 482 (9th Cir. 1973).

²⁹⁸ 638 F.2d 77, 79 (9th Cir. 1980).

²⁹⁹ 794 F.2d 1388, 1391 (9th Cir. 1986).

³⁰⁰ *Id.*

³⁰¹ 493 F.2d 1027, 1035 (2d Cir. 1974).

warehouse receipts which were akin to a commodity future—promised the investors that they would find buyers in the future and investors would double their money in four years.³⁰²

In considering how this element applies to digital assets, analyzing the case of bitcoin is illustrative. Bitcoin miners profit by obtaining new tokens as a result of their own mining efforts. Certainly, a portion of their profits relies upon the greater network of miners and users on the Bitcoin network, but such reliance on the continued existence of this network is far from the reliance on the “essential managerial efforts” of others and closer to the reliance on the world gold market that was deemed not to be sufficient to fulfill this factor in *Belmont Reid*.

Nonetheless, few digital currencies in recent years have replicated the extensive decentralization of bitcoin, with many being sold specifically to finance promoters’ efforts at building a new system or service or based on the expectation that the promoters will support the project after the sale. For example, in the DAO Report, the SEC stated that “[t]he expertise of The DAO’s creators and Curators was critical in monitoring the operation of The DAO, safeguarding investor funds, and determining whether proposed contracts should be put for a vote.”³⁰³ Further, “[a]lthough DAO Token holders were afforded voting rights,” those voting rights “did not provide them with meaningful control over the enterprise, because (1) DAO Token holders’ ability to vote for contracts was a largely perfunctory one; and (2) DAO Token holders were widely dispersed and limited in their ability to communicate with one another.”³⁰⁴

Determining whether the role of the creator of a particular token rises to the level of essential managerial efforts is a fact-specific analysis. At a minimum, the analysis must take into

³⁰² *Id.*

³⁰³ DAO REPORT, *supra* note 70, at 12–13.

³⁰⁴ *Id.* at 13.

account whether there is an identifiable individual or group promoting the asset, and then assess the specific role of that party. A minimal role, without more, is unlikely to be sufficient to constitute “efforts of others” upon which purchasers can rely. For example, in *Belmont Reid*, the gold purchasers relied upon the promoter to mine gold in order to produce gold coins.³⁰⁵ The Ninth Circuit held that this reliance did not change the fact that the investors’ profit was determined by the world gold market.³⁰⁶ Instead, the reliance was like “any sale-of-goods contract in which the buyer pays for advance delivery and the ability of the seller to perform is dependent, in part, on both his managerial skill and some good fortune.”³⁰⁷

Recent enforcement actions brought by the SEC against the issuers and promoters of ICO tokens provide further insight into when the SEC believes that the role of the creator of a particular digital asset rises to the level of “essential managerial efforts.” In its November 16, 2018, cease-and-desist order against Paragon Coin, Inc., the SEC placed particular emphasis on Paragon’s stated plans to create an “ecosystem” of uses and applications that it said would increase the value of its token.³⁰⁸ Likewise, in its cease-and-desist order entered on the same date against Airfox, which had sold a digital asset (AirTokens) through an ICO, the SEC reasoned that investors’ expected profits “were to be derived from the significant entrepreneurial and managerial efforts of others—specifically AirFox and its agents—who were to create the ecosystem that would increase the value of AirTokens, and facilitate secondary market trading.”³⁰⁹

³⁰⁵ *Belmont Reid*, 794 F.2d at 1389.

³⁰⁶ *Id.* at 1391.

³⁰⁷ *Id.*

³⁰⁸ *Paragon Order*, *supra* note 247, at ¶ 34.

³⁰⁹ *Airfox Order*, *supra* note 247, at ¶ 22.

Pinpointing whether purchasers are relying upon the efforts of others is important because the separation (and resulting information asymmetries) between those investors and promoters is what underlies the disclosure requirements of securities offerings, discussed in more detail below.³¹⁰ The protections of the federal securities laws are needed where investors rely upon the efforts of a third party to realize gains from an investment because, in that scenario, “learning material information about the third party—its background, financing, plans, financial stake and so forth—is a prerequisite to making an informed investment decision.”³¹¹

Given the SEC staff’s position on Ether, the SEC seems prepared to take into account how reliance on the efforts of others may change over the course of a digital token’s lifecycle.³¹² Although the SEC has not spoken with specificity as to how this element of the *Howey* test applies to Ether, Ether’s evolution illustrates how the role of founders can change and potentially affect the *Howey* analysis. The initial developers of Ether and the Swiss entity that managed the presale and dissolved upon its conclusion—the Ethereum Switzerland GmbH³¹³—had a role in the establishment of the blockchain and the presale.³¹⁴ Ether was purposefully set up, however, to be an open-source, consensus-based blockchain that would not be controlled by any one holder of Ether. Three years after its initial sale, over 30,000 developers participate in the

³¹⁰ See also Hinman, *supra* note 47.

³¹¹ *Id.*

³¹² *Id.*

³¹³ *Terms and Conditions of the Ethereum Genesis Sale*, ETHEREUM.ORG, 3 (July 21, 2014), [https://github.com/ethereum/www/blob/master-postsale/src/extras/pdfs/TermsAndConditionsOfTheEthereumGenesisSale.pdf](https://github.com/ethereum/www/blob/master/postsale/src/extras/pdfs/TermsAndConditionsOfTheEthereumGenesisSale.pdf).

³¹⁴ Gabriel T. Rubin, *CFTC Official Urges SEC to Clarify Ether’s Status*, WALL ST. J. (May 14, 2018, 4:04 PM), <https://www.wsj.com/articles/cftc-official-urges-sec-to-clarify-ethers-status-1526328264>.

Ethereum platform,³¹⁵ a large and disperse enough group that holders of Ether can be said to rely significantly less upon the efforts of any identifiable others today than at the time of the pre-sale.

2. Implications for the Requirements of the Securities Act and Exchange Act

Although ICO in the digital asset space has “grown rapidly, gained greater prominence in the public conscience and attracted significant capital” over the past few years, the risks inherent in any under-regulated space “are high and numerous—including risks caused by or related to poor, incorrect or non-existent disclosure, volatility, manipulation, fraud and theft.”³¹⁶ The SEC’s goal in regulating securities is to mitigate these risks while facilitating capital formation through increased transparency,³¹⁷ and its authority to do so comes primarily from two statutes: the Securities Act and the Exchange Act. If a particular digital asset is classified as a security, dealings or transactions in that digital asset would be subject to the requirements of these statutes. This Section analyzes those requirements and exemptions that may be available to parties transacting in or facilitating transactions in digital assets. It also references some of the challenges of applying existing regulations to this new asset class.

(a) The Securities Act

The Securities Act regulates the offer and sale of digital assets deemed securities and

³¹⁵ Michelle Castillo, *Despite \$319 to 10 cents flash crash, ethereum still has massive potential, says digital currency expert*, CNBC.COM, <https://www.cnbc.com/2017/06/23/ethereum-has-massive-potential-blockchain-expert-william-mougayar.html> (last updated June 23, 2017, 11:31 AM).

³¹⁶ Clayton HUA Statement, *supra* note 250, at 37.

³¹⁷ *Id.* (stating that the agency’s goals are “to protect investors, maintain fair, orderly and efficient markets and facilitate capital formation.”). Other regulators have described their goals in similar terms. *See, e.g.*, Jay Clayton & J. Christopher Giancarlo, *Regulators are Looking at Cryptocurrency*, WALL ST. J.: OPINION (Jan. 24, 2018, 6:26 PM), <https://www.wsj.com/articles/regulators-are-looking-at-cryptocurrency-1516836363> (describing the combined roles of the SEC and CFTC as “to set and enforce rules that foster innovation while promoting market integrity and confidence.”).

requires either registration or exemption for the sale of such assets.³¹⁸ It focuses primarily on ensuring transparency and preventing fraud by making it “unlawful [with certain exceptions] for any person . . . to offer to sell . . . any security, unless a registration statement has been filed as to such security”³¹⁹ and the sale is accompanied by a prospectus containing certain required information.³²⁰

In practical terms, Section 5 of the Securities Act requires that before selling a security to the public, an issuer must register the securities with the SEC on Form S-1 or satisfy an exemption from registration, such as offering the securities in a private placement in accordance with Regulation D. Form S-1 requires that issuers provide extensive disclosure related to both the security being offered and the registrant itself, including details about the financial health of the company, how it will use the proceeds from the sale, and the risk factors inherent in the security.

With respect to digital assets, these disclosure requirements, and the concerns animating them, would be especially important for promoters of digital assets who use ICOs in place of conventional securities offerings. Some commenters have argued that in “the wild west of ICOs,” the disclosure requirements in Section 5 are particularly crucial.³²¹ Indeed, they are the primary means by which the SEC can ensure “transparency in [] securities markets” by “reduc[ing] opacity and, thereby, enhanc[ing] . . . efforts to deter, mitigate, and eliminate

³¹⁸ See 15 U.S.C. § 77b(a)(3).

³¹⁹ *Id.* § 77e(c).

³²⁰ *Id.* § 77j.

³²¹ Maksymilian Ewendt, *The Wild West of Initial Coin Offerings*, N.C. J.L. & TECH. (Feb. 5, 2018), <http://ncjolt.org/wild-west-initial-coin-offerings/>.

fraud.”³²² This concern about opacity ties into the final element of the *Howey* test—reliance on the efforts of others—because the more holders of digital assets rely on the efforts of others, the larger the concerns about information asymmetries between the promoters and investors.³²³

The link between failure to disclose accurate information and fraud becomes apparent when examining past SEC enforcement actions. Many of those targeted by the SEC have attempted to issue tokens while making false statements about their activities with the intent of creating an inflated impression of the value of the digital asset. For example, according to the SEC, the co-founders of Centra, which conducted an ICO that raised over \$32 million in 2017, claimed that funds raised from their “CTR Token” would help “build a suite of financial products . . . that would allow users to instantly convert hard-to-spend cryptocurrencies into U.S. dollars or other legal tender.”³²⁴ The SEC alleged that in making these statements the co-founders claimed to have agreements in place with Visa and Mastercard to create debit cards serving this function.³²⁵ Although the statements were allegedly false, such statements, along with Centra’s marketing and promotion efforts more generally, supported the value of the ICO. The SEC charged Centra’s co-founders with violating the anti-fraud and registration provisions of the Securities Act.³²⁶

³²² Chairman Clayton, Chairman, SEC, Governance and Transparency at the Commission and in Our Markets, Remarks at the PLI 49th Annual Institute on Securities Regulation (Nov. 8, 2017), <https://www.sec.gov/news/speech/speech-clayton-2017-11-08>.

³²³ Hinman, *supra* note 47 (“The impetus of the Securities Act is to remove the information asymmetry between promoters and investors.”).

³²⁴ Press Release (No. 2018-53), SEC, SEC Halts Fraudulent Scheme Involving Unregistered ICO (Apr. 2, 2018), <https://www.sec.gov/news/press-release/2018-53>.

³²⁵ *Id.*

³²⁶ Amended Complaint, *SEC v. Sohrab Sharma*, No. 18 Civ. 02909 (DLC) (S.D.N.Y. filed Apr. 20, 2018).

Several exemptions are potentially available to market participants depending upon the nature of the transaction, amount of the offering, and participants involved. The Securities Act section 4(a)(1) exemption, for example, applies to transactions by anyone other than an issuer, underwriter, or dealer.³²⁷ However, if a person purchases from an issuer “with a view to, or offers or sells for an issuer in connection with, the distribution of any security,” including digital assets deemed securities, then he or she is operating as an underwriter and cannot rely on the Securities Act section 4(a)(1) exemption.³²⁸

Transactions not involving a public offering may qualify for the exemption under Securities Act section 4(a)(2),³²⁹ including by relying on the safe harbor in Regulation D.³³⁰ SEC Rule 506 of Regulation D provides that private placements of securities would be deemed to meet the Securities Act section 4(a)(2) exemption so long as certain conditions are met, primarily that the issuer’s securities are sold only to “accredited investors,” a term that includes, among others, most entities with more than \$5 million of assets and individuals that meet certain minimum income or net worth tests.³³¹ For example, in 2017, Overstock.com’s blockchain-focused subsidiary, t0, Inc., proposed to sell \$250 million of preferred equity in the form of blockchain tokens.³³² Although t0 conceded the tokens were securities, it sought to issue the

³²⁷ 15 U.S.C. § 77d(a)(1).

³²⁸ *Id.* § 77b(a)(11) (defining underwriters).

³²⁹ *Id.* § 77d(a)(2).

³³⁰ 17 C.F.R. §§ 230.500–508.

³³¹ *Id.* § 230.501; see *Fast Answers: Rule 506 of Regulation D*, SEC, <https://www.sec.gov/fast-answers/answers-rule506htm.html> (last updated Nov. 27, 2017).

³³² Michael del Castillo, *Overstock: \$250 Million tZero ICO Under SEC Review*, COINDESK (Mar. 2, 2018, 9:11 AM), <https://www.coindesk.com/overstock-confirms-250-million-tzero-ico-sec-review/>.

tokens in a private placement offering under Regulation D of the Securities Act.³³³

Other firms have sought to conduct ICOs of digital assets that may be deemed securities in reliance on Regulation D through a construct called a Simple Agreement for Future Tokens (“SAFT”).³³⁴ Generally, SAFT purchasers invest in a blockchain company, but instead of receiving debt or equity securities, they receive a promise that the company will, at some point in the future once it has been developed, deliver to the investors a token that will have some feature on the promised blockchain system.³³⁵ The theory underlying the SAFT structure is that once the network is developed and the fully functional tokens are delivered, token recipients should no longer be relying on the efforts of the promoters, and as a result, the digital asset would not be a security under *Howey*.³³⁶ In practice, however, determining whether the digital asset that is ultimately delivered pursuant to a SAFT itself constitutes a security is still governed by the *Howey* analysis, which will look at the economic realities of the digital asset at that point in time.³³⁷

The SEC’s recent issuance of subpoenas to ICO companies applying the SAFT framework suggests that the agency may be considering whether tokens sold through a SAFT

³³³ T0.COM, INC., Confidential Private Placement Offering Memorandum, as Amended, Supplemented and Restated (Form 8-K, Ex. 99.1) (Mar. 1, 2018), https://www.sec.gov/Archives/edgar/data/1130713/000110465918013731/a18-7242_1ex99d1.htm.

³³⁴ The notion of SAFTs derived from Simple Agreements for Future Equity (“SAFE”), an agreement typically used in venture capital, which gives investors rights to future equity without a determined price per share at the time of initial investment. Pete Rizzo, *SAFT Arrives: ‘Simple’ Investor Agreement Aims to Remove ICO Complexities*, COINDESK (Oct. 3, 2017, 11:17 AM), <https://www.coindesk.com/saft-arrives-simple-investor-agreement-aims-remove-ico-complexities/>.

³³⁵ See, e.g., PROTOCOL LABS AND COOLEY LLP, SAFT PROJECT: TOWARD A COMPLIANT TOKEN SALE FRAMEWORK (2017), <https://saftproject.com/static/SAFT-Project-Whitepaper.pdf>.

³³⁶ 328 U.S. 293 (1946).

³³⁷ Hinman, *supra* note 47, at n.15.

structure continue to be securities.³³⁸ If the SAFT-derived tokens are securities, even if initially sold in an exempt offering under Regulation D, questions arise as to whether investors who received the digital assets can resell them without registration. As previously noted, Securities Act section 4(a)(1) exempts from registration transactions by a person who is not an issuer, underwriter or dealer. Although an investor may rely on this exemption to resell securities, they would need to ensure that they would not be deemed to be an “underwriter,” *i.e.*, someone who purchased the securities from the issuer with a view to distribution.³³⁹ Persons not affiliated with the issuer who have held the securities for at least one year may be able to rely on a safe harbor from “underwriter” status under SEC Rule 144.³⁴⁰ When considering whether the one-year period begins with the investment in the SAFT or the delivery of the underlying tokens, a complicating factor is the question whether the holding periods can be “tacked” together.

Another alternative for issuers of digital-asset securities is the so called “Regulation A-Plus,” adopted under the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). The JOBS Act tasked the SEC with implementing rules to exempt small issues from registration requirements.³⁴¹ Regulation A-Plus provides for two tiers of offerings, with Tier 1 encompassing offerings of up to \$20 million in a 12-month period with no more than \$6 million in offers by selling security holders that are affiliates of the issuer, and Tier 2 encompassing offerings of

³³⁸ Brady Dale, *What If the SEC Is Going After the SAFT?*, COINDESK (Mar. 6, 2018, 1:28 PM), <https://www.coindesk.com/sec-going-saft/>.

³³⁹ 15 U.S.C. § 77b(a)(11) (defining underwriters).

³⁴⁰ 17 C.F.R. § 230.144. The application of SEC Rule 144 to digital assets that were sold without reliance on an exemption is less clear. By its terms, SEC Rule 144 is available only with respect to “restricted securities,” which is generally defined as either (i) securities acquired directly or indirectly from the issuer, or from an affiliate of the issuer, in a transaction or chain of transactions not involving any public offering, or (ii) securities sold in reliance on particular exemptions from Securities Act section 5. If the securities were initially sold in a public offering without reliance on an exemption, they may not be “restricted securities” under SEC Rule 144 and holders may not be eligible for the safe harbor from status as an “underwriter.”

³⁴¹ See 15 U.S.C. § 77c(b)(2).

securities of up to \$50 million in a 12-month period with no more than \$15 million in offers by selling security holders that are affiliates of the issuer.³⁴²

Certain basic requirements apply to both Tier 1 and Tier 2 offerings under Regulation A-Plus, such as the requirement that an issuer file an offering statement with the SEC and have it qualified before the issuer may begin selling securities.³⁴³ Tier 2 offerings are subject to additional disclosure and reporting requirements.³⁴⁴ Accordingly, a Regulation A-Plus offering requires issuers of digital assets to engage more closely with the SEC than they would under a Regulation D offering, primarily because the SEC must “qualify” the offering statement.³⁴⁵

A central benefit of a Regulation A-Plus offering is that securities issued in such an offering are not subject to resale restrictions, at least under the federal securities laws.³⁴⁶ The possibility of immediate trading may encourage the development of a vibrant secondary market.³⁴⁷ However, Regulation A-Plus pre-empts state securities laws (which may separately require registration) only “with respect to primary offerings of securities by the issuer or secondary offerings by selling security holders that are qualified pursuant to Regulation A and offered or sold to qualified purchasers pursuant to a Tier 2 offering.”³⁴⁸ Tier 1 offerings and

³⁴² 17 C.F.R. § 230.251(a).

³⁴³ See *id.* § 230.251(d); ANZHELA KNYAZEVA, SEC STAFF PAPER REGULATION A+: WHAT DO WE KNOW SO FAR?, (2016), https://www.sec.gov/files/Knyazeva_RegulationA%20.pdf.

³⁴⁴ See, e.g., 17 C.F.R § 230.257(b).

³⁴⁵ *Id.* § 230.251(d).

³⁴⁶ Knyazeva, *supra* note 343, at 26.

³⁴⁷ Aaron Kaplan, *Reg A-Plus is Perfect for Initial Coin Offerings*, LAW360 (Jan. 10, 2018, 4:42 PM), <https://www.law360.com/articles/1000365/reg-a-plus-is-perfect-for-initial-coin-offerings>.

³⁴⁸ *Securities Act Rules: Compliance and Disclosure Interpretations*, SEC at Question 182.10, <https://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm> (last updated Nov. 6, 2017).

resales of securities purchased in Tier 2 offerings will still require a state-by-state analysis.³⁴⁹ In addition, by its terms, Regulation A-Plus is limited to “eligible securities,” defined as “[e]quity securities, debt securities, and securities convertible or exchangeable to equity interests, including any guarantees of such securities.”³⁵⁰ As the SEC has classified certain digital assets as “investment contracts” under the *Howey* test, it is not clear whether the SEC will treat digital assets as equity securities for purposes of Regulation A-Plus eligibility.

Even if a digital asset is exempt from the registration requirements, the digital asset may nevertheless be subject to other requirements under the Securities Act. For example, Securities Act section 17(a) makes it unlawful for any person to use fraudulent means to effect any securities sale, including making “any untrue statement of material fact or any omission to state a material fact necessary in order to make the statements made . . . not misleading.” This provision applies regardless of whether the security has been registered.³⁵¹

Securities Act section 17(b) likewise makes it unlawful for any person to publish, give publicity to, or circulate any advertisement for a security in exchange for consideration from the issuer, underwriter, or dealer of that security without fully disclosing the receipt of that consideration.³⁵² Paid promotions or endorsements of digital assets that constitute securities may thus be unlawful absent full disclosure of any underlying consideration being paid for the promotion. Indeed, in December 2018, the SEC brought enforcement actions for violation of

³⁴⁹ *Id.*

³⁵⁰ 17 C.F.R. § 230.261(c).

³⁵¹ *See* 15 U.S.C. § 77q(c).

³⁵² *Id.* § 77q(b).

Securities Act section 17(b) against boxer Floyd Mayweather Jr.³⁵³ and music producer DJ Khaled.³⁵⁴ The SEC alleged that Mayweather and Khaled had both received consideration from ICO issuers in exchange for promoting the relevant ICOs through social media posts, but failed to disclose their receipt of consideration.³⁵⁵

(b) The Exchange Act

While the Securities Act focuses on the registration of securities, the Exchange Act regulates secondary trading of securities. The Exchange Act imposes registration requirements and substantive regulations on the financial intermediaries that engage in or facilitate the trading of securities, including broker-dealers, exchanges, transfer agents, and clearing agencies. If a particular digital asset is determined to be a security, then market participants that act in these capacities in connection with the digital asset may be subject to registration and regulation as they would with any other security. Although the SEC's initial enforcement actions and public statements involving digital assets largely focused on Securities Act violations, Exchange Act considerations are more recently the focus of attention.³⁵⁶ For example, in September 2018, the SEC brought its first enforcement action against a person who allegedly acted as an unregistered

³⁵³ *Floyd Mayweather Jr.*, Securities Act Release No. 10,578, Admin Proc. File No. 3-18906 (Nov. 29, 2018), <https://www.sec.gov/litigation/admin/2018/33-10578.pdf>.

³⁵⁴ *Khaled Khaled*, Securities Act Release No. 10,579, Admin. Proc. File No. 3-18907 (Nov. 29, 2018), <https://www.sec.gov/litigation/admin/2018/33-10579.pdf>.

³⁵⁵ Press Release (No. 2018-268), SEC, Two Celebrities Charged With Unlawfully Touting Coin Offerings (Nov. 29, 2018), <https://www.sec.gov/news/press-release/2018-268>.

³⁵⁶ See, e.g., Press Release (No. 2014-273), SEC, SEC Sanctions Operator of Bitcoin-Related Stock Exchange for Registration Violations (Dec. 8, 2014), <https://www.sec.gov/news/press-release/2014-273>; Press Release (No. 2018-23), SEC, SEC Charges Former Bitcoin-Denominated Exchange and Operator with Fraud (Feb. 21, 2018), <https://www.sec.gov/news/press-release/2018-23>.

broker-dealer in connection with the sale of ICO tokens and facilitation of secondary market trading in the digital assets.³⁵⁷

This subpart highlights certain of the Exchange Act requirements for securities market intermediaries and infrastructure. While the secondary market infrastructure for traditional securities is highly regulated, much of the digital asset trading infrastructure was established without regard to the securities laws. In addition, some of the Exchange Act requirements, and the rules and regulations thereunder, do not apply neatly to digital assets as a class. The application of the Exchange Act requirements to these mostly unregulated activities may also significantly impact this business, and as a result, discourage transactions in digital assets that may be securities.³⁵⁸

(1) Brokers and Dealers

Exchange Act section 15 makes it “unlawful for any broker or dealer . . . to induce or attempt to induce the purchase or sale of, any security . . . unless such broker or dealer is registered” with the SEC.³⁵⁹ Brokers and dealers (typically referred to as “broker-dealers”), and associated natural persons (“associated persons”), are subject to extensive regulations.

A “broker” is a person “engaged in the business of effecting transactions in securities for the account of others.”³⁶⁰ This definition has been expansively interpreted by the SEC and courts.

³⁵⁷ *TokenLot LLC*, Securities Act Release No. 10,543, Exchange Act Release No. 84,075, Investment Company Act No. 33,221, Admin. Proc. File No. 3-18739 (Sept. 11, 2018) [hereinafter *TokenLot Order*].

³⁵⁸ Cf. Paul Vigna, *Crypto Investing Comes with a Big Risk: The Exchanges*, WALL ST. J. (Mar. 3, 2018, 7:00 AM), <https://www.wsj.com/articles/crypto-investing-comes-with-a-big-risk-the-exchanges-1520078400> (describing risks of using unregulated exchanges).

³⁵⁹ 15 U.S.C. § 78o(a)(1). Unless an exemption is available, non-U.S. firms “that, from outside the United States, induce or attempt to induce trades by any person in the United States” may also be subject to U.S. broker-dealer registration. See Registration Requirements for Foreign Broker-Dealers, Exchange Act Release No. 27,017, 54 Fed. Reg. 30,013 (July 18, 1989).

³⁶⁰ 15 U.S.C. § 78(a)(4)(A).

In addition to those persons executing securities transactions and holding custody of customers' funds and securities, a person or entity may be deemed a broker if it assists issuers with structuring a securities offering, identifies potential purchasers, or advertises a securities offering, among other things.³⁶¹ The SEC has highlighted that a person who is compensated through the receipt of commissions or similar transaction-based fees in connection with securities activity is likely acting as a broker.³⁶²

A person is a "dealer" if it is "engaged in the business of buying and selling securities . . . for such person's own account," but only insofar as such transactions are part of that person's "regular business."³⁶³ Importantly, a person must both buy and sell securities in order to qualify as a dealer. The SEC and courts have distinguished between dealers and traders, who also buy and sell securities, based on whether the dealer is buying and selling as a business, rather than as an investor.³⁶⁴ Indicia of dealer activity include whether the person holds itself out as willing to buy or sell securities on a continuous basis or provides liquidity to the market (as a market maker), is involved in originating new securities (such as an underwriter), has regular customers or clientele, has a regular turnover inventory of securities, and provides securities-related services in connection with its transactions (such as providing advice or extending credit).³⁶⁵

The SEC recently has focused on broker-dealer requirements relating to digital asset activity. In September 2018, the SEC entered a cease-and-desist order against TokenLot LLC

³⁶¹ ROBERT L.D. COLBY, LANNY A. SCHWARTZ & ZACHARY J. ZWEIHORN, *What Is a Broker-Dealer?*, in BROKER-DEALER REGULATION 2-1, 2-12 (2016), https://www.davispolk.com/files/whats_a_broker_dealer_2.pdf.

³⁶² *Id.* 2-18.

³⁶³ 15 U.S.C. § 78c(a)(5)(A)–(B).

³⁶⁴ COLBY, SCHWARTZ, & ZWEIHORN, *supra* note 361, at 2-59.

³⁶⁵ *Id.*

and its owner-operators, Lenny Kugel and Eli Lewitt, for unregistered broker-dealer activity.³⁶⁶ TokenLot operated a website that it marketed as an “ICO Superstore” and through which it sold digital assets both in connection with ICOs and secondary market trading.³⁶⁷ More than 6,100 individual investors placed over 8,400 purchase orders on the TokenLot platform.³⁶⁸ The SEC alleged that TokenLot and its operators acted as brokers by facilitating the sale of digital assets as part of other entities’ ICOs, including by marketing the digital assets, accepting investors’ orders, accepting payment for orders, and working with issuers to transfer digital assets to investors after payment.³⁶⁹ The SEC alleged that TokenLot and its operators also acted as dealers by purchasing digital assets for accounts in TokenLot’s name, often at a discount to the ICO price, and then selling the digital assets to investors for profit immediately or at a later time after being held in inventory.³⁷⁰ The SEC concluded that TokenLot and its operators violated the Exchange Act by engaging in such activity without the required broker-dealer registration.

Registration and operation of a broker-dealer is not a light undertaking. Firms seeking to comply with the broker-dealer registration requirements face a high compliance burden—made more difficult by the fact that the relevant rules were designed for traditional securities, custody and transfer models. Broker-dealers are subject to an extensive list of regulatory requirements, including, without limitation:

- minimum regulatory capital requirements;
- restrictions on the distribution of assets to affiliates;

³⁶⁶ *TokenLot Order*, *supra* note 357.

³⁶⁷ *Id.* ¶¶ 3, 6.

³⁶⁸ *Id.* ¶ 6.

³⁶⁹ *Id.* ¶¶ 11–12.

³⁷⁰ *Id.* ¶ 13.

- regulation concerning the handling of customers' funds and securities;
- restrictions on margin lending;
- significant event and financial reporting as well as annual financial audits;
- books and records obligations;
- supervision and surveillance requirements;
- anti-money-laundering and know-your-customer requirements;
- restrictions on communications with the public;
- requirements to obtain FINRA approval for material changes in business or certain changes in ownership; and
- general adherence to high standards of commercial honor and just and equitable principles of trade.³⁷¹

In addition to registration with the SEC, broker-dealers are also generally required to become members of FINRA and register with applicable states. Natural persons seeking to become associated with a broker-dealer must pass qualifying examinations administered by FINRA, subject themselves to fingerprinting and provide disclosure of extensive background information. Registered individuals may be subject to restrictions on the business activities that they engage in outside the scope of their association with the broker-dealer, including personal securities transactions, must meet continuing education requirements, and are subject to various ongoing reporting requirements.³⁷² Broker-dealers and associated natural persons are subject to examination and enforcement by the SEC, applicable states, FINRA and any other self-regulatory organization of which the broker-dealer is a member.³⁷³

³⁷¹ See COLBY, SCHWARTZ, & ZWEIHORN, *supra* note 361, at 2-6 to 2-9.

³⁷² *Id.*

³⁷³ *Id.*

(2) Exchanges and Alternative Trading Systems

Among other things, the Exchange Act regulates the activities of securities exchanges. Exchange Act section 3(a)(1) defines an exchange as any entity that “constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities,” although the term does not include persons that merely route orders or operate single-dealer platforms.³⁷⁴ Exchange Act section 5 makes it “unlawful for any . . . exchange, directly or indirectly, . . . to effect any transaction in a security” unless it is registered with the SEC as a national securities exchange.³⁷⁵

Many existing digital asset trading platforms, which maintain limit order books of bids and offers for digital assets and match buyers with sellers, would appear to be acting as an “exchange,” if the digital assets traded on the platforms are securities.³⁷⁶ Indeed, in November 2018, the SEC brought an enforcement action against Zachary Coburn, the former operator of the EtherDelta online platform, on the basis that EtherDelta had operated as an unregistered exchange in violation of the Exchange Act.³⁷⁷ Although ostensibly a “decentralized” exchange operating through a smart contract, EtherDelta’s website provided a user-friendly interface that allowed buyers and sellers to access a secondary market for certain digital tokens, particularly

³⁷⁴ See 17 C.F.R. § 240.3b-16.

³⁷⁵ 15 U.S.C. § 78e.

³⁷⁶ See Public Statement, SEC, Statement on Potentially Unlawful Online Platforms for Trading Digital Assets (Mar. 7, 2018) [hereinafter SEC Statement on Digital Asset Trading Platforms], <https://www.sec.gov/news/public-statement/enforcement-tm-statement-potentially-unlawful-online-platforms-trading>. A non-U.S. exchange may also become subject to registration with the SEC if it “provides direct electronic access to persons located in the U.S.” See, e.g., Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: Eurex Deutschland, Exchange Act Release No. 70,148 (Aug. 8, 2013) [hereinafter Eurex Report], <https://www.sec.gov/litigation/investreport/34-70148.pdf>.

³⁷⁷ *Zachary Coburn*, Exchange Act Release No. 84,553, Admin. Proc. File No. 3-18888 (Nov. 8, 2018) [hereinafter EtherDelta Order].

Ether and ERC20 Tokens (including many digital assets issued in ICOs).³⁷⁸ EtherDelta’s website provided access to the EtherDelta order book, allowing users to enter buy or sell orders for supported digital assets at a specified price and with a specified time for the order to remain open.³⁷⁹ Between July 12, 2016, and December 15, 2017, more than 3.6 million orders were traded on EtherDelta platform.³⁸⁰ In this regard, the SEC alleged that EtherDelta operated as a market place for bringing together the orders of multiple buyers and sellers in digital assets that constituted securities, and thereby itself constituted an exchange for the purposes of the Exchange Act.³⁸¹ By not registering as an exchange, or qualifying for an exemption from registration, Coburn operated EtherDelta in violation of the Exchange Act.³⁸²

The activities of registered national securities exchanges are subject to extensive regulation by the SEC. The exchange’s rules and stated policies, practices, and interpretations, are subject to filing with and, in most cases, approval by, the SEC before they can become effective.³⁸³ A national securities exchange’s rules, among other things, must be “designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade . . . and, in general, to protect investors and the public interest.”³⁸⁴ National securities

³⁷⁸ *Id.* ¶¶ 1, 2.

³⁷⁹ *Id.* ¶ 2.

³⁸⁰ *Id.* ¶ 4.

³⁸¹ *Id.* ¶ 26.

³⁸² *Id.* ¶ 27.

³⁸³ 15 U.S.C. § 78s(b)(1).

³⁸⁴ *Id.* § 78f(b)(5).

exchanges are also themselves SROs and must therefore enforce their members' compliance with the exchanges' rules and the federal securities laws.³⁸⁵

In practice, firms wishing to offer a trading platform for digital assets may find that doing so through a registered national securities exchange is impractical. In addition to the extensive regulatory obligations imposed on exchanges, status as a national securities exchange may also limit the business that the platform can undertake. Only registered broker-dealers and their natural person associated persons—rather than direct investors—may become members of a national securities exchange.³⁸⁶ In addition, only securities registered under the Exchange Act may be traded on national securities exchanges.³⁸⁷

Given the regulatory burden of operating as a national securities exchange and the limitations on the kinds of securities that may be traded, many have considered operating trading platforms for digital assets as an ATS operated by a registered broker-dealer. Although a broker-dealer would meet the definition of an “exchange” by providing a marketplace for bringing together purchasers and sellers of securities, a broker-dealer (although not others) may rely on an exemption from exchange status if it operates an ATS in compliance with Regulation ATS.³⁸⁸ While ATS registration is less burdensome than registration and regulation as a national securities exchange, ATSs are subject to regulation as a broker-dealer and cannot engage in all the same activities as national securities exchanges.³⁸⁹ In particular, under Regulation ATS,

³⁸⁵ *Id.* § 78s(g)(1).

³⁸⁶ *Id.* § 78f(c)(1).

³⁸⁷ *Id.* § 78l(a).

³⁸⁸ *See* 17 C.F.R. § 240.3a1-1(a)(2).

³⁸⁹ ATSs that effect five percent of the trading volume with respect to a particular non-exchange listed equity security may, however, become subject to Regulation SCI, a regulation that seeks to ensure the operational integrity
(cont'd)

ATSs cannot “[s]et rules governing the conduct of subscribers other than the conduct of such subscribers’ trading on such organization” or “[d]iscipline subscribers other than by exclusion from trading.”³⁹⁰ ATSs must register as broker-dealers with the SEC in addition to filing Form ATS, and must become members of the requisite SRO.³⁹¹

At least one firm has structured an ATS to facilitate secondary market trading in digital asset securities, although limited to one particular security with limited functionality. In 2016, Overstock.com registered and issued preferred stock as “digital securities.” These securities would “have the same rights, preferences and privileges as traditional securities of the same class, but . . . [their] ownership and transfer [is] recorded on a proprietary ledger that will be publicly distributed.”³⁹² Overstock arranged for these securities to be available for secondary-market trading on its subsidiary broker-dealer’s ATS, although unlike open networks like Bitcoin, which allow anyone to open a wallet and hold the asset, the Overstock system is a “closed trading platform” where “only customers of the sole broker-dealer that will be licensed to provide access to the . . . digital securities trading platform . . . will be able to buy and sell [the] digital securities.”³⁹³

(3) Clearing Agencies and Transfer Agents

One of the primary innovations of blockchain technology is that settlement of transactions in digital assets can occur without involving or relying on a particular intermediary.

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and continuing availability of critical securities market infrastructure. See 17 C.F.R. § 240.1000 (clause (2) of definition of SCI alternative trading system).

³⁹⁰ 17 C.F.R. § 242.300(a)(2).

³⁹¹ *Id.* § 242.301(b); see also SEC Statement on Digital Asset Trading Platforms, *supra* note 376.

³⁹² Overstock.com, Prospectus Supplement (Form 424B2) (Nov. 14, 2016), <https://www.sec.gov/Archives/edgar/data/1130713/000104746916016691/a2230280z424b2.htm>.

³⁹³ *Id.*

When the digital asset is a security, however, this innovation raises a round hole, square peg problem, as the federal securities laws assume that intermediaries are involved in settlement, and seek to regulate those intermediaries. In particular, Exchange Act section 17A(b)(1) requires a person acting as a “clearing agency” to register with the SEC. A clearing agency operates as an SRO,³⁹⁴ and is subject to a regulatory regime similar to national securities exchanges—including that it must adopt and operate in accordance with rules that are subject to filing and, typically, approval by the SEC.³⁹⁵

A person is a “clearing agency” if, among other things, the person acts as an intermediary to “permit[] or facilitate[] the settlement of securities transactions . . . without physical delivery of securities certificates.”³⁹⁶ With regard to traditional exchange-traded securities, the Depository Trust Company and its affiliate, the National Securities Clearing Corporation, are each registered clearing agencies that, together, net down a large number of transactions and maintain records of changes in beneficial ownership among their participants.³⁹⁷

For digital assets that are securities, where transactions settle on a blockchain through the activities of miners, it is unclear who—if anyone—might be acting as a clearing agency. At first glance, the miners might fit this definition as they most directly facilitate settlement, but because their operations are decentralized and uncoordinated, it is difficult to imagine how, practically, they could be subject to registration with the SEC. Further, miners may not even be aware that

³⁹⁴ 15 U.S.C. § 78c(a)(26).

³⁹⁵ *Id.* § 78s(b)(1).

³⁹⁶ *Id.* § 78c(a)(23). The definition of “clearing agency” excludes a bank or broker-dealer that would “be deemed to be a clearing agency solely by reason of functions performed by such institution as part of customary banking, brokerage, [or] dealing” activities.

³⁹⁷ See *Clearing Agencies*, SEC, <https://www.sec.gov/divisions/marketreg/mrclearing.shtml> (last updated Dec. 18, 2018).

they are facilitating settlement of securities; for example, many ICO tokens have been built as ERC-20 smart contracts on the Ethereum network, rather than being separately mined. Where these tokens are securities, Ether miners may unwittingly be facilitating the settlement of securities transactions. The firm that created the system in the first place, or the firm that seeks to use an existing system for securities settlement, may alternatively be considered to be clearing agencies.

The SEC staff has identified this issue, although its views are not yet known. In connection with Overstock's digital securities offering described above, the SEC staff asked "whether [Overstock] anticipate[s] interaction with or involvement of a registered clearing agency."³⁹⁸ In part based on the unique structure of its offering, Overstock argued that no clearing agency was involved because (i) changes of ownership were actually reflected on the books of the issuer maintained by its transfer agent, and (ii) certain other functions were performed by a registered broker-dealer that may benefit from the exemption for certain broker-dealer functions.³⁹⁹ However, the SEC staff again made at least a passing reference to the issue in a March 2018 warning that the activities of certain online trading platforms "may trigger other registration requirements under the federal securities laws, including broker-dealer, transfer agent, or clearing agency registration, among other things."⁴⁰⁰

Status as a "transfer agent" is also potentially triggered by activities involving the settlement of securities over a blockchain, although registration may not actually be required. A "transfer agent" is a person that, on behalf of an issuer, among other things, "register[s] the

³⁹⁸ OVERSTOCK.COM, INC., AMENDMENT NO. 1 TO REGISTRATION STATEMENT ON FORM S-3/A, File No. 333-203607 (2015), <https://www.sec.gov/Archives/edgar/data/1130713/000110465915055326/filename1.htm>.

³⁹⁹ *Id.*

⁴⁰⁰ SEC Statement on Digital Asset Trading Platforms, *supra* note 376.

transfer of . . . securities” or “transfer[s] record ownership of securities by bookkeeping entry without physical issuance of securities certificates.”⁴⁰¹ As with clearing agencies, this statutory definition could apply to various parties involved in the settlement of securities transactions over a blockchain.

Although registration as a transfer agent triggers certain regulatory requirements, merely acting as a transfer agent does not always require registration. Under Exchange Act section 17A(c)(1), unless registered, a transfer agent may not engage in transfer agent activities with respect to securities registered under Exchange Act section 12, or certain securities exempt from section 12 registration.⁴⁰² Because most digital assets have not been registered under Exchange Act section 12, transfer agent registration may not be a current concern, although it may become one should firms seek in the future to register securities that will settle over a blockchain.⁴⁰³

* * *

This Section has sought to explore the regulatory questions and potential hurdles for firms dealing in digital assets that are determined to be securities. The *Howey* test as applied to digital assets is still very much under development by the SEC and the courts, but it is evident at this early stage that the analysis is necessarily fact-specific and requires a close understanding of

⁴⁰¹ 15 U.S.C. § 78c(a)(25).

⁴⁰² See also Transfer Agent Regulations, Exchange Act Release No. 76,743, 80 Fed. Reg. 81,948, 81,960 (Dec. 31, 2015) (“Section 17A(c)(1) of the Exchange Act requires any person performing any of these functions with respect to any security registered pursuant to Section 12 of the Exchange Act or with respect to any security which would be required to be registered except for the exemption contained in subsection (g)(2)(B) or (g)(2)(G) of Section 12 . . . to register.”).

⁴⁰³ In the case of Overstock’s registered preferred stock digital securities, ComputerShare Trust Company, a registered transfer agent was used and, notwithstanding the blockchain aspects of the offering, ultimately the securities were “issued as book-entry digital securities directly registered in the stockholder’s name in the stockholder books and records maintained for us by Computershare.” Overstock.com, Prospectus Supplement (Form 424B2) (Nov. 14, 2016), <https://www.sec.gov/Archives/edgar/data/1130713/000104746916016691/a2230280z424b2.htm>.

the underlying blockchain technology and the operations of the promoter at present and over time. This Section has outlined several issues facing intermediaries dealing in digital assets once a *Howey* analysis suggests the asset is likely to be viewed as a security by the SEC, including the often high and unexpected burdens associated with registration as a broker-dealer or national securities exchange. The federal securities laws will no doubt develop to take into account the particular characteristics of this burgeoning industry. Until then, market participants must carefully try to assess how the traditional federal securities laws will be applied to the rapidly developing technology of digital assets.

SECTION 4. FEDERAL SECURITIES REGULATION: INVESTMENT COMPANY ACT AND INVESTMENT ADVISERS ACT*

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If a digital asset is deemed to be a security, the regulatory regimes of the Investment Company Act of 1940 and the Investment Advisers Act of 1940, which regulate, respectively, the operations of securities investment funds and the provision of securities-related investment advice, may also apply.

1. The Investment Company Act

While the SEC, market participants, industry commenters, and the courts have scrutinized the jurisdiction of the SEC over ICOs, tokens, and other digital assets under the Securities Act and the Exchange Act, there has been far less public dialogue on the status of these products or related participants under the ICA. For example, in the SEC's cornerstone pronouncement on its jurisdiction in this area, the DAO Report, the SEC expressly determined not to conduct an investment company analysis under the ICA, and in the one subsequent case in which the SEC charged ICA violations, there is little discussion or analysis.⁴⁰⁴ Nonetheless, because investment company status, and the attendant regulatory consequences, could be functionally unworkable in the context of ICOs and other digital asset products, the application of the ICA in this area warrants the close attention of market participants.

* The authors of Section 4 wish to thank Patrick Green and Aliza Khan for their substantial contributions to this Section.

⁴⁰⁴ See DAO REPORT, *supra* note 70, at 1 n.1; *Crypto Asset Mgmt.*, Securities Act Release No. 10,544, Advisers Act Release No. 5004, Investment Company Act Release No. 33,222, Admin. Proc. File No. 3-18740 (Sept. 11, 2018) [hereinafter *Crypto Asset Order*], <https://www.sec.gov/litigation/admin/2018/33-10544.pdf>.

At the same time, investment vehicles of all types have sought to enter the markets expressly for the purpose of providing investors with investment exposure to digital assets through digital asset funds. A number of such funds, primarily exchange-traded funds (“ETFs”) planning to invest in bitcoin futures, have sought to register as investment companies under the ICA, thereby implicating the Act’s regulatory consequences for digital asset funds. Based on the nature of the intended underlying assets, other issuers—primarily exchange-traded products (“ETPs”) intending to invest directly in bitcoin or other tokens—have sought registration only for their securities under the Securities Act and not fund registration under the ICA. (Technically, an ETF is an ETP, but this Section primarily uses “ETP” to refer to exchange-traded investment vehicles that are not regulated as investment companies under the ICA.) In some cases, these “Securities Act-only” registrants have provided risk disclosure with respect to the possibility that the issuer could be considered an investment company and subject to regulation under the ICA.

To date, none of the ICA or Securities Act-only registration statements for these digital asset funds has become effective. In connection with the ICA registration filings by digital asset funds, the SEC staff has raised threshold concerns about the ability of funds that invest substantially in cryptocurrencies and related products to comply with key investor protection provisions of the ICA. The staff explained these concerns in a letter and request for information directed to investment company trade groups on January 18, 2018.⁴⁰⁵ At the request of the staff, all pending ICA registration statements for digital asset funds have been withdrawn, and there is, in effect, a moratorium on ICA registration of digital asset funds, pending further study of these issues. Some Securities Act-only ETP registration statements remain pending, but the ETPs have

⁴⁰⁵ See SEC Staff Letter from Dalia Blass, Dir. of Div. Inv. Mgmt., SEC, to Paul Schott Stevens, President & CEO, Inv. Co. Inst., & Timothy W. Cameron, Asset Mgmt. Grp.–Head, SIFMA (Jan. 18, 2018) [hereinafter Staff Cryptocurrency Funds Letter], <https://www.sec.gov/divisions/investment/noaction/2018/cryptocurrency-011818.htm>.

been unable to persuade the SEC that they meet the standards for exchange listing (which is required for the operation and sale of ETPs), and to date, the SEC has not approved the listing of any digital asset ETPs.⁴⁰⁶

This Section will identify and address a range of issues raised by digital products under the ICA, focusing primarily on two areas: (1) application of the regulatory framework of the ICA to ICOs and digital asset funds with respect to investment company status, and (2) regulatory implications for registered investment companies that invest in digital assets, and the related concerns raised by the SEC staff.

(a) Overview of Regulatory Framework

The ICA, which has been called “the most complex of the entire SEC series of securities laws,”⁴⁰⁷ was enacted in 1940 to combat widespread abuses identified in the formation and sale to the public of interests in collective investment vehicles, primarily conduct involving self-dealing, conflicts of interest, misappropriation of funds, overreaching, and misleading disclosure to investors on the part of the sponsors and promoters of these vehicles. As a consequence, unlike the Securities Act and Exchange Act that preceded it, the ICA is not primarily a disclosure statute, but extensively regulates the conduct and operation of “investment companies,” as the

⁴⁰⁶ See, e.g., Self-Regulatory Organizations; Bats BZX Exchange, Inc.; Order Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, to BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, To List and Trade Shares Issued by the Winklevoss Bitcoin Trust, Exchange Act Release No. 80,206, 82 Fed. Reg. 14,076 (Mar. 16, 2017) [hereinafter Winklevoss Order] (through delegated authority to the Commission staff, disapproving a proposed rule change that would have allowed the Bats BZX Exchange to list and trade shares of the Winklevoss Bitcoin Trust, for the stated reasons that the significant markets for Bitcoin are unregulated and the exchange had not entered into, and would currently be unable to enter into, surveillance-sharing agreements with the underlying markets). The SEC granted the exchange’s petition for review of the disapproval order, but subsequently affirmed the staff’s disapproval of the exchange’s rule. See Self-Regulatory Organizations; Bats BZX Exchange, Inc.; Order Setting Aside Action by Delegated Authority and Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, to List and Trade Shares of the Winklevoss Bitcoin Trust, Exchange Act Release No. 83,723, 83 Fed. Reg. 37,579 (Aug. 1, 2018); see also Robert Crea, et al., *Cryptocurrency Exchange Traded Products: If, When, and How*, 25 Inv. Law., Dec. 2018, at 1, http://prod.resource.cch.com/docmedia/attach/WKUS-TAL-DOCS-PHC/41/09013e2c8ca9fdf8_IL_1218.pdf.

⁴⁰⁷ 1 LOUIS LOSS & JOEL SELIGMAN, SECURITIES REGULATION 263–64 (3d ed. 1989).

term is defined under the Act, and their sponsors, service providers, first- and second-tier affiliates, and distributors. It has famously been described as “the most intrusive financial regulation known to man or beast.”⁴⁰⁸ Enactment of the ICA reflected “a congressional recognition that substantive protections beyond the disclosure requirements of the [Securities Act] and the [Exchange Act] were needed because of the unique character of investment companies and their role in channeling savings into the national economy.”⁴⁰⁹

(1) Registration and Regulation Under the ICA

Issuers that fall within the definition of “investment company” and offer their shares to the public must register as such with the SEC, in addition to registering their shares for sale under the Securities Act. The SEC has designed special “dual registration” forms for these companies. In keeping with the congressional goals described above, once registered, these companies are subject to a comprehensive federal regulatory framework that “places substantive restrictions on virtually every aspect of the operations of investment companies: their valuation of assets, their governance and structure, their issuance of debt and other senior securities, their investments, sales and redemptions of their shares, and, perhaps most importantly, their dealings with service providers and other affiliates.”⁴¹⁰

⁴⁰⁸ Jerry W. Markham, *Mutual Funds Scandals—A Comparative Analysis of the Role of Corporate Governance in the Regulation of Collective Investments*, 3 HASTINGS BUS. L. J. 67, 76 (2006) (quoting CLIFFORD E. KIRSCH, *THE FINANCIAL SERVICES REVOLUTION* 382 (1997)), https://repository.uchastings.edu/cgi/viewcontent.cgi?article=1098&context=hastings_business_law_journal.

⁴⁰⁹ SEC, DIV. OF INV. MGMT., *PROTECTING INVESTORS: A HALF CENTURY OF INVESTMENT COMPANY REGULATION* xvii (1992) [hereinafter *PROTECTING INVESTORS*], <https://www.sec.gov/divisions/investment/guidance/icreg50-92.pdf>.

⁴¹⁰ Paul F. Roye, Dir., Div. Inv. Mgmt., SEC, Remarks Before American Law Institute/American Bar Association Investment Company Regulation and Compliance Conference (June 19, 2003), <https://www.sec.gov/news/speech/spch061903pfr.htm>.

The ICA imposes different types of regulation depending on the type of registered investment company. Registered investment companies may be either open-end or closed-end investment companies. Open-end investment companies (such as mutual funds) must issue only “redeemable securities,” which are securities that are redeemable on request by shareholders, on a daily basis, for a proportionate amount of the shareholder’s investment based on net asset value (“NAV”). Shares of open-end funds are offered to the public (including to retail investors) on a continuous basis, and are sold on a principal basis from the issuer at NAV. Closed-end funds, by contrast, do not offer redeemable securities and are typically traded by investors on exchanges, at prices set by the market, rather than in continuous offerings at NAV. Open-end funds are subject to additional regulation relating to the issuer’s obligation to redeem shares at NAV. Closed-end funds are subject to additional regulation under the Exchange Act relating to the listing of their shares.

ETFs are generally registered as open-end funds, but are traded by public investors on exchanges, at prices that are set by the market but designed to be aligned with NAV through an arbitrage mechanism. They operate pursuant to special ICA exemptive orders, designed to adapt the requirements of the ICA to their operational structure, and are also subject to Exchange Act listing requirements. The exchange proposing to list the ETF must apply to and obtain approval from the SEC under Rule 19b-4 for an exchange rule change that will permit the listing.

Because of the significant regulatory consequences that follow from the characterization of an issuer as an investment company, there is an extensive and well-developed body of law surrounding the threshold “status” issue: is the issuer an “investment company,” as defined in the ICA? In many situations, the regulatory consequences of investment company status will be prohibitive, and an affirmative answer to this threshold question would present potentially

insurmountable hurdles. On the other hand, for issuers that can comply with the regulatory burdens imposed by the ICA, registered investment company status offers many benefits in terms of market acceptance,⁴¹¹ access to continuous capital flows (for open-end funds), and significant tax benefits.⁴¹²

An issuer can be characterized as an investment company under either of two scenarios:

- (1) **Orthodox Investment Companies**—the issuer is engaged primarily in the business of investing in securities or holds itself out as such;⁴¹³ or
- (2) **Inadvertent Investment Companies**—the issuer meets a statistical investment test (*i.e.*, 40% or more of its assets are invested in investment securities).⁴¹⁴

The ICA provides an exception from the definition of investment company for issuers that fall within the “inadvertent” investment company definition, but are primarily engaged in an operating or other type of business. The ICA also provides exceptions to the definition of investment company for certain types of collective investment vehicles (*e.g.*, private funds and pension plans), in each case that meets specific conditions.

⁴¹¹ Given the stringent investor protection provisions of the ICA, in particular those that provide investors with daily liquidity at NAV, transparency (with respect to investment strategy, holdings, fees and expenses), safekeeping of assets, governance safeguards, and protections against overreaching by affiliates, mutual funds have become the investment of choice as a savings vehicle for U.S. investors of all types, including retail investors and a large segment of the investing public referred to by SEC Chairman Clayton as “Mr. and Mrs. 401(k).” See Jay Clayton, Chairman, SEC, Remarks at the Economic Club of New York (July 12, 2017) [hereinafter Clayton Remarks], <https://www.sec.gov/news/speech/remarks-economic-club-new-york>. As of 2017, assets in U.S. mutual funds were \$18.7 trillion, compared to \$3.3 trillion for assets in ETFs. See INV. CO. INST., 2018 INVESTMENT COMPANY FACT BOOK 58, 86 (58th ed. 2018), https://www.ici.org/pdf/2018_factbook.pdf.

⁴¹² Investment companies that qualify as “registered investment companies” or “RICs” under Sub-Chapter M of the Internal Revenue Code enjoy pass-through taxation, so that investors pay taxes on distributed income and gains, but the RIC itself does not pay federal income taxes. See 26 U.S.C. § 852.

⁴¹³ 15 U.S.C. § 80a-3(a)(1)(A).

⁴¹⁴ *Id.* § 80a-3(a)(1)(C).

(2) Implications for ICOs and Digital Asset Funds

The regulatory scheme of the ICA, which was designed for investments in securities and other traditional assets, raises novel issues when applied to either (1) issuers of tokens or other digital assets, in ICOs or otherwise, which in most cases could not realistically function under such a regime, or (2) digital asset funds that fall within the definition and seek to register under the ICA. These will be discussed in more detail below, but it is helpful to keep the basic “digital asset” issues in mind while reading the description of the regulatory scheme.

ICOs—Inadvertent Investment Company Status. The DAO Report clarified that the digital tokens issued in an ICO can be securities and the entity offering those tokens can be an issuer of securities. That issuer could also be an investment company if it holds instruments determined to be securities at levels breaching the “inadvertent investment company” test.⁴¹⁵ This could happen, for example, if the issuer invested cash held pending use for various funding proposals.⁴¹⁶

⁴¹⁵ See *Crypto Asset Order*, *supra* note 404. Characterization of an ICO issuer as an investment company would not be the first time a novel structure or enterprise found itself inadvertently caught in the ICA regime. See, e.g., *Prudential Ins. Co. of Am. v. SEC*, 326 F.2d 383 (3d Cir. 1964) (holding that an insurance company separate account funding variable annuity contracts sold to the public was an investment company under the ICA). In a more analogous scenario, high tech startups have faced these issues based on high capital needs and low physical assets and in some cases extremely profitable investment deployment of cash. See, e.g., *Yahoo! Inc.*, Investment Company Act Release No. 24,494, 2000 WL 870891 (June 13, 2000) [hereinafter *Yahoo! Order*] (granting an order exempting Yahoo from investment company status under ICA section 3(b)(2)). To give some indication of the potential stakes involved in these determinations, Yahoo was later sued by shareholders challenging the ICA exemption, although Yahoo prevailed, based on the Ninth Circuit Court of Appeals holding that the ICA does not establish a private right of action for challenging the continued validity of an ICA exemption. See *UFCW Local 1500 Pension Fund v. Mayer*, 895 F.3d 695 (9th Cir. 2018).

⁴¹⁶ It has also been suggested that, absent SEC clarification, an issuer of tokens could be an investment company if it retained a significant amount of its own tokens. See *Examining the Cryptocurrencies and ICO Markets: Hearing Before the Subcomm. on Capital Mkts., Sec. & Inv. of the H. Comm. on Fin. Servs.*, 115th Cong. (2018) (testimony of Robert Rosenblum, Partner, Wilson Sonsini Goodrich & Rosati), <https://docs.house.gov/meetings/BA/BA16/20180314/108012/HHRG-115-BA16-Wstate-RosenblumR-20180314.pdf>.

Digital Asset Funds—Compliance with ICA Investor Protections. Sponsors of a number of digital asset funds have sought ICA registration and regulation, and are willing to be subject to the ICA’s regulatory regime. For reasons relating primarily to market acceptance, these funds are organized as open-end rather than closed-end funds and primarily use the ETF structure. These registration efforts have encountered SEC staff concerns about the “fit” of these funds and their holdings with the ICA’s investor protection provisions, especially those relating to valuation, liquidity, custody, the ETF arbitrage mechanism, and fraud and manipulation. As discussed in greater detail below, there is currently a moratorium on these filings while the SEC staff studies these issues. However, even if the moratorium is lifted, digital asset funds will likely face continuing scrutiny on these issues that will require assiduous ongoing attention to compliance and implementation of rigorous compliance policies and procedures.

In addition, funds registered under the ICA that invest in digital assets to any extent will have to face the same issues, even though the overall impact will not be as significant.⁴¹⁷

(3) Investment Company Status—Digitized Product Issuers and Vehicles for Investment in Digitized Products

In general, an “investment company” under the ICA is an issuer that is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, or trading in securities.⁴¹⁸

In addition, the definition of an “investment company” includes any issuer which is engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities, and owns or proposes to acquire investment securities having a value

⁴¹⁷ See Joe Morris, *BlackRock Open to Bitcoin Investments: Report*, IGNITES (July 16, 2018), http://ignites.com/c/2035193/238223/blackrock_open_bitcoin_investments_report.

⁴¹⁸ 15 U.S.C. § 80a-3(a)(1)(A) defines “investment company” as any issuer which “is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, or trading in securities.”

exceeding 40% of the value of such issuer's total assets (exclusive of Government securities and cash items) on an unconsolidated basis.⁴¹⁹ However, an issuer that falls within this part of the definition is not an investment company if it is primarily engaged, directly or through a wholly-owned subsidiary or subsidiaries, in a business or businesses other than that of investing, reinvesting, owning, holding, or trading in securities.⁴²⁰

The definition of "investment company" in the ICA thus applies both to intentional or "orthodox" investment companies, which ordinarily are marketed as securities investment vehicles, and to "inadvertent" investment companies, which are companies that are presumed to be investment companies because of the percentage of their assets invested in investment securities.⁴²¹

(i) The Issuer Requirement

As a preliminary matter, for a person to be an investment company it must be an issuer, that is, a "person who issues or proposes to issue any security, or has outstanding any security which it has issued."⁴²² This definition is similar to the definition of "issuer" in the Securities Act, and is likely to be interpreted in a similar manner.⁴²³

⁴¹⁹ ICA § 3a(1)(C), 15 U.S.C. § 80a-3(a)(1)(C), defines "investment company" to include any issuer which "is engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities, and owns or proposes to acquire investment securities having a value exceeding 40 per centum of the value of such issuer's total assets (exclusive of Government securities and cash items) on an unconsolidated basis."

⁴²⁰ 15 U.S.C. § 80a-3(b)(1).

⁴²¹ The body of law interpreting ICA status issues is extensive and complex, and this White Paper necessarily provides only a basic introduction to these issues. For a full discussion of these issues, see ROBERT H. ROSENBLUM, INVESTMENT COMPANY DETERMINATION UNDER THE 1940 ACT: EXEMPTIONS AND EXCEPTIONS (2d ed. 2003). See also 1 THOMAS P. LEMKE, GERALD T. LINS & A. THOMAS SMITH III, REGULATION OF INVESTMENT COMPANIES § 3.02[1] (2018).

⁴²² 15 U.S.C. § 80a-2(a)(22).

⁴²³ See Securities Act section 2(a)(4) (defining "issuer" as a person who issues or proposes to issue any security, with certain additional provisions relevant to liability under the Securities Act).

The term “person” includes all companies, and the term company in turn includes funds and all organized groups of persons whether incorporated or not.⁴²⁴ As stated in the DAO Report, the term “issuer” under the Securities Act is “broadly defined to include ‘every person who issues or proposes to issue any security’” and “person” includes “any unincorporated organization”; the term is “flexibly construed in the Section 5 context ‘as issuers devise new ways to issue their securities and the definition of a security itself expands.’”⁴²⁵

Thus, an “issuer” need not be an identifiable business entity. In the DAO Report, the SEC concluded that The DAO, an unincorporated organization, was an issuer of securities for purposes of Section 5 of the Securities Act. Information about The DAO, according to the Report, was “crucial” to the DAO Token holders’ investment decision. The DAO was “responsible for the success or failure of the enterprise.”⁴²⁶ Accordingly, The DAO was the entity about which the investors needed information material to their investment decision.

While (as explained below) the definition of “security” for some ICA purposes can be interpreted differently than under the Securities Act or Exchange Act, the term “issuer” for ICA purposes is likely to follow the reasoning in the DAO Report and authorities cited. Thus, in the ICO context, whether a person is an “issuer” under the ICA will depend primarily on whether the

⁴²⁴ 15 U.S.C. § 80a-2(a)(8), which defines “company” as—

[A] corporation, a partnership, an association, a joint-stock company, a trust, a fund, or any organized group of persons whether incorporated or not; or any receiver, trustee in a case under Title 11 of the United States Code or similar official or any liquidating agent for any of the foregoing, in his capacity as such.

⁴²⁵ DAO REPORT, *supra* note 70, at 15–16 (citing *Doran v. Petroleum Mgmt. Corp.*, 545 F.2d 893, 909 (5th Cir. 1977); *accord SEC v. Murphy*, 626 F.2d 633, 644 (9th Cir. 1980) (“[W]hen a person [or entity] organizes or sponsors the organization of limited partnerships and is primarily responsible for the success or failure of the venture for which the partnership is formed, he will be considered an issuer . . .”).

⁴²⁶ *Id.* at 16 (citing *Murphy*, 626 F.2d at 643–44 (“Here there is no company issuing stock, but instead, a group of individuals investing funds in an enterprise for profit, and receiving in return an entitlement to a percentage of the proceeds of the enterprise.” (citation omitted))).

token or other instrument the person is offering investors is a “security” separate from the securities or other assets held by the person, and whether the information about that person is critical to the investors’ investment decision.⁴²⁷

(ii) ICA Definition of Security

The definition of “security” in the ICA is largely the same as in the Securities Act and the Exchange Act.⁴²⁸ As a general matter, courts have analyzed the ICA definition similarly as under those statutes.⁴²⁹

The term “security” under the ICA, however, serves two distinct purposes. First, as discussed above, the term “security” is used to determine whether a person is an “issuer,” and for that purpose would generally follow the Securities Act interpretation.⁴³⁰ The second use of the term “security,” which is of broader significance for the investment company status issue, is to identify the types of investments that, when held by the issuer, count as “securities” under the

⁴²⁷ See LEMKE, LINS & SMITH, *supra* note 421.

⁴²⁸ 15 U.S.C. § 80a-2(a)(36). The full definition is as follows, with changes marked to show differences from the definition in Securities Act Section 2(a)(1):

“Security” means 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, (including a certificate of deposit), or on any 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.

⁴²⁹ See, e.g., *SEC v. Banner Fund Int’l*, 211 F.3d 602, 614 n.* (D.C. Cir. 2000) (applying the analysis in *Howey*, 328 U.S. 293).

⁴³⁰ For a full discussion of the definition of “security” under the Securities Act and the Exchange Act, see Section 3.1 of this White Paper.

definition of investment company.⁴³¹ For that purpose, the SEC and its staff have long held that there are differences between the Securities Act and the Exchange Act definitions, on the one hand, and the ICA definition, on the other, and that the ICA definition can be broader.⁴³² Thus, some instruments can be securities for purposes of the ICA even though they are not securities under the Securities Act or Exchange Act.⁴³³

As a consequence, tokens and other instruments determined to be securities under the Securities Act and Exchange Act will likely be treated as securities under the ICA. In addition, in a close case, the SEC or the courts could determine that a particular digital asset is a security for purposes of determining whether a fund's holdings trigger investment company status under the

⁴³¹ The dual role of the “security” definition was explicitly referenced recently in a Statement on Digital Asset Securities Issuance and Trading issued by the SEC’s Divisions of Corporation Finance, Investment Management, and Trading and Markets. The Statement notes that pooled investment vehicles not only invest in securities but also are themselves issuers of securities.

⁴³² The classic examples of the distinction in the interpretation of the term “security” in the ICA relative to the Securities Act and Exchange Act relate to bank CDs and certain other types of debt instruments. The Supreme Court held in *Marine Bank v. Weaver*, 455 U.S. 551 (1982), that CDs are generally not securities for purposes of the Securities Act and Exchange Act and in *Reves v. Ernst & Young*, 494 U.S. 56 (1990), that the securities status of bank loans turns on the particular facts and circumstances. These decisions relied on the introductory language to the definition in each statute: “unless the context otherwise requires.” Nevertheless, the SEC has taken the position that CDs, promissory notes, and certain other evidence of indebtedness that the Supreme Court held not to be securities under the Securities Act and Exchange Act could still be securities for purposes of applying the definition of investment company under the ICA. While the definition texts may be the same, the regulatory purposes behind each statute—regulation of the management of a portfolio of securities rather than the issuance or trading of such securities—are different and thus the “context” permits, and indeed may require, different interpretations. *See, e.g.*, Brief for the United States as Amicus Curiae, *Marine Bank v. Weaver*, 455 U.S. 551 (1982) (No. 80-1562) (“The legislative history of that clause [‘unless the context otherwise requires’], and the decisions construing it, establish that courts are not bound by the literal terms of the statutory definition in all cases, and should not treat particular instruments as ‘securities’ if that would extend the federal securities laws to contexts not intended to be regulated by those laws” Since, among other things, “the exclusion of certificates of deposit from the definition of security in the Investment Company Act would seriously undermine the protections contemplated by Congress, the SEC believes that the relevant context requires that the term “security” take on a “different coloration” under the Investment Company Act.”); *see also Bank of America Canada*, SEC No-Action Letter (July 25, 1983) (stating that a determination that a note evidencing a commercial transaction is not a security under the Securities Act and the Exchange Act is, in the SEC staff’s view, not applicable in determining whether a person engaged in the business of investing in such notes is investing in “securities” in the context of a determination of whether the person is an investment company under the 1940 Act).

⁴³³ Notably, however, it appears that this difference is a “one-way ratchet.” That is, while some instruments may be “in” as securities under the ICA while “out” under the Securities Act and Exchange Act, we are aware of no instances where the reverse has been true (instruments that are securities under the Securities Act and Exchange Act have been determined to be “not securities” for purpose of the ICA).

ICA, without necessarily coming to the same conclusion under the Securities Act or Exchange Act (or even having come to a contrary conclusion).

As an additional complication to the analysis (and putting aside the extent to which this view is grounded in the relevant case law), the view of SEC Director Hinman, described in Section 3.1, that the characterization of an instrument is not “static” and can change over time,⁴³⁴ could have implications for whether a token in its second “non-security” phase, when purchased by a collective investment vehicle, could still be considered a security for ICA status issues.

Orthodox Investment Companies. ICA section 3(a)(1)(A) defines the term investment company to include any issuer that (1) is engaged primarily in the business of investing, reinvesting, or trading in securities, (2) holds itself out as being so primarily engaged, or (3) proposes to engage primarily in that business.⁴³⁵ Such an issuer has been referred to as an “orthodox” investment company, and has been described as “a company that knows that it is an investment company and does not claim to be anything else.”⁴³⁶

In determining whether the “engaged primarily” criterion is met, the SEC has looked to five principal factors, often referred to as the “*Tonopah*” factors, based on the SEC administrative proceeding in which they were first stated.⁴³⁷ The five *Tonopah* factors are: (1) the company’s historical development; (2) its public representations of policy; (3) the activities of its officers and directors; (4) the nature of its present assets; and (5) the sources of its present

⁴³⁴ Hinman, *supra* note 47.

⁴³⁵ 15 U.S.C. § 80a-3(a)(1)(A).

⁴³⁶ *SEC v. Fifth Ave. Coach Lines, Inc.*, 289 F. Supp. 3d 27 (S.D.N.Y. 1968), *aff’d*, 435 F.2d 510 (2d Cir. 1970).

⁴³⁷ *Tonopah Mining Co. of Nev.*, 26 S.E.C. 426 (1947). Although *Tonopah* was issued in the context of an application for an order declaring the applicant not to be an investment company, the SEC has stated that the same standards are applicable to other determinations of investment company status. *See also* Certain Prima Facie Investment Companies, Investment Company Act Release No. 10,937, 44 Fed. Reg. 66,608, 66,610 n.24 (proposed Nov. 13, 1979) (to be codified at 17 C.F.R. pt. 270) (“Release IC-10937”).

income. The last two factors are the most important and are weighed most heavily in the analysis. If an issuer invests in both securities and non-security assets, the SEC would consider of first importance the area of business in which the entity anticipates realization of the greatest gains and exposure to the largest risks of loss, rather than simply the percentage of its assets invested in securities.⁴³⁸

There are three entry points to investment company status based on the “engaged primarily” test—(1) actually being so engaged, (2) holding out as being so engaged, or (3) proposing to be so engaged—and there are cases and authorities interpreting all three. Because the last two (holding out and proposing) imply intent to be an investment company, they fall, to some extent, within the control of the issuer and its public statements. “Holding out,” in particular, is conceptually similar to estoppel—under ICA section 3(a)(1)(A), an issuer that holds itself out as an investment company will be held to that characterization, regardless of its actual holdings.⁴³⁹

For issuers that do not hold themselves out as or propose to be investment companies, whether the issuer is in fact engaged in the business of an investment company involves a facts and circumstances analysis of actual investments and activities. The issuer’s intent, or its descriptions of its intent, will not be determinative.

Inadvertent Investment Companies. ICA section 3(a)(1)(C) defines the term investment company also to include an issuer based on owning or holding securities, even if it is not engaged primarily in the business of investing, reinvesting, or trading in securities. An issuer is

⁴³⁸ *Peavey Commodity Futures Funds I, II and III*, SEC No-Action Letter, [1983–1984 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 77,511 (June 2, 1983).

⁴³⁹ See 1 TAMAR FRANKEL & ANN TAYLOR SCHWING, *THE REGULATION OF MONEY MANAGERS* § 5.02[G] (2d ed. 2008).

presumed to be an investment company if it (1) is engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities and (2) owns or proposes to acquire investment securities having a value exceeding 40% of the value of its total assets (exclusive of Government securities and cash items) on an unconsolidated basis.⁴⁴⁰ For this purpose, “investment securities” include all securities except (1) government securities, (2) securities issued by employees’ securities companies, and (3) securities issued by majority-owned subsidiaries which are operating companies (*i.e.*, neither investment companies nor private investment companies).⁴⁴¹

There are two components of this test. First, the issuer must be engaged in, or propose to engage in, the business of investing, reinvesting, owning, holding, or trading in securities. Second, the issuer must meet the 40% ownership test. As a practical matter, the tests are typically merged in the analysis, and issuers that meet the 40% test are generally found to have met the “engaged in the business” test as well.⁴⁴² Issuers that qualify as investment companies under ICA section 3(a)(1)(C) are often called “inadvertent” investment companies because passive holdings can trigger investment company status. They are also referred to as “prima facie”

⁴⁴⁰ 15 U.S.C. § 80a-3(a)(1)(C). When used in this title, “investment company” means any issuer which—

(C) is engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities, and owns or proposes to acquire investment securities having a value exceeding 40 per centum of the value of such issuer’s total assets (exclusive of Government securities and cash items) on an unconsolidated basis.

⁴⁴¹ *Id.* § 80a-3(a)(2). “As used in this section, ‘investment securities’ includes all securities except (A) Government securities, (B) securities issued by employees’ securities companies, and (C) securities issued by majority-owned subsidiaries of the owner which (i) are not investment companies, and (ii) are not relying on the exception from the definition of investment company in paragraph (1) or (7) of subsection (c) [the private investment company exceptions].”

⁴⁴² Note that the ICA section 3(a)(1)(C) “engaged in the business” test is significantly broader than the “engaged primarily” test for ICA section 3(a)(1)(A), in two respects: (1) it does not require “primary” engagement and (2) the business can include “owning” or “holding” securities, not only “investing, reinvesting, or trading.” As a result, ICA section 3(a)(1)(C) can sweep in companies that are more passively involved in securities holdings, without intending an investment company business.

investment companies because ICA section 3(a)(1)(C) creates a rebuttable presumption of investment company status for such issuers.

Exceptions for Certain Inadvertent Investment Companies. Notwithstanding the presumption of investment company status created by ICA section 3(a)(1)(C), ICA section 3(b)(1) provides that such an issuer is not an investment company if it is primarily engaged, directly or through a wholly-owned subsidiary or subsidiaries, in a business or businesses other than that of investing, reinvesting, owning, holding, or trading in securities.⁴⁴³ This exception is self-executing and does not require an SEC order. Issuers (and in the case of a challenge, the SEC or the courts) determine whether they are primarily engaged in a business other than investing, owning or trading in securities based on the *Tonopah* factors described above.⁴⁴⁴ This provision is designed primarily to exclude holding companies and companies that are essentially operating companies but have a substantial part of their assets in marketable securities.⁴⁴⁵ Although by its terms this exception applies only to inadvertent investment companies, the SEC staff has recognized that an issuer meeting this test will also not be an orthodox investment company.⁴⁴⁶

A second exception, similar in purpose and analysis, is available if the SEC, upon application, finds and by order declares the issuer to be primarily engaged in a business or businesses other than that of investing, reinvesting, owning, holding, or trading in securities.⁴⁴⁷

⁴⁴³ 15 U.S.C. § 80a-3(b)(1); see also *Yahoo!* Order, *supra* note 415.

⁴⁴⁴ *Tonopah*, 26 S.E.C. 426.

⁴⁴⁵ See LEMKE, LINS & SMITH, *supra* note 421, at § 3.05[1].

⁴⁴⁶ *Managed Futures Ass'n*, SEC No-Action Letter, [1993–2001 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 72,231 (July 15, 1996), <https://www.sec.gov/divisions/investment/noaction/1996/mfa071196.pdf>.

⁴⁴⁷ 15 U.S.C. § 80a-3(b)(2):

(cont'd)

The filing of an application under this provision in good faith exempts the applicant for 60 days from all provisions of the ICA applicable to investment companies as such, and the SEC, for cause shown, may extend the period of exemption for an additional period or periods.⁴⁴⁸

Rule 3a-1—The 45% Asset and Income Test Exception. To provide more certainty for companies that may fall into the “inadvertent investment company” category, SEC Rule 3a-1 excepts from investment company status under ICA section 3(a)(1)(C) those “prima facie” investment companies “whose asset composition and sources of income would provide conclusive evidence” that they are not investment companies for ICA section 3(a)(1)(C) purposes.⁴⁴⁹ Specifically, SEC Rule 3a-1 provides an exception from the ICA section 3(a)(1)(C) presumption if no more than 45% of the value of the issuer’s total assets (exclusive of Government securities and cash items) consists of and no more than 45% of its net income after taxes (for the last four fiscal quarters combined) is derived from securities other than Government securities (with certain other exclusions).⁴⁵⁰ These percentages are determined on an

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Any issuer which the Commission, upon application by such issuer, finds and by order declares to be primarily engaged in a business or businesses other than that of investing, reinvesting, owning, holding, or trading in securities either directly or (A) through majority-owned subsidiaries or (B) through controlled companies conducting similar types of businesses. The filing of an application under this paragraph in good faith by an issuer other than a registered investment company shall exempt the applicant for a period of sixty days from all provisions of this title applicable to investment companies as such. For cause shown, the Commission by order may extend such period of exemption for an additional period or periods. Whenever the Commission, upon its own motion or upon application, find that the circumstances which gave rise to the issuance of an order granting an application under this paragraph no longer exist, the Commission shall by order revoke such order.

⁴⁴⁸ *Id.*

⁴⁴⁹ Release IC-10937, 44 Fed. Reg. 66,608.

⁴⁵⁰ Other securities that are not counted for the tests are securities issued by employees’ securities companies, securities issued by majority-owned subsidiaries of the issuer (other than subsidiaries relying on the exclusion from the definition of investment company in ICA Section 3(b)(3) or Section 3(c)(1)), and securities issued by companies which are controlled primarily by such issuer, through which such issuer engages in a business other than that of investing, reinvesting, owning, holding or trading in securities, and which are not investment companies. 17 C.F.R. § 270.3a-1(a)(1)–(4).

unconsolidated basis, except that the issuer must consolidate any wholly-owned subsidiaries. In order to rely on SEC Rule 3a-1, the issuer must not be an orthodox investment company within the definition of ICA section 3(a)(1)(A).⁴⁵¹

In addition to providing certainty, Rule 3a-1 can have advantages over the statutory test in that it permits consolidation of wholly-owned subsidiaries and provides more flexibility on the asset component (45% as opposed to 40% in ICA section 3(a)(1)(C)). On the other hand, SEC Rule 3a-1 also imposes an income test, which is not required under ICA section 3(a)(1)(C), and may be a disadvantage for some issuers.

Exception for Transient Investment Companies. SEC Rule 3a-2 under the ICA provides an exception for “transient” investment companies, for a period not to exceed one year, that can be used for an issuer that intends to be in a non-investment business, but holds and invests in securities for a limited time either pending or after commencement of operations.

The rule provides that for purposes of either ICA section 3(a)(1)(A) or section 3(a)(1)(C) (that is, either orthodox or inadvertent investment companies), an issuer is deemed not to be engaged in the business of investing, reinvesting, owning, holding or trading in securities during a period of time not to exceed one year, provided that the issuer has a bona fide intent to be engaged primarily, as soon as is reasonably possible and in any event by the termination of such period of time, in a business other than of investing, reinvesting, owning, holding or trading in securities. That intent must be evidenced by both (1) the issuer’s business activities and (2) appropriate corporate resolutions. The rule includes specific provisions regarding when the one-

⁴⁵¹ 17 C.F.R. § 270.3a-1(b) (“[T]he issuer is not an investment company as defined in section 3(a)(1)(A) or 3(a)(1)(B) of the [ICA] and is not a special situation investment company”).

year time period commences based on the issuer's investments. Significantly, the rule prohibits issuers from relying on this exception more frequently than once during any three-year period.

Exceptions for Certain Private Investment Companies. Certain types of collective investment vehicles that would otherwise fall within the ICA definition of investment company are expressly excepted from investment company status, and thus are not regulated as investment companies under the Act.⁴⁵² For purposes of this White Paper, the most important exception category applies to private funds, which are issuers described in ICA Section 3(c)(1) or Section 3(c)(7). ICA section 3(c)(1) generally applies to any issuer whose outstanding securities (other than short-term paper) are beneficially owned by not more than 100 persons and that is not making and does not presently propose to make a public offering of its securities. ICA Section 3(c)(7) generally applies to any issuer, the outstanding securities of which are owned exclusively by persons who, at the time of acquisition, are qualified purchasers, and that is not making and does not at that time propose to make a public offering of such securities.⁴⁵³

Both of these exceptions are designed for private offerings to institutional investors or sophisticated high net worth individuals, and are not available for issuers that offer their securities to retail investors.⁴⁵⁴

⁴⁵² Some of the main categories of excepted entities are private funds, banks, insurance companies, pension plans, and charitable foundations. See *generally* 15 U.S.C. § 80a-3(c).

⁴⁵³ A “qualified purchaser” generally is defined as a natural person who owns not less than \$5 million in investments, and any person, acting for its own account or the accounts of other qualified purchasers, who in the aggregate owns and invests on a discretionary basis not less than \$25 million in investments, as well as certain companies and trusts owned by such persons. 15 U.S.C. § 80a-2(a)(51).

⁴⁵⁴ The Bitcoin Investment Trust, sponsored by Grayscale Investments, LLC, is an example of a private cryptocurrency fund that relies on Rule 506(c) of Regulation D under the Securities Act. GRAYSCALE INVESTMENTS, LLC, <https://grayscale.co/investors/> (last visited Jan. 2, 2019). *But cf. Crypto Asset Order*, *supra* note 404 (the fund in question did not meet the private fund requirements under Rule 506(c) of Regulation D of the Securities Act because it made a public offering through its website to individuals that were non-qualified investors.).

(4) Application to ICOs

In the DAO Report, the SEC determined that DAO Tokens were securities under the Securities Act and the Exchange Act, but expressly declined to address whether The DAO was an investment company under the ICA. In a footnote at the beginning of the DAO Report, the SEC noted the absence of an ICA analysis, explaining that this was based, in part, on the fact that The DAO had never commenced its business operations funding projects. Nonetheless, the report cautioned users of virtual obligations that they themselves should consider their obligations under the ICA.⁴⁵⁵ The DAO Report also did not address the status of DAO Tokens as securities under the ICA definition of the term, which, as discussed above, serves two purposes under the ICA and, for purposes of determining the extent of a person's holdings of securities when determining investment company status under the ICA, has been interpreted more broadly than the Securities Act and Exchange Act definition.

For purposes of determining whether a person is an issuer of securities, in most cases it is likely that the ICA analysis will follow the Securities Act and Exchange Act definitions of these terms. For example, since it has been determined that the DAO Tokens are securities, it could be expected that the entity issuing the Tokens would be considered an issuer of securities for ICA purposes as well.

The additional analysis (beyond issues resolved by the Securities Act and Exchange Act cases) for ICA implications is whether the issuer falls within the definition of investment

⁴⁵⁵ DAO REPORT, *supra* note 70, at 1 n.1:

This Report does not analyze the question whether The DAO was an “investment company,” as defined under Section 3(a) of the Investment Company Act of 1940 (“Investment Company Act”), in part, because The DAO never commenced its business operations funding projects. Those who would use virtual organizations should consider their obligations under the Investment Company Act.

company, either because it is, proposes to be, or holds itself out as being engaged primarily in the business of investing, reinvesting, or trading in securities (in which case it would be an “orthodox” investment company under ICA section 3(a)(1)(A)) or because its holdings of securities exceed the 40% test (in which case the issuer would be an “inadvertent” investment company under ICA section 3(a)(1)(C), unless it is primarily engaged in a business or businesses other than that of investing, reinvesting, owning, holding, or trading in securities). This determination will depend both on how the issuer’s business is described in the offering documents and the nature and extent of its actual holding and investments, including an analysis of whether specific digital assets should be considered securities under the potentially broader ICA definition.⁴⁵⁶ The nature of the holdings must be addressed both in terms of intended investments and investments that will be made during any start up or transitional period.

Investment company status issues relating to ICO issuers could focus on either the inadvertent or orthodox investment company definition. The need for an inadvertent investment company analysis could be triggered by the issuer’s holding, or planning to hold, assets pending investment in any projects or proposals contemplated by the ICO, in excess of the 40% test (unless the issuer can meet the 45% asset and income test under Rule 3a-1).⁴⁵⁷ An issuer could also be considered an orthodox investment company based on its investment-related intent, as indicated in its marketing materials.

⁴⁵⁶ Such an issuer nevertheless would not be an investment company if it is able to rely on one of the exceptions for private funds. It should be noted, however, that the private fund exceptions are not available to an issuer that is making, or presently proposing to make, a public offering of its securities or accept retail investors, and thus may not be available to an ICO.

⁴⁵⁷ According to the DAO’s promotional materials, “[t]he DAO would earn profits by funding projects that would provide DAO Token holders a return on investment.” DAO REPORT, *supra* note 70, at 5–6. The business of funding projects never commenced, but it appears that the Commission’s reference to ICA issues was triggered by the possibility that the issuer’s funding operations could include investing, owning, holding or trading securities.

While neither the SEC nor the courts have applied the ICA status issues specifically to ICOs, in situations raising these issues, we would expect issuers, the SEC, and the courts to refer to the statutory and rule provisions and the authorities that have historically provided the framework for determining whether an issuer is an investment company under the ICA.⁴⁵⁸ As the Commission stated in the DAO Report with respect to the Securities Act and Exchange Act, the use of innovative technology in the capital markets does not remove conduct from the purview of the U.S. federal securities laws, and this should be equally true of the ICA.

(5) Application to Digital Asset Funds

Collective investment vehicles that invest in digital assets may or may not fall within the definition of investment company, depending on the nature of the digital assets and other proposed holdings, the sponsor's promotional statements, and other factors.⁴⁵⁹ In some cases, where the characterization is not clear, entities may prefer to be characterized as investment companies for tax, marketing, or other reasons.⁴⁶⁰ Funds that seek exposure to digital assets through futures or other derivatives, for example a bitcoin futures ETF, typically involve substantial investments in government securities and cash equivalents to be used as collateral for the derivatives. By seeking such exposure in this manner, a fund may meet the definition of

⁴⁵⁸ These include, in addition to *SEC v. Fifth Ave. Coach Lines, Inc. and Tonopah Mining Co. of Nev.*, see *supra* notes 436 and 437, *SEC v. Nat'l Presto Indus.*, 486 F.3d 305 (7th Cir. 2007).

⁴⁵⁹ To give one other example of how there could be subjective elements in making this determination, the term "value" in the ICA, as defined in section 2(a)(41), has a complex definition that, in the case of securities without readily available market quotations, is based on "fair value" as determined by the company's board of directors.

⁴⁶⁰ In theory, the SEC can refuse to permit ICA registration of companies that do not meet the definition, but has exercised this authority rarely and only in specific cases. For example, the Commission has declined to permit certain real estate companies to register under the ICA, when their asset mix clearly qualified them for the exception under ICA section 3(c)(5), and private investment companies that qualified under ICA section 3(c)(1) (or would have absent express efforts on the part of the issuer to appear to go beyond the 100 investor maximum). Generally, the SEC does not object to ICA registration of companies based on questions about failure to meet the intentional or inadvertent investment company definitions in ICA section 3(a)(1), in part because the issuer can, in effect, fit within the "intentional" definition by stating its intent to engage in the business of investing in securities. FRANKEL & SCHWING, *supra* note 439, at § 5.02.

investment company under either or both of ICA Sections 3(a)(1)(A) and 3(a)(1)(C). In that case, if the fund makes a public offering of its securities, it would be required to register as such and be regulated under the ICA.⁴⁶¹

By contrast, for a fund that seeks exposure to cryptocurrencies through direct investment in the cryptocurrency, investment company status would depend on whether the cryptocurrency itself is a security. For example, direct investments in bitcoin, by themselves, would not result in investment company status, because bitcoin is not considered a security. A fund investing directly in bitcoin that offers its shares to the public would be required to register the offering under the Securities Act, but not the 1940 Act (a “Securities Act-only fund”).⁴⁶² However, direct investments in DAO Tokens (or other tokens that are deemed to be securities) could trigger investment company status, depending on the extent of the holdings, the fund’s other holdings, and how the fund holds itself out.

In September of 2018, the SEC brought its first digital asset case charging violations of the ICA, which was based on findings (which the respondents neither admitted nor denied) that a fund formed for the purpose of investing in digital assets was an unregistered investment company under ICA section 3(a)(1)(C) (the inadvertent investment company definition).⁴⁶³ The

⁴⁶¹ To describe in more detail the holdings of a bitcoin futures ETF seeking ICA registration, these funds, for tax purposes, generally propose a structure used by other ETFs that invest primarily in commodities. In order to meet the “good income” requirements of Sub-Chapter M of the Internal Revenue Code, the bitcoin futures (or, in some cases, short positions on bitcoin futures) would be held by a wholly owned subsidiary domiciled in the Cayman Islands that would be treated as a disregarded entity for accounting purposes but not for tax purposes. The ETFs would have 100% nominal exposure to the bitcoin futures, but the value of the subsidiary’s assets would not exceed 25% of the total assets of the ETFs. The remaining 75% of the ETFs’ total assets would be invested in cash and cash equivalents, including registered money market funds.

⁴⁶² An example of a Securities Act only fund is the Winklevoss Bitcoin Trust, which was proposed to be traded on the Bats BZX Exchange. As described above, the offering was stalled when the Commission, through delegated authority to the Commission Staff, in March 2017 disapproved a proposed rule change that would have allowed the Exchange to list and trade shares of the Trust. See Winklevoss Order, *supra* note 406.

⁴⁶³ *Crypto Asset Order*, *supra* note 404.

SEC order stated that Crypto Asset Fund, LLC (“CAF”) engaged in the business of investing, holding, and trading certain digital assets that were investment securities (as defined in ICA section 3(a)(2)) having a value exceeding 40% of the value of CAF’s total assets (exclusive of Government securities and cash items) and thus met the definition of investment company under ICA section 3(a)(1)(C), but did not register with the SEC as an investment company, meet any available exemptions or exclusions, or seek an SEC order under Section 3(b) or otherwise request exemptions from any provisions of the ICA. The order stated that as a result of the conduct described, Crypto Asset Management, LP (“CAM”), CAF’s sponsor and manager, had caused CAF to violate ICA section 7(a), which prohibits an investment company not registered with the SEC from offering, selling, purchasing, or redeeming interests in the investment company. The order also charged that CAM violated Securities Act section 5(a) by offering interests in CAF for sale without registration under the Securities Act and in a manner that did not qualify as a private offering, or any other Securities Act registration exemption, and that CAM and its founder violated the anti-fraud provisions of both the Securities Act and, as further discussed in the next section, the Investment Advisers Act of 1940 by making materially untrue statements in connection with the CAF offering.⁴⁶⁴ The three SEC divisions most directly involved in regulating digital assets (the Divisions of Corporate Finance, Investment Management, and Trading and Markets) highlighted this proceeding in a Statement on Digital

⁴⁶⁴ The order states that the respondents, who had consulted counsel in launching CAF, immediately halted the offering when contacted by the SEC, took steps to determine the relevant facts, and made a rescission offer to investors, with accompanying disclosure regarding the previous misstatement. The order also states that beginning in January 2018, the respondents began offering securities pursuant to the Regulation D Rule 506(c) exemption from regulation, which permits general solicitation as long as the securities are sold only to accredited investors. The order does not specifically state whether these securities were securities issued by CAF, and if so, whether they were relying on the ICA section 3(c)(1) or (7) private fund exceptions. The case settled with a cease and desist agreement, a censure, and a civil money penalty of \$200,000, to be paid in installments over the course of 10 months.

Asset Securities Issuance and Trading issued on November 16, 2018, in a section captioned

“Investment Vehicles Investing in Digital Asset Securities,” with the following admonition:

Investment vehicles that hold digital asset securities and those who advise others about investing in digital asset securities, including managers of investment vehicles, must be mindful of registration, regulatory and fiduciary obligations under the Investment Company Act and the Advisers Act.⁴⁶⁵

The statement also references the dual role the term “security” serves for investment companies, noting that pooled investment vehicles not only invest in securities but also are themselves issuers of securities.

(b) Regulatory Implications of Investment Company Status

As discussed above, the ICA was enacted to protect investors in collective investment vehicles, including retail investors entrusting their savings to these vehicles, from the patterns of misconduct that had characterized the emergence and initial growth of the fund industry in the 1920s and 1930s.⁴⁶⁶ In accordance with these regulatory goals, investment companies are subject to comprehensive regulation under the ICA, including, among others, the following regulatory requirements:

⁴⁶⁵ See Public Statement, SEC, Div. Corp. Fin., Div. Inv. Mgmt., Div. Trading & Mkts., Statement on Digital Asset Securities Issuance and Trading (Nov. 16, 2018) [hereinafter SEC Digital Asset Statement], <https://www.sec.gov/news/public-statement/digital-asset-securities-issuance-and-trading>. The Statement highlights several recent SEC enforcement actions involving the intersection of long-standing applications of the federal securities laws and new technologies, and addresses a range of activities and securities laws requirements, including offers and sales of digital asset securities under the Securities Act and the Exchange Act, trading of digital asset securities under the Exchange Act, and broker-dealer regulation under the Exchange Act. The Statement describes the facts underlying the CAM proceeding as follows:

On Sept. 11, 2018, the Commission issued the Crypto Asset Management Order, finding that the manager of a hedge fund formed for the purpose of investing in digital assets had improperly failed to register the fund as an investment company. The order found that the manager engaged in an unlawful, unregistered, non-exempt, public offering of the fund. By investing more than 40 percent of the fund’s assets in digital asset securities and engaging in a public offering of interests in the fund, the manager caused the fund to operate unlawfully as an unregistered investment company. The order also found that the fund’s manager was an investment adviser, and that the manager had violated the anti-fraud provisions of the Investment Advisers Act of 1940 (“Advisers Act”) by making misleading statements to investors in the fund.

⁴⁶⁶ See PROTECTING INVESTORS, *supra* note 409.

- Registration with, and examinations by, the SEC;
- SEC enforcement authority against the investment company and its affiliates;
- Restrictions on payments for distribution;
- Restrictions on certain investments, particularly investments in other investment companies;
- Governance requirements (including independent director “watchdogs”);
- Restrictions on external investment advisers, including contract approval requirements, a requirement that the investment adviser be registered with the SEC, and potential shareholder suits for the adviser’s receipt of compensation in breach of the adviser’s fiduciary duty;
- Restrictions on transactions with affiliates;
- Requirements for the custody (safekeeping) of assets;
- Code of ethics requirements for insiders;
- Limitations on leverage and capital structure;
- Voting stock requirements;
- Public reporting requirements;
- Compliance program requirements; and
- Valuation of investments at market prices or “fair value.”

It is beyond the scope of this White Paper to provide a full description of the requirements imposed on registered investment companies under the ICA.⁴⁶⁷ However, a number of key provisions that would affect digital asset funds in particular are identified and explained in the discussion of the Staff Cryptocurrency Funds Letter, described below.

⁴⁶⁷ For a comprehensive discussion of ICA regulation, see LEMKE, LINS & SMITH, *supra* note 421.

(1) Open-End Management Investment Companies (Mutual Funds)

Funds that register as open-end management companies (referred to as mutual funds) have additional obligations related to the requirement that investors must be able to redeem their shares daily at their proportionate amount of the fund's NAV.⁴⁶⁸ This in turn requires funds to value their securities daily (to price purchases and redemptions) and to maintain sufficient liquidity to meet redemptions without diluting the interests of remaining shareholders.⁴⁶⁹

(2) Exchange-Traded Investment Companies (ETFs)

An ETF issues shares that can be bought or sold throughout the day in the secondary market at a market-determined price that, through the operation of an arbitrage mechanism, tends to track the shares' NAV. ETFs are similar in many respects to conventional mutual funds (most ETFs are organized as open-end management companies and ETFs pursue a wide variety of investment strategies), and they are subject to most of the same provisions of the 1940 Act as other open-end funds. However, there are two key regulatory distinctions. First, because of their distinctive operational structure, ETFs need exemptions from some of the requirements of the ICA, which they currently obtain through the exemptive order process.⁴⁷⁰ Second, because ETFs

⁴⁶⁸ “‘Open-end company’ means a management company which is offering for sale or has outstanding any redeemable security of which it is the issuer.” 15 U.S.C. § 80a-5(a)(1). “‘Management company’ means any investment company other than a face-amount certificate company or a unit investment trust.” *Id.* § 80a-4(3). “‘Redeemable security’ means any security, other than short-term paper, under the terms of which the holder, upon its presentation to the issuer or to a person designated by the issuer, is entitled (whether absolutely or only out of surplus) to receive approximately his proportionate share of the issuer’s current net assets, or the cash equivalent thereof.” *Id.* § 80a-2(a)(32).

⁴⁶⁹ See 17 C.F.R. § 270.22c-1 (generally requiring that sales, redemptions, and repurchases of a redeemable security of a registered investment company be at a price based on the NAV next computed after receipt of a tender of such security for redemption or of an order to purchase or sell such security). See also Investment Company Liquidity Risk Management Programs, Securities Act Release No. 10,233, Investment Company Act Release No. 32,315, 81 Fed. Reg. 82,142 (Nov. 18, 2016) (to be codified at 17 C.F.R. pts. 270, 274) (“Rule 22e-4 Adopting Release”) (adoption of SEC Rule 22e-4, requiring open-end funds (other than money market funds) and ETFs to adopt formal liquidity risk management programs).

⁴⁷⁰ ICA section 6(c) permits the SEC to grant exemptions, by order or rule, from any or all provisions of the ICA when it finds that such exemption(s) would be consistent with investor protection and the policies of the ICA. The
(cont’d)

are traded on exchanges, they are subject to the exchange's listing standards and additional Exchange Act requirements that do not apply to traditional open-end funds.

A comprehensive discussion of ETFs is beyond the scope of this White Paper. However, the key features that distinguish ETFs from mutual funds and raise ICA issues are addressed in the Staff Cryptocurrency Funds Letter (most of the registration statements that were the subject of the Staff Cryptocurrency Funds Letter were ETFs).

(3) ICA Registration Filings by Digital Asset Funds

(i) Initial Group of Filings

As of the beginning of 2018, sponsors of fourteen funds (most of them ETFs), intending to invest primarily in cryptocurrency derivatives and to register their shares for offer and sale to the public, had filed registration statements on Form N-1A (the combined Securities Act and ICA registration form for funds seeking to register with the SEC as open-end investment companies or ETFs).⁴⁷¹ Most of the funds sought on amount, given the fragmentation and volatility into invest in Bitcoin-related derivative instruments, primarily bitcoin futures, but also including pooled investment vehicles, options and swaps, and other instruments providing exposure to Bitcoin. Only one of the funds, which was not one of the ETFs, sought more generally to invest in investments linked to digital coins.

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SEC has traditionally granted ETF applications by order to individual ETF sponsors, but on June 28, 2018, it proposed a rule that would provide relief for all ETFs and participants that comply with the conditions of the Rule. Exchange-Traded Funds, Securities Act Release No. 10,515, Investment Company Act Release No. 33,140 (June 28, 2018), 83 Fed. Reg. 37,332 (July 31, 2018).

⁴⁷¹ These funds are to be distinguished from blockchain investment funds and other funds seeking exposure to blockchain technology, which are more similar to traditional equity funds investing in developers and users (*e.g.*, retail companies that accept cryptocurrencies in lieu of fiat currency). These funds may raise other ICA-related issues, such as "names rule" issues (17 C.F.R. § 270.35d-1(2)(i) requires a fund whose name suggests a particular type of investment to invest 80% of its assets in that type of investment).

All of these registration statements were withdrawn as of January 10, 2018, in response to a request from the SEC's Division of Investment Management, further described below.

(ii) Regulatory Issues Under the ICA for Registered Crypto Currency Funds—The Staff Cryptocurrency Funds Letter

Overview of Staff Letter. On January 18, 2018, Dalia Blass, the Director of the SEC's Division of Investment Management, sent a letter to the heads of two major industry trade groups, the Investment Company Institute and the Asset Management Group of the Securities Industry Financial Markets Association, captioned "Engaging on Fund Innovation and Cryptocurrency-related Holdings," in which the Division sought information and insight on a number of significant investor protection issues that the staff thought needed to be examined before sponsors begin offering these funds to retail investors.⁴⁷²

The letter focused on five issues raised under the ICA: (1) Valuation, (2) Liquidity, (3) Custody, (4) Arbitrage (for ETFs), and (5) Potential Manipulation and other Risks. The stated purpose of the letter was to facilitate the necessary dialogue, and it accordingly invited the two trade groups and any interested sponsors to engage with the SEC staff on the issues specified in the letter.

In addition to identifying the five regulatory issues, the letter made a number of points that can be viewed as telling indications of the SEC staff's general stance in this area:

- **Importance of the U.S. fund market.** The U.S. investment fund market is one of the most robust, varied, and successful markets for investment products in the world, which is in significant part due to the commitment of fund sponsors to responsible innovation and product improvement. This commitment is especially important because of the reliance on registered funds by America's Main Street investors for their education, retirement and other investment goals.

⁴⁷² Staff Cryptocurrency Funds Letter, *supra* note 405.

- **Need for a moratorium on ICA registration until concerns addressed.** The staff has asked sponsors that have filed registration statements for such products to withdraw them, until the questions identified above can be addressed satisfactorily.⁴⁷³ The staff has also cautioned sponsors of these funds against using SEC Rule 485(a), which allows post-effective amendments to previously effective registration statements for registration of a new series to go effective automatically:

If a sponsor were to file a post-effective amendment under rule 485(a) to register a fund that invests substantially in cryptocurrency or related products, we would view that action unfavorably and would consider actions necessary or appropriate to protect Main Street investors, including recommending a stop order to the Commission.

- **Challenges inherent in using the existing regulatory framework for these novel products.** The innovative nature of cryptocurrencies and related products, as well as their expected use and utility in our financial markets, means that they are, in many ways, unlike the types of investments that registered funds currently hold in substantial amounts.
- **Seriousness of questions raised.** The staff identified significant outstanding questions concerning how funds holding substantial amounts of cryptocurrencies and related products would satisfy the requirements of the 1940 Act and its rules.
- **Agency-wide nature of issues.** Resolution of the ICA issues will also be important to the ongoing analysis of filings for ETPs and related changes to exchange listing standards by the SEC's Division of Corporation Finance, Division of Trading and Markets, and Office of the Chief Accountant; accounting, audit and reporting implications under the Exchange Act; and registered offerings of Securities Act-only funds holding similar products and pursuing similar investment strategies. The Divisions and Offices throughout the Commission will be working closely together.
- **Other digital assets.** The letter stated that although it addressed issues arising from funds potentially focused on cryptocurrency-related products, other types of digital assets and related products could present similar issues.

Specific ICA Concerns Raised. The letter addressed the following points within each of the five categories of concerns raised by the SEC:

- **Valuation.** Mutual funds and ETFs value their assets on each business day to strike NAV, which is the basis for pricing purchases and redemptions and also used to measure fund

⁴⁷³ As discussed above, all of the relevant registration statements have been withdrawn.

performance. Appropriate valuation, either based on market prices or a fair valuation process overseen by fund boards, is critical to investor protection.

The staff's questions on valuation focused on how funds would value their assets, given the volatility, fragmentation and general lack of regulation of underlying cryptocurrency markets and the "nascent state" and current trading volume in the cryptocurrency futures markets. In particular, the staff asked how funds would: (1) develop and implement procedures to value, including to "fair value," cryptocurrency related products; (2) address "forks" and "air drops"; (3) take into account the impact on valuation of differences among types of cryptocurrencies; and (4) address the impact of market information and any potential manipulation in the underlying cryptocurrency markets on the determination of the settlement price of cryptocurrency futures.

- **Liquidity.** A key feature of open-end funds is daily redeemability, and funds must maintain sufficiently liquid assets to provide daily redemptions. New SEC Rule 22e-4, adopted in 2016, will, among other requirements, require open-end funds to classify their investments in four liquidity buckets: highly liquid investments, moderately liquid investments, less liquid investments, and illiquid investments, based on the number of days in which the fund reasonably expects the investment to be convertible into cash (or, in the case of the less-liquid and illiquid categories, sold or disposed of) without the conversion significantly changing the market value of the investment.⁴⁷⁴ Under SEC Rule 22e-4, the classification determinations must be made using a complex, multi-step methodology that takes into account, among other factors, market information (such as trading volumes and spreads) and "market depth." Market depth is not a defined term, but refers to the requirement that a fund determine, and take into account for

⁴⁷⁴ See Rule 22e-4 Adopting Release, 81 Fed. Reg. 82,142. Compliance with the classification requirement will be required on June 1, 2019, for larger entities, and December 1, 2019, for smaller entities.

liquidity classification, whether trading varying portions of a position in a particular investment, in sizes that the fund would reasonably anticipate trading, is reasonably expected to significantly affect the liquidity of that investment.

The letter asked, in light of the limited trading experience and market data for digital assets and the other issues mentioned for valuation, how these funds could ensure adequate liquidity and how they will classify their investments. The staff asked a number of questions related to specific requirements of SEC Rule 22e-4, including: (1) how funds would take into account the trading history, price volatility and trading volume of cryptocurrency futures contracts; (2) whether funds would be able to conduct a meaningful market depth analysis in light of these factors; (3) whether, again for market depth analysis, funds would need to assume an unusually large potential daily redemption amount, given the fragmentation and volatility in the cryptocurrency markets; and (4) how funds would prepare for the possibility that funds investing in cryptocurrency-related futures could grow to represent a substantial portion of the cryptocurrency-related futures markets, and the impact of such a development on the fund's portfolio management and liquidity analysis.

- **Custody.** The 1940 Act imposes safeguards to ensure that registered funds maintain safe custody of their holdings, including use of a qualified custodian and verification of holdings. The staff asked how these requirements would be complied with for cryptocurrencies, noting that the staff was not aware of a custodian currently providing fund custodial services for cryptocurrencies.

The letter also noted that while the currently available bitcoin futures contracts are cash settled, it was the staff's understanding that other derivatives related to cryptocurrencies may provide for physical settlement, and physically settled cryptocurrency futures contracts may be

developed. Under these circumstances, the staff asked, how a fund planning to hold cryptocurrency directly would: (1) satisfy the ICA custody requirements; (2) validate existence, exclusive ownership and software functionality of private cryptocurrency keys and other ownership records; and (3) assess the impact of cybersecurity threats or the potential for hacks on digital wallets on the safekeeping of fund assets under the ICA. With respect to cryptocurrency-related derivatives that are physically settled, the staff asked under what circumstances the fund would have to hold cryptocurrency directly, and, if the fund may take delivery of cryptocurrencies in settlement, what plans it would have in place to provide for the custody of the cryptocurrency.

- **Arbitrage Mechanism (for ETFs).** ETFs obtain Commission orders that enable them to operate in a specialized structure that provides for both exchange trading of their shares throughout the day at market-based prices, and an arbitrage mechanism that involves purchases and redemptions by authorized participants of large blocks of shares priced at NAV. In order to promote fair treatment of investors, an ETF is expected to have a market price that would not deviate materially from the NAV.

The staff asked: (1) how ETFs would comply with this term of their orders in light of the fragmentation, volatility and trading volume of the cryptocurrency marketplace; (2) whether funds have engaged with market makers and authorized participants to understand the feasibility of the arbitrage mechanism for ETFs investing substantially in cryptocurrency and cryptocurrency-related products; (3) how volatility-based trading halts on a cryptocurrency

futures market would impact this arbitrage mechanism; and (4) how the shutdown of a cryptocurrency exchange would affect the market price or arbitrage mechanism.⁴⁷⁵

- **Potential Manipulation and Other Risks.** Referring to a statement by SEC Chairman Jay Clayton, SEC orders denying exchange listing proposals for shares of trusts holding cryptocurrency, and a number of media reports, the letter notes that concerns have been raised that cryptocurrency markets, as they are currently operating, feature substantially less investor protection than traditional securities markets, with correspondingly greater opportunities for fraud and manipulation. While some funds may propose to hold cryptocurrency-related products, rather than cryptocurrencies, the pricing, volatility and resiliency of these derivative markets generally would be expected to be strongly influenced by the underlying markets.

The staff asked: (1) how these concerns about fraud and manipulation inform views provided on the questions above (for example, on valuation and liquidity); (2) how these concerns should be weighed in offering funds to retail investors; (3) whether there have been discussions with broker-dealers as to how they would analyze the suitability of offering the funds to retail investors in light of these risks; and (4) what challenges investment advisers would face in meeting their fiduciary obligations when investing in cryptocurrency-related funds on behalf of retail investors.

Market Participant Responses. There have been six responses to the Staff Cryptocurrency Funds Letter.

⁴⁷⁵ Note that since most of the then pending ICA registration statements for cryptocurrency-related funds stated an intent to invest primarily in cash settled bitcoin futures, most of the custody concerns raised in the letter would not have been applicable.

Cboe Global Markets (“Cboe”), March 23, 2018⁴⁷⁶

Cboe is a leading operator of securities exchanges for the trading of ETPs, and it operates the first U.S. futures exchange to offer a bitcoin futures product for trading.⁴⁷⁷ Cboe’s response focused on cryptocurrency ETPs, and offered information and insights based on Cboe’s experience as an exchange operator for trading both ETPs generally and bitcoin-related ETPs in particular, as well as bitcoin futures themselves. Generally, Cboe urged that while cryptocurrency-related holdings raise a number of unique issues, such holdings do not require significant revision to the well-established framework for evaluation related to valuation, liquidity, custody, arbitrage, and manipulation. Rather, Cboe stated, “each Cryptocurrency Fund and underlying cryptocurrency-related holdings should be evaluated on a case by case basis in a manner very similar to previous funds and their underlying holdings.”⁴⁷⁸ Cboe added that “this framework can be replicated for other cryptocurrencies as regulatory clarity emerges and the ecosystem continues to grow.”⁴⁷⁹

Cboe’s letter addressed each issue raised by the staff in turn, and provided factual and historical information intended to support the view that the issues raised are similar to those encountered with respect to other ETPs and underlying assets and can be addressed in a similar manner. The information provided focused primarily on trading in bitcoin and bitcoin futures

⁴⁷⁶ Letter from Chris Concannon, President and COO, Cboe, to Dalia Blass, Dir. of Div. Inv. Mgmt., SEC (Mar. 23, 2018) [hereinafter Cboe Letter], <https://www.sec.gov/divisions/investment/cboe-global-markets-innovation-cryptocurrency.pdf>.

⁴⁷⁷ The Cboe Letter stated that Cboe operates the first national securities exchange to submit a proposal to list and trade an ETP that would hold Bitcoin, and that it subsequently submitted three proposals to list and trade ETPs that would hold bitcoin futures. *Id.*

⁴⁷⁸ *Id.* at 5.

⁴⁷⁹ *Id.* at 4.

(for example, price discovery and liquidity in those markets), but parts of the letter referred to the potential applicability of the same principles to other cryptocurrencies as well.

Asset Management Group of the Securities Industry and Financial Markets Association (“SIFMA AMG”), May 14, 2018⁴⁸⁰

SIFMA AMG stated that, like others in the financial services industry, many of its members believe that over time blockchain-enabled technology could have a transformative effect in the provision of certain financial services, that many of its members are exploring the potential for this technology, and that some of its members have experience trading in cryptocurrency assets on a limited basis and are considering the implications of making investments for institutional clients through separate account mandates or institutionally-oriented private funds. SIFMA AMG’s membership both recognizes the desire of certain registered investment fund sponsors to incorporate blockchain-related digital assets into their portfolios, potentially including certain cryptocurrency assets, and acknowledges the staff’s prudential concerns about investor protection and other regulatory issues. Many are interested in exploring the potential of this technology. The letter addresses each of the concerns raised by the staff and shares SIFMA AMG’s preliminary observations, with a view to facilitating a collaborative dialogue with the staff regarding the development of registered funds designed to invest substantially in cryptocurrencies and related assets.

⁴⁸⁰ Letter from Timothy W. Cameron, Managing Dir., SIFMA, to Dalia Blass, Dir. of Div. Inv. Mgmt., SEC (May 14, 2018), <https://www.sec.gov/divisions/investment/sifma-amg-innovation-cryptocurrency.pdf>.

Van Eck Associates Corporation (“VanEck”), July 20, 2018⁴⁸¹

VanEck is the sponsor of the VanEck Vectors Bitcoin Strategy ETF (the “ETF”), a futures-based bitcoin ETF for which registration statements had been filed in 2017 and subsequently withdrawn at the staff’s request. VanEck’s response states that it remains interested in bringing a futures-based bitcoin ETF to market.

VanEck believes that the staff’s concerns for cryptocurrency and cryptocurrency-related investment funds relating to valuation, liquidity, custody, arbitrage, potential manipulation, and other risks have appropriate answers, each of which VanEck reviews in the letter. Furthermore, VanEck urges that by offering investors exposure to Bitcoin through a regulated investment product, its proposed ETF will be consistent with the SEC’s mission to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.

VanEck makes the following points, among others, regarding the specific issues raised. While the valuation of digital assets themselves in the underlying spot markets may present some unique issues as raised in the staff’s letter (such as the valuation of forks and airdrops), the valuation of futures contracts in accordance with the requirements of the ICA do not present any novel issues for a futures-based bitcoin ETF. “The use of futures contracts to gain exposure to an asset is not unusual, and the valuation of futures contracts is a well-established practice.”

VanEck points to the two bitcoin futures contracts currently trading in the U.S. With respect to liquidity and custody, respectively, VanEck states that there is sufficient liquidity in the bitcoin futures market to support a futures-based bitcoin ETF, and that the VanEck ETF would maintain its assets with futures commission merchants pursuant to Rule 17f-6 under the ICA. The letter

⁴⁸¹ Letter from Jan F. van Eck, President and CEO, VanEck Assocs. Corp. & Gabor Gurbacs, Dir. of Digital Asset Strategy, VanEck Assocs. Corp., to Dalia Blass, Dir. of Div. Inv. Mgmt., SEC (July 20, 2018), <https://www.sec.gov/divisions/investment/van-eck-associates-innovation-cryptocurrency.pdf>.

also addresses in detail the staff’s concerns about arbitrage and potential for fraud and manipulation.

In addition to the narrative discussion, VanEck’s letter provides several appendixes, setting forth graphs and other presentations of data captioned: bitcoin futures Trade Close to the Underlying; Bitcoin spreads; bitcoin futures Premium/Discount to Spot; bitcoin futures: CME and CBOE Comparison; Bitcoin trading is diversified; and Bitcoin ownership seems well distributed.

Rafael Duval, August 9, 2018⁴⁸²

Mr. Duval submitted a comment advocating “friendly” regulation for cryptocurrency funds. Arguments supporting such friendly regulation include: (1) cryptocurrencies will not go away, but without friendly regulation in the U.S., will move to other jurisdictions and “entrench in the dark web” in hidden networks and (2) absent friendly regulation in the U.S., all the economic opportunities generated by cryptocurrencies will be enjoyed by other countries.

Malcolm Rose, August 24, 2018⁴⁸³

Mr. Rose holds a master’s degree in computer science and is an educator in the cryptocurrency field, with an expertise on the technical side, as well as the markets and surrounding culture. Mr. Rose’s letter offered commentary on some but not all of the questions raised, emphasizing that a bitcoin ETF would be a big step and needs to be done right. While encouraging the staff to study these issues carefully, Mr. Rose supports proper regulation of cryptocurrencies as “likely to enrich our country and our markets in the long term.”

⁴⁸² Email from Rafael Duval to SEC (Aug. 9, 2018), <https://www.sec.gov/investment/duval-innovation-cryptocurrency>.

⁴⁸³ Email from Malcolm Rose to SEC (Aug. 24, 2018), <https://www.sec.gov/investment/rose-innovation-cryptocurrency>.

Christopher Allen, Bryan Bishop, Angus Champion de Crespigny, Gavin Fearey, and Caitlin Long (the “Cryptocurrency Group”), September 19, 2018⁴⁸⁴

The Cryptocurrency Group includes blockchain and cryptocurrency industry professionals with expertise and experience across the entire cryptocurrency space, including in financial services, cryptography, and cryptoeconomics. The intent of the Group’s response is to assist the SEC by disclosing what it feels are critical considerations for handling cryptocurrency regulation that the other comment letters had not yet addressed.

The main points made and explained in the Group’s response are: digital assets are a unique asset class with unique strengths and abilities; regulators should be cautioned against applying rules to digital assets in ways that do not reflect their strengths; the technology of the asset class should be leveraged to protect investors in ways not previously possible; and solutions in this space may depend on technology, not policy.

(c) Securities Act-Only Registration Filings for Cryptocurrency Funds

(1) Overview

A number of ETPs have also sought to register their shares under the Securities Act, without registering as investment companies under the ICA, by filing registration statements on Form S-1 (the general Securities Act registration form for securities for which no other form is applicable). Most of these funds are designed to seek exposure to bitcoin in a variety of ways, including (1) direct investments in bitcoin, (2) investments in securities, (3) and investments in bitcoin futures. One of them seeks to offer investors the opportunity to participate in the Ether markets through an investment in securities. Another seeks to create a portfolio of digital assets,

⁴⁸⁴ Letter from the Cryptocurrency Group to Dalia Blass, Dir. of Div. Inv. Mgmt., SEC (Sept. 19, 2018), <https://www.sec.gov/divisions/investment/allen-bishop-crespigny-fearey-long.pdf>.

including bitcoin and other “protocol tokens,” in order to provide investors a “diversified pure-play exposure to the bitcoin and blockchain industries.”

Some of these filings have been rejected or withdrawn, while a few remain pending (none has become effective). However, as described above, ETPs cannot be brought to market until the exchange proposing to list the shares of the ETP has obtained SEC approval for a rule change permitting the exchange to list the ETP. To date, the SEC has not approved any such filings, and has definitively rejected one, for reasons related to absence of regulation, and particularly market surveillance, of the underlying markets.⁴⁸⁵

Cryptocurrency funds may also seek SEC registration without using an ETF or ETP structure and without listing on an exchange, and at least one such fund, discussed below, has been declared effective.

(2) ICA Risk Disclosure

Reflecting the uncertainty of the ICA analysis with respect to digital assets, which turns substantially on the status of cryptocurrencies and related products as securities, a number of the Securities Act-only filings have included ICA risk disclosure, along the lines of the following two examples.

EtherIndex Ether Trust. The purpose of the Trust is “to provide shareholders with exposure to the daily change in the U.S. dollar price of ether.”

⁴⁸⁵ See Winklevoss Order, *supra* note 406. In addition, the staff has issued disapproval orders for exchange listing of three filings relating to bitcoin futures ETPs, and the SEC has stayed the effectiveness of these orders pending its further review. See, e.g., Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Order Disapproving a Proposed Rule Change to List and Trade the Shares of the GraniteShares bitcoin ETF and the GraniteShares Short bitcoin ETF, Exchange Act Release No. 83913 (Aug. 22, 2018), 83 Fed. Reg. 43923 (Aug. 28, 2018), <https://www.sec.gov/rules/sro/cboebzx/2018/34-83913.pdf>; Notification of Commission Review of Order Disapproving a Proposed Rule Change to List and Trade the Shares of the GraniteShares bitcoin ETF and the GraniteShares Short bitcoin ETF, Exchange Act Release No. 83913 (Aug. 22, 2018), <https://www.sec.gov/rules/sro/cboebzx/2018/34-83913-letter-from-secretary.pdf>;

“To the extent that ether is deemed to fall within the definition of a security pursuant to subsequent rulemaking by the SEC, the Trust and the Sponsor may be required to register and comply with additional regulation under the Investment Company Act, including additional periodic reporting and disclosure standards and requirements and the registration of the Trust as an investment company. Moreover, the Sponsor may be required to register as an investment adviser under the Investment Advisers Act of 1940. Such additional registrations may result in extraordinary expenses of the Trust, and adversely impact the value of the Shares. If the Sponsor determined not to comply with such additional regulatory and registration requirements, the Sponsor would dissolve and liquidate the Trust. Any such termination could result in the liquidation of the Trust’s ether at a time that is disadvantageous to a holder of the Shares.”⁴⁸⁶

BTCS Inc. (“BTCS”) “[T]he Company plans to acquire additional Digital Assets to provide investors with indirect ownership of Digital Assets that are not securities, such as bitcoin and ether . . . Further, the Company does not intend to participate in registered or unregistered initial coin offerings.”

Because Digital Assets may be determined to be Digital Securities, we may inadvertently violate the 1940 Act and incur large losses as a result and potentially be required to register as an investment company or terminate operations.

Presently our only material asset (other than cash) is an investment in bitcoin. Digital Assets we may own in the future may be determined to be Digital Securities by the SEC or a court. If a Digital Asset we were to hold was later determined to be a Digital Security, we could inadvertently be [sic] become an investment company as defined by the 1940 Act if the value of the Digital Securities we owned exceeded 40% of our assets excluding cash. We are subject to the following risks:

- Contrary to our legal advice, the SEC or a court may conclude that bitcoin or ether are securities;
- Based on legal advice, we may acquire other Digital Assets which we have been advised are not securities but later are held to be securities;
- We may knowingly acquire Digital Assets that are securities and acquire minority investments in businesses which investments are securities; and

⁴⁸⁶ EtherIndex Ether Trust, Amendment No. 2 to Registration Statement on Form S-1 (Form S-1/A) (Sept. 5, 2017), https://www.sec.gov/Archives/edgar/data/1679791/000121390017009423/fs12016a2_etherindexether.htm.

- Regardless of the internal procedures we take to avoid surpassing the 40% threshold, future volatility during the course of a day may cause us to exceed the 40% threshold.

If we exceed the test, we will have one-year to reduce our holdings of securities below the 40% threshold. However, that can only occur once during a three-year period. Accordingly, if volatility causes us to exceed the 40% threshold, we may experience large losses when we liquidate securities as a result of continued volatility. Further, if we elect to sell a private investment, not only may it be difficult to find a buyer but we could incur a significant loss on the sale of a private investment due to not only the lack of liquidity but also the entity's poor performance. If we are able to come below the 40% threshold and again face the same problem, it is likely we will be forced to terminate operations, sell all assets and distribute cash to our shareholders who will likely suffer very large losses. Further, the cost of distributing cash to our shareholder may exceed the amount of cash on hand in which case we would use our remaining funds to wind down the Company.⁴⁸⁷

The BTCS disclosure above comprises only a small part of the full ICA risk disclosure included in the amended BTCS registration statement. In fact, the full text of the ICA risk disclosure could serve as a primer on status and other issues raised for digital issuers by the ICA. Additional captions introducing such disclosures include:

If We Acquire Digital Securities, Even Unintentionally, We May Violate the 1940 Act and Incur Potential Third Party Liabilities.

If we become an inadvertent investment company in violation of the 1940 Act, our failure to register under the 1940 Act will adversely affect us and you will likely lose your entire investment.

If regulatory changes or interpretations require the regulation of bitcoins and other Digital Assets (in contrast to Digital Securities) under the Securities Act and 1940 Act by the SEC, we may be required to register and comply with such regulations. To the extent that we decide to continue operations, the required registrations and regulatory compliance steps may result in extraordinary, non-recurring expenses to us. We may also decide to cease certain operations. This would likely have a material adverse effect on us and investors may lose their investment.⁴⁸⁸

⁴⁸⁷ BTCS Inc., Amendment No. 6 to Registration Statement on Form S-1 (Form S-1/A) (July 25, 2018), <https://www.sec.gov/Archives/edgar/data/1436229/000149315218010430/forms-1a.htm>.

⁴⁸⁸ *Id.*

The BTCS registration statement was declared effective on November 5, 2018, and BTCS is currently a reporting company whose securities trade over the counter on the OTCQB quotation system.

2. The Investment Advisers Act

The Investment Advisers Act of 1940 (“Advisers Act” or “IAA”) is the primary federal statute regulating persons who provide investment advice with respect to securities. Persons providing advice with respect to digital assets that are securities may be investment advisers and subject to regulation and possible SEC registration requirements under the Advisers Act or comparable provisions of state law. In addition, some of the Advisers Act’s regulatory requirements imposed on investment advisers apply with respect to digital assets even when the digital assets are not securities. Of course, investment advice with respect to the securities of issuers that invest in digital assets, such as ETFs or private funds that hold cryptocurrencies or cryptocurrency derivatives, may also implicate the Advisers Act.

In 2018, the SEC brought one cryptocurrency related enforcement case under the IAA, charging violations of the anti-fraud provisions of the Act.⁴⁸⁹ In addition, pronouncements in this area point to the IAA as an area that needs to be considered by market participants involved in digital assets. In particular, the Digital Asset Statement admonishes that “those who advise others about investing in digital asset securities, including managers of investment vehicles, must be mindful of registration, regulatory and fiduciary obligations” under the Advisers Act, as well

⁴⁸⁹ See *Crypto Asset Order*, *supra* note 404.

as the ICA.⁴⁹⁰ Also, two important messages from SEC statements and actions can serve as words to the wise for persons providing advice, directly or indirectly, about digital assets.

First, the general themes expressed in the actions and statements of the SEC, SEC Chairman Clayton, and other SEC officials and staff members emphasize the need for investors in digital assets to understand the risks of investing and the potential for fraud and abuse by market participants.⁴⁹¹ These themes, and the resulting regulatory obligations, are of particular importance to persons that are deemed investment advisers under the IAA, as they have fiduciary duties to their customers as well as obligations under express and specific disclosure and anti-fraud rules.

Second, with respect to the threshold jurisdictional question under the IAA—whether a person’s advice relates to securities—anyone providing advice with respect to digital assets should be familiar with the analysis and precedents that determine the securities status of a digital asset. As discussed in Sections 3.1 and 4.1, this analysis is complex and often without certainty, and thus market participants that provide advice with respect to digital assets should proceed with caution and ensure that they have given due consideration to their regulatory status.

(a) Investment Adviser Status

(1) Definition of “Investment Adviser” and “Security”

IAA section 202(a)(11) generally defines “investment adviser” to mean

⁴⁹⁰ SEC Digital Asset Statement, *supra* note 465. *See also* DAO REPORT, *supra* note 70, at 14 n.38 (stating that persons who would use organizations such as The DAO “should consider their obligations under the Advisers Act”); Staff Cryptocurrency Funds Letter, *supra* note 405 (asking if there are particular challenges investment advisers would face in meeting their fiduciary obligations when investing in cryptocurrency-related funds on behalf of retail investors); Clayton Remarks, *supra* note 411 (stating that market participants and their advisers should thoughtfully consider securities laws, regulations and guidance).

⁴⁹¹ *See, e.g.*, Clayton HUA Statement, *supra* note 250, at 40, ; *Investor Alert: Public Companies Making ICO-Related Claims*, SEC (Aug. 28, 2017), https://www.sec.gov/oiea/investor-alerts-and-bulletins/ia_icorelatedclaims; *Investor Bulletin: Initial Coin Offerings*, SEC (July 25, 2017), https://www.sec.gov/oiea/investor-alerts-and-bulletins/ib_coinofferings; Clayton Remarks, *supra* note 411.

any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities.

In construing this definition, the SEC applies a three-part test, under which status as an investment adviser depends on whether a person (1) provides advice, or issues reports or analyses, regarding securities; (2) is in the business of providing such services; and (3) provides such services for compensation.⁴⁹² Providing advice encompasses a wide range of activities, including advice on market trends, the value of investing in securities instead of other categories of assets, and selecting an investment adviser or manager.⁴⁹³ The SEC staff considers a person to be “in the business” of providing advice if the person (1) holds himself or herself out as an investment adviser or as one who provides investment advice, (2) receives any separate or additional compensation that represents a clearly definable charge for providing advice about securities, regardless of whether the compensation is separate from or included within any overall compensation, or receives transaction-based compensation if the client implements the investment advice, or (3) on anything other than rare, isolated and non-periodic instances, provides specific investment advice.⁴⁹⁴ The compensation element is satisfied by the receipt of any economic benefit, whether in the form of an advisory fee or some other fee relating to the

⁴⁹² Applicability of the Investment Advisers Act to Financial Planners, Pension Consultants, and Other Persons Who Provide Investment Advisory Services as a Component of Other Financial Services, Investment Advisers Act Release No. 1092, at 5–6 (Oct. 8, 1987) [hereinafter Release IA-1092], <https://www.sec.gov/rules/interp/1987/ia-1092.pdf>.

⁴⁹³ *Id.* at 6–7.

⁴⁹⁴ *Id.* at 7–9.

total services rendered, commissions, or some combination of the foregoing, whether paid by the person receiving advisory services or from some other source.⁴⁹⁵

IAA section 202(a)(11) provides an exception from the definition of investment adviser for banks, bank holding companies, professionals such as lawyers, accountants, and teachers, publishers of bona fide financial publications, government securities advisers, and broker-dealers whose advisory services are incidental to the securities business and who receive no special compensation for making recommendations.⁴⁹⁶

While the definition of “investment adviser” can be broad, it can apply only if a person provides advice, or issues reports or analyses, regarding securities. The IAA’s definition of “securities” is identical to the definition under the ICA.⁴⁹⁷ Advice about types of assets that are not securities would not bring a person within the IAA, but if a person’s advice also extends to securities, even if only to a limited extent, the person may be deemed to be giving advice about securities under the IAA.⁴⁹⁸ In addition, advice about *interests in* entities that own or hold non-securities, such as ETFs or other vehicles that hold digital assets, would generally be considered giving advice about securities to the extent that these interests are themselves securities.⁴⁹⁹

The SEC has not specifically addressed the requirements of the IAA with respect to digital assets, other than the anti-fraud provisions mentioned above,⁵⁰⁰ or the application of the

⁴⁹⁵ *Id.* at 9–10.

⁴⁹⁶ For the full list of the categories of persons excepted from the definition of an investment adviser, see 15 U.S.C. § 80b-2(a)(11)(A)–(H).

⁴⁹⁷ See *id.* § 80b-2(a)(18); *id.* § 80a-2(a)(36), *supra* note 428 and accompanying text (comparison of the ICA’s definition of “security” versus the Securities and Exchange Acts’ definition of “security”).

⁴⁹⁸ THOMAS P. LEMKE & GERALD T. LINS, REGULATION OF INVESTMENT ADVISERS § 1:7 (2018).

⁴⁹⁹ *Id.*

⁵⁰⁰ See *Crypto Asset Order*, *supra* note 404 (discussing CAM’s violation of 15 U.S.C. § 80b-6(4) and 17 C.F.R. § 275.206(4)-8, which make it unlawful for any adviser to a pooled investment vehicle to make any untrue statement
(*cont’d*)

IAA definition of security to digital assets. However, as both the DAO Report and the SEC Digital Asset Statement make clear, it is the responsibility of those who advise others about digital assets that are securities to be mindful of registration, regulatory and fiduciary obligations under the IAA.⁵⁰¹

The general standards for determining who is an investment adviser should be equally applicable to digital assets that are securities, or that involve securities, as they are to other types of securities or securities-related transactions. The more difficult issue is the determination of whether a particular digital asset is a security, which is complex and often uncertain. As described in Section 3.1 above, this determination depends on the application of the so-called “Howey” test, which has been the subject of volumes of commentary, court opinions, and SEC statements, both in general and in connection with the security status of digital assets. Under the *Howey* test, according to the SEC staff, the status of a digital asset as a security can also change over time and may depend on the circumstances surrounding its sale.⁵⁰² Accordingly, this threshold issue is likely to pose a significant challenge for unsophisticated market participants and a trap for the unwary.

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of a material fact or to omit to state a material fact necessary to make the statements made, in the light of the circumstances under which they were made, not misleading, to any investor or prospective investor in the pooled investment vehicle).

⁵⁰¹ DAO REPORT, *supra* note 70, at 14 n.38; SEC Digital Asset Statement, *supra* note 465.

⁵⁰² Hinman, *supra* note 47. Although Director Hinman stated that his speech did not necessarily reflect the views of other members of the staff, SEC Chairman Clayton subsequently described the speech as an outline of the approach the SEC staff takes to evaluate whether a digital asset is a security. *Oversight of the U.S. Securities and Exchange Commission: Hearing Before the H. Fin. Servs. Comm.*, 115th Cong. (2018) (statement of Jay Clayton, Chairman, SEC), <https://financialservices.house.gov/uploadedfiles/hhrg-115-ba00-wstate-jclayton-20180621.pdf>.

(2) Registration Requirement

(i) Investment Adviser Registration

An investment adviser must register with the SEC under the IAA, unless an exemption applies.⁵⁰³ Exempt advisers include venture capital fund advisers, certain private fund advisers, and foreign private advisers who have no place of business within the United States.⁵⁰⁴ Of particular note is an exemption for certain advisers registered with the CFTC as commodity trading advisors whose business does not consist primarily of acting as an investment adviser.⁵⁰⁵

In general, an investment adviser that does not advise an investment company and that has less than \$100 million of assets under management (which includes non-securities in a securities portfolio)⁵⁰⁶ must register at the state level rather than with the SEC,⁵⁰⁷ unless an

⁵⁰³ 15 U.S.C. § 80b-3(a). Note that exempt advisers will still be subject to the anti-fraud and certain other provisions of the IAA. *See, e.g., id.* § 80b-6.

⁵⁰⁴ *Id.* § 80b-3(b), (l), (m); *see also id.* § 80b-2(a)(30) (defining “foreign private adviser”); 17 C.F.R. §§ 275.202(a)(30)-1 (definitions relevant to foreign private advisers), 203(l)-1 (defining “venture capital fund”), 203(m)-1 (private fund adviser exemption).

⁵⁰⁵ 15 U.S.C. § 80b-3(b)(6). This provision states that the registration requirement of the Advisers Act shall not apply to:

(A) any investment adviser that is registered with the Commodity Futures Trading Commission as a commodity trading advisor whose business does not consist primarily of acting as an investment adviser, as defined in section 202(a)(11) of this title, and that does not act as an investment adviser to—

(i) an investment company registered under [the ICA]; or

(ii) a company which has elected to be a business development company pursuant to section 54 of [the ICA] and has not withdrawn its election; or

(B) any investment adviser that is registered with the Commodity Futures Trading Commission as a commodity trading advisor and advises a private fund, provided that, if after the date of enactment of the Private Fund Investment Advisers Registration Act of 2010 [*i.e.*, July 21, 2010], the business of the advisor should become predominately the provision of securities-related advice, then such adviser shall register with the Commission.

⁵⁰⁶ “An account is a securities portfolio if at least 50% of the total value of the account consists of securities. For purposes of this 50% test [securities include] . . . cash and cash equivalents (*i.e.*, bank deposits, certificates of deposit, bankers acceptances, and similar bank instruments) . . .” SEC, FORM ADV UNIFORM APPLICATION FOR INVESTMENT ADVISER REGISTRATION 20 [hereinafter Form ADV], <https://www.sec.gov/about/forms/formadv-instructions.pdf>.

exemption from the prohibition on SEC registration is available.⁵⁰⁸ States may not require persons that are registered with the SEC, or that are excepted from the definition of “investment adviser” in the IAA, to register with them as investment advisers.⁵⁰⁹

Whether registering with the SEC or with one or more states, investment advisers register on Form ADV.⁵¹⁰

(ii) Investment Adviser Representative Registration

There is no requirement for the supervised persons or other associated persons of an investment adviser to register with the SEC. However, the large majority of states do impose a registration and testing requirement on investment adviser representatives, and this includes the investment adviser representatives of SEC-registered investment advisers. A state can impose registration and qualification requirements on an investment adviser representative if the following requirements are met:⁵¹¹

- The person is a supervised person (*i.e.*, a partner, officer, director (or other person occupying a similar status or performing similar functions), or employee of an investment adviser, or other person who provides investment advice on behalf of the investment adviser and is subject to the supervision and control of the investment adviser);⁵¹²
- The person has more than five clients who are natural persons, and more than ten percent of the person’s clients are natural persons, except in each case for qualified clients.⁵¹³ For

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⁵⁰⁷ 15 U.S.C. § 80b-3a(a). An investment adviser may but is not required to register with the SEC if it has assets under management of at least \$100 million but less than \$110 million, and it need not withdraw its registration unless it has less than \$90 million of assets under management. 17 C.F.R. § 275.203A-1(a)(1).

⁵⁰⁸ See 17 C.F.R. § 275.203A-2 (exemptions from prohibition on registration with SEC).

⁵⁰⁹ 15 U.S.C. § 80b-3a(b).

⁵¹⁰ Form ADV, *supra* note 506.

⁵¹¹ 15 U.S.C. § 80b-3a(b)(1)(A).

⁵¹² See *id.* § 80b-2(a)(25) (defining “supervised person”).

⁵¹³ See 17 C.F.R. § 275.203A-3(a) (defining “investment adviser representative”).

this purpose, a qualified client generally is a natural person or company that has at least \$1 million under the investment adviser's management or a net worth of more than \$2.1 million (excluding a primary residence and certain indebtedness), or certain investment adviser personnel; and⁵¹⁴

- The person has a place of business located within the state.⁵¹⁵

Most states require investment adviser representatives to register on the Form U4, Uniform Application for Securities Industry Registration or Transfer.⁵¹⁶ In addition, most states require investment adviser representatives to successfully complete the Series 65, Uniform Investment Adviser Law Examination, or the Series 66, Uniform Combined State Law Examination.⁵¹⁷

(iii) Selection of Investment Advisers and Solicitation Arrangements

Investment advice includes the provision of advice on the selection of an investment adviser or manager.⁵¹⁸ Thus, depending on whether a person who provides such advice is in the business of doing so and provides such services for compensation, investment adviser status may result.

The issue arises in, among other situations, the context of solicitation arrangements, which are subject to SEC regulation. Arrangements in which a registered investment adviser pays cash referral fees to a solicitor must comply with IAA Rule 206(4)-3. That rule generally

⁵¹⁴ See 17 C.F.R. § 275.205-3(d)(1) (defining “qualified client”). The dollar thresholds in this definition are subject to periodic adjustment. *Id.* § 275.205-3(e); see Order Approving Adjustment for Inflation of the Dollar Amount Tests in Rule 205-3 Under the Investment Advisers Act of 1940, Investment Advisers Act Release No. 4421, 81 Fed. Reg. 39,985 (June 20, 2016).

⁵¹⁵ See 17 C.F.R. § 275.203A-3(b) (defining “place of business”).

⁵¹⁶ See Current Uniform Registration Forms for Electronic Filing in Web CRD, <https://www.finra.org/industry/web-crd/current-uniform-registration-forms-electronic-filing-web-crd>; Rev. Form U4 (05/2009), <https://www.finra.org/sites/default/files/form-u4.pdf>.

⁵¹⁷ See Exams, <http://www.nasaa.org/industry-resources/exams/>.

⁵¹⁸ See, e.g., Release IA-1092, *supra* note 492, at 7 & n.6; *JMB Fin. Managers*, SEC No-Action Letter, 1993 WL 343461 (June 23, 1993).

requires that the solicitor not have been found to have violated certain statutes and rules, that the arrangement be documented in a written agreement to which the investment adviser is a party, and that certain disclosures be made to the persons solicited. IAA Rule 206(4)-3 applies to solicitations of any client on behalf of an investment adviser that pays cash referral fees and does not specifically indicate that the client must invest in securities. While no formal SEC statement flatly prohibits the payment of non-cash referral fees to solicitors, the SEC staff may question the propriety of such payments under the IAA, particularly absent full disclosure about the arrangement.⁵¹⁹

A solicitor subject to IAA Rule 206(4)-3 is not required to register with the SEC as an investment adviser with respect to its solicitation activities.⁵²⁰ However, a third-party solicitor (*i.e.*, a solicitor who is not a partner, officer, director, or employee of the adviser) will be subject to state qualification and registration requirements to the extent state investment adviser statutes apply to solicitors (which is the case in some states but not others); there is no preemption of state regulation for third-party solicitors.⁵²¹

(b) Advisers Act Regulatory Requirements with Respect to Digital Assets

For conventional investment advisers, as well as for persons that are investment advisers only because they manage digital assets that are securities, the provision of advice with respect to

⁵¹⁹ LEMKE, LINS & SMITH, *supra* note 421, § 2:189.

⁵²⁰ Requirements Governing Payments of Cash Referral Fees by Investment Advisers, Investment Advisers Act Release No. 688, 44 Fed. Reg. 42,126, 42,129 (July 12, 1979). However, a person who solicits municipal entities, such as states and their subdivisions, may be required to register as a municipal advisor. 15 U.S.C. § 78o-4; *see Municipal Advisors*, SEC, <https://www.sec.gov/municipal/municipal-advisors.html> (last updated Jan. 9, 2017); *see also* 17 C.F.R. § 275.206(4)-5(a)(2)(i) (restricting payments for soliciting government entities for investment advisory services).

⁵²¹ Rules Implementing Amendments to the Investment Advisers Act of 1940, Investment Advisers Act Release No. 1633, 62 Fed. Reg. 28,112, 28,123 (May 22, 1997) (to be codified at 17 C.F.R. pts. 275, 279).

digital assets raises a number of special issues. Many of these issues are similar or related to issues discussed in Section 4.1 of this White Paper and the Staff Cryptocurrency Funds Letter.

(1) Anti-Fraud Restrictions

IAA section 206 (prohibited transactions by investment advisers) makes it unlawful for any investment adviser (1) to employ any device, scheme, or artifice to defraud any client or prospective client, (2) to engage in any transaction, practice, or course of business which operates as a fraud or deceit upon any client or prospective client, (3) to act as principal in certain transactions with a client without client consent, or (4) to engage in any act, practice or course of business that is fraudulent, deceptive, or manipulative. Notably, IAA section 206 applies to persons that meet the definition of investment adviser, whether or not they are registered, and not all of the prohibitions in section 206, in particular section 206(2), require fraudulent intent or scienter on the part of the adviser. The SEC has adopted a number of rules under IAA section 206 that address specific matters raising anti-fraud and related concerns.⁵²² Some of these rules apply only to SEC-registered investment advisers (or investment advisers that are required to be registered with the SEC).

IAA section 206 is interpreted to give rise to a general fiduciary duty on the part of investment advisers, which is discussed below. As part of this fiduciary duty, as well as from the specific provisions of and rules adopted under IAA section 206, investment advisers are subject to a number of general and specific disclosure obligations.

⁵²² For example, the IAA custody rule and compliance program rule, discussed below, are adopted under Section 206.

(i) Conflicts of Interest Disclosure

IAA section 206 requires investment advisers to make full and frank disclosure of material conflicts of interest to their clients and prospective clients, and a failure to do so is a violation of law, notwithstanding that the investment adviser may have had no intent to defraud its clients and notwithstanding that there may have been no resulting injury.⁵²³ IAA section 206 applies to all investment advisers, including those that are registered with the SEC, those that are registered at the state level and not with the SEC, and those that are exempt from any registration requirement.

The anti-fraud provisions of IAA section 206 apply whenever fraud arises from an investment advisory relationship, whether or not the conduct involves securities.⁵²⁴ Thus, investment advice with respect to non-security digital assets is subject to the same duty to make full and frank disclosure that applies to investment advice with respect to securities. In other words, an investment adviser, *without being asked*, must disclose conflicts of interest to prospective clients before they accept offers of services and to existing clients before they receive recommendations, and must disclose conflicts of interest that arise during the relationship.⁵²⁵

(ii) Material Misrepresentations by Investment Advisers to Pooled Investment Vehicles

IAA Rule 206(4)-8 specifically makes it unlawful for any investment adviser to a pooled investment vehicle to make any untrue statement of a material fact or to omit to state a material

⁵²³ *SEC v. Capital Gains Research Bureau, Inc.*, 375 U.S. 180 (1963).

⁵²⁴ *Timbervest, LLC*, Investment Advisers Act Release No. 4197, Investment Company Act Release No. 31,830, Admin. Proc. File No. 3-15519, at 23 (Sept. 17, 2015) [hereinafter Release IA-4197], <https://www.sec.gov/litigation/opinions/2015/ia-4197.pdf>; Release IA-1092, *supra* note 492, at 18–19; LEMKE, LINS & SMITH, *supra* note 421, at § 2:30.

⁵²⁵ See FRANKEL & SCHWING, *supra* note 439, at § 11.01.

fact necessary to make the statements made, in light of the circumstances under which they were made, not misleading, to any investor or prospective investor in the pooled investment vehicle.⁵²⁶

This is the IAA rule that the SEC invoked in the sole digital asset enforcement case, to date, brought under the IAA. In that case, the SEC charged that the respondents, CAM and its founder, violated IAA Rule 206(4)-8 by negligently misrepresenting to actual and prospective investors in CAF, a fund managed by CAM, in certain marketing materials that CAF was the “first regulated crypto asset fund in the United States” and that it had filed a registration statement with the SEC. The order states that the respondents had failed to take reasonable steps to ensure the accuracy of these statements before disseminating them to actual and potential investors. The conduct described was found to have violated IAA Rule 206(4)-8, even though the conduct is characterized as “negligent” and the order notes remedial efforts immediately undertaken by the Respondents when contacted by the SEC staff.⁵²⁷

(iii) Disclosure of Risks of Investing in Digital Assets

IAA Rule 206(4)-1(a)(5) states that it is a fraudulent practice for a registered investment adviser to publish or distribute any advertisement (broadly defined as a written communication to more than one person) that “contains any untrue statement of a material fact, or which is otherwise false or misleading.” This prohibition is broad enough to encompass communications that are misleading by omission of statements, including omissions of disclosures of material risks, that are needed in order to make the statements made not misleading.

In this connection, SEC statements about digital asset fraud in other areas are likely to be relevant. Of particular concern to the SEC is whether investors understand the risks of investing,

⁵²⁶ 17 C.F.R. § 275.206(4)-8.

⁵²⁷ *Crypto Asset Order*, supra note 404.

including the risk of loss and the lack of regulation of digital asset markets. For example, SEC Chairman Clayton expressed this concern in a February 2018 statement to the Senate:

Before discussing regulation in more detail, I would like to reiterate my message to Main Street investors from a statement I issued in December. Cryptocurrencies, ICOs and related products and technologies have captured the popular imagination—and billions of hard-earned dollars—of American investors from all walks of life. In dealing with these issues, my key consideration—as it is for all issues that come before the Commission—is to serve the long term interests of our Main Street investors. My efforts—and the tireless efforts of the SEC staff—have been driven by various factors, but most significantly by the concern that too many Main Street investors do not understand all the material facts and risks involved. Unfortunately, it is clear that some have taken advantage of this lack of understanding and have sought to prey on investors’ excitement about the quick rise in cryptocurrency and ICO prices.⁵²⁸

While the SEC has not applied these specific concerns to investment advisers, the NFA, the self-regulatory organization for commodity interest market participants (including commodity trading advisors and commodity pool operators), has issued a detailed notice to its members spelling out both standardized and non-standardized disclosures that commodity trading advisers and commodity pool operators should provide investors in their marketing materials.⁵²⁹ The NFA’s notice may provide an indication of the types of risks that regulators may consider relevant.

Finally, Form ADV, the registration statement form for registered investment advisers that must be filed with an initial registration and updated at least annually, requires an adviser to describe its investment strategies and the related risks.⁵³⁰ Note that the disclosure requirements in Form ADV are not strictly anti-fraud provisions, and thus the standard for demonstrating

⁵²⁸ Clayton HUA Statement, *supra* note 250, at 37–38 (footnote omitted).

⁵²⁹ See NFA Rulebook, Interpretative Notice 9073—Disclosure Requirements for NFA Members Engaging in Virtual Currency Activities (Board of Directors, May 17, 2018; effective Oct. 31, 2018), <https://www.nfa.futures.org/rulebook/rules.aspx?Section=9&RuleID=9073>.

⁵³⁰ See Form ADV, Part 2, Item 8, <https://www.sec.gov/about/forms/formadv-part2.pdf>.

inadequacy in ADV disclosure is likely to be lower than the standard for demonstrating an omission under the anti-fraud provisions of the IAA and Rule 206(4)-1.

(2) Fiduciary Obligations of Investment Advisers

The IAA establishes federal fiduciary standards to govern the conduct of investment advisers.⁵³¹ Although the precise parameters of these fiduciary standards are not always clear, the SEC has recently published for comment a proposed interpretation intended to address in one release and reaffirm, and in some cases clarify, certain aspects of an investment adviser's fiduciary duty.⁵³² In the view of the SEC, an investment adviser's fiduciary duty comprises a duty of care and a duty of loyalty, and it requires an investment adviser, at all times, to serve the best interest of its clients and not subordinate its clients' interest to its own.⁵³³ These standards are made enforceable by the anti-fraud provisions of Section 206.⁵³⁴

The fiduciary duty that arises from an investment advisory relationship is not limited to securities transactions.⁵³⁵ Thus, investment advisers owe the same fiduciary duty to their clients with respect to digital assets, including non-security digital assets, that they owe to them with respect to other investment transactions. The fiduciary duty extends to all persons who are investment advisers within the meaning of the IAA definition, not just those registered or required to be registered with the SEC.

⁵³¹ *Transamerica Mortg. Advisors v. Lewis*, 444 U.S. 11, 17 (1979); *SEC v. Capital Gains Research Bureau, Inc.*, 375 U.S. 180 (1963); Proposed Commission Interpretation Regarding Standard of Conduct for Investment Advisers; Request for Comment on Enhancing Investment Adviser Regulation, Investment Advisers Act Release No. 4889 (Apr. 18, 2018), 83 Fed. Reg. 21,203 (May 9, 2018) ("Release IA-4889").

⁵³² Release IA-4889, 83 Fed. Reg. 21,203.

⁵³³ *Id.* at 21,205.

⁵³⁴ *Id.*

⁵³⁵ Release IA-4197, *supra* note 524, at 23.

In connection with the fiduciary duty arising under the IAA, advice with respect to digital assets would raise the due diligence and risk disclosure concerns highlighted by SEC Chairman Clayton and others. Chairman Clayton has highlighted the types of questions an investor should ask in order to understand the risks of a digital asset investment.⁵³⁶ It seems likely that the SEC would expect a fiduciary advising on an investment to know the answers to these questions before recommending an investment. For example, in one recent enforcement case, the SEC alleged that the offering documents for an ICO included fraudulent statements.⁵³⁷ One issue that may be raised with respect to investment advisers is the level of their responsibility for detecting such fraudulent statements, or at least circumstances that may raise red flags that expose their customers to risk (or are viewed as red flags in retrospect when a fraud is uncovered).

Also among the duties imposed by the fiduciary duty of care is the obligation of an investment adviser to seek “best execution” of a client’s transactions if it is responsible for arranging execution of those transactions (typically in the case of discretionary accounts). In meeting this obligation, an investment adviser must seek to obtain the execution of transactions for each of its clients such that the client’s total cost or proceeds in each transaction are the most favorable under the circumstances, and the investment adviser should periodically and systematically evaluate the execution it is receiving for clients.⁵³⁸ To date, there is no developed body of law with respect to best execution of transactions in digital assets.

⁵³⁶ Jay Clayton, Chairman, SEC, Statement on Cryptocurrencies and Initial Coin Offerings (Dec. 11, 2017), <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11>.

⁵³⁷ SEC Litigation Release No. 24,088, (Mar. 29, 2018), <https://www.sec.gov/litigation/litreleases/2018/lr24088.htm>.

⁵³⁸ Release IA-4889, 83 Fed. Reg. at 21,207.

(3) Code of Ethics Reporting

IAA Rule 204A-1 requires registered investment advisers to establish, maintain and enforce a written code of ethics.⁵³⁹ This includes a provision to require all access persons to report periodically their personal securities transactions and holdings, including securities in which the access person has any direct or indirect beneficial ownership.⁵⁴⁰ Access persons are required to provide the chief compliance officer information about their quarterly securities transactions, including information about the broker, dealer or bank through which the transaction was effected, and they are required to submit reports of their securities holdings at least annually. Access persons are also required to get pre-approval before directly or indirectly acquiring beneficial ownership in any security in an initial public offering or in a limited offering (*i.e.*, an offering that is exempt from registration under certain provisions of the Securities Act of 1933).

The code of ethics rule applies to transactions in and holdings of securities.⁵⁴¹ Thus, it appears that registered investment advisers currently have an obligation to require their access persons to report their holdings of and transactions in digital assets that are securities, even if the investment adviser is not otherwise involved with digital assets. Digital assets present unique challenges for investment advisers' obligations under the code of ethics rule. For example, individual investors historically have rarely traded digital assets through banks or registered

⁵³⁹ 17 C.F.R. § 275.204A-1(a).

⁵⁴⁰ Access persons are any of the investment adviser's supervised persons (1) who have access to nonpublic information regarding any clients' purchases or sale of securities, or nonpublic information regarding the portfolio holdings of any reportable funds; or (2) who are involved in making securities recommendations to clients, or who have access to such recommendations that are nonpublic. If providing advice is the adviser's primary business, all directors, officers and partners are presumed to be access persons. *Id.* § 275.204A-1(b)(2)(e).

⁵⁴¹ Jay G. Baris & Joshua Ashley Klayman, *Blockchain Basics for Investment Managers: A Token of Appreciation*, 51 REV. SEC. & COMMODITIES REG. 67, 79 (2018), <https://media2.mofo.com/documents/180321-blockchain-investment-managers-token.pdf>.

broker-dealers, so the IAA Rule 204A-1 reporting requirements do not mesh well with digital assets. Investment advisers will face a compliance challenge to ensure that personal trades of access persons do not affect the price of digital assets that are securities, and that they do not profit improperly by front-running client trades in digital assets that are securities.⁵⁴² Currently, practices vary with respect to which codes of ethics have been updated to take digital assets into account.⁵⁴³

(4) Custody

IAA Rule 206(4)-2 establishes requirements for registered investment advisers that have custody over their clients' funds or securities.⁵⁴⁴ An investment adviser is deemed to have custody if it or a related person holds, directly or indirectly, client funds or securities, or has any authority to obtain possession of them. Such funds and securities must be maintained by a qualified custodian, *i.e.*, a federally insured bank or savings association, a registered broker-dealer, a registered futures commission merchant (with respect to client funds and security futures), or a foreign financial institution that customarily holds financial assets for its customers. The qualified custodian must send an account statement at least quarterly to each client, and client funds and securities must be verified at least annually by an independent public accountant.

Digital assets are subject to the custody rule if they are either “funds” or “securities” and if the registered investment adviser has any authority to obtain possession of them (*e.g.*, as a

⁵⁴² *Id.*

⁵⁴³ Anna Irrera, *Compliance Officers Sweat as Cryptocurrency Trades Go Mainstream*, REUTERS (Feb. 6, 2018, 1:12 AM), <https://www.reuters.com/article/us-crypto-currency-conflicts/compliance-officers-sweat-as-cryptocurrency-trades-go-mainstream-idUSKBN1FQ0L1>.

⁵⁴⁴ 17 C.F.R. § 275.206(4)-2. The IAA custody requirements differ from those applicable to registered funds under the ICA, which have been raised by the SEC staff in connection with registration of funds investing substantially in digital assets. Such ICA custody requirements are discussed in Section 3(b)(3)(ii) of this White Paper. However, many of the same regulatory goals and practical issues relating to custody of digital assets apply to both the ICA and IAA.

consequence of discretionary trading authority). The custody rule presents particular challenges for investment advisers. First, there are as yet only a small number of custodians that represent that they are qualified custodians for digital assets, although the number appears to be growing.⁵⁴⁵ Second, holding the digital asset presents practical difficulties. Ownership of a digital asset is reflected in a string of numbers on a distributed ledger, accessible only by a public key and a private key, much the same way access to a safe deposit box is accessible by the bank's key and the depositor's key.⁵⁴⁶ The digital asset is at risk of loss from hackers or other thieves who gain access to the private key, or if the storage medium malfunctions or is otherwise compromised. Third, it is not clear how an independent public accountant could validate the existence, exclusive ownership, and software functionality of the private keys and other ownership records.⁵⁴⁷ Until these issues are addressed, it is not clear how an investment adviser that is deemed to have custody of digital assets can comply with IAA Rule 206(4)-2.⁵⁴⁸

(5) Valuation

The IAA does not impose a valuation requirement, per se, but proper valuation of assets under management is critical to many key aspects of an investment adviser's obligations,

⁵⁴⁵ Chris Kentouris, *Custody: Uncharted Waters for Digital Assets*, FINOPS REPORT (June 1, 2018), <https://finops.co/investors/custody-unchartered-waters-for-digital-assets/>; Lawrence Delevinge & Anna Irrera, *Lack of Wall Street Back-Office Deters Mainstream Crypto Investments*, REUTERS (May 8, 2018, 10:15 AM), <https://www.reuters.com/article/us-crypto-currencies-funds/lack-of-wall-st-back-office-deters-mainstream-crypto-investments-idUSKBN1I91WF>.

⁵⁴⁶ Baris & Klayman, *supra* note 541, at 79–80.

⁵⁴⁷ See Staff Cryptocurrency Funds Letter, *supra* note 418 (raising this issue).

⁵⁴⁸ The SEC staff has recently raised other issues under the IAA custody rule that could be relevant to digital issues, including “inadvertent custody,” which may occur when a custodial agreement between a client and the client's custodian grant an adviser broader access to client funds or securities than the adviser's own agreement with the client contemplates, and whether an adviser's purchase and sale instructions other than on a delivery-versus-payment basis create custody on the part of the adviser. See SEC DIV. INV. MGMT., INADVERTENT CUSTODY: ADVISORY CONTRACT VERSUS CUSTODIAL CONTRACT AUTHORITY, No. 2017-01 (2017), <https://www.sec.gov/investment/im-guidance-2017-01.pdf>.

including assessment of asset-based fees, calculation and reporting of performance, and disclosure of risks. With respect to digital assets, valuation raises challenges based on the nascent state of the trading markets, and issues relating to volatility, fragmentation, and lack of regulatory oversight. As with custody, these issues have been raised by the SEC staff under the Investment Company Act in connection with digital asset investments by registered funds, and apply in much the same manner under the Advisers Act.⁵⁴⁹

(c) Other IAA Requirements

A general guide to the requirements of the Advisers Act is beyond the scope of this White Paper. However, managers of digital assets who become registered investment advisers should be aware that registered investment advisers are subject to a number of other requirements, some of which include the following:

- Compliance program requirement;
- Reporting and disclosure requirements;
- Advisory agreement and advisory fee restrictions;
- Restrictions on the use of solicitors;
- Advertising regulation;
- Privacy policy and privacy notice requirements;
- Restrictions on political contributions;
- Recordkeeping requirements;
- Supervision requirements; and
- SEC examination and enforcement authority.⁵⁵⁰

⁵⁴⁹ See Staff Cryptocurrency Funds Letter, *supra* note 405.

⁵⁵⁰ See generally SEC, DIV. INV. MGMT., REGULATION OF INVESTMENT ADVISERS BY THE U.S. SECURITIES AND EXCHANGE COMMISSION (2013), https://www.sec.gov/about/offices/oia/oia_investman/rplaze-042012.pdf.

SECTION 5. THE NEED FOR A BETTER CFTC AND SEC REGULATORY SCHEME FOR DIGITAL ASSETS

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1. Introduction

The CFTC's and the SEC's authority over transactions in digital assets and derivatives involving them begs the questions of where the jurisdictional boundaries between the two agencies lie and how each agency's authority can or should be best applied to foster the public interests in vibrant, honest markets and investor protection. The application of their separate statutes and policies can materially affect the development of the markets in digital assets and the blockchain technology that underlies them, for better or worse. Sorting out the appropriate policies to advance market vibrancy and integrity is a work-in-progress and not a simple task. The statutes are complex; myriad different types of digital assets are potentially covered; and the current laws and regulations were not crafted with such novel and varied assets in mind. Also, because the markets for these assets developed rapidly without clear regulatory guidance, policy makers now must grapple with how these assets and the markets for them can be brought into regulatory compliance with the least harm to the markets' many participants and to beneficial financial innovation.

2. Framing the Legal and Policy Analysis

(a) The Intersection of Securities and Non-Security Commodities Transactions

The main goals of futures and swaps regulation are to facilitate use of derivatives markets for price discovery and shifting of risk, to assure the integrity of derivatives prices and their convergence with prices in the underlying cash markets, and to protect market participants from fraud and manipulation. The predominant goals of securities regulation are to facilitate capital-formation and capital flows in an efficient and fair environment, assure the integrity of market valuations, and protect investors from fraud and manipulation in securities investments.⁵⁵¹ Despite those substantial differences in primary market focus and market regulation objectives, the boundary lines between what the CFTC regulates and what the SEC regulates can get blurred.

Points of intersection of CFTC and SEC jurisdiction principally occur in three ways:

When an interest underlying a derivative is a security.⁵⁵² Securities-based derivatives initially generated debate over whether securities are covered by the CEA's commodity definition—the settled answer is yes—and if so, which agency should regulate derivatives on securities or related interests in securities.⁵⁵³ As explained in Section 2.4, the current statutory framework largely resolves jurisdictional issues in this area by giving the CFTC the authority to

⁵⁵¹ See generally PHILLIP M. JOHNSON & THOMAS L. HAZEN, DERIVATIVES REGULATION § 4.05 [9], at 1014 (Wolters Kluwer, 2004).

⁵⁵² The CEA uses the definition of “security” in the Securities Act and Exchange Act. See 7 U.S.C. § 1a(41). The CEA also defines other securities-related terms that are relevant for delineating how jurisdiction is allocated to the CFTC and SEC over security-based derivatives, including “security futures,” “security futures products,” “exempted securities” and a “narrow-based security index.”

⁵⁵³ As explained in Section 5.4, after the CEA's commodity definition was expanded in 1974 along with the establishment of the CFTC, there was initial debate over whether the amendments gave the CFTC exclusive jurisdiction over futures, options on futures or options on securities. The current statutory framework reflects the resolution of those issues. When Dodd-Frank expanded the CEA's reach to cover swaps in 2010, it divided oversight of swaps relating to securities between the SEC and CFTC.

regulate certain securities-based derivatives (*e.g.*, futures on Treasury securities or a broad-based index of equity securities), the SEC the authority to regulate others (*e.g.*, options on securities or an index of securities), and both agencies the authority to regulate one segment together (security futures products). When a commodity's classification as a security or a non-security is straightforward, the regulatory allocation scheme is relatively straightforward to apply. When it is not, as can be the case with certain digital assets, the determination as to which agency regulates derivatives on a particular token can be uncertain.⁵⁵⁴

When a non-security commodity or derivative is embedded in a security. The CFTC also can have jurisdiction with respect to a security that has embedded characteristics of a non-security commodity or derivative, such as when the value of a security is linked to the value of a non-security commodity. Certain “hybrid securities” linked to non-security commodities may qualify for relief from CEA derivatives regulation under existing exemptions (described below). However, hybrid digital assets that are securities on the basis that they are investment contracts—*i.e.*, by virtue of how they are first offered and marketed and not because they represent equity ownership in an entity or the promise of debt repayment as a debt security—raise special policy considerations.

When a derivative has both securities and non-security commodities as underlying reference components. Although perhaps less common, CFTC and SEC jurisdictional interests also can overlap when a derivative has both securities and non-security commodities as underlying reference values. The statutory scheme acknowledges that this permutation could

⁵⁵⁴ Where the agencies allow regulated trading of derivatives on a digital asset, one can infer whether the asset is a security or a non-security commodity from the manner in which the derivative is permitted to trade. The fact that the futures exchanges list bitcoin futures as products the CFTC alone regulates and not as security futures, without SEC challenge during the very public new product review process that occurred, would seem to ratify bitcoin's status as a non-security commodity.

occur for derivatives classified as swaps, and resolves the issue by treating so-called “mixed swaps” as both swaps that the CFTC regulates and security-based swaps that the SEC regulates.⁵⁵⁵ Apart from this area of overlap, as between the two agencies, the CFTC alone regulates swaps and the SEC alone regulates security-based swaps.⁵⁵⁶

(b) Novel Characteristics of Digital Assets

The diverse terms and uses among digital assets, combined with the creativity of those developing such products, can pose unprecedented challenges for applying a jurisdictional analysis to products that involve some combination of securities characteristics with non-security commodity characteristics and/or derivatives characteristics. This is most notable for digital assets where the securities characteristics may be temporary. The SEC staff has recognized that some digital assets—the digital coin Ether being the example offered—might begin life as a security in the form of an investment contract but over time transform into a non-security commodity.⁵⁵⁷ The current legal framework does not anticipate this type of temporal

⁵⁵⁵ A mixed swap is a swap that meets the security-based swap definition in CEA section 3(a)(68)(A) of the Exchange Act, and which is also “based on the value of 1 or more interest or other rates, currencies, commodities, instruments of indebtedness, indices, quantitative measures, other financial or economic interest or property of any kind (other than a single security or a narrow-based security index), or the occurrence, non-occurrence, or the extent of the occurrence of an event or contingency associated with a potential financial, economic, or commercial consequence (other than an event described in subparagraph (A)(iii).” 7 U.S.C. § 1a(49)(D). CEA section 1a(49)(B)(x) excludes “security-based swaps” from the swap definition, “other than a security-based swap as described in subparagraph (D),” *i.e.*, other than a mixed swap.

⁵⁵⁶ The SEC retains enforcement authority that it possessed prior to the enactment of Dodd-Frank Act over “security-based swap agreements,” which are defined as swap agreements (as defined in section 206A of the Gramm-Leach-Bliley Act) of which a material term is based on the price, yield, value or volatility of any security or any group or index of securities, including any interest therein, but does not include a security-based swap. *See* 15 U.S.C. 78c(a)(78); 7 U.S.C. 1a(47)(A)(v). Such security-based swap agreements may include, for example, swaps on broad-based security indices and U.S. Treasury securities that are subject to CFTC regulatory authority. *See* Product Definitions 77 Fed. Reg. at 48,294. However, the SEC does not have regulatory authority with respect to such swaps.

⁵⁵⁷ Hinman, *supra* note 47. The CFTC and SEC also can share jurisdiction with the states over cash market transactions in digital assets. Most states have laws governing virtual currency businesses. *See infra* Section 8 and Appendix; *Cryptocurrency & Law: A Comprehensive Overview of 50 States’ Guidance and Regulations on Blockchain and Digital Currency*, BITCOIN CENTER NEW YORK CITY (Mar. 6, 2018), <https://bitcoincenternyc.com/bitcoin-news/bitcoin-blockchain-cryptocurrency-laws-50-states/>. Other federal

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permutation. The closest analog would be when an index of securities may toggle between being classified as a narrow or a broad based index, which affects the classification of certain securities-based derivatives (futures vs. security futures; swap vs. security-based swap) for purposes of applying CFTC and SEC jurisdiction.⁵⁵⁸ For example, a security-based index may evolve from a product under the CFTC's exclusive jurisdiction to one subject to joint CFTC and SEC jurisdiction as the index's composition shifts over time.⁵⁵⁹ That circumstance, however, effectively involves the mechanical application of the statutory requirements to known securities. In contrast, the digital asset context involves the substantive determination of when the characteristics of the sale of a non-security commodity or derivative cease to involve an investment contract, so the transition or sharing of jurisdiction between the commissions would require new rules or rule interpretations.

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agencies such as the IRS and FinCEN have created additional regulatory considerations for market participants in the tax and money transmitter contexts, respectively. See I.R.S. News Release IR-2018-71, U.S. Internal Revenue Service, in which the IRS reminds taxpayers to report virtual currency transactions (Mar. 23, 2018), <https://www.irs.gov/newsroom/irs-reminds-taxpayers-to-report-virtual-currency-transactions> ("Taxpayers who do not properly report the income tax consequences of virtual currency transactions can be audited for those transactions and, when appropriate, can be liable for penalties and interest. In more extreme situations, taxpayers could be subject to criminal prosecution for failing to properly report the income tax consequences of virtual currency transactions."); see also FIN-2013-G001, *supra* note 158.

⁵⁵⁸ The definitions of security future and security-based swap include, respectively, futures or swaps on a narrow-based security index. See 7 U.S.C. § 1a(44) (definition of security future); 15 U.S.C. § 78c(a)(68) (definition of security-based swap). In the Part 41 Rules for security futures products, CFTC Rule 41.14, 17 C.F.R. § 41.14, sets out tolerance and transaction provisions for security futures on an index that ceases to be a narrow-based security index. The CEA definition of "narrow-based security index" in CFTC Rule 1.3, 17 C.F.R. § 1.3, as used in the definition of "security-based swap," includes tolerance period and grace period concepts for swaps traded on exchanges or SEFs that become security-based swaps when the index has changed to a narrow-based security index.

⁵⁵⁹ This occurred, for example, with a futures contract offered by Eurex. In 2002, the CFTC granted no-action relief permitting Eurex to offer futures on a securities index in the U.S., finding that the index met the statutory requirements for a broad-based securities index. See CFTC No-Action Letter No. 02-38 (Apr. 2, 2002), *available at* <https://www.cftc.gov/sites/default/files/idc/groups/public/@lrllettergeneral/documents/letter/02-38.pdf>. In 2011, Eurex conducted an internal review and determined that the index had transitioned to a narrow-based securities index, which it brought to the attention of the SEC and CFTC. See Eurex Report, *supra* note 376, at 3.

(c) Cash Market Trading of Digital Assets

Each agency's authority over cash market trading of *commodities* (under the broad CEA definition) should not intersect. The federal securities laws authorize the SEC, not the CFTC, to regulate initial offerings and secondary market trading of securities. As a general matter, the CFTC does not regulate cash commodity markets—it regulates derivatives markets. As one exception, the CFTC has regulatory authority over leveraged, margined or financed retail commodity transactions under CEA section 2(c)(2)(D),⁵⁶⁰ but that authority is expressly limited to transactions in commodities that are not securities.⁵⁶¹ The CEA also gives the CFTC anti-fraud and anti-manipulation enforcement authority (but not rulemaking authority) over contracts for the sale of commodities in interstate commerce.⁵⁶² CEA section 6(c)(1),⁵⁶³ which was added as part of the Dodd-Frank Act amendments to the CEA, as relevant here, broadly prohibits any person, directly or indirectly, from using or employing, or attempting to use or employ, in connection with any contract of sale of any commodity in interstate commerce, any manipulative or deceptive device in contravention of any CFTC rule. CFTC Rule 180.1⁵⁶⁴ implements this statutory prohibition. However, CEA section 2(a)(1)(H)⁵⁶⁵ provides that the CFTC shall have no jurisdiction under the Dodd-Frank Act or any amendment to the CEA made by the Dodd-Frank

⁵⁶⁰ 7 U.S.C. § 2(c)(2)(D). As explained in Section 2.2, transactions covered by this provision are regulated as or “as if” they are futures contracts, unless the transactions fit within an exemption. In practice, parties to such transactions try to operate within the “28 day actual delivery” exemption.

⁵⁶¹ See 7 U.S.C. § 2(c)(2)(D)(ii)(II) (expressly providing that CEA section 2(c)(2)(D) does not apply to “any security”).

⁵⁶² Of course the SEC does not regulate the non-security cash commodity markets either. These markets are not obligated to meet any of the registration and reporting requirements or business conduct standards that derivatives markets and securities must meet. See *supra* Section 2.3(f).

⁵⁶³ 7 U.S.C. § 9(c)(1).

⁵⁶⁴ 17 C.F.R. § 180.1.

⁵⁶⁵ 7 U.S.C. § 2(a)(1)(H),

Act with respect to any security other than a security-based swap.⁵⁶⁶ This would seem to exclude transactions in securities from the scope of CEA section 6(c)(1) and CFTC Rule 180.1.⁵⁶⁷

(d) Smart Contracts

Use of smart contracts as digitized representations of recognized derivatives contracts should not raise any unique issues of jurisdictional conflict between the CFTC and SEC over the derivatives.⁵⁶⁸ The terms and conditions defining the contract are relevant for analyzing the legal classification of the derivative, regardless of how they are expressed. Representing derivatives through smart contracts that administer performance obligations under the contracts may, of course, raise other regulatory issues, but those are outside the scope of this analysis.

(e) Terminology Challenges

When discussing potential CFTC and SEC jurisdictional issues, regulators and others typically use the term “commodity” under its commonly understood meaning as shorthand to refer to commodities that are not securities. For clarity and precision, we use the term “non-security commodity” to cover commodities that are not securities, in light of the CEA commodity definition, as that definition covers securities. As explained in Section 2.3, though, there also are possible interpretations of the scope of the CEA’s commodity definition that, if accepted, would result in certain products falling outside the statutory definitions of both security

⁵⁶⁶ Presumably, this reservation of CFTC authority refers to mixed swaps, which are both swaps under the definition and security-based swaps. See 7 U.S.C. §§ 1a(49)(B)(x), 1a(49)(D); *supra* note 555 and accompanying text.

⁵⁶⁷ Given that Congress in the retail commodities transactions provision expressly excluded leveraged OTC transactions in securities from the CFTC’s jurisdiction, *see supra* note 561, there would appear to be little or no basis to conclude that Congress intended for the CFTC to have any jurisdiction over non-leveraged cash securities transactions.

⁵⁶⁸ Likewise, the use of smart contracts to track and administer performance under deferred delivery commercial merchandizing transactions should not itself be dispositive of whether the contract is within the forward contract exclusion and thus outside the scope of regulation under the CEA as a future or swap.

and commodity. This issue to date principally affects the scope of the CFTC's enforcement authority over cash market activities.

(f) Questions Guiding Analysis of CFTC and SEC Jurisdiction

Current law recognizes that issues of jurisdictional overlap can occur between the SEC and CFTC over novel derivative products, as they have in the past, and provides a mechanism (discussed below) for the two agencies to try to resolve them when they arise. Whether through that mechanism or otherwise, the following questions may be useful for evaluating whether transactions in or involving a particular digital asset are—or should be—within the regulatory purview of the CFTC alone, the SEC alone, both agencies together, or neither agency:

1. Is the digital asset a security?
2. Does the digital asset have characteristics of both a security and a non-security commodity?
3. Does the digital asset have the initial characteristics of a security only, with the potential to transform from a security to a non-security commodity (*e.g.*, as a future virtual currency offered as part of an investment contract to be used as a medium of exchange)?
4. As a variation of #3, if a digital asset is perceived to have characteristics of both a security and a non-security commodity from the outset, could the security characteristics cease in the future?
5. Does the digital asset have characteristics of both a security and a derivative related to a non-security commodity?
6. Is the digital asset an underlying interest for any contracts or transactions that are derivatives (futures, options on futures, options, swaps)?

3. The Challenging Issues Applying the Statutory Schemes to Digital Assets

The digitization of an asset principally functions as a technological wrapper for the particular unique bundle of property rights and interests each asset represents. The DAO token, the Munchee token, bitcoin, and a commodity-backed token are all digital assets, but have different features and functions. Some digital assets may be straightforward to classify as a

security or a non-security commodity, such as tokens that are simply a form of electronic title for ownership of an underlying asset, say gold, where the token's status should follow that of the underlying asset.

Other tokens can be more challenging to classify for appropriate regulatory treatment. In particular, the initial offering of digital assets for capital raising and their resale in secondary markets, when they are perceived to have attributes of both securities and non-security commodities, have brought confusion and uncertainty surrounding the interplay of the agencies' jurisdictions. Tokens that are sold initially as a means to raise capital to build the platform in which the tokens will serve a utility function, *e.g.*, as a medium of exchange for the issuer's products and services, or as a store of value for investment, seemingly implicate both the CFTC's and the SEC's regulatory interests. If the SEC believes the initial or secondary market transactions constitute the purchase or sale of a security under the tests set forth in *SEC v. WJ Howey Co.*⁵⁶⁹ or *Gary Plastic Packaging v. Merrill Lynch, Pierce, Fenner & Smith Inc.*,⁵⁷⁰ the SEC could assert regulatory and enforcement authority to require compliance with the federal securities laws. If the CFTC believes they are non-security commodities, it could assert jurisdiction over cash market sales of the digital asset under its anti-fraud and anti-manipulation authority or possibly under its authority over certain retail commodity transactions. But competing assertions of jurisdiction over the same cash market commodity transactions by the SEC and CFTC would be at odds with the statutory allocation of jurisdiction between them described above.

⁵⁶⁹ 328 U.S. 293 (1946).

⁵⁷⁰ 756 F.2d 230 (2d Cir. 1985).

The clarity of the existing statutory scheme is further strained when a digital asset might be considered a security because it is offered to raise capital for a business enterprise but also appears to replicate the structure and terms of a future, option or swap on a non-security commodity. For example, if the token is designed to be backed by a store of gold at a future time, has its value largely pegged to the future price of gold, can be redeemed in the future for a pro-rata share of the gold or the cash equivalent, and can be traded in a secondary market, those initial transactions in the token might look like a vehicle to speculate on the future value of gold. Is it more appropriate from a regulatory perspective to treat those transactions as securities transactions regulated by the SEC, as derivatives transactions regulated by the CFTC or as transactions regulated concurrently by both agencies? If those creating the tokens decide to resolve the question by expressly offering them as securities, seeking to rely on the CEA exemption for hybrid securities to avoid CFTC regulation, it is fair to ask whether that exemption was really intended to cover securities that economically replicate derivatives the CFTC would otherwise regulate. On the other hand, if the token represents title to gold, the circumstances of how the transactions are offered and the nature and intention of the parties to the transaction may support the conclusion that the transactions are most appropriately treated as commercial forward contracts that neither agency regulates.

These issues of regulatory uncertainty and ambiguity have the potential to frustrate enforcement of the laws. The agencies appear to have coordinated the use of their respective resources to combat perceived fraudulent activity in connection with cash market transactions in digital assets, such that in some circumstances only one agency has initiated action to protect potential victims and the public interest. But in the absence of clear public statements to the contrary, their coordination does not necessarily mean that, where only one agency initiates an

action, only that agency has determined that it has jurisdiction. When a digital asset straddles classification as a security or a non-security commodity, the risk that both the SEC and the CFTC could choose to assert their respective anti-fraud enforcement powers undermines the asserting agency's jurisdictional position. If either agency initiates an enforcement action for suspected fraud in connection with cash market sales of digital assets, but the manner in which the digital asset is marketed to purchasers arguably brings it within the definition of a security as an investment contract, sorting out the proper scope of each agency's authority through the courts could frustrate the timely enforcement of either agency's authority.

From the perspective of creators and purveyors of such assets, the uncertainty could frustrate or overwhelm the commercial viability of the enterprise. The regulatory complexity and uncertainty are especially acute for digital assets that over time are deemed to morph from a security to a non-security commodity. Ether is the only example the SEC staff has identified of an asset that may have been a security when initially offered and later transformed into a non-security commodity. It bears noting, however, that as a practical matter Ether's acceptance and use might not have happened if the securities law requirements for transfers of securities (*e.g.*, requiring broker-dealers to act as intermediaries) had been observed. This implicates a key issue for the commercial practicality of the views of SEC staff: How will it be feasible for a digital asset that is intended to function as a medium of exchange to fulfill that function if its transfer from one owner to another must comply with restrictions on the purchase and sale of securities or can only be facilitated by persons that are registered (as appropriate to the roles they perform) as broker-dealers, exchanges, clearing agencies or transfer agents? Even if, for example, the initial offering of the asset is made in compliance with securities private placement offerings, the securities law resale restrictions would seem to effectively prevent the asset from being

serviceable for purchasing goods and services, thereby blocking its evolution to non-security status and killing the enterprise.

Even assuming that the asset could reach a point to be considered transformed into a non-security commodity, there are major regulatory impediments that have yet to be addressed. For example, when and how is it to be determined that the transformation to a non-security commodity has occurred? How does the transformation affect the enforcement authority of each agency and the states and any private claims? It can be hoped that with more experience, clearer standards may be established with respect to when a digital asset will be deemed a security or a non-security commodity, and a less complicated regulatory regime might emerge that establishes clear and commercially reasonable lines for the treatment of digital assets.

Digital assets that from inception are backed by a non-security commodity, but which do not confer on the holder any ownership rights in the commodity, may also raise interpretive jurisdictional issues. Such instruments may draw a comparison to commodity-based ETFs suggesting they should be treated as securities. But commodity-based ETFs were intentionally offered as investments representing share ownership in fund vehicles. It is worth recalling that when commodity-based ETFs first emerged they presented the novel issue of whether it was more appropriate to treat ETF shares as securities or as non-security commodities when their value as an investment would derive solely from changes in the value of the non-security commodities that the ETFs would passively hold. The CFTC granted exemptions pursuant to its authority under CEA section 4(c) to permit options on such ETFs to trade as listed securities on markets regulated by the SEC and futures on the ETFs to trade as security futures it would jointly regulate with the SEC, on the basis that the products would be appropriately regulated.

The CFTC did not take a formal position as to whether the ETFs should be viewed as securities or non-security commodities.

ETFs have been around for years now, and commodity-based ETFs are commonly known as a type of security and today are probably covered under that element of the definition in the federal securities laws.⁵⁷¹ But it does not follow that digital assets backed by non-redeemable commodity holdings and linked to price changes in such non-security commodities are necessarily securities. Tokens of that type should be evaluated based on their own merits, in terms of how they are structured, the manner in which they are offered, and the functions and features they possess. And the issue is not simply whether such a token is a security or a non-security commodity. By linking the price of the token to the price of a non-security commodity, there is the implicit expectation that the token's price will have some correlation to the prevailing price for the commodity. This raises questions whether the token should be viewed as a form of cash-settled derivative on the commodity, and if so, whether the token fits within any of the CEA's existing classifications for derivatives regulated by the CFTC. On the other hand, where the link is intended to provide pricing stability to facilitate acceptance of the token as a means of exchange to pay for goods or services, perhaps the currency-related function should define the token as a non-security commodity in its own right, and not as a derivative on the referenced commodity.

Securities with embedded derivatives elements are another area where CFTC and SEC jurisdiction can intersect. The existing landscape provides some clarity for hybrid securities that remain securities, through exemptions from CFTC regulation available under CEA section 2(f)

⁵⁷¹ The definitions of "security" in Securities Act section 2(a)(1) and Exchange Act section 3(a)(10) include a "catchall" element covering any "instrument commonly known as a 'security.'" 15 U.S.C. § 77b(a)(1); *id.* § 78c(a)(10).

or under the CFTC Part 34 Rules. CEA section 2(f) provides one exemption for hybrid instruments that are “predominantly securities.” For an instrument to meet the predominance test, the purchaser must fully pay for the security, without any obligation to make additional payments such as margin or mark-to-market settlement, throughout the lifespan or at maturity of the security, and the hybrid security must not be marketed as a futures or options on futures contract subject to the CEA. The CFTC Part 34 Rules provide another exemption. It is limited to securities that are debt or equity securities,⁵⁷² and also imposes the “fully paid for” requirement and marketing restriction. In addition, the exemption assumes that the security has both commodity dependent and commodity independent components, and requires the value of the commodity dependent component(s) to be less than the value of the commodity independent component.

It is appropriate to question whether it makes sense to apply the more lenient terms of the CEA hybrid securities exemption to digital assets that may be securities on the basis of being an investment contract and that also have characteristics of derivatives the CFTC regulates. In practical terms, this issue may not arise, as the CEA exemption (and likewise the Part 34 exemption) would not be available for a digital asset where it is envisioned that the token will cease to be a security at some future time and continue life as a non-security commodity, because the exemption is predicated on the instrument retaining its security status at all times. But if an issuer were willing to do so, should it be allowed to keep the “security” label to claim the CEA exemption on the digital asset after the securities characteristics disappear? When the “entrepreneurial or managerial efforts of others” are amorphous to quantify and the non-security commodity and commodity derivatives characteristics dominate or may in the future, it would

⁵⁷² The exemption also covers certain banking products such as demand deposits or time deposits.

seem there is a strong policy justification for CFTC jurisdiction. The commodity-based ETF precedent suggests that hybrid digital assets of this type should not be pigeonholed into the CEA section 2(f) exemption, but instead should be addressed through coordination between the two agencies, and the CFTC's exercise of its judgment whether it is appropriate to exercise its exemptive authority under CEA section 4(c) to accommodate trading of derivatives on such digital assets.

Putting aside the foregoing issue, it is reasonable to foresee interest in offering debt or equity securities where one or more payment components are linked in whole or in part to the value of a virtual currency or other digital asset. In this hybrid security context, the issue, of course, is whether the digital asset is a non-security commodity. If it is, it will be important for the issuer to understand the terms of the exemptions if it wants to qualify for relief from CEA regulation.

There are other interpretive issues that may impede development of the digital asset markets. For example, the definition of security in the ICA (and the IAA) is broader than the one used in the Securities Act, Exchange Act and CEA, raising the prospect that a digital asset could be a non-security commodity under the CEA and yet be pulled into the realm of investment company regulation of a commodity fund holding the asset in its portfolio.

4. The History of Resolving Jurisdictional Issues Between the SEC and CFTC

Issues of jurisdictional overlap between the SEC and CFTC are not new. The legal scheme today recognizes the value of cooperation between the two agencies, reflecting lessons learned from the history of resolving such issues.

In the earlier part of this history, jurisdictional questions between the CFTC and SEC over the application of their respective statutes to various financial products were debated in the courts. Those controversies generally were subsequently resolved through negotiated outcomes

between the agencies, some of which were later enacted into law. Shortly after passage of the Commodity Futures Trading Commission Act of 1974 providing the CFTC with “exclusive jurisdiction” over futures on commodities in CEA section 2(a)(1) under a newly expanded “commodity” definition, the SEC asserted that the CEA amendments had not diminished its jurisdiction over transactions involving a security—even with respect to future contracts that involved securities.⁵⁷³

Not long thereafter, when the Chicago Board of Trade (“CBOT”), following the CFTC’s approval, was preparing to list and trade a futures contract on Government National Mortgage Association (“GNMA”) certificates, the SEC warned that trading that contract might be illegal, notwithstanding the CFTC’s approval. The CBOT initiated trading anyway, and the SEC took no formal action against the exchange. In 1981, however, when the SEC granted permission to the Chicago Board Options Exchange (“CBOE”) to trade options on GNMA certificates, the CBOT sued the SEC, arguing that a GNMA certificate was a commodity under the CEA and therefore the CFTC had exclusive jurisdiction. The CFTC and SEC, through their respective chairmen, Philip Johnson for the CFTC and John Shad for the SEC, negotiated a resolution in what is known as the “Shad-Johnson Accord” (“Accord”) that delineated the statutory applications to specific types of traded instruments. However, because Congress had not enacted the Accord into law, the Seventh Circuit Court of Appeals did not consider it and instead held that GNMA certificates were commodities, that the CFTC had exclusive jurisdiction over GNMA options, and that the SEC had no power to authorize their trading on the CBOE.⁵⁷⁴ Later, following

⁵⁷³ Johnson & Hazen, *supra* note 551, at §4.05[8].

⁵⁷⁴ *Bd. of Trade of Chi. v. SEC*, 677 F.2d 1137 (7th Cir. 1982), *vacated as moot*, 459 U.S. 1026 (1982).

Congress's enactment of the Accord into law as part of the Futures Trading Act of 1982,⁵⁷⁵ options on GNMA certificates were treated as options directly on securities over which the SEC exercised jurisdiction, but futures contracts and options on futures contracts on GNMA certificates (and more generally on exempted securities as defined in the Exchange Act) were subject to CFTC jurisdiction.

A similar controversy arose in 1988 when three securities exchanges filed applications to permit exchange trading in what were called "stock index participation" instruments. These instruments were perceived to have many characteristics of futures contracts. Significantly, the CFTC took the position that the index participation instruments were not securities and therefore should be regulated by the CFTC as futures contracts. When the SEC granted the securities exchanges' applications to list these products for trading, the CME challenged the SEC before the Seventh Circuit. That court found that the index participation instruments potentially could be classified as both securities and futures contracts, but concluded that, based on the jurisdictional Accord, an instrument that can be classified as both a security and futures contract was subject to the exclusive jurisdiction of the CFTC.⁵⁷⁶ Consequently, the instruments could not trade on the securities exchanges without CFTC approval.

Additional jurisdictional controversies continued to arise into the early 1990s. Proposed legislation in 1991 sought to further delineate the jurisdiction between the CFTC and SEC over certain hybrid investment vehicles, including securities whose values were tied to the market price of another asset or commodity. The legislation ultimately did not include a jurisdictional

⁵⁷⁵ Pub. L. No. 97-444, 96 Stat. 2294 (Jan. 11, 1983).

⁵⁷⁶ *Chicago Mercantile Exchange v. SEC*, 883 F.2d 537 (7th Cir. 1989).

allocation between the agencies. Rather, the 1992 amendments to the CEA gave the CFTC in new section 4(c)⁵⁷⁷ authority to exempt transactions from the requirements of the CEA.

One of the CFTC's first uses of its authority under CEA section 4(c) related to the instruments that spawned the need for the authority—hybrid instruments. The CFTC crafted the Part 34 exemption (discussed above), covering hybrid instruments that are equity or debt securities or depository instruments with one or more commodity-dependent components that have payment features similar to commodity futures or commodity option contracts or combinations thereof. In the Commodity Futures Modernization Act of 2000 (CFMA), Congress added CEA section 2(f) to provide a statutory exclusion for hybrid securities that are predominantly securities (but on more lenient terms than set out in the CFTC exemption).

The CFMA also sought to resolve a jurisdictional controversy between the CFTC and SEC over the trading of futures on a single non-exempt security or a narrow-based security index. How to allocate jurisdiction over such products was one issue that the Accord left unresolved, and thus the Futures Trading Act of 1982 banned trading of such products, but the ban was intended to be temporary. The CFMA established a structure for joint CFTC and SEC jurisdiction over those products, which is set out in CEA section 2(a)(1)(C).⁵⁷⁸

Points of jurisdictional overlap do not always result in disputes, as the more recent history illustrates. The two agencies cooperated to work out an approach for handling commodity-based ETFs in 2008. A number of these vehicles are structured as trusts that passively hold commodities, with the objective that the share prices would track the prices of the underlying commodities. The registration statement for the first product of this type—a gold

⁵⁷⁷ 7 U.S.C. § 6(c).

⁵⁷⁸ *Id.* § 2(a)(1)(C).

ETF—was making slow progress through the SEC, as staff rightly anticipated that exchanges would want to list options and futures on the ETF shares, raising the issue of whether such derivatives should be regulated by the CFTC as commodity options and as futures, or by the SEC as options on securities and by the CFTC and SEC jointly as security futures. The exchanges did, in fact, pursue listing of such derivatives on shares of the gold ETF, which brought the issue before both agencies.

The CFTC and SEC entered into an MOU in March 2008 setting out an approach for addressing novel derivatives products that “may reflect elements of both securities and commodity futures or options, and may impact the regulatory mission of each agency.”⁵⁷⁹ Shortly thereafter, the CFTC exercised its exemptive authority under CEA section 4(c) to permit options on the ETF shares to be traded on national securities exchanges as options on securities and futures on such ETF shares to be traded on exchanges as security futures.⁵⁸⁰ In its orders, the CFTC did not take a position on whether the ETF shares should be considered a security or a non-security commodity, but instead determined that the exemption would be consistent with the public interest, in large part because the products would be subject to regulation by the SEC or, for the futures, jointly by the SEC and CFTC.

Following that cooperation, in a joint report in 2009, the CFTC and the SEC recommended legislation that would provide a process for expedited judicial review of

⁵⁷⁹ CFTC & SEC, MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. SECURITIES AND EXCHANGE COMMISSION AND THE U.S. COMMODITY FUTURES TRADING COMMISSION REGARDING COORDINATION IN AREAS OF COMMON REGULATORY INTEREST (2008), https://www.sec.gov/news/press/2008/2008-40_mou.pdf; CFTC & SEC, ADDENDUM TO CFTC—SEC MEMORANDUM OF UNDERSTANDING REGARDING COORDINATION IN AREAS OF COMMON REGULATORY INTEREST: PRINCIPLES GOVERNING THE REVIEW OF NOVEL DERIVATIVE PRODUCTS (2008), https://www.skadden.com/-/media/files/publications/2018/07/fn3b_addendumtomouprinciples.pdf?la=en.

⁵⁸⁰ See, e.g., SPDR Exemption Order, 73 Fed. Reg. 31,981; CFTC Order Exempting the Trading and Clearing of Certain Products Related to SPDR Gold Trust Shares, 73 Fed. Reg. 21,917 (proposed Apr. 28, 2008) (permitting options on SPDR Gold Trust Shares to be listed by securities exchanges and cleared by Options Clearing Corporation as options on securities).

jurisdictional matters regarding new products.⁵⁸¹ The report grew out of a joint meeting of the two Commissions and 30 public panelist members including industry experts and market participants. Among other issues, panelists commented about the past jurisdictional disagreements between the CFTC and SEC over particular products due to uncertainty as to their proper regulatory classifications: a securities product would be subject to SEC jurisdiction, and a derivatives product to CFTC jurisdiction. That uncertainty, in turn, occasionally caused lengthy delays in bringing new products to market, such as the gold ETF discussed above. Despite the Commissions' entry into the 2008 MOU,⁵⁸² panelists advocated a legislative solution to more clearly define the jurisdictional boundaries between the two agencies and establish procedures to promptly resolve jurisdictional issues.

In their joint report, the agencies concurred with panelists that legislation was necessary with respect to jurisdictional matters regarding novel products. Specifically, the joint report called for (i) a review process to ensure that the Commissions resolve any jurisdictional dispute against a firm timeline and (ii) legal certainty with respect to the agencies' authority over products exempted by the other agency.⁵⁸³ Congress addressed the report's recommendations in Dodd-Frank,⁵⁸⁴ enacting the first proposal in Section 718 and the second in Section 717.

⁵⁸¹ CFTC & SEC, A JOINT REPORT OF THE SEC AND THE CFTC ON HARMONIZATION OF REGULATION (Oct. 16, 2009), <https://www.cftc.gov/sites/default/files/idc/groups/public/@otherif/documents/ifdocs/opacftc-secfinaljointreport101.pdf>.

⁵⁸² The Commissions recently updated the MOU to cover swaps and security-based swaps. *See* CFTC & SEC, MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. SECURITIES AND EXCHANGE COMMISSION AND THE U.S. COMMODITY FUTURES TRADING COMMISSION REGARDING COORDINATION IN AREAS OF COMMON REGULATORY INTEREST AND INFORMATION SHARING (July 11, 2018) [hereinafter CFTC-SEC Information Sharing MOU], https://www.cftc.gov/sites/default/files/2018-07/CFTC_MOU_InformationSharing062818.pdf.

⁵⁸³ *Id.* at 11.

⁵⁸⁴ Pub. L. No. 111-203, 124 Stat. 1376 (2010).

As a more recent expression of cooperation, the CFTC and SEC entered into an MOU in July 2018 that updates the 2008 MOU.⁵⁸⁵ The new MOU is predicated on their joint acknowledgment that “enhanced coordination and cooperation concerning issues of common regulatory interest is necessary in order to foster market innovation and fair competition and to promote efficiency in regulatory oversight.”⁵⁸⁶

5. Statutory Process for Seeking Regulatory Clarity for Novel Derivative Products

Section 718 of Dodd-Frank establishes a procedure for the CFTC and SEC to determine the status of “novel derivative products” that might implicate the regulatory interests of both agencies. Under section 718(a)(1)(A), any person filing a proposal to list or trade a novel derivative product that may have elements of both securities and futures contracts, options on futures or commodity options, may concurrently provide notice and furnish a copy of such filing to the SEC and CFTC.⁵⁸⁷ The notice must state it has been made to both agencies. If no concurrent notice is made, section 718(a)(1)(B) provides, as an alternative, that if either Commission receives a proposal to list or trade a product, and determines that the proposal involves a novel derivative product that may implicate the jurisdiction of the other, it must within five business days of making that determination notify and provide a copy of the proposal to the other Commission.⁵⁸⁸

Not later than 21 days after receipt of a notice under Dodd-Frank section 718(a)(1), or upon its own initiative if no notice is received, the CFTC pursuant to section 718(a)(2) may

⁵⁸⁵ *Memorandum of Understanding Between the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission Regarding Coordination in Areas of Common Regulatory Interest and Information Sharing* (July 11, 2018).

⁵⁸⁶ *Id.* at 1.

⁵⁸⁷ 15 U.S.C. § 8306(a)(1)(A).

⁵⁸⁸ *Id.* § 8306(a)(1)(B).

request in writing that the SEC issue a determination as to whether a product is a “security,” as defined in Exchange Act section 3(a)(10).⁵⁸⁹ Similarly, the SEC, within 21 days after receipt of a notice under section 718(a)(1), or upon its own initiative if no such notice is received, may request in writing that the CFTC issue a determination as to whether a product is a futures contract, an option on futures, or a commodity option.⁵⁹⁰ In addition, the CFTC and SEC may request that the other agency issue an exemption with respect to a novel derivative product pursuant to their respective exemptive authorities under CEA section 4(c)⁵⁹¹ or Exchange Act section 36.⁵⁹²

Once a written request for a determination or exemption is made, the requested agency shall by order issue the requested determination and the reasons therefor, or grant an exemption or provide reasons for not granting an exemption not later than 120 days after the date of receipt of such a request.⁵⁹³ Determinations by one agency that a novel derivative product is a security or a futures contract, option on futures or commodity option (but not exemptions) are subject to judicial challenge by the other agency in the U.S. Court of Appeals for the District of Columbia Circuit.⁵⁹⁴ The court of appeals must review such a petition on an expedited basis and, in considering such a petition, must not give deference to, or any presumption in favor of, the views of either Commission.

⁵⁸⁹ *Id.* § 78c(a)(10).

⁵⁹⁰ *Id.* § 8306(a)(2).

⁵⁹¹ 7 U.S.C. § 6(c).

⁵⁹² 15 U.S.C. § 78(mm).

⁵⁹³ *Id.* § 8306(a)(3).

⁵⁹⁴ 15 U.S.C. § 8306(b).

Section 717 of Dodd-Frank amended the CEA and the Exchange Act to clarify that even if the CFTC or the SEC exempts a novel derivative product, the exempting Commission still retains jurisdiction over the product in certain cases. Specifically, Dodd-Frank Section 717(a) amended CEA section 2(a)(1)(C)⁵⁹⁵ to provide that the CFTC has jurisdiction over a product that has been exempted by the SEC from the Exchange Act with the condition that the SEC exercise concurrent jurisdiction over the product. Similarly, Dodd-Frank Section 717(b) added Section 3B to the Exchange Act⁵⁹⁶ to provide that the securities laws govern as a security any agreement, contract or transaction (or class thereof) that has been exempted by the CFTC from the CEA with the condition that the CFTC exercise concurrent jurisdiction over such agreement, contract, or transaction (or class thereof).

6. Potential Approaches to Resolving Jurisdictional Issues Without New Legislation

The CFTC's and SEC's principal statutory tools to resolve jurisdictional questions without resorting to new legislation—section 718 of Dodd-Frank covering “novel derivative products” and exemptive authority under CEA section 4(c) and Exchange Act section 36—give the agencies extensive freedom to craft solutions.⁵⁹⁷ They confer authority to exempt any product, transaction, or person, or any class of each, from any and all provisions of their statutes, unconditionally or conditionally and retroactively, prospectively or both. The freedom this allows, however, does not diminish the difficulty of exercising that exemptive authority to constrain power or effectively cede power to the other agency. Those decisions take time and great deliberation if it is difficult for either agency to reach a level of confidence that an

⁵⁹⁵ 7 U.S.C. § 2(a)(1)(C).

⁵⁹⁶ 15 U.S.C. § 78c-2.

⁵⁹⁷ The SEC has additional and similar exemptive authority under the other statutes it administers, *e.g.*, Securities Act section 28 and section 6(c) of the Investment Company Act of 1940.

alteration of the exercise of its power will not harm the interests of those whom the statutes are intended to protect. The examples of CFTC exemptive relief discussed above concerning hybrid securities and ETFs on commodities required an extensive period of review and careful agency attention before approval.

Digital assets present a more complex set of issues due to their varied characteristics and the capacity of some to change from securities to non-security commodities. But the exemptive or section 718 processes provide a potential context by which broader and more developed regulatory guidance can be provided to the public. To date, most of the guidance has come in the form of one-off enforcement settlements or court complaints that sometimes, given the complexity of the subject matter, can raise more questions than they answer, especially with respect to application of the announced principles or reasoning to transactions with features different from those that were the subject of the settlement or complaint.

Before determining a prudent use of exemptive authority, the agencies may need to develop a shared understanding of the different types of transactions and uses of digital assets and sort out their respective interests in each type. For example, for one of the problematic jurisdictional areas—a transaction like that described in the SEC’s order in *In re Munchee LLC* in which a putative virtual currency (*i.e.*, a putative commodity) underlies an investment contract but provides no equity interest in the enterprise—the agencies may need to consider their respective interests at each stage of the issuing enterprise’s development. The SEC’s interest may be paramount and the CFTC’s remote at the outset, when an enterprise is offering the virtual currency for initial sale and promoting its potential appreciation in value over time in a secondary market, but the virtual currency has little if any active secondary market. In that instance, reliance on the SEC’s authority alone might be adequate to address the public’s interest

and market integrity. However, in the event the virtual currency develops into an active secondary market, the CFTC's interest might become paramount and the SEC's interest may wane because the sale of investment contracts will have concluded.

Sorting out the complex issues may require a regular internal deliberative process between the agencies' staff. An important shared objective of both agencies would appear to provide a means to inform the public of the agencies' shared views of the law and the character of various types of transactions. This might also call for a more formal public process, such as notice and comment rulemaking or some other means to receive comment from interested parties. Restricting the exemptive process to non-public requests and communications from particular interested parties involved in the offering of a digital asset might, in certain instances, be inadequate to inform the agencies of all of the potential impacts of an exemption or regulatory approach.⁵⁹⁸

An established process for resolving issues arising in the context of enforcement actions can be equally important to the development of consistent jurisdictional positions on which the public can rely. To the extent, for example, that the SEC considers a digital asset to be a security, it can be important that the CFTC both shares the SEC's view and believes the transaction does not involve CFTC jurisdiction over a non-security commodity or derivative. Again, an ongoing, structured internal process for analyzing and resolving these issues could be beneficial. In the end, the difficult jurisdictional issues ultimately could require congressional legislation to resolve. But legislation would benefit from collaborative work by the agencies between themselves and in a public comment process to identify and start to resolve how this area of

⁵⁹⁸ See, e.g., 7 U.S.C. § 6(c)(1)(B) (not requiring public notice and opportunity for hearing for the CFTC and SEC's joint exemption of a product from SEC regulation of security futures).

commerce can be best regulated for the benefit of market participants and the development of innovative financial products that improve commerce.

SECTION 6. FINCEN REGULATION

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1. Scope

Cryptocurrencies offer a variety of benefits generally not available to users of other mediums of exchange, including anonymity, limited regulatory oversight, low transaction costs, and cross-border flexibility. These same benefits, however, expose cryptocurrencies to exploitation by money launderers and terrorist financiers, and the general absence of clarity regarding the AML and CFT laws and rules that govern cryptocurrency transactions exacerbates the potential for exploitation.⁵⁹⁹

The Bank Secrecy Act of 1970 (the “BSA”) is the primary federal statute governing AML efforts outside of criminal prohibitions.⁶⁰⁰ Generally, the BSA applies to “financial institutions.” The FinCEN, a bureau of the U.S. Department of the Treasury, has the authority to

⁵⁹⁹ These and other vulnerabilities continue to be a subject of discussion. In June 2014, the FATF, an independent inter-governmental body that develops and promotes policies to protect the global financial system against money laundering, terrorist financing and other related threats, issued a report identifying the potential AML and CFT risks associated with virtual currencies. See FATF, VIRTUAL CURRENCIES: KEY DEFINITIONS AND POTENTIAL AML/CFT RISKS, (2014), <https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>. As recently as February 2018, the Task Force continued to discuss the AML/CFT risks associated with virtual currencies, as well as regulatory measures being taken in different countries. See FATEF, *Outcomes FATF Plenary, 21-23* (Feb 23, 2018), <http://www.fatf-gafi.org/publications/fatfgeneral/documents/outcomes-plenary-february-2018.html>.

⁶⁰⁰ See 18 U.S.C. §§ 1956, 1957 for criminal prohibitions.

implement, administer, and enforce compliance with the BSA and associated regulations⁶⁰¹ that are intended to detect and prevent money laundering.⁶⁰² As part of this authority, FinCEN determines which persons are “financial institutions” under the BSA and has determined that certain persons not typically thought of as financial institutions, including casinos and MSBs, *do constitute* financial institutions for purposes of the BSA.⁶⁰³ Thus far, FinCEN has issued and implemented regulations relevant to digital asset businesses, including issuers of digital assets, exchanges and administrators, as part of the body of FinCEN regulations that apply to MSBs. Therefore, this Section focuses on AML requirements that apply to MSBs.

FinCEN’s definition of a MSB is particularly expansive, and includes any person⁶⁰⁴ doing business as a currency dealer, currency exchanger, check casher, issuer or seller of money orders and traveler’s checks, or money transmitter, among others.⁶⁰⁵ A money transmitter is any person that provides money transmission services, such as the acceptance of currency, funds, or other value that substitutes for currency from one person and the transmission of currency, funds, or other value that substitutes for currency to another location or person by any means.”⁶⁰⁶

With respect to digital assets, FinCEN has stated that the “definition of a money transmitter does not differentiate between real currencies and convertible virtual currencies,” and that accepting and transmitting *anything* of value that can be used as currency makes a person a

⁶⁰¹ This authority is by delegation from the Secretary of the Treasury.

⁶⁰² 31 U.S.C. § 5318(h); Treasury Order 180-01 (Mar. 24, 2003).

⁶⁰³ *See generally* 31 C.F.R. ch. X.

⁶⁰⁴ FinCEN’s regulations define “person” as “an individual, a corporation, a partnership, a trust or estate, a joint stock company, an association, a syndicate, joint venture, or other unincorporated organization or group, an Indian Tribe (as that term is defined in the Indian Gaming Regulatory Act), and all entities cognizable as legal personalities.” 31 C.F.R. § 1010.100(mm).

⁶⁰⁵ 31 C.F.R. § 1010.100(ff).

⁶⁰⁶ 31 C.F.R. § 1010.100(ff)(5).

money transmitter.⁶⁰⁷ In its 2013 guidance on virtual currencies, FinCEN further defined an “exchanger” as “a person engaged as a business in the exchange of virtual currency for real currency, funds, or other virtual currency,” and further defined an “administrator” as a “person engaged as a business in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.”⁶⁰⁸ Therefore, digital asset businesses are money transmitters that are subject to FinCEN regulation as MSBs.⁶⁰⁹ In a similar vein, FinCEN recently indicated that certain conduct in connection with ICOs may qualify as money transmission and be subject to FinCEN’s rules applicable to that type of MSB.⁶¹⁰

2. Registration as a MSB

Generally, U.S. MSBs and non-U.S. MSBs that do business in the United States must register with FinCEN.⁶¹¹ FinCEN has explicitly stated that exchangers and administrators of virtual currency are subject to this registration requirement.⁶¹²

⁶⁰⁷ FIN-2013-G001, *supra* note 158, at 3 (emphasis added). The 2013 Guidance defines “convertible virtual currencies” as having an equivalent value in real currency or acting as a substitute for real currency. “Real currency” is defined as “the coin and paper money of the United States or of any other country that [i] is designated as legal tender and that [ii] circulates and [iii] is customarily used and accepted as a medium of exchange in the country of issuance.” 31 C.F.R. § 1010.100(m).

⁶⁰⁸ FIN-2013-G001, *supra* note 158, at 2.

⁶⁰⁹ *Id.*

⁶¹⁰ See Letter from Drew Maloney, Assistant Sec’y for Legislative Affairs, U.S. Dep’t of the Treasury, to Senator Ron Wyden, Ranking Member, U.S. Senate Comm. on Fin. (Feb. 13, 2018) [hereinafter Maloney Letter], <https://coincenter.org/files/2018-03/fincen-ico-letter-march-2018-coin-center.pdf>.

⁶¹¹ See 31 C.F.R. § 1022.380(a). The jurisdictional reach of the BSA is generally understood to apply to financial institutions that are organized under U.S. law, operate within the U.S., or provide financial products or services to U.S. residents. Accordingly, non-U.S. digital asset businesses that do not service U.S. residents typically would not be required to register as MSBs. Non-U.S. digital asset business that do service U.S. residents clearly are within the reach of the BSA, as evidenced by FinCEN’s recent enforcement action against BTC-E. See *infra* note 628 and accompanying text.

⁶¹² See Maloney Letter, *supra* note 610.

The primary consequences of registration are that the registered MSB (i) will be subject to examination by the IRS with respect to its AML compliance and (ii) may receive requests from FinCEN under section 314(a) of the USA PATRIOT Act of 2001 to provide specified information to law enforcement agencies across the country regarding accounts and transactions of persons that may be involved in terrorism or money laundering.⁶¹³ About 100 MSBs whose activities involve digital assets have registered with FinCEN, and the IRS has already examined approximately one-third of them as of February 2018.⁶¹⁴

The requirement to register with FinCEN is independent of the obligation a person or entity may have to become licensed as a money transmitter under state law. While many FinCEN-registered MSBs are also licensed as state money transmitters and vice versa, FinCEN's regulations are solely concerned with AML compliance, while state money transmission laws are generally targeted at achieving consumer protection goals. It is therefore possible that an entity may be required to register as a MSB with FinCEN but, due to differences with state law requirements, not be required to register as a MSB under particular state laws.

If a person is required to register with FinCEN as a MSB, they do so by electronically filing a FinCEN Form 107 (*Registration of Money Services Businesses*) with FinCEN.⁶¹⁵ A MSB's owner or controlling person is responsible for completing the two-page form within 180 days of establishing the MSB.

⁶¹³ 31 C.F.R. §§ 1010.520, 1022.320(f). A secondary consequence of registration with FinCEN is that a MSB's information is published in FinCEN's online MSB database, which some state regulators use to identify MSBs that should be licensed under state money transmitter laws. However, not all FinCEN-registered MSBs must be licensed as state money transmitters, so this consequence is not necessarily a universal concern.

⁶¹⁴ Maloney Letter, *supra* note 610.

⁶¹⁵ BSA E-Filing System, BSA E-FILING SYSTEM, <https://bsaefiling.fincen.treas.gov/main.html> (last visited Mar. 6, 2019).

A MSB must renew its Form 107 filing every two years, or more frequently for the following significant events:

- First, if a MSB is registered under the laws of any U.S. state and experiences a change in ownership or control that requires the business to be re-registered under state law, then the MSB must re-file Form 107 with FinCEN.
- Second, if there is a transfer of more than ten percent of the voting power or equity interests of a MSB (other than a MSB that is required to report such transfers to the SEC), then the MSB must re-file Form 107 with FinCEN.
- Third, if a MSB experiences a more than 50-percent increase in the number of its agents during any registration period, then the MSB must re-file Form 107 with FinCEN.⁶¹⁶

The registration form must be filed not later than 180 days after a triggering change in ownership, transfer of voting power or equity interests, or increase in agents. FinCEN also expects MSBs to promptly file updated Form 107 filings if the MSB engages in a new line of money transmission (*e.g.*, a check casher who begins selling money orders) or offers its products in a new jurisdiction (*e.g.*, a MSB expands its geographic footprint to offer money transmission in a U.S. state in which it previously did not do so). As a general rule, MSBs whose activities involve digital assets will typically be concerned with filing updates for new lines of business and new jurisdictions, because most digital assets do not implicate changes in the ownership structure of the MSB and digital asset businesses tend not to implicate the agent-model that is used in retail MSB settings.

3. Anti-Money Laundering Program

FinCEN requires MSBs (including digital asset businesses) to develop, implement, and maintain an effective, risk-based AML program that is reasonably designed to prevent the MSB from being used to facilitate money laundering and the financing of terrorist activities.⁶¹⁷

⁶¹⁶ 31 C.F.R. § 1022.380(b).

⁶¹⁷ *Id.* § 1022.210

Although the precise expectations for any given MSB will vary based on the nature of the financial activity involved, generally an effective AML program for a MSB will address or include the following:

- collecting and verifying customer identifying information;
- appropriate internal controls;
- designation of a BSA/AML compliance officer;
- employee AML training;
- independent review of the AML compliance program;
- monitoring and reporting suspicious activity by filing SARs with FinCEN, which generally is triggered at a \$2,000 threshold for MSBs;⁶¹⁸
- subject to dollar thresholds, filing Currency Transaction Reports⁶¹⁹ and Currency and Other Monetary Instrument Reports with the U.S. government;⁶²⁰
- maintaining required records;⁶²¹ and
- responding to certain law enforcement requests.⁶²²

For nonbank financial institutions, such as MSBs, there is also a requirement (subject to certain exceptions) for fund transfers over \$3,000 to record and report the person placing the order and the recipient (Transfer Rule) and to include specified information regarding the sender and recipient to track the transaction as it travels through intermediary financial institutions (Travel Rule).⁶²³

⁶¹⁸ *Id.* § 1022.320

⁶¹⁹ *Id.* §§ 1022.310, 1022.311

⁶²⁰ *Id.* §1010.340

⁶²¹ *Id.* §1010.410

⁶²² Banks, broker-dealers, mutual funds, futures commission merchants, and introducing brokers are also subject to other, more extensive AML requirements, such as with respect to customer due diligence and beneficial ownership identification. *See* Customer Due Diligence Requirements for Financial Institutions, 81 Fed. Reg. 29,398 (May 11, 2016) (to be codified at 31 C.F.R. pts. 1010, 1020, 1023, 1024, 1026) (adopting due diligence requirements for banks, broker-dealers, mutual funds and futures commission merchants).

⁶²³ 31 C.F.R. § 1010.410(e)

4. Know-Your-Customer Requirements

As noted, MSBs are required to obtain and verify the identity of their customers and maintain certain records. At a minimum, this means that a MSB must collect sufficient information regarding a customer to meet the MSB's recordkeeping and reporting obligations.⁶²⁴ In practice, however, a MSB may need to collect additional information from a customer when it is opening an account with the MSB in order to make a risk assessment regarding the customer and to enable it to understand its customers sufficiently to carry out the MSB's SAR-reporting obligations. The nature and extent of the information collected should be consistent with the risk of the MSB's activities.

For fund transmitters and fund recipients that are not established customers, which may frequently be the case with MSBs, the following information regarding the identity of the customer is required:

- Verification of the identity of the person placing and receiving the transmittal order (if in person) through examination of an identity card;
- Name and address;
- Record of the type of identification reviewed and the number of the identification document (*e.g.*, driver's license); and
- Taxpayer identification number (*e.g.*, social security or employer identification number), or alien identification number or passport number and country of issuance, or a notation in the record of the lack thereof.⁶²⁵

The MSB may need to collect additional information from these non-established customers in order to fulfill its other reporting obligations, such as SAR reporting.

⁶²⁴ See, *e.g.*, *id.* § 1010.410.

⁶²⁵ *Id.* § 1010.410(e)(2)–(3).

5. Enforcement

Failure to comply with applicable BSA requirements has resulted in severe consequences for persons engaged in digital asset businesses. In May 2015, Ripple, which facilitated transfers of cryptocurrency and provided cryptocurrency exchange transaction services, agreed to pay FinCEN a civil money penalty of \$700,000 to settle potential liability in connection with violations of the BSA—failing to register with FinCEN as a MSB, maintain an appropriate AML program, and file required SARs.⁶²⁶ The DOJ also imposed on Ripple a \$450,000 forfeiture.⁶²⁷

More recently, in July 2017, FinCEN, again in coordination with the DOJ, assessed more than \$110 million in civil money penalties against BTC-E a/k/a Canton Business Corporation, a virtual currency trading platform based outside the United States.⁶²⁸ The charges, based on the company's transactions with U.S. customers, included failing to register with FinCEN as a MSB, maintain an appropriate AML program, file required SARs, and retain records related to funds transfers.

Another approach the U.S. Treasury has used to address the money laundering risk posed by non-U.S. virtual currency providers is its authority under the USA Patriot Act section 311 to identify the provider as a financial institution of primary money laundering concern. In 2013, FinCEN issued a notice of finding under section 311 with respect to now-defunct Liberty

⁶²⁶ See Press Release, FinCEN, FinCEN Fines Ripple Labs Inc. in First Civil Enforcement Action Against a Virtual Currency Exchanger, (May 5, 2015) [hereinafter FinCEN Press Release], <https://www.fincen.gov/news/news-releases/fincen-fines-ripple-labs-inc-first-civil-enforcement-action-against-virtual>.

⁶²⁷ See *In the Matter of Ripple Labs Inc.*, FinCEN No. 2015-05 (May 5, 2015), https://www.fincen.gov/sites/default/files/shared/Ripple_Assessment.pdf; FinCEN Press Release, *supra* note 626.

⁶²⁸ See *In the matter of BTC-E*, FinCEN No. 2017-03 (June 26, 2017), https://www.fincen.gov/sites/default/files/enforcement_action/2017-07-26/Assessment%20for%20BTCeVinnik%20FINAL%20SignDate%2007.26.17.pdf.

Reserve S.A., a web-based money transfer system registered in Costa Rica, thereby eliminating its access to the U.S. financial system.⁶²⁹

⁶²⁹ Notice of Finding that Liberty Reserve S.A. Is a Financial Institution of a Primary Money Laundering Concern, 78 Fed. Reg. 34,169 (June 6, 2013).

SECTION 7. INTERNATIONAL REGULATION OF DIGITAL ASSETS AND BLOCKCHAIN TECHNOLOGY*

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The global nature of blockchain technologies and cryptocurrencies presents unique regulatory challenges. Most cryptocurrencies and other blockchain applications traverse international boundaries, thus creating challenges associated with how to—and who should—regulate them. For this reason, a number of international organizations and regulatory bodies, both within and across continents, have endeavored to issue guidance and regulations in these areas. Individual countries, too, have sought to do so, often using the guidance of larger international organizations as a springboard, and sometimes even adopting it wholesale. In such a dynamic environment, individual countries often look to one another to take the lead—with European and Asian nations frequently at the helm—and then use their peer countries’ approaches as frameworks for evaluating how best to regulate within their own borders. This Section focuses on the applicable regulations in Europe and Asia, and in individual countries of interest.

1. European Initiatives

Both individual European countries and European institutions have issued a number of statements, guidance, and regulations potentially applicable to cryptocurrencies, blockchain, and

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ICOs. In November 2017, for example, ESMA⁶³⁰ issued a statement reminding firms involved in ICOs to “give careful consideration as to whether their activities constitute regulated activities,” and if so, to comply with applicable EU legislation.⁶³¹ Where the coins or tokens at issue in an ICO qualify as “financial instruments,” as defined in the MiFID II, firms likely are conducting regulated investment activities, such as placing, dealing in, or advising on financial instruments or offering transferable securities to the public.⁶³² In that instance, a number of rules and regulations may apply, including MiFID II. The Prospectus Directive, the AIFMD, and the Fourth Anti-Money Laundering Directive (“4AMLD”) and Fifth Anti-Money Laundering Directive (“5AMLD”) also may apply. The EMIR⁶³³ similarly governs market clearing activities.⁶³⁴ Blockchain technologies may be used for clearing, and thus may be subject to EMIR requirements in certain instances. With respect to licensing, cryptocurrency exchanges seeking to offer services in the EU also may seek either a payment institution or an electronic money

⁶³⁰ ESMA is an independent EU authority that “contributes to safeguarding the stability of the European Union’s financial system by enhancing the protection of investors and promoting stable and orderly financial markets.” *Who We Are*, ESMA, <https://www.esma.europa.eu/about-esma/who-we-are>. Although independent, ESMA is accountable to the European Parliament’s Economic and Monetary Affairs Committee, as well as the Council of the European Union and the European Commission, and works closely with other European supervisory authorities. *Id.*

⁶³¹ ESMA Statement, 50-157-828, ESMA Alerts Firms Involved in *Initial Coin Offerings* (ICOs) to the Need to Meet Relevant Regulatory Requirements (Nov. 13, 2017) [hereinafter ESMA Statement 1], https://www.esma.europa.eu/sites/default/files/library/esma50-157-828_ico_statement_firms.pdf; see also ESMA Statement, 50-157-829, ESMA Alerts Investors to the High Risks of *Initial Coin Offerings* (ICOs), (Nov. 13, 2017), https://www.esma.europa.eu/sites/default/files/library/esma50-157-829_ico_statement_investors.pdf (alerting investors of risks of investing in ICOs).

⁶³² ESMA Statement 1, *supra* note 631.

⁶³³ Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (“EMIR”), 2012 O.J. (L 201).

⁶³⁴ See ESMA, 50-1121423017-285, REPORT: THE DISTRIBUTED LEDGER TECHNOLOGY APPLIED TO SECURITIES MARKETS 13 (2017) [hereinafter DLT SECURITIES MARKETS REPORT], https://www.esma.europa.eu/sites/default/files/library/dlt_report_-_esma50-1121423017-285.pdf.

institution license (or work in partnership with entities that have such licenses).⁶³⁵

(a) MiFID II

MiFID II is a European Directive that regulates firms that provide services to clients linked to “financial instruments” and the venues in which those instruments trade in the European Union.⁶³⁶ Broadly speaking, MiFID II “aims to create a single market for investment services and activities and to ensure a high degree of harmonised protection for investors in financial instruments.”⁶³⁷ Firms that provide investment services in relation to financial instruments, as defined in MiFID II, in turn must comply with MiFID II requirements.⁶³⁸

MiFID II defines “financial instruments” as transferable securities, money-market instruments, units in collective investment undertakings, and certain options, futures, forward rate agreements, and swaps, among other items.⁶³⁹ ESMA has stated that where firms provide services in relation to financial instruments, including ICOs involving a coin or token that qualifies as a financial instrument, the process by which the coin or token is created, distributed, or traded likely involves MiFID II-regulated activities, and thus must comply with MiFID II requirements.⁶⁴⁰ Whether the coin or token qualifies as a financial instrument depends on its

⁶³⁵ See EUROPEAN COMMISSION, EUROPEAN FINANCIAL STABILITY AND INTEGRATION REVIEW 2018, at 79–80 (2018) [hereinafter EFSIR 2018], https://ec.europa.eu/info/sites/info/files/european-financial-stability-and-integration-review-2018_en.pdf. Payment institution license holders, unlike electronic money institution license holders, cannot issue their own electronic money. *Id.* at 80 n.154.

⁶³⁶ *MiFID II*, FCA, <https://www.fca.org.uk/markets/mifid-ii> (last updated June 14, 2018). MiFID II revised MiFID to improve financial market functioning and strengthen investor protection in the wake of the financial crisis. *Id.*

⁶³⁷ ESMA Statement 1, *supra* note 631, at 2.

⁶³⁸ *Id.*

⁶³⁹ See Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (“MiFID II”), art. 4(1)(15) & Annex I, Section C, 2014 O.J. (L 173) 382, 481–482; *see also id.* art. 4(1)(44) (defining “transferable securities”); *id.* art. 4(1)(17) (defining “money-market instruments”).

⁶⁴⁰ ESMA Statement 1, *supra* note 631.

characteristics and nature, and whether certain safe harbors may apply.

(b) The Prospectus Directive

If an ICO is structured such that the coins or tokens at issue constitute a “transferable security,” the issuer of the ICO must publish a prospectus, which is subject to the approval of the relevant Competent Authority.⁶⁴¹ The Prospectus Directive, in turn, “requires publication of a prospectus before the offer of transferable securities to the public or the admission to trading of such securities on a regulated market situated or operating within a Member State, unless certain exclusions or exemptions apply.”⁶⁴² Prospectuses must contain all material information necessary for investors to make an informed assessment of the facts, presented in an analyzable and comprehensible form.⁶⁴³ If an ICO does not qualify as a securities offering, however, “there are [] no minimum disclosure standards on the type, structure and quality of information provided as part of an ICO process, except for those stipulated in general consumer protection legislation.”⁶⁴⁴

(c) The Alternative Investment Fund Managers Directive

The AIFMD includes rules for the authorization, ongoing operation, and transparency in AIF markets in the EU and requires AIF managers to comply with capital, operational, and organizational rules and transparency requirements.⁶⁴⁵ An ICO may qualify as an AIF, and thus

⁶⁴¹ *Id.* at 2. Each EU member state has a designated Competent Authority for implementing the Directive. Different European countries have different Competent Authorities.

⁶⁴² *Id.* at 1.

⁶⁴³ *Id.* at 1–2.

⁶⁴⁴ EFSIR 2018, *supra* note 635, at 79.

⁶⁴⁵ See ESMA Statement 1, *supra* note 631, at 2.

be subject to AIFMD requirements, if used to raise capital from a number of investors for investment in accordance with a defined investment policy.⁶⁴⁶

(d) Anti-Money Laundering and Terrorist Financing

In December 2017, the European Parliament and the EU Council reached an agreement on proposed amendments to the 4AMLD to “bring more transparency to improve the prevention of money laundering and to cut off terrorist financing,”⁶⁴⁷ approved in April 2018.⁶⁴⁸ These amendments (known as the 5AMLD), which member states must implement by January 2020,⁶⁴⁹ seek to “put cryptocurrency exchanges and custodial wallet providers within the scope of money laundering supervision” and aim to provide “less anonymity and more traceability, through better customer identification, and strong due diligence.”⁶⁵⁰ The amendments bring custodial wallet providers and virtual exchange platforms within the EU’s AML remit and require them to put in place policies and procedures to “detect, prevent and report money laundering and terrorist financing,”⁶⁵¹ including performing identity checks on their customers and customers’ beneficial owners (where applicable), reporting suspicious transactions, and registering with relevant

⁶⁴⁶ *Id.*

⁶⁴⁷ See Press Release, European Commission, Strengthened EU Rules to Prevent Money Laundering and Terrorist Financing (Dec. 15, 2017), https://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=610991; Jurgita Miseviciute, *Blockchain and Virtual Currency Regulation in the EU*, GLOBAL POLICY WATCH (Jan. 31, 2018), https://www.globalpolicywatch.com/2018/01/blockchain-and-virtual-currency-regulation-in-the-eu/#_ftnref5.

⁶⁴⁸ Press Release, European Parliament, Anti-Money Laundering: MEPs Vote to Shed Light on the True Owners of Companies (Apr. 19, 2018, 12:37 PM), <http://www.europarl.europa.eu/news/en/press-room/20180411IPR01527/anti-money-laundering-meps-vote-to-shed-light-on-the-true-owners-of-companies>.

⁶⁴⁹ Gina Conheady, *EU Regulation of Cryptocurrency Exchanges: 5AMLD Ups the Ante*, BLOOMBERG (June 27, 2018), <https://www.bna.com/insight-eu-regulation-n73014476945/>.

⁶⁵⁰ Speech/18/398. European Commission, Remarks by Vice-President Dombrovskis at the ECOFIN Press Conference (Jan. 23, 2018), http://europa.eu/rapid/press-release_SPEECH-18-398_en.htm.

⁶⁵¹ Miseviciute, *supra* note 647. The amendments cover only providers engaged in exchanging virtual currencies and fiat currencies (cryptocurrency exchanges) and custodian wallet providers, however; “virtual-to-virtual” exchanges are not included. *Id.*

authorities.⁶⁵²

(e) EMIR

EMIR provides that certain classes of OTC derivatives transactions must be cleared through CCPs⁶⁵³ and that risk mitigation techniques must be applied to other OTC transactions.⁶⁵⁴ In some instances, blockchain technologies may be used to clear derivatives transactions, including OTC derivatives transactions. Where the underlying OTC derivatives transactions are subject to CCP clearing obligations, the blockchain network used for clearing must comply with EMIR requirements; that is, either the blockchain network itself must meet EMIR's CCP definition (and obtain a CCP authorization) or an existing CCP must join the network.⁶⁵⁵

EMIR requires a number of risk mitigation techniques even for OTC derivative transactions not cleared by CCPs, though it does not prescribe the technology to be used for those techniques.⁶⁵⁶ Accordingly, blockchain technology could be used for non-centrally cleared OTC derivatives as well. In that instance, the blockchain technology would need to accommodate EMIR's risk mitigation requirements.⁶⁵⁷ However, not all clearing activities that may involve blockchain technology are subject to EMIR regulation. Spot transactions, for

⁶⁵² Conheady, *supra* note 649.

⁶⁵³ CCPs are corporate entities that reduce counterparty, operational, settlement, market, legal, and default risk for traders. See Jake Frankenfield, *Central Counterparty Clearing House—CCP*, INVESTOPEDIA, <https://www.investopedia.com/terms/c/ccph.asp> (last updated July 30, 2018). CCPs help to facilitate trading in European derivatives and equities markets by protecting trading firms against default from electronically matched buyers and sellers whose creditworthiness is unknown. *Id.*

⁶⁵⁴ See DLT SECURITIES MARKETS REPORT, *supra* note 634, at 13.

⁶⁵⁵ *Id.* at 14.

⁶⁵⁶ *Id.*

⁶⁵⁷ *Id.*

example, “are not in scope of the clearing obligation under EMIR,” so use of blockchain technology to clear spot transactions could fall outside the scope of EMIR regulation, provided that CCPs are not involved in the clearing.⁶⁵⁸

2. Individual European Country Regulations

As a board member of the German Central Bank (Bundesbank) suggested in January 2018, cryptocurrency regulation can be achieved only through international cooperation, given the “obviously limited” regulatory power of individual nation states in light of the cross-border features of cryptocurrencies.⁶⁵⁹ Regulations pertaining specifically to blockchain and cryptocurrencies remain in their infancy or nonexistent in many European countries, and in many instances, European nations—much like the United States—continue to examine the feasibility of regulating these new technologies under existing laws that pre-date them while also contemplating new laws and regulations tailored to address them.⁶⁶⁰

Nevertheless, in addition to (and in many instances in conjunction with) EU regulations and directives,⁶⁶¹ a number of individual European jurisdictions have begun to jump on the

⁶⁵⁸ *Id.*

⁶⁵⁹ See Jon Buck, *German Central Bank Director: Crypto Regulations Must Be International*, COINTELEGRAPH (Jan. 16, 2018), <https://cointelegraph.com/news/german-central-bank-director-crypto-regulations-must-be-international>.

⁶⁶⁰ For example, the Danish Financial Supervisory Activity (“FSA”) has stated that “[c]ryptocurrencies that are only usable as a means of payment, remain unregulated in the financial legislation in Denmark.” See *Statement: ICO*, DANISH FIN. SUPERVISORY AUTH. (Nov. 13, 2017), <https://www.dfsa.dk/en/News/Pressemeddelelser/2018/Ico-statement-131117>. That said, the Danish FSA has cautioned businesses to carefully consider whether their ICO and cryptocurrency activities fall within the scope of Danish financial regulations because certain cryptocurrencies increasingly resemble financial instruments, and the FSA determines on a case-by-case basis whether ICOs and cryptocurrencies are subject to these regulations. *Id.*

⁶⁶¹ Finland’s Financial Supervisory Authority issued a November 2017 warning on cryptocurrencies and ICOs to issuers and investors, for example, which did not address whether Finnish regulations apply; instead, it directed issuers to ESMA’s guidelines, to determine whether any European Commission requirements apply. See Press Release (No. 17/2017), Finnish Fin. Supervisory Auth., Financial Supervisory Authority Warning: Cryptocurrencies and ICOs (Initial Coin Offering) are High-Risk Investments (Nov. 22, 2017), <https://www.finanssivalvonta.fi/en/publications-and-press-releases/Press-release/2017/financial-supervisory-authority-warning-cryptocurrencies-and-icos-initial-coin-offering-are-high-risk-investments/>.

cryptocurrency and blockchain bandwagon. Most European nations have at minimum commenced the process of examining how cryptocurrencies, ICOs, and blockchain technologies fit within their existing regulatory frameworks and whether new regulation in those spheres is necessary. In particular, many European countries have examined and issued guidance regarding whether a particular token or coin constitutes a “security,” whether certain ICOs constitute “securities offerings,” and how certain blockchain and cryptocurrency transactions fit (or do not fit) within, and thus are or are not subject to, existing securities laws and regulations—often taking a case-by-case approach.⁶⁶² A number of European countries also have issued advisories to warn citizens of the risks associated with investments in cryptocurrencies and ICOs,⁶⁶³ as discussed in further detail in the selected country-specific analyses below.⁶⁶⁴

⁶⁶² The Dutch Authority for the Financial Markets, for example, has stated that certain ICOs and cryptocurrencies with structures similar to securities fall within the Dutch Financial Supervision Act and thus are subject to Dutch financial regulations. See *Initial Coin Offerings (ICO's): Serious Risks*, DUTCH AUTH. FOR FIN. MKTS., <https://www.afm.nl/en/professionals/onderwerpen/ico>. It assesses each case on an individual basis to determine whether the Financial Supervision Act applies. *Id.*

⁶⁶³ See generally *Regulators' Statements on Initial Coin Offerings*, OICV-IOSCO, <http://www.iosco.org/publications/?subsection=ico-statements> (last visited Mar. 7, 2019). Sweden's Financial Supervisory Authority issued a five-point warning in November 2017 regarding risks associated with ICOs, for example, emphasizing (1) ICOs are unregulated and not subject to the Financial Supervisory Authority's supervision; (2) issuers are not required to sell a new digital asset for real market value or allow investors to evaluate the asset; (3) there is no guaranteed access to a secondary market; (4) ICOs have no information requirements—that is, issuers of ICOs are not required to provide all material information; and (5) the risk of investment fraud. See Press Release, Swedish Fin. Supervisory Auth., Warning for Risks with Initial Coin Offerings (ICO) (Nov. 7, 2017), <https://translate.google.com/translate?hl=en&sl=auto&tl=en&u=https%3A%2F%2Fwww.fi.se%2Fsv%2Fpublicerat%2Fnyheter%2F2017%2Fvarning-for-risker-med-initial-coin-offerings%2F&sandbox=1>.

⁶⁶⁴ Concerns regarding money laundering, terrorist financing, and other types of fraud and scams have prompted several countries to take action in these areas. For example, Belgium's Minister of Justice voiced support for strict new cryptocurrency legislation in light of cryptocurrency's popularity with cybercriminals, scammers, and terrorist groups, and the Belgian Ministry of Justice is working in cooperation with experts from the Central Office for Seizure and Confiscation and the Board of Procurators General on procedural solutions to facilitate the seizure of digital assets following the Belgian government's seizure of large numbers of bitcoins in two drug trafficking cases. See Elena Platonova, *Belgium May Tighten Cryptocurrency Regulation*, COINFOX (Apr. 17, 2017), <http://www.coinfox.info/news/6959-belgium-may-tighten-cryptocurrency-regulation>. In September 2018, Belgium's Financial Services and Markets Authority (“FSMA”) issued an updated consumer warning against cryptocurrency trading platforms, listing more than two dozen platforms in which it has identified signs of fraud. See *Warning Against New Cryptocurrency Trading Platforms*, FSMA (Sept. 4, 2018), <https://www.fsma.be/en/warnings/warning-against-new-cryptocurrency-trading-platforms>; see also *List of Companies Operating Unlawfully in Belgium*, FSMA, (cont'd)

(a) The United Kingdom

The UK FCA, an independent financial regulator and EU Competent Authority in the UK, issued a statement addressing certain aspects of cryptocurrencies in April 2018.⁶⁶⁵ According to that statement and related publications, neither the FCA nor the Bank of England currently regulates cryptocurrencies unless they constitute a part of other regulated products or services, and the FCA does not consider cryptocurrencies to be “currencies” or “commodities” for purposes of regulation under MiFID II.⁶⁶⁶

By contrast, because cryptocurrency derivatives are “capable of being financial instruments” under MiFID II, the FCA has determined that firms conducting business in cryptocurrency derivatives in the UK must comply with both applicable FCA rules and relevant provisions in EU regulations.⁶⁶⁷ By extension, the FCA has deemed it likely that “dealing in, arranging transactions in, advising on or providing other services that amount to regulated activities in relation to derivatives that reference either cryptocurrencies or tokens issued through an [ICO],” such as cryptocurrency futures, cryptocurrency CFDs, and cryptocurrency options, “will require authorisation by the FCA.”⁶⁶⁸ Offering products or services requiring FCA

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https://www.fsma.be/en/warnings/companies-operating-unlawfully-in-belgium?field_type_of_fraude_tid_i18n=10595&submit=Apply (last visited Mar. 7, 2019).

⁶⁶⁵ See *Cryptocurrency Derivatives: FCA statement on the requirement for firms offering cryptocurrency derivatives to be authorised*, FCA (Apr. 6, 2018), <https://www.fca.org.uk/news/statements/cryptocurrency-derivatives>. The FCA, a financial regulatory body in the UK that regulates some 58,000 financial services firms and financial markets in the UK and serves as the prudential regulator for more than 18,000 of them, is an independent public body funded entirely by the firms it regulates. See *About the FCA*, FCA, <https://www.fca.org.uk/about/the-fca> (last updated Apr. 9, 2018). Established in April 2013 to take over the Financial Services Authority’s responsibility, the FCA is accountable to the UK Treasury (responsible for the UK’s financial system) and Parliament. *Id.*

⁶⁶⁶ *Cryptocurrency Derivatives*, *supra* note 665; FCA, DISTRIBUTED LEDGER TECHNOLOGY FEEDBACK STATEMENT ON DISCUSSION PAPER 12 (2017) [hereinafter DLT FEEDBACK STATEMENT], <https://www.fca.org.uk/publication/feedback/fs17-04.pdf>.

⁶⁶⁷ *Cryptocurrency Derivatives*, *supra* note 665.

⁶⁶⁸ *Id.*

authorization without obtaining that authorization constitutes a criminal offense in the UK and may subject a firm to enforcement action.⁶⁶⁹ Accordingly, it would behoove firms providing services in connection with these cryptocurrency-based products to obtain appropriate authorization by the FCA, lest they risk potential criminal prosecution.

(1) FCA Consumer Warnings

The FCA has issued consumer warnings in relation to cryptocurrencies, including one regarding ICOs⁶⁷⁰ and another regarding cryptocurrency CFDs.⁶⁷¹ With respect to ICOs, the FCA acknowledges that ICOs “vary widely in design” and deems them “very high-risk, speculative investments.”⁶⁷² The FCA warns that only experienced investors should invest in ICOs, and those who do so should be “prepared to lose [their] entire stake.”⁶⁷³ The FCA has identified a number of risks associated with ICOs, including: (1) the fact that most ICOs are not regulated by the FCA, and many are based overseas; (2) ICOs offer little or no investor protection, and investors are “extremely unlikely” to have access to UK regulatory protections, such as the Financial Services Compensation Scheme or the Financial Ombudsman Service; (3) price volatility; (4) potential for fraud; (5) inadequate documentation, because instead of a regulated prospectus, ICOs usually provide only a “white paper,” which may be “unbalanced, incomplete or misleading”; and (6) ICOs often are in an early development stage, such that their business

⁶⁶⁹ *Id.*

⁶⁷⁰ *Initial Coin Offerings: Consumer warning about the risks of Initial Coin Offerings (“ICOs”)*, FCA (last updated Sept. 9, 2017) [hereinafter *Initial Coin Offerings*], <https://www.fca.org.uk/news/statements/initial-coin-offerings>. The FCA describes ICOs as “a digital way of raising funds from the public using a virtual currency, also known as cryptocurrency.” *Id.*

⁶⁷¹ *Consumer Warning about the risks of investing in cryptocurrency CFDs*, FCA, <https://www.fca.org.uk/news/news-stories/consumer-warning-about-risks-investing-cryptocurrency-cfds> (last updated Dec. 1, 2017).

⁶⁷² *Initial Coin Offerings*, *supra* note 670.

⁶⁷³ *Id.*

models are “experimental,” and “[t]here is a good chance of losing your whole stake.”⁶⁷⁴ The FCA does not regulate ICOs collectively; rather, “[w]hether an ICO falls within the FCA’s regulatory boundaries or not can only be decided case by case,” and “[m]any ICOs will fall outside the regulated space.”⁶⁷⁵ That said, depending on their structure, some ICOs may involve FCA-regulated investments, such that firms involved in them may be subject to FCA regulations.⁶⁷⁶ Similarly, some ICOs may parallel initial public offerings, private placement of securities, crowdfunding, or collective investment schemes, and some tokens may constitute transferable securities under MiFID II, thereby subjecting those ICOs to FCA oversight.⁶⁷⁷

The FCA’s consumer warning about cryptocurrency CFDs calls these products “extremely high-risk” and “speculative,” given that cryptocurrencies are “not issued or backed by a central bank or government” and “have experienced significant price volatility in the past year which, in combination with leverage, places [investors] at risk of suffering significant losses and potentially losing more than [they] have invested.”⁶⁷⁸ Specific risks associated with investment in cryptocurrency CFDs include: (1) price volatility; (2) leverage, which multiplies losses and profits and could result in an investor “owing money to the firm”; (3) charges and funding costs; and (4) lack of price transparency—that is, greater risk that investors will not

⁶⁷⁴ *Id.*

⁶⁷⁵ *Id.*

⁶⁷⁶ *Id.*

⁶⁷⁷ *Id.*; see MiFID II Art. 4(1)(44).

⁶⁷⁸ *Consumer Warning about the Risks of Investing in Cryptocurrency CFDs*, *supra* note 671. The FCA defines CFDs as “complex financial instruments” that permit speculation on the price of an asset and are often offered through online platforms. *Id.* CFDs typically are offered with “leverage,” meaning that an investor must put down only a portion of the investment’s total value. *Id.* Leverage multiplies the impact of price changes on both profits and losses, meaning that money loss can occur “very rapidly.” *Id.* Cryptocurrency CFDs, in turn, permit speculation on price changes in cryptocurrencies like Bitcoin or Ethereum. *Id.*

receive a “fair and accurate price” for the underlying cryptocurrency.⁶⁷⁹ The consumer warning goes on to state that the FCA does regulate CFDs, including cryptocurrency CFDs, so investors are subject to protections offered by the UK financial services regulatory framework, including requirements that firms offering cryptocurrency CFDs must be authorized and supervised by the FCA; individual complaints may be referred to the Financial Ombudsman Service; and eligible customers have access to the Financial Services Compensation Scheme.⁶⁸⁰ These protections, however, will not compensate investors for losses associated with trading.

(2) FCA Discussion Paper on Distributed Ledger Technology and Cryptoassets Taskforce Report

In April 2017, the FCA published a discussion paper on DLT to “start a dialogue on the potential for future development of DLT” in FCA-regulated markets, including the “balance of risk and opportunities” in relation to DLT.⁶⁸¹ The paper acknowledges that the FCA generally takes a “technology neutral” approach to regulating financial services—that is, “not to regulate specific technology types, only the activities they facilitate and the firms carrying out these activities,” so as to “accommodate innovation but avoid arbitrage and unfair competition”—and endeavors to examine “whether there is anything distinctive about DLT” that would require a different approach.⁶⁸² The FCA noted that in some instances, DLT may not fit within FCA requirements, such that the FCA may “need to consider whether [its] rules prevent or restrict

⁶⁷⁹ *Id.*

⁶⁸⁰ *Id.*

⁶⁸¹ FCA, DP17/3, DISCUSSION PAPER ON DISTRIBUTED LEDGER TECHNOLOGY 5 (2017), <https://www.fca.org.uk/publication/discussion/dp17-03.pdf>. The discussion paper describes DLT as “a set of technological solutions that enables a single, sequenced, standardised and cryptographically-secured record of activity to be safely distributed to, and acted upon by, a network of varied participants,” in contrast to a “traditional centralised ledger system, owned and operated by a single trusted entity.” *Id.* at 10. Blockchain, in turn, is a “type of DLT where records are collated into ‘blocks’ and linked using a cryptographic signature.” *Id.*

⁶⁸² *Id.* at 5, 7.

sensible development that would benefit consumers and hence whether changes may be needed.”⁶⁸³ The FCA concluded that it currently does “not see a clear need to consider changes to [its] regulatory framework for DLT solutions to be implemented,” but noted that it continues to work actively with other regulators and standard setting bodies, including ESMA, IOSCO, and the Financial Stability Board, given the cross-border applications of DLT.⁶⁸⁴ The FCA discussion paper also posed a series of questions, including those addressing regulatory reporting requirements, smart contracts, and how best to manage security, operational, and other risks associated with DLT, and invited comments from users and providers of DLT, committing to review those responses and determine next steps.⁶⁸⁵

In December 2017, the FCA published a feedback statement in response to the comments it received on the discussion paper.⁶⁸⁶ The feedback generally supported the notion that the FCA’s current rules “are flexible enough to accommodate applications of various technologies, including the use of DLT by regulated firms,” and “[n]early all respondents generally agreed there are no substantial barriers to adopting DLT under [the FCA’s] regulatory rules and no changes to specific rules were proposed,” although “some respondents doubted the compatibility of permissionless networks with [the FCA’s] regulatory regime.”⁶⁸⁷ Most respondents “strongly supported continued direct engagement by the FCA and other financial services regulators to foster innovation and ensure appropriate regulatory safeguards are in place at the outset,” and all

⁶⁸³ *Id.* at 7.

⁶⁸⁴ *Id.* at 8.

⁶⁸⁵ *Id.* at 9, 12–25, Annex 1.

⁶⁸⁶ DLT FEEDBACK STATEMENT, *supra* note 666.

⁶⁸⁷ *Id.* at 4–5.

“urged [the FCA] to collaborate even more proactively with other national and international regulatory bodies and industry associations,” given the “global nature of DLT.”⁶⁸⁸

In response to these and other comments from the industry, the FCA committed to continue monitoring developments in the DLT-related markets, keep its rules and guidance “under review” in light of such developments, and continue to work collaboratively with other national and international regulatory bodies—although the FCA did not identify a “need to propose specific changes [to its rules and guidance] at this juncture.”⁶⁸⁹ In 2014, the FCA also established an innovation hub, which includes a regulatory “sandbox” that allows firms to test new products, services, and business models—including those related to cryptocurrencies and DLT—in a live market environment while simultaneously ensuring that appropriate safeguards are in place.⁶⁹⁰

More recently, in March 2018, the UK formed a Cryptoassets Taskforce with the FCA, the UK Treasury, and the Bank of England, which published an October 2018 report evaluating the policy and regulatory implications of DLT and cryptoassets, as well as the opportunities and risks they present.⁶⁹¹ The report concluded that cryptoassets “have no intrinsic value and investors should therefore be prepared to lose all the value they have put in.”⁶⁹² It also identified

⁶⁸⁸ *Id.* at 5.

⁶⁸⁹ *Id.* at 6; *see id.* at 26.

⁶⁹⁰ *See* FCA, REGULATORY SANDBOX LESSONS LEARNED REPORT 4 (2017) [hereinafter FCA REGULATORY SANDBOX REPORT], <https://www.fca.org.uk/publication/research-and-data/regulatory-sandbox-lessons-learned-report.pdf>; FCA Innovate, FCA, <https://www.fca.org.uk/firms/fca-innovate> (last visited Mar. 7, 2019).

⁶⁹¹ *See Cryptoasset Taskforce Publishes Report on UK Approach to Cryptoassets*, FCA, <https://www.fca.org.uk/news/news-stories/cryptoasset-taskforce-publishes-report-uk-approach-cryptoassets> (last updated Dec. 7, 2018); HM TREASURY, FCA, BANK OF ENGLAND, CRYPTOASSETS TASKFORCE: FINAL REPORT (2018), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf.

⁶⁹² CRYPTOASSETS TASKFORCE: FINAL REPORT, *supra* note 691.

numerous risks associated with cryptoassets, including harm to consumers and market integrity, use for illegal activities, and potential future threats to financial stability.⁶⁹³ The report committed the Taskforce to a number of actions to mitigate these risks, including consulting to (1) clarify which cryptoassets do and do not fall within existing regulations; (2) determine whether regulations should be extended to cover cryptoassets with features similar to other types of investments but that currently fall outside the regulatory regime; (3) evaluate a potential prohibition on the sale of certain cryptoasset-based derivatives to retail consumers; (4) address how regulations can meaningfully address risks posed by exchange tokens and related exchanges and wallet providers; and (5) implement and exceed 5AMLD regulations.⁶⁹⁴

(b) Switzerland

In September 2017, the Swiss FINMA⁶⁹⁵ published guidance setting out its position on ICOs.⁶⁹⁶ Therein, FINMA acknowledged the recent “marked increase” in ICOs in Switzerland and noted that the structure of ICOs “varies markedly from offering to offering,” such that “[t]here is no catch-all definition.”⁶⁹⁷ FINMA also noted that ICOs “are currently not governed by any specific regulation, either globally or in Switzerland,” but given the purpose and

⁶⁹³ *See id.*

⁶⁹⁴ *Id.*

⁶⁹⁵ FINMA is the independent financial-markets regulator in Switzerland charged with supervising banks, insurance companies, exchanges, securities dealers, collective investment schemes, and their asset managers and fund management companies. It is institutionally independent from Switzerland’s political authorities, such that neither Swiss Parliament nor the government may direct how it carries out its regulatory duties. It remains subject to parliamentary scrutiny and must account to parliamentary commissions overseeing its work, however. FINMA is financed by the fees and levies it charges for its supervisory work and is responsible for ensuring the effective functioning of Switzerland’s financial markets. *See FINMA—an independent supervisory authority*, FINMA, <https://www.finma.ch/en/finma/finma-an-overview/> (last visited Mar. 7, 2019).

⁶⁹⁶ FINMA, FINMA GUIDANCE 04/2017: REGULATORY TREATMENT OF INITIAL COIN OFFERINGS (2017) [hereinafter FINMA GUIDANCE 2017], <https://www.finma.ch/en/~media/finma/dokumente/dokumentencenter/myfinma/4dokumentation/finma-aufsichtsmittelungen/20170929-finma-aufsichtsmittelung-04-2017.pdf?la=en>.

⁶⁹⁷ *Id.* at 2.

characteristics of ICOs, “various links to current regulatory law may exist depending on the structure of the services provided,” including in the areas of AML and terrorist financing, banking laws, provisions on securities trading (such that a licensing requirement to operate as a securities dealer may exist where tokens qualify as securities), and collective investment schemes.⁶⁹⁸ Accordingly, “the likelihood arises that the scope of application of at least one of the financial market laws may encompass certain types of ICO model,” and “[w]here financial market legislation has been breached or circumvented, enforcement proceedings will be initiated.”⁶⁹⁹ FINMA also issued a warning to potential investors, highlighting that because ICOs often are in early development stages, “a number of uncertainties [exist] regarding the financial and implementation aspects involved,” and “FINMA cannot rule out that ICO activities may be fraudulent,” given the “increased fraudulent activities by providers of fake cryptocurrencies.”⁷⁰⁰

In February 2018, FINMA released ICO guidelines to provide market participants with information regarding the supervisory and regulatory framework for ICOs.⁷⁰¹ FINMA again acknowledged that the “wide variety of types of token and ICO set-ups” renders it impossible to generalize legal guidance; instead, “[c]ircumstances must be considered holistically in each individual case,” and FINMA will base its assessment on the “underlying economic purpose of an ICO,” particularly when indications of attempts to circumvent existing regulations are present.⁷⁰² This will include assessing the transferability and economic function and purpose of

⁶⁹⁸ *Id.* at 2–3.

⁶⁹⁹ *Id.* at 3.

⁷⁰⁰ *Id.* at 3–4; *see also* Press Release, FINMA, FINMA Closes Down Coin Providers and Issues Warning about Fake Cryptocurrencies (Sept. 19, 2017), <https://www.finma.ch/en/news/2017/09/20170919-mm-coin-anbieter/>.

⁷⁰¹ FINMA GUIDELINES, *supra* note 51, at 1.

⁷⁰² *Id.* at 2.

the tokens—that is, whether the tokens at issue constitute one or more of three types of tokens:

(1) “payment tokens” (which FINMA deems “synonymous with cryptocurrencies”) intended to be used as a means of payment for acquiring goods or services or as a means of money or value transfer; (2) “utility tokens” intended to provide digital access to an application or service via a blockchain-based infrastructure; or (3) “asset tokens” representing assets like a debt or equity claim on the issuer (analogous to equities, bonds, or derivatives), as well as tokens enabling physical assets to be traded via blockchain.⁷⁰³ “Hybrid tokens”—a combination of tokens that fall into more than one category—also exist; in those instances, the applicable requirements are cumulative, and the token could be deemed both a security and a means of payment.⁷⁰⁴

In assessing whether tokens qualify as securities, FINMA will base its assessment on Swiss law definitions. Under the Swiss Financial Market Infrastructure Act, “securities” are “standardised certificated or uncertificated securities, derivatives, and intermediated securities” that are “suitable for mass standardised trading”—that is, they are “publicly offered for sale in the same structure and denomination or are placed with more than 20 clients, insofar as they have not been created especially for individual counterparties.”⁷⁰⁵ Under this definition, FINMA will not treat payment tokens as securities, given that they are designed to act as a means of payment.⁷⁰⁶ Similarly, utility tokens will not be treated as securities if their “sole purpose is to confer digital access rights to an application or service” and the token can be used in that manner at the point of issue, because in that instance, the token’s “underlying function” is to grant access

⁷⁰³ *Id.* at 3.

⁷⁰⁴ *Id.*; see also *supra* Section 1.2(b).

⁷⁰⁵ FINMA GUIDELINES, *supra* note 51, at 4.

⁷⁰⁶ *Id.* If, however, new case law or legislation classified payment tokens as securities, FINMA “would accordingly revise its practice.” *Id.*

rights, and the connection with capital markets—a “typical feature of securities”—is absent.⁷⁰⁷

That said, if a utility token has an “investment purpose” at the point of issue, FINMA will treat it as a security (in the same manner as asset tokens).⁷⁰⁸ Finally, FINMA will treat asset tokens as securities under the Swiss Financial Market Infrastructure Act, provided that they represent an “uncertificated security” or a derivative (whose value depends on an underlying asset) and the tokens are standardized and suitable for mass standardized trading.⁷⁰⁹ If, under these guidelines, FINMA concludes that ICO tokens constitute securities, they will be subject to Swiss securities regulation.⁷¹⁰ Further, to the extent that tokens can be transferred on a blockchain infrastructure—at either the time of the ICO or at a later date—the provisions of Switzerland’s AML Act will apply.⁷¹¹

In late November 2018, the Swiss Federal Council brought into force an amendment to the Swiss Banking Act designed to “promote innovation (fintech).”⁷¹² Pursuant to that amendment, starting on January 1, 2019, companies that “operate beyond the core activities characteristic of banks”—including cryptocurrency- and blockchain-related firms—“will be able to accept public funds of up to a maximum of CHF 100 million on a professional basis subject to simplified requirements,” provided that they receive special authorization (that is, a license) and

⁷⁰⁷ *Id.* at 5.

⁷⁰⁸ *Id.*

⁷⁰⁹ *Id.*

⁷¹⁰ *Id.*

⁷¹¹ *Id.* at 6. The AML Act governs anyone providing payment services or issuing or managing a means of payment. *Id.* AML Act regulations do not apply to utility tokens if the purpose of issuing the tokens is to provide access rights to a non-financial application of blockchain technology. *Id.* at 7.

⁷¹² Press Release, The Federal Council, Switz. Gov’t, Federal Council Adopts Implementing Provisions for Fintech Authorisation (Nov. 30, 2018), <https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-73186.html>.

“neither invest nor pay interest on these funds.”⁷¹³ In December 2018, FINMA published guidelines regarding how interested companies may apply for the new FinTech license and what information they must provide, including: a description of the proposed business activity, geographical scope, and clientele; information about the persons responsible for the administration and management of the business; a business plan and budget; and policies regarding risk management, internal controls, and AML.⁷¹⁴

(c) France

In January 2018, the French Minister of the Economy created a working group headed by the former deputy governor of France’s central bank, tasked with developing cryptocurrency regulation.⁷¹⁵ Shortly thereafter, in a March 2018 report, the Bank of France proposed to ban insurance companies, banks, and trust companies from “taking part in deposits and loans in crypto-assets” and prohibit all marketing of crypto-asset savings products to the public, emphasizing the need for regulations to combat money laundering and terrorism financing.⁷¹⁶ The Bank of France does not consider cryptocurrencies to constitute money or legal tender,⁷¹⁷ but they may qualify as “intangible movable property” under French civil law.⁷¹⁸

⁷¹³ *Id.*

⁷¹⁴ FINMA, *FinTech Licence: FINMA Publishes Guidelines* (Dec. 3, 2018), <https://www.finma.ch/en/news/2018/12/20181203-aktuell-fintech-bewilligung/>. The FinTech license guidelines are available for download via this link. See also Helen Partz, *Swiss Fintech License Allows Blockchain, Crypto Firms to Accept \$100 Mln in Public Funds*, COINTELEGRAPH (Dec. 3, 2018), <https://cointelegraph.com/news/swiss-fintech-license-allows-blockchain-crypto-firms-to-accept-100-mln-in-public-funds/>.

⁷¹⁵ See Samuel Martinet, *French Crypto Regulation à la Carte: Context, News, Perspectives*, COINTELEGRAPH (May 4, 2018), <https://cointelegraph.com/news/french-crypto-regulation-a-la-carte-context-news-perspectives>.

⁷¹⁶ Annaliese Milano, *France’s Central Bank: Keep Financial Institutions Out of Crypto*, COINDESK (Mar. 19, 2018), <https://www.coindesk.com/frances-central-bank-keep-financial-institutions-crypto/>.

⁷¹⁷ *Id.*

⁷¹⁸ See AUTORITÉ DES MARCHÉS FINANCIERS, *ANALYSIS OF THE LEGAL QUALIFICATION OF CRYPTOCURRENCY DERIVATIVES 1* (Mar. 23, 2018) [hereinafter AMF CRYPTO LEGAL ANALYSIS], <http://www.amf->

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With respect to blockchain, the French government passed a statute authorizing the use of DLT for the issuance of mini-bonds and the recording of trades. The statute defines DLT and recognizes it as a recording tool for use in transferring and authenticating ownership titles in the mini-bond context.⁷¹⁹ In the ICO context, the AMF⁷²⁰ has divided cryptocurrency tokens into two categories: (1) utility tokens, which grant a right of use to the holder by allowing the holder to use the technology and/or services distributed by the ICO promoter; and (2) security tokens, which offer financial or decisional prerogatives and are intended to grant their holders financial rights or voting rights.⁷²¹ Because certain crypto-asset derivatives can qualify as financial contracts (depending on their structure), the AMF has concluded that they are subject to regulations applicable to the offer of financial instruments, including relevant Monetary and Financial Code rules concerning approval, good conduct, and the ban on advertising derivatives.⁷²² The AMF plans to create a “visa” system through which it will approve and legitimize ICOs that abide by certain rules and other best practices.⁷²³ This will enable legitimate

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france.org/en_US/Reglementation/Dossiers-thematiques/Marches/Produits-derives/Analyse-sur-la-qualification-juridique-des-produits-d-riv-s-sur-crypto-monnaies.

⁷¹⁹ JAVIER SEBASTIAN CERMEÑO, BBVA RESEARCH, (No. 16/20, 2016) BLOCKCHAIN IN FINANCIAL SERVICES: REGULATORY LANDSCAPE AND FUTURE CHALLENGES FOR ITS COMMERCIAL APPLICATION 28 (2016), https://www.bbvaresearch.com/wp-content/uploads/2016/12/WP_16-20.pdf.

⁷²⁰ The AMF is an independent public body in France that regulates, authorizes, monitors, and enforces financial regulations. *See Duties & Powers: Who We Are*, AUTORITÉ DES MARCHÉS FINANCIERS (July 16, 2013), http://www.amf-france.org/en_US/L-AMF/Missions-et-competences/Presentation.

⁷²¹ *See* AUTORITÉ DES MARCHÉS FINANCIERS, SUMMARY OF REPLIES TO THE PUBLIC CONSULTATION ON INITIAL COIN OFFERINGS (ICOS) AND UPDATE ON THE UNICORN PROGRAMME 3 (2018), http://www.amf-france.org/technique/en_US/proxy-lien?docId=workspace://SpacesStore/a9e0ae85-f015-4beb-92d2-ece78819d4da. In certain cases, security tokens may be classified as “financial instruments.” *Id.* at 5.

⁷²² *See* AUTORITÉ DES MARCHÉS FINANCIERS, 2018 MARKETS AND RISK OUTLOOK 99 (2018), https://www.amf-france.org/en_US/Publications/Lettres-et-cahiers/Risques-et-tendances/Archives?docId=workspace%3A%2F%2FSpacesStore%2F543a184a-4e98-466d-84eb-27e97e120ce5; *see also* AMF CRYPTO LEGAL ANALYSIS, *supra* note 728, at 1–7.

⁷²³ *See* Martinet, *supra* note 715.

ICOs to more easily interact with third parties like banks and accounting firms.⁷²⁴

(d) Germany

Germany's BaFin⁷²⁵ has stated that the country's existing regulatory framework applicable to other financial services also applies to blockchain technologies,⁷²⁶ emphasizing that it is not the technology itself that needs regulation, but rather its application in different contexts within the financial sector.⁷²⁷ BaFin has classified all virtual currencies as "financial instruments" under the German Banking Act,⁷²⁸ which in turn provides that financial instruments include "securities, money market instruments, foreign exchange units of account, and derivatives."⁷²⁹

Similarly, in March 2018, BaFin issued an advisory letter stating that it will assess on a case-by-case basis whether an ICO token constitutes: (a) a "financial instrument" within the meaning of the German Securities Trading Act or MiFID II; (b) a "security" within the meaning of the German Securities Prospectus Act; or (c) a "capital investment" within the meaning of the German Capital Investment Act.⁷³⁰ Pursuant to that advisory, the classification of a token does

⁷²⁴ *Id.*

⁷²⁵ BaFin is Germany's autonomous financial regulatory authority that falls under the supervision of the Federal Ministry of Finance. *See About BaFin*, BAFIN, <https://www.bafin.de/dok/7859472> (last visited Mar. 7, 2019). BaFin authorizes what financial entities may conduct banking business in Germany and monitors their conduct, seeking to ensure the transparency and integrity of the financial market and the protection of investors. *See Functions & history*, BAFIN, <https://www.bafin.de/dok/7859558> (last updated May 28, 2013). BaFin oversees banks, financial services institutions, insurance undertakings, pension funds, domestic investment funds, and asset management companies. *See id.*

⁷²⁶ *See Blockchain Technology*, BAFIN, <https://www.bafin.de/dok/9224990> (last updated June 9, 2017).

⁷²⁷ *Id.*

⁷²⁸ *See Virtual Currency (VC)*, BAFIN, <https://www.bafin.de/dok/8054452> (last visited Mar. 7, 2019).

⁷²⁹ Kreditwesengesetz [KWG] [German Banking Act], Sept. 9, 1998, BGBl. I at 6, § 1(11), no. 1 (Ger.), <https://www.bafin.de/dok/7859046>. In contrast, virtual currencies are not considered legal tender, currencies, foreign notes or coins, or e-money in Germany. *See Virtual Currency (VC)*, *supra* note 728.

⁷³⁰ *See Initial Coin Offerings: BaFin publishes advisory letter on the classification of tokens as financial instruments*, BAFIN (Mar. 28, 2018), https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2018/meldung_180213_ICOs_Hinweisschreib (cont'd)

not depend on whether it is a unit of account under the German Banking Act,⁷³¹ and not all tokens are automatically deemed units of account under that Act.⁷³² BaFin also established that a token can be classified as a “security” even if it cannot be physically represented by a certificate or global note, provided that each “holder of the token can be documented, for example by means of distributed ledger or blockchain technology.”⁷³³

(e) Austria

Austria’s FMA similarly has published guidelines on how regulations may apply to blockchain technologies, depending on their structure and use.⁷³⁴ These include the following:

- Under the **Austrian Banking Act**, if an activity conducted on a commercial basis includes the receipt of funds from other parties for the purpose of management or deposits, then the activity constitutes a banking transaction and requires a license from the FMA. Certain blockchain cryptocurrency transactions likely fall within this classification.
- Austria’s **Alternative Investment Fund Managers Act** provides that if a company collects capital from a number of investors that subsequently is invested in virtual currencies according to a defined investment strategy and the profit is passed on to the investors, the company meets the definition of an alternative investment fund and must hold a license.
- Austria’s **Capital Markets Act** provides that if a company publicly offers investments or securities in virtual currencies, or in companies investing in virtual currencies, then the company must publish a prospectus in accordance with the Act.
- Austria’s **Payment Services Act** provides that if an online platform used for purchasing virtual currencies also processes payments in euros, the platform may be

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en_en.html;jsessionid=4B1F0A5C8905A226670E613F72E5FA1B.1_cid363; see also *Initial Coin Offerings: Advisory letter on the Classification of Tokens as Financial Instruments*, BAFIN (Mar. 28, 2018), https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/WA/dl_hinweisschreiben_einordnung_ICOs_en.html.

⁷³¹ *Id.* Units of account are not deemed financial instruments pursuant to the German Securities Trading Act or MiFID II, and thus are treated differently under this legislation than under the German Banking Act. *Id.*

⁷³² *Id.*

⁷³³ *Id.*

⁷³⁴ See generally *FinTech Navigator*, FMA, <https://www.fma.gv.at/en/cross-sectoral-topics/fintech/fintech-navigator/> (last visited Mar. 7, 2019).

required to hold a license.⁷³⁵

The FMA determines whether Austrian regulations apply to various business models on a case-by-case basis.⁷³⁶

With respect to ICOs, the FMA has provided the following guidance:

- **Austrian Banking Act:** If capital is raised with legal currency (not virtual currency) and is to be invested by the ICO organizer, this constitutes a deposit-taking activity and requires a license under the Act. Even if capital is raised with virtual currency, the activity still may fall within the Act's parameters and require a license, depending on the ICO structure. Further, if the coins or tokens are structured as securities or financial instruments, then their custody and administration on behalf of other parties falls within the Act's scope and requires a license.
- **Securities Supervision Act:** If an ICO offers rights comparable to those offered by securities—for example, voting rights, shares in profits, tradability, interest payments—the coins and tokens may constitute “financial instruments” and require a license.
- **Capital Markets Act:** If coins or tokens grant holders certain proprietary rights—for example, rights to a claim, membership rights or conditional rights, dividends, repayment—against the ICO organizer, they may qualify as investments within the scope of the Act, thus requiring organizers to publish a prospectus pursuant to the Act.
- **E-Money Act and Payment Services Act:** Whether an ICO falls within the scope of these acts is evaluated on a case-by-case basis and depends in part upon whether (1) the ICO results in the payment of “money” (a legal means of payment), and (2) the token may be used by every holder and therefore is transferable (as opposed to personalized for each user).
- **Alternative Investment Fund Managers Act:** If a company collects capital from a number of investors that is then invested in virtual currencies according to a defined investment strategy, and the profit is passed on to the investors, that transaction qualifies as an alternative investment fund, and the company must hold a license.⁷³⁷

When an activity falls within the scope of an Austrian regulation and requires a license, Austria's Financial Markets Anti-Money Laundering Act's due diligence obligations apply, and

⁷³⁵ See *Licensing*, FMA, <https://www.fma.gv.at/en/cross-sectoral-topics/fintech-navigator/licensing/> (last visited Mar. 7, 2019); *Is a Prospectus Needed?*, FMA, <https://www.fma.gv.at/en/cross-sectoral-topics/fintech-navigator/is-a-prospectus-needed/> (last visited Mar. 7, 2019).

⁷³⁶ See *id.*

⁷³⁷ *ICOs*, FMA, <https://www.fma.gv.at/en/cross-sectoral-topics/fintech-navigator/initial-coin-offerings/> (last visited Mar. 7, 2019).

the conduct is subject to the FMA's supervision.⁷³⁸ In cases in which activities do not require a license, the Financial Markets Anti-Money Laundering Act's provisions still may apply based on the Austrian Commercial Code, though other Austrian authorities (not the FMA) supervise those cases.⁷³⁹

(f) Slovenia

Slovenia seeks to become a leader in blockchain development in the EU⁷⁴⁰ and is one of the relatively few European countries to have revised certain of its existing laws to address cryptocurrencies. Slovenia has updated its AML law to explicitly reference cryptocurrencies, defining all crypto-exchanges and brokers engaged in trading cryptocurrencies as financial institutions.⁷⁴¹ In light of that amendment, crypto-exchanges and cryptocurrency brokers must follow transparency rules and compliance procedures applicable to other financial institutions.⁷⁴²

(g) Malta

Malta, like Slovenia, has updated its existing laws to accommodate blockchain and cryptocurrency technologies. The country seeks to attract blockchain companies and in June 2018 approved three bills towards that end:

- The **Digital Innovation Authority Bill** establishes an authority responsible for promoting and regulating companies using blockchain. The authority will certify legitimate blockchain companies and provide legal certainty to users who wish to make use of a blockchain platform.

⁷³⁸ *FinTech & AML*, FMA, <https://www.fma.gv.at/en/cross-sectoral-topics/fintech-navigator/fintech-aml/> (last visited Mar. 7, 2019).

⁷³⁹ *Id.*

⁷⁴⁰ See Lubomir Tassev, *Steps Towards Self-Regulation in Croatia and Slovenia*, BITCOIN.COM (Feb. 18, 2018), <https://news.bitcoin.com/steps-towards-self-regulation-croatia-slovenia/>.

⁷⁴¹ See Iven de Hoon, *Tax Treatment of Cryptocurrencies in Slovenia*, NOMORETAX, <http://www.nomoretax.eu/crypto-taxation-slovenia/> (last visited Mar. 7, 2019).

⁷⁴² *Id.*

- The **Technology Arrangements and Services Bill** deals primarily with processes associated with setting up exchanges and other companies operating in the blockchain market. It also addresses the possibility of Technology Service Provider registration and certification of Technology Arrangements, possibly granting legal personality to Technology Arrangements.
- The **Virtual Financial Assets Bill** focuses on the regulatory framework applicable to ICOs and regulation of certain service providers involved in activities related to ICOs. It also outlines the regulatory framework that will apply to cryptocurrency exchanges.⁷⁴³

The MFSA⁷⁴⁴ has proposed a “financial instrument test” to determine whether a DLT asset should be classified as an “asset” under the recently approved Virtual Financial Assets Bill or as a “financial instrument” under Section C of MiFID Annex 1.⁷⁴⁵ This test applies to issuers of ICOs conducted in or from within Malta, as a means of determining whether their activities fall within the context of applicable European Commission or Maltese regulations.⁷⁴⁶ The test includes twelve checklists, “the first of which focuses on [virtual tokens] under the [Virtual Financial Assets Bill] while the remaining focus on the various financial instruments under

⁷⁴³ See Gerald Fenech, *Exclusive: Maltese Government Approves Three Cryptocurrency Bills*, CCN (June 27, 2018), <https://www.ccn.com/exclusive-maltese-government-approves-three-cryptocurrency-bills/>; see also Malcolm Falzon et al., *Malta’s Blockchain Legal Framework Unveiled: Regulation of Technology Arrangements and Service Providers, Virtual Currencies, ICOs and the Digital Innovation Authority*, CAMILLERI PREZIOSI ADVOCATES (Feb. 19, 2018), <http://camilleripreziosi.com/en/news-resources/1/2504/maltas-blockchain-legal-framework-unveiled-re>.

⁷⁴⁴ The MFSA is the Maltese financial regulator responsible for functions previously carried out by the Central Bank of Malta, the Malta Stock Exchange, and the Malta Financial Services Centre. See *About Us*, MFSA, <https://www.mfsa.com.mt/about-us/> (last visited Mar. 7, 2019). The MFSA is a fully autonomous public institution and reports to Parliament on an annual basis. *Id.* Some of the MFSA’s key functions include: regulating and supervising the conduct of the financial services industry in Malta; consumer and investor protection; issuing licenses to businesses involved in banking, investments, insurance, pensions, and stock brokerage; inspections of licensed financial services businesses; publication of guidance notes and directives to the financial services industry; and proposing the improvement of existing legislation or creation of new legislation. See *id.*

⁷⁴⁵ See MFSA, REF: 04-2018, CONSULTATION PAPER ON THE FINANCIAL INSTRUMENT TEST 2 (2018), https://webcache.googleusercontent.com/search?q=cache:6YE5anrI-jAJ:https://www.mfsa.com.mt/pages/readfile.aspx%3Ff%3D/Files/Announcements/Consultation/2018/20180413_FI_Test.pdf+%&cd=1&hl=en&ct=clnk&gl=us.

⁷⁴⁶ *Id.*

MiFID.”⁷⁴⁷ The MFSA already has different definitions of virtual assets for purposes of the test, all of which are found in the consultation paper for the “financial instrument test.”⁷⁴⁸

3. Asian and Australian Regulations

The contemporary regulatory landscape of cryptocurrencies in Asia and Australia is nascent and fluid. Nevertheless, in the past year, five governments with jurisdiction over major cryptocurrency markets—Japan, South Korea, Australia, Singapore, and China—have begun to crystallize their respective regulatory stances.

As each country summary in this Section will explain, each of the Asian or Australian government’s regulatory postures conceptually fall into two categories: (1) proactive regulation, which results in a more detailed regulatory scheme; or (2) less nuanced regulation to remain consistent with policy interests in permitting, or prohibiting, the growth of the virtual currency market. Japan, South Korea, and Australia fall within the first category, whereas Singapore and China fall within the second. Each government primarily regulates cryptocurrency exchanges and ICOs within its borders by first deciding whether to permit these practices and, if so, by deciding what regulatory standards virtual currency market participants must meet to operate. Each government has adopted a position in rough accordance with its overall regulatory posture, although regulation is in a state of flux. Asian governments also have regulated cryptocurrencies by affording (or withholding) the status of legal payment, permitting (or banning) mining, and levying various forms of taxes.

Each of these governments also has taken a position on when and to what extent its regulatory posture impacts foreign parties and cross-border transactions. No clear regional trend

⁷⁴⁷ *Id.* at 4.

⁷⁴⁸ *Id.* at 2–3.

has emerged, with the five countries split along two broader questions: whether foreign parties can participate in their markets, and to what extent their regulations apply to those parties. Moreover, no larger regulatory body has been established to coordinate regulation at a regional level in Asia. As a result, national regulatory regimes remain largely particularized to the issues facing each individual jurisdiction, with less regulatory attention on cross-border effects.

(a) Japan

Of all the countries in Asia, and arguably globally, Japan has the deepest and most turbulent history with cryptocurrencies. The world's first cryptocurrency exchange was established in Japan in 2010 (it was shut down shortly thereafter because of fraudulent activity),⁷⁴⁹ and the founder of Bitcoin is widely considered to be a Japanese citizen, although his or her identity remains a mystery.⁷⁵⁰ Japan also has been the site of the world's two largest cryptocurrency heists. In February 2014, Mt. Gox, a massive cryptocurrency exchange that then accounted for roughly 70% of global cryptocurrency trading, was hacked. Over \$450 million (based on bitcoin's trading price at the time) was stolen;⁷⁵¹ at peak bitcoin prices, those coins were worth more than \$10 billion.⁷⁵² Then, in January 2018, hackers infiltrated Coincheck, another Japanese cryptocurrency exchange, and stole roughly \$500 million (based on the value

⁷⁴⁹ Zoran Spirkovski, *Bitcoin History, From 2010-2013* (Nov. 8, 2016), CRYPTO NEWS, <https://www.crypto-news.net/bitcoin-history-2010-2013/>.

⁷⁵⁰ Joshua Davis, *The Crypto-Currency: Bitcoin and its mysterious inventor*, THE NEW YORKER (Oct. 10, 2011), <https://www.newyorker.com/magazine/2011/10/10/the-crypto-currency>.

⁷⁵¹ Christian Decker & Roger Wattenhofer, *Bitcoin Transaction Malleability and Mt. Gox*, in *Computer Security—ESORICS 2014: 19th European Symposium on Research in Computer Security*, Wroclaw, Poland, Sept. 7–11, 2014, Proceedings, Pt. II, at 314 (M. Kutylowski & J. Vaidya eds., 2014).

⁷⁵² In the Mt. Gox hack, roughly 850,000 coins were stolen, then valued at over \$450 million. At Bitcoin's peak price of \$19,783.21, logged on December 17, 2017, the total value of these stolen coins was roughly \$17 billion.

of the coins at the time).⁷⁵³ Despite these incidents, Japan has become the world's largest cryptocurrency market—roughly 55% of all bitcoin traded daily is denominated in yen.⁷⁵⁴

Japan's legal embrace of cryptocurrency began in 2017, after both China and South Korea restricted cryptocurrency exchanges and ICOs.⁷⁵⁵ Shortly thereafter, Japan passed an amendment to the Payment Services Act that had two primary regulatory implications: first, it recognized virtual currency as a legal form of payment, and second, it allowed for legal operation of cryptocurrency exchanges once prospective exchanges meet minimum guidelines and register with the FSA.⁷⁵⁶ These requirements apply in equal force to domestic and international exchange providers, although foreign registrants need not establish a company in Japan to qualify.⁷⁵⁷ Although Reuters announced the amendment as Japan's acceptance of cryptocurrencies as legal tender, this view was mistaken as a matter of law.⁷⁵⁸ Nevertheless, more retail outlets have begun accepting cryptocurrencies as a form of payment; estimates vary from 5,000 to 20,000.⁷⁵⁹ Moreover, in the fourth quarter of 2017, the FSA approved the

⁷⁵³ Evelyn Cheng, *Japanese cryptocurrency exchange loses more than \$500 million to hackers*, CNBC NEWS, <https://www.cnbc.com/2018/01/26/japanese-cryptocurrency-exchange-loses-more-than-500-million-to-hackers.html> (last updated Jan. 29, 2018, 12:15 PM).

⁷⁵⁴ Minoru Matsutani, *Japan a global leader in cryptocurrency investment*, THE JAPAN TIMES (Jan. 23, 2018), <https://www.japantimes.co.jp/news/2018/01/23/business/japan-global-leader-cryptocurrency-investment/#.W2hkQ9JKiUk>.

⁷⁵⁵ Ken Yagami, *Japan: A Forward Thinking Bitcoin Nation*, FORBES (Nov. 2, 2017, 5:48 AM), <https://www.forbes.com/sites/outofasia/2017/11/02/japan-a-forward-thinking-bitcoin-nation/#67b46f2933a3>.

⁷⁵⁶ See Payment Services Act, Act No. 59 of 2009, amended by Act No. 62 of 2016 (Japan).

⁷⁵⁷ Masahiko Ishida, Edward Mears & Ryutaro Takeda, *Japan Regulatory Update on Virtual Currency Business*, DLA PIPER PUBLICATIONS (Dec. 29, 2017), <https://www.dlapiper.com/en/japan/insights/publications/2017/12/japan-regulatory-update-on-virtual-currency-business/>.

⁷⁵⁸ *Advisory: References to Bitcoin as 'legal tender' in Japan*, REUTERS (Dec. 13, 2017, 5:35 AM), <https://uk.reuters.com/article/idUKL3N1OD35L>.

⁷⁵⁹ Shusuke Murai, *More retailers in Japan accept virtual currency*, THE JAPAN TIMES (Apr. 5, 2017), <https://www.japantimes.co.jp/news/2017/04/05/business/tech/retailers-japan-accept-virtual-currency/#.W2hpmdJKiUk>.

registration of Japan's sixteen major exchanges.⁷⁶⁰ Finally, in April 2018, a self-regulatory body—the Japan Virtual Currency Exchange Industry Association—was founded to strengthen the regulatory framework surrounding cryptocurrency exchanges. It joins a growing Japanese community of self-regulating associations including the Japan Blockchain Association and the Japan Cryptocurrency Business Association, which were similarly designed to raise standards within Japan's emerging cryptocurrency industry.

Despite this generally permissive regulatory treatment, Japan has a stringent regulatory posture in other areas. For example, ICOs are banned in Japan, although a government-backed study group recently laid out basic regulatory guidelines to build the foundation for their eventual legalization.⁷⁶¹ Moreover, Japan taxes cryptocurrency at a high rate; Japan treats cryptocurrencies as income-generating assets, and thus taxes income generated through cryptocurrency trading by as much as 45% (under the miscellaneous income tax), depending on the asset holder's income. Exchanges, however, are not subject to Japan's consumption tax.⁷⁶²

In May 2018, the FSA released a five-point agenda on its regulatory intentions going forward. First, it plans to institute strict security standards to ensure that exchanges can defend against hacks. Second, it will require exchanges to implement strict KYC processes for AML and CFT. Third, it will require separate management of corporate and consumer assets and will require protections to prevent employee trading on consumer assets. Fourth, it will restrict cryptocurrencies that afford complete anonymity to the consumer. Finally, it will require that

⁷⁶⁰ Gareth Allan & Yuri Hagiwara, *Cryptocurrency Exchanges Get Nod to Operate in First for Japan*, BLOOMBERG (Sept. 29, 2017, 2:28 AM), <https://www.bloomberg.com/news/articles/2017-09-29/cryptocurrency-exchanges-get-nod-to-operate-in-first-for-japan>.

⁷⁶¹ Yuki Hagiwara & Yuji Nakamura, *Japan Unveils Guidelines for Allowing Initial Coin Offerings*, BLOOMBERG (Apr. 4, 2018, 9:20 PM), <https://www.bloomberg.com/news/articles/2018-04-05/japan-plans-first-step-toward-legalizing-initial-coin-offerings>.

⁷⁶² Ishida et al., *supra* note 757.

exchange programs organize in accordance with Japanese corporate law and will monitor them to ensure separations between shareholders and management, and between internal asset manager and developer roles.⁷⁶³

(b) South Korea

South Korea's regulatory posture towards cryptocurrencies has oscillated considerably in the past year, but, like Japan, it generally has moved towards legitimizing cryptocurrencies by focusing on targeted regulations in an otherwise permissive regulatory environment. South Korea originally approached cryptocurrencies with a comparatively cautious approach. That posture was driven in part by the rapid increase in bitcoin's value, as well as the "kimchi premium," a speculative phenomenon in which cryptocurrency coins (including bitcoin) trade in South Korea at significant (*i.e.*, up to 50%) mark-ups over the global trading price for that coin.⁷⁶⁴ In part because of these premiums, South Korea witnessed several illegal arbitrage schemes, for which the government indicted nearly two dozen perpetrators in December 2017.⁷⁶⁵ Despite South Korea's ongoing regulatory uncertainty regarding cryptocurrencies, it is the third largest global market for cryptocurrencies (after the U.S. and Japan).⁷⁶⁶ Moreover, South Korea aimed to have 8,000 stores accepting cryptocurrencies as payment by the end of the 2018 calendar year.⁷⁶⁷

⁷⁶³ *Japan fleshes out crypto market rules to prevent coincheck 2.0*, NIKKEI ASIAN REV. (May 6, 2018, 5:24 AM) <https://asia.nikkei.com/Spotlight/Bitcoin-evolution/Japan-fleshes-out-crypto-market-rules-to-prevent-Coincheck-2.0>.

⁷⁶⁴ Panos Mourdoukoutas, *How to Find the Next Ripple, Ethereum, Monero and EOS—Try the Kimchi Premium*, FORBES (Apr. 29, 2018, 9:00 AM), <https://www.forbes.com/sites/panosmourdoukoutas/2018/04/29/how-to-find-the-next-ripple-ethereum-monero-and-eos-try-the-kimchi-premium/>.

⁷⁶⁵ Michael Kim, Daniel Lee & Nathan Park, *Cryptocurrency laws and regulations in South Korea*, ASIA BUS. L. J. (July 12, 2018), <https://www.vantageasia.com/cryptocurrency-law-south-korea/>.

⁷⁶⁶ Sam Jacobs, *The fiat currencies most commonly traded for Bitcoin, in one chart*, BUSINESS INSIDER (Jan. 31, 2018, 4:48 PM), <https://www.businessinsider.com.au/bitcoin-fiat-currencies-most-commonly-traded-2018-1>.

⁷⁶⁷ Park Si-Soo, *Cryptocurrencies to be available at 6,000 outlets in Korea*, THE KOREA TIMES (Mar. 26, 2018, 4:59 PM), https://www.koreatimes.co.kr/www/tech/2018/03/133_246252.html.

To reduce speculation in late 2017, the government repeatedly warned that cryptocurrencies were not legal tender and not insured by the central bank.⁷⁶⁸ In September 2017, the Financial Services Commission proposed a ban on all ICOs. Although the ban never became law, the lack of regulatory clarity around ICOs chilled their adoption.⁷⁶⁹ Later that year, government leaders proposed a ban on all anonymous trading. These statements fueled speculation that the government might move to ban cryptocurrencies entirely; in response, an over 200,000-person petition was sent to the government, leading to a public assurance that an outright ban would not take place.⁷⁷⁰ In January 2018, South Korea released guidelines for the industry that increased AML and KYC standards and banned anonymous trading on domestic exchanges and foreigners and minors from trading on any exchange.⁷⁷¹ Later in January, the government announced that it would tax cryptocurrency exchanges at the corporate rate, which currently is 24.2% of corporate income.⁷⁷²

To date, the lack of regulatory clarity—a function of myriad official statements yet limited legislation—has led to an environment of uncertainty. Partially as a result, Korean operators have begun to self-regulate. In May 2018, the Korean Blockchain Association—a self-regulatory industry association that includes South Korea’s 14 largest virtual currency

⁷⁶⁸ *Gov’t to require real-name transactions in cryptocurrency trading*, YONHAP NEWS AGENCY (Dec. 28, 2017, 11:56 AM), <http://english.yonhapnews.co.kr/news/2017/12/28/0200000000AEN20171228005651315.html>.

⁷⁶⁹ Elaine Ramirez, *Facts and Myths Surrounding Crypto in South Korea: Death, Taxes and Bans*, FORBES (Feb. 28, 2018, 6:00 PM), <https://www.forbes.com/sites/elaineramirez/2018/02/28/facts-and-myths-surrounding-crypto-in-south-korea-death-taxes-and-bans/#5e14938557e4>.

⁷⁷⁰ Evelyn Cheng, *More than 200,000 sign petition in South Korea to stop government’s crackdown on bitcoin ‘happy dream’*, CNBC (Jan. 16, 2018, 9:00 AM), <https://www.cnbc.com/2018/01/16/over-200000-sign-petition-in-south-korea-to-stop-bitcoin-regulation.html>.

⁷⁷¹ Kim et al., *supra* note 765.

⁷⁷² Ramirez, *supra* note 769.

exchanges—released a set of self-regulatory measures it would apply to its membership.⁷⁷³ The guidelines recommended separate management of customer and exchange assets, a process to flag and review abnormal transactions, enhanced client protection systems, minimum capital reserves, and the publishing of regular audit and finance reports, among other items. In July, the Korean Blockchain Association announced that its major exchanges had met these minimums.⁷⁷⁴

By mid-2018, South Korea's regulatory posture has become more permissive, despite suffering the country's largest hack (of roughly \$70M on two exchanges) in June 2018.⁷⁷⁵ Later that month, the National Assembly announced its plans to pass comprehensive cryptocurrency regulation in the near future. The current proposal focuses on AML and KYC provisions and would require exchanges to register with the FSC Financial Intelligence Unit.⁷⁷⁶ Moreover, in July 2018, the FSC established the Financial Innovation Bureau to supervise and regulate all financial innovation in South Korea, including cryptocurrencies.⁷⁷⁷ These decisions follow the National Assembly's announcement in May 2018 that it soon will propose legislation to ultimately lift the ban on ICOs.⁷⁷⁸

⁷⁷³ Son Ji-Hyoung, *Association affirms 12 cryptocurrency exchanges' security standards*, THE KOREA HERALD (July 11, 2018, 6:29 PM), <http://www.koreaherald.com/view.php?ud=20180711000695>.

⁷⁷⁴ *Id.*

⁷⁷⁵ *Cryptocurrencies Tumble After \$32 Million South Korea Exchange Hack*, FORTUNE (June 20, 2018), <http://fortune.com/2018/06/20/south-korea-cryptocurrency-hack/>; Cho Mu-Huyn, *South Korean cryptocurrency exchange hack sees \$40m in altcoin stolen*, ZDNET (June 11, 2018, 5:21 AM), <https://www.zdnet.com/article/south-korean-cryptocurrency-exchange-hack-sees-40m-in-altcoin-stolen/>.

⁷⁷⁶ Kim et al., *supra* note 765.

⁷⁷⁷ See Press Release, Fin. Servs. Comm'n, FSC Reshuffles Organizational Structure (July 17, 2018, 4:14 PM), <https://www.fsc.go.kr/downManager?bbsid=BBS0048&no=127904>.

⁷⁷⁸ Yoon Young-sil, *National Assembly Calls for Measures to Allow ICOs*, BUSINESSKOREA (May 29, 2018, 10:25 AM), <http://www.businesskorea.co.kr/news/articleView.html?idxno=22613>.

(c) Australia

Australia has taken a generally permissive regulatory posture towards cryptocurrencies but has done so cautiously in certain areas (*e.g.*, tax, AML, and CFT laws) and recently has increased the stringency of relevant regulatory regimes affecting cryptocurrency products. Historically, Australia had taken a somewhat restrictive tax posture towards cryptocurrencies. Although standard capital gains and income taxes apply, from 2014 until mid-2017, Australia effectively double-taxed cryptocurrencies by applying its goods and services tax to both digital currency purchases and to products purchased in digital currencies.⁷⁷⁹ Other than this special treatment, Australia historically has treated cryptocurrencies under pre-existing regulatory regimes where possible. For example, cryptocurrency exchanges must receive an Australian Financial Services License if the exchange provides financial services or deals in financial products.⁷⁸⁰ Similarly, ICO providers must comply with ASIC regulations issued in September 2017, which provide guidance for ICO regulation based on the underlying transaction taking place on the platform (*e.g.*, managed investment schemes must follow the Corporations Act; share offers must follow Australian public corporations law; financial service provision requires the appropriate license).⁷⁸¹

However, in the past year, Australia has passed and increasingly enforced more stringent quality controls on cryptocurrency exchanges and ICOs. In April 2018, the Australian Transaction Reports and Analysis Centre mandated that all exchanges with a business operation located in Australia register and meet its AML and CFT compliance and reporting obligations

⁷⁷⁹ *Treasury Laws Amendment Act 2017* (Cth) s 1 (Austl.).

⁷⁸⁰ *See Anti-Money Laundering and Counter-Terrorism Financing Act 2006* (Cth) (Austl.).

⁷⁸¹ *Initial coin offerings and crypto-currency*, Austl. Sec. & Invs. Comm'n (last updated May 2018), <https://asic.gov.au/regulatory-resources/digital-transformation/initial-coin-offerings-and-crypto-currency/>.

pursuant to the Anti-Money Laundering and Counter-Terrorism Financing Act of 2006. That law requires regulated entities to establish their customers' identities, monitor activity, and report suspicious activity to the Centre, among a host of other requirements to ensure the security of financial transactions in Australia.⁷⁸² The regulation surfaced in an environment of growing concern around Australia's AML and CFT laws following the widely-reported Commonwealth Bank scandal. In June 2018, a year-long investigation into Commonwealth Bank of Australia, Australia's largest bank, ended with a \$534 million fine for the bank's AML and CFT violations.⁷⁸³ Stringency regarding ICOs similarly has grown. In May 2018, ASIC prohibited multiple ICOs from moving forward because of their deceptive and misleading practices. The agency noted that this provision of Australian law applies to ICOs irrespective of whether they are dealing in a financial product.⁷⁸⁴

As a general matter, Australian cryptocurrency regulations apply to any operator, foreign or domestic, with a location in Australia. Notably, ASIC's ICO guidelines also may soon be applied to foreign operators seeking to access the Australian market, even if the provider does not have a location in Australia. In April 2018, ASIC Commissioner John Price noted that "we will highlight that Australian corporate and consumer law might apply—even if the ICO is created and offered from overseas."⁷⁸⁵ It does not appear, however, that this has become official policy.

⁷⁸² See *Anti-Money Laundering and Counter-Terrorism Financing Act 2006*, *supra* note 780.

⁷⁸³ Daniel Shane, *Australia's biggest bank hit with record for money-laundering scandal*, CNN MONEY (June 4, 2018, 5:26 AM), <https://money.cnn.com/2018/06/04/investing/cba-fine-money-laundering/index.html>.

⁷⁸⁴ See Press Release (No. 18-122), Austl. Sec. & Invs. Comm'n, ASIC Takes Action on Misleading or Deceptive Conduct in ICOs (May 1, 2018), <https://asic.gov.au/about-asic/media-centre/find-a-media-release/2018-releases/18-122mr-asic-takes-action-on-misleading-or-deceptive-conduct-in-icos/>.

⁷⁸⁵ John Price, Austl. Sec. & Invs. Comm'n, ASIC update: Initial coin offerings and cryptocurrency, Speech at the Tyro FinTech Hub, Sydney, Australia (Apr. 26, 2018), <https://asic.gov.au/about-asic/news-centre/speeches/asic->
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(d) Singapore

Singapore generally has embraced cryptocurrencies and sought to create a permissive environment for their operation largely to attract foreign operators to its market. As a result, Singapore has moved at a far slower pace to design cryptocurrency-specific legislation; as late as October 2017, the MAS managing director went so far as to state that “as of now, I see no basis for wanting to regulate cryptocurrencies.”⁷⁸⁶ Following this philosophy, Singapore consistently has adopted a guiding principle of choosing to regulate cryptocurrencies within preexisting regulatory frameworks whenever possible, and to look case-by-case to determine whether an individual cryptocurrency transaction is subject to regulation. That philosophy has its roots in the earliest periods of cryptocurrency adoption in Singapore; in 2014, the MAS already had been on record stating that it would not regulate cryptocurrencies unless they fell within the ambit of a previously regulated financial instrument.⁷⁸⁷

As a practical matter, most regulation of cryptocurrencies occurs when the underlying product is treated as a security by the MAS. For example, when an ICO seeks to raise debt or equity, the offering is regulated as a security under Singaporean securities law.⁷⁸⁸ Similarly, an exchange platform facilitating secondary trading of cryptocurrency securities must be a MAS-

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update-initial-coin-offerings-and-cryptocurrency/; see *Initial coin offerings a “Key Focus” for Australian regulator*, REUTERS (Apr. 26, 2018, 5:15 AM), <https://www.reuters.com/article/crypto-currencies-australia/initial-coin-offerings-a-key-focus-for-australian-regulator-idUSL3N1S34DM>.

⁷⁸⁶ Jacquelyn Cheok, *Singapore not rushing to regulate cryptocurrencies: MAS*, THE BUSINESS TIMES (Oct. 26, 2017, 6:56 PM), <https://www.businesstimes.com.sg/banking-finance/singapore-fintech-festival-2017/singapore-not-rushing-to-regulate-cryptocurrencies>.

⁷⁸⁷ Memorandum from Dr. Alexander Ressos on How to do an Initial Coin Offering (ICO) in Singapore: The Legal and Regulatory Framework, Key Structuring Considerations and Documentation Requirements to File 5 (July 6, 2018), <https://ressos.com/downloads/Ressos%20-%20How%20to%20do%20an%20ICO%20in%20Singapore.pdf>.

⁷⁸⁸ *Id.*, at 4–5, 7–8.

approved exchange or market operator.⁷⁸⁹ However, as of this writing, no cryptocurrency exchanges are so licensed in Singapore, and the existing law governing licensing currently is under a notice and comment period as part of a broader process for amendment.⁷⁹⁰ Ultimately, when cryptocurrency exchanges seek to be licensed under Singaporean securities law, they will need to comply with the same AML, CFT, and KYC guidelines applicable to fiat currencies. Finally, capital gains made on cryptocurrency investments are not taxed in Singapore, which has no capital gains tax; income and sales taxes, however, do apply equally to cryptocurrencies.

Singapore treats cross-border cryptocurrency flow under a similar regulatory philosophy. Foreign-operated exchanges must obtain the proper licensing to facilitate cryptocurrency trading when the underlying cryptocurrency asset is classified as a security. By offering clarity, Singapore has sought to attract foreign ICO operators fleeing more stringent regulatory regimes (e.g., in China, India) or cautiously permissive regulatory regimes where guidelines are in a state of flux. The strategy has had some desired effect: recently, Singapore became the third largest market for ICOs since 2014, ahead of every other market in Asia.⁷⁹¹

(e) China

Despite its historical importance to the international cryptocurrency market, China recently has taken a restrictive regulatory posture towards cryptocurrencies. At its height, China

⁷⁸⁹ Li Fei Quek et al., *Regulating Cryptocurrency Exchanges in Singapore*, CNPLAW (May 9, 2018), <https://www.cnplaw.com/regulating-cryptocurrency-exchanges-in-singapore/>.

⁷⁹⁰ See MONETARY AUTH. OF SING., P010-2018, CONSULTATION PAPER ON REVIEW OF THE RECOGNIZED MARKET OPERATORS REGIME (2018), <http://www.mas.gov.sg/~media/MAS/News%20and%20Publications/Consultation%20Papers/2018%20May%2022%20RMO%203P/Consultation%20Paper%20on%20RMO%20Regime.pdf>.

⁷⁹¹ FUNDERBEAM, INITIAL COIN OFFERINGS FUNDING REPORT 9 (2017), <https://coinreport.net/wp-content/uploads/2017/12/Funderbeam-report.pdf>.

arguably represented the industry's most consequential market—over 95% of bitcoin's daily trading volume was in renminbi, and over 50% of major mining pools were based in China.⁷⁹²

Starting in 2017, however, China significantly restricted its private cryptocurrency industry. First, it banned domestic ICOs in September 2017.⁷⁹³ Later that month, it banned all domestic cryptocurrency exchanges, though it did not ban OTC and peer-to-peer trading, nor did it effectively prevent foreign-operated exchanges from interfacing with Chinese consumers. In January 2018, China's Leading Group on Internet Financial Risks Remediation (the leading internet finance regulatory body in China) ordered all local governments to "actively guide" companies in their regions to exit the cryptocurrency mining industry.⁷⁹⁴ In February, the government blocked access to and banned foreign exchanges to sever the loophole that domestic traders had used to avoid the September 2017 domestic exchange ban. The government also suggested it would increase enforcement on "exchange-like" cryptocurrency service providers.⁷⁹⁵

Despite this strict treatment of cryptocurrencies, China has embraced the concept of a government-sanctioned virtual currency and of the blockchain. In March 2018, the Central Bank of China announced its intention to create a sovereign digital currency and suggested that it

⁷⁹² DR. GARRICK HILEMAN & MICHAEL RAUCHS, CAMBRIDGE CENTRE FOR ALT. FIN., GLOBAL CRYPTOCURRENCY BENCHMARKING STUDY 33, 93 (2017), https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2017-global-cryptocurrency-benchmarking-study.pdf.

⁷⁹³ Grant Clark & Lulu Yilun Chen, *How China's Stifling Bitcoin Cryptocurrencies: Quick Take*, BLOOMBERG, <https://www.bloomberg.com/news/articles/2018-01-09/how-china-s-stifling-bitcoin-and-cryptocurrencies-quicktake-q-a> (last updated Feb. 27, 2018, 6:28 PM).

⁷⁹⁴ Gabriel Wildau, *China Moves to Shutter Bitcoin Mines*, FIN. TIMES (Jan. 9, 2018), <https://www.ft.com/content/adfe7858-f4f9-11e7-88f7-5465a6ce1a00>.

⁷⁹⁵ See Clark & Chen, *supra* note 793.

could accept any virtual currency that had a stabilizing effect on the economy.⁷⁹⁶ Moreover, China increased its investment in blockchain technology—including a commitment to fostering the technology in the Communist Party’s most recent five-year plan—and encouraged private sector innovation.⁷⁹⁷ Finally, in May 2018, an editorial in a state-owned newspaper made the case for moving towards a cautiously permissive regulatory approach, in which cryptocurrency exchanges and ICOs were legal but more heavily regulated.⁷⁹⁸ While these changes have not yet widely materialized, their inclusion in a state-owned newspaper suggests an active exploration by the Communist Party of more permissive cryptocurrency regulation. This overall regulatory posture has led some commentators to speculate that China’s hostility towards cryptocurrencies lies not in its resistance to their innovative potential, but instead reflects the Communist Party’s reluctance to cede control in its financial markets to privately-operated and hard-to-control cryptocurrency platforms.⁷⁹⁹

4. Global Guidance

A number of transcontinental bodies also have published statements, guidance, and position papers regarding cryptocurrencies and blockchain technologies. Although many of these organizations have endeavored to embrace these new technologies, others have cast doubt on their safety and long-term viability.

⁷⁹⁶ Sidney Leng & Xie Yu, *China is open to idea of digital currency, as long as it’s ‘efficient and safe’*, S. CHINA MORNING POST (Mar. 9, 2018, 11:13 PM), <https://www.scmp.com/news/china/economy/article/2136551/china-open-idea-digital-currency-long-its-efficient-and-safe>.

⁷⁹⁷ Jane Li, *China wants to be a front runner in blockchain technology even if the ban on bitcoin remains*, S. CHINA MORNING POST (Mar. 7, 2018, 9:33 PM), <https://www.scmp.com/business/china-business/article/2136188/beijing-signals-it-wants-become-front-runner-blockchain>.

⁷⁹⁸ Xiao Xin, *Improved regulation makes more sense than just saying no to bitcoin in China*, GLOB. TIMES (May 30, 2018), <http://www.globaltimes.cn/content/1104753.shtml>.

⁷⁹⁹ See Clark & Chen, *supra* note 793.

(a) IOSCO

IOSCO⁸⁰⁰ published a lengthy report on fintech in February 2017, which defines and discusses a multitude of DLT and blockchain technology applications and potential associated risks, challenges, and benefits.⁸⁰¹ The report also highlights key regulatory developments in the area and acknowledges that IOSCO and other international organizations “are observing the developments of DLT under their respective objectives.”⁸⁰²

More recently, in January 2018, the IOSCO Board issued a press release advising investors to “be very careful in deciding whether to invest in ICOs” and highlighting the “clear risks” associated with them, deeming ICOs “highly speculative investments in which investors are putting their entire invested capital at risk.”⁸⁰³ The IOSCO Board has acknowledged that ICOs are “not standardized, and their legal and regulatory status is likely to depend on the circumstances of the individual ICO.”⁸⁰⁴ The IOSCO Board also established an ICO Consultation Network as a resource for IOSCO members, through which members may discuss their experiences and bring concerns, including cross-border issues, to the attention of regulators.⁸⁰⁵

Similarly, in May 2018, IOSCO issued a press release in relation to the organization’s

⁸⁰⁰ *About IOSCO*, IOSCO (last visited Mar. 7, 2019), http://www.iosco.org/about/?subsection=about_iosco (IOSCO “develops, implements and promotes adherence to internationally recognized standards for securities regulation,” and its membership regulates more than 95% of securities markets globally in more than 115 jurisdictions).

⁸⁰¹ *See IOSCO*, IOSCO RESEARCH REPORT ON FINANCIAL TECHNOLOGIES (FINTECH) 47–63 (2017), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD554.pdf>.

⁸⁰² *Id.* at 64.

⁸⁰³ *See Media Release* (No. 01/2018), IOSCO, IOSCO Board Communication on Concerns Related to Initial Coin Offerings (ICOs) (Jan. 18, 2018), <http://www.iosco.org/news/pdf/IOSCONEWS485.pdf>.

⁸⁰⁴ *Id.*

⁸⁰⁵ *Id.*

annual conference,⁸⁰⁶ where the IOSCO Board agreed to develop a Support Framework addressing domestic and cross-border issues related to ICOs, and to create a Fintech Network to serve as a collaborative forum for discussion of regulatory issues and emerging fintech risks.⁸⁰⁷ In collaboration with other international bodies, IOSCO reported to the G20⁸⁰⁸ at the July 2018 G20 summit that at present, crypto-asset platforms, like crypto-assets more generally, do not pose global financial stability risks, but they “raise other significant concerns, including consumer and investor protection, market integrity and money laundering/terrorism financing, among others.”⁸⁰⁹ IOSCO emphasized the importance of coordination among financial regulators in different jurisdictions in the crypto-asset space and noted that it may soon examine issues and risks associated with the operations of crypto-asset platforms that fall or should fall within security regulators’ auspices.⁸¹⁰

(b) G20, FSB, BCBS, CPML, BIS, and FATF

Several other international organizations have worked collaboratively with IOSCO and the G20 to address issues related to cryptocurrencies and blockchain. At the conclusion of their March 2018 summit, the G20 members issued a statement on crypto-assets, acknowledging crypto-assets’ potential to “improve the efficiency and inclusiveness of the financial system and the economy more broadly” but cautioning that they do “raise issues with respect to consumer

⁸⁰⁶ See Media Release (No. 13/2018), IOSCO, IOSCO Annual Conference Focuses on Key Challenges Facing Securities Regulators (May 10, 2018), <https://www.iosco.org/news/pdf/IOSCONEWS497.pdf>.

⁸⁰⁷ *Id.*

⁸⁰⁸ The G20 is a leading forum of major global economies, with 19 countries and the EU as members. See *What is the G20 Summit?*, G20.ORG, <https://www.g20.org/en/summit/about/> (last visited Mar. 7, 2019).

⁸⁰⁹ See FSB, CRYPTO-ASSETS: REPORT TO THE G20 ON WORK BY THE FSB AND STANDARD-SETTING BODIES 6 (2018) [hereinafter FSB CRYPTO-ASSETS REPORT TO G20], <http://www.fsb.org/wp-content/uploads/P160718-1.pdf>.

⁸¹⁰ *Id.*

and investor protection, market integrity, tax evasion, money laundering and terrorist financing,” “lack the key attributes of sovereign currencies,” and “could have financial stability implications.”⁸¹¹ In its March 2018 statement, the G20 also committed to apply the FATF⁸¹² standards to crypto-assets and called on international standard-setting bodies, including the FSB,⁸¹³ the CPMI,⁸¹⁴ the FATF, and IOSCO to report back to the G20 in July 2018 and continue monitoring crypto-assets and associated risks and assess multilateral responses as necessary.⁸¹⁵

In response to the March G20 statement, the FSB published a July 2018 report on its work and the work of other international organizations related to crypto-assets.⁸¹⁶ According to that report, in the first quarter of 2018, the FSB examined potential financial stability implications from crypto-assets and concluded that crypto-assets “do not pose a material risk to global financial stability at this time,” though the FSB supports “vigilant monitoring in light of

⁸¹¹ *Communiqué*, G20.ORG, http://www.g20.utoronto.ca/2018/2018-03-30-g20_finance_communique-en.html (last updated Aug. 29, 2018); see also *Communiqué Annex*, G20.ORG, http://www.g20.utoronto.ca/2018/2018-03-30-g20_finance_annex-en.html (last updated Mar. 21, 2018).

⁸¹² *Who we are*, FATF, <http://www.fatf-gafi.org/about/> (last visited Mar. 7, 2019) (the FATF is an inter-governmental body established to set standards and “promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system”).

⁸¹³ *About the FSB*, FSB, <http://www.fsb.org/about/> (last visited Mar. 7, 2019) (established in April 2009 as the successor to the Financial Stability Forum, the FSB is an “international body that monitors and makes recommendations about the global financial system” to “promote[] financial stability” by “coordinating national financial authorities and international standard-setting bodies as they work toward developing strong regulatory, supervisory and other financial sector policies”).

⁸¹⁴ *Committee on Payments and Market Infrastructures (CPMI)—overview*, BIS (last updated May 13, 2015), <https://www.bis.org/cpmi/> (CPMI, a committee of the BIS, “promotes the safety and efficiency of payment, clearing, settlement and related arrangements,” “monitors and analyses developments in these arrangements, both within and across jurisdictions,” and “serves as a forum for central bank cooperation in related oversight, policy and operational matters”); *About BIS—overview*, BIS, <https://www.bis.org/about/index.htm?m=1%7C1> (established in 1930 and based in Basel, Switzerland, the BIS is owned by 60 central banks across the globe and serves as a bank for other central banks).

⁸¹⁵ *Communiqué*, *supra* note 811; *Communiqué Annex*, *supra* note 811.

⁸¹⁶ See FSB CRYPTO-ASSETS REPORT TO G20, *supra* note 809.

the speed of developments and data gaps.”⁸¹⁷ To that end, the FSB worked collaboratively with the CPMI on a framework for monitoring financial stability risks related to crypto-assets, which the FSB Plenary approved in June 2018.⁸¹⁸

The FSB’s July 2018 G20 report also details the BCBS⁸¹⁹ efforts in the cryptocurrency space. The BCBS focuses on regulating and supervising banks globally to enhance financial stability, and its current initiatives in the crypto-asset context include: “(i) quantifying the materiality of banks’ direct and indirect exposures to crypto-assets; (ii) clarifying the prudential treatment of banks’ exposures to crypto-assets; and (iii) monitoring developments related to crypto-assets/FinTech and assessing their implications for banks and supervisors.”⁸²⁰

For its part, the CPMI has a mandate to promote safety and efficiency in payment, clearing, and settlement arrangements and has acknowledged the need to closely monitor digital currencies and DLT.⁸²¹ Since the issuance of its 2015 report on digital currencies, the CPMI has continued to monitor developments, and to develop frameworks and reports to assist central banks.⁸²²

⁸¹⁷ *Id.* at 1. This is in accord with an earlier report the FSB published in June 2017 regarding regulatory issues in fintech that warrant authorities’ attention. See FSB, FINANCIAL STABILITY IMPLICATIONS FROM FINTECH (2017), <http://www.fsb.org/wp-content/uploads/R270617.pdf>. Therein, the FSB considered the number of digital currencies “relatively small,” and as such, concluded that “they do not currently pose a systemic risk,” further stating that “given the difficulties of a [digital currency] ever accounting for a significant proportion of transactions in a jurisdiction, the likelihood of a [digital currency] ever becoming systematically important is judged to be low.” *Id.* at 52. If one or more digital currency were to achieve “widespread adoption,” however, the FSB acknowledged that financial stability issues could arise, such as challenges related to enforcing [KYC] and [AML] rules and overseeing a particular digital currency given its “international, borderless nature.” *Id.* at 52–53.

⁸¹⁸ See FSB CRYPTO-ASSETS REPORT TO G20, *supra* note 809, at 1, 8.

⁸¹⁹ *The Basel Committee – Overview*, BIS, <https://www.bis.org/bcbs/> (BCBS is a BIS committee responsible for prudential regulation of banks; it has 45 member central banks and bank supervisors from 28 jurisdictions).

⁸²⁰ FSB CRYPTO-ASSETS REPORT TO G20, *supra* note 809, at 6–7.

⁸²¹ *Id.* at 3.

⁸²² *Id.* at 3–4; see also CPMI, DIGITAL CURRENCIES (2015), <https://www.bis.org/cpmi/publ/d137.pdf>; CPMI, DISTRIBUTED LEDGER TECHNOLOGY IN PAYMENT, CLEARING AND SETTLEMENT: AN ANALYTICAL FRAMEWORK (2017),
(*cont’d*)

Separately, in June 2018, the BIS (of which the CPMI and the BCBS are member committees) issued its annual economic report and expressed skepticism about cryptocurrencies, concluding that cryptocurrencies “raise a host of issues” and are a “poor substitute for the solid institutional backing of money.”⁸²³ The BIS did acknowledge that the technology underlying cryptocurrencies (blockchain and DLT) “could have promise in other applications, such as the simplification of administrative processes in the settlement of financial transactions,” however.⁸²⁴

The FATF made a separate submission to the G20 in July 2018. In the submission, the FATF pledged to prioritize fostering improvements in regulation and supervision of virtual currencies and crypto-assets, outlined a comprehensive approach to combat increased use of virtual currencies and crypto-assets for money laundering and terrorist financing, and committed to examine how existing FATF standards may apply to virtual currencies and crypto-assets.⁸²⁵ In response to these developments, at the conclusion of its July 2018 meeting, the G20 reiterated its commitment to implementing FATF standards and further requested that the FATF clarify how its standards apply to crypto-assets.⁸²⁶ It also encouraged additional future updates from the FSB and other organizations regarding further work in monitoring potential risks of crypto-assets

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<https://www.bis.org/cpmi/publ/d157.pdf>; CPMI & BIS MARKETS COMMITTEE, CENTRAL BANK DIGITAL CURRENCIES (2018), <https://www.bis.org/cpmi/publ/d174.pdf>.

⁸²³ BIS, ANNUAL ECONOMIC REPORT 91 (2018), <https://www.bis.org/publ/arpdf/ar2018e5.pdf>; see Edward Robinson, *Bitcoin Could Break the Internet, Central Bank Overseer Says*, BLOOMBERG, <https://www.bloomberg.com/news/articles/2018-06-17/bitcoin-could-break-the-internet-central-banks-overseer-says> (last updated June 18, 2018, 10:20 AM).

⁸²⁴ ANNUAL ECONOMIC REPORT, *supra* note 823, at 91.

⁸²⁵ FATF, FATF REPORT TO THE G20 FINANCE MINISTERS AND CENTRAL BANK GOVERNORS 1–4 (2018), <http://www.fatf-gafi.org/media/fatf/documents/reports/FATF-Report-G20-FM-CBG-July-2018.pdf>.

⁸²⁶ *Communiqué*, UN ENVIRONMENT (July 21–22, 2018), http://unepinquiry.org/wp-content/uploads/2018/07/Communique_FMCBG_Meeting_July_2018.pdf.

and responses thereto.⁸²⁷ The G20 further acknowledged the “significant benefits” that technologies underlying crypto-assets can deliver to the financial system and larger economy, while again cautioning that they may “raise issues with respect to consumer and investor protection, market integrity, tax evasion, money laundering and terrorist financing.”⁸²⁸ The G20 nonetheless concluded that as of July 2018, crypto-assets “do not at this point pose a global financial stability risk,” but pledged to “remain vigilant” in monitoring the issue.⁸²⁹

In October 2018, the FSB published an additional report for G20 detailing potential cryptocurrency risks,⁸³⁰ and during its November 30-December 1, 2018 meeting, the G20 signed a declaration committing to regulate crypto-assets for AML and CFT “in line with FATF standards” and “consider other responses as needed.”⁸³¹

In sum, the inherently global, cross-border nature of emerging blockchain technologies and cryptocurrencies renders their monitoring and regulation inherently challenging, in a manner perhaps unparalleled in history. Accordingly, numerous regulators and larger organizations, both within and among countries and continents, continue to work collaboratively to examine how best to govern these areas in a manner that both protects investors and fosters continued innovation.

⁸²⁷ *Id.*

⁸²⁸ *Id.*

⁸²⁹ *Id.*

⁸³⁰ See FSB, CRYPTO-ASSETS: POTENTIAL CHANNELS FOR FUTURE FINANCIAL STABILITY IMPLICATIONS (Oct. 10, 2018), <http://www.fsb.org/wp-content/uploads/P101018.pdf>.

⁸³¹ *G20 Nations Agree to Reform WTO in Joint Declaration*, SAUDI GAZETTE (Dec. 1, 2018, 10:05 PM), <http://saudigazette.com.sa/article/549293/World/America/G20-nations-agree-to-reform-WTO-in-joint-declaration>.

SECTION 8. STATE LAW CONSIDERATIONS

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1. New York State Department of Financial Services' BitLicense

On June 24, 2015, the DFS adopted an extensive set of regulations on virtual currency businesses in New York State. Under the regulations, any person that is a resident of or located in, or has a place of business or is conducting business in New York and is engaged in a “virtual currency business activity” is required to obtain a license from the DFS. Licensed virtual currency businesses must have in place certain compliance policies; meet capital requirements set by the DFS on a case-by-case basis; meet prescribed customer protection and asset custody standards; keep certain required books and records; be subject to DFS examinations; have implemented AML and cyber security programs; have a business continuity and disaster recovery program in place; and establish and maintain a customer complaints process.⁸³²

(a) BitLicense Applicability

A three-step analysis helps determine if a business must be licensed under the DFS's BitLicense regulations. The first step is to determine whether the business's product or service involves a “virtual currency.” DFS Rule 200.2(p) defines “virtual currency” to include “any type of digital unit that is used as a medium of exchange or a form of digitally stored value.”⁸³³ The regulations further explain that “Virtual Currency shall be broadly construed to include digital

⁸³² N.Y. COMP. CODES R. & REGS. tit. 23, pt. 200 Virtual Currencies.

⁸³³ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2(p).

units of exchange that (i) have a centralized repository or administrator; (ii) are decentralized and have no centralized repository or administrator; or (iii) may be created or obtained by computing or manufacturing effort.”⁸³⁴ The definition of virtual currency explicitly excludes:

(1) digital units that (i) are used solely within online gaming platforms, (ii) have no market or application outside of those gaming platforms, (iii) cannot be converted into, or redeemed for, Fiat Currency or Virtual Currency, and (iv) may or may not be redeemable for real-world goods, services, discounts, or purchases.

(2) digital units that can be redeemed for goods, services, discounts, or purchases as part of a customer affinity or rewards program with the issuer and/or other designated merchants or can be redeemed for digital units in another customer affinity or rewards program, but cannot be converted into, or redeemed for, Fiat Currency or Virtual Currency; or

(3) digital units used as part of Prepaid Cards.⁸³⁵

If the business involves a virtual currency, the second step in the analysis is whether the business is engaged in a “virtual currency business activity.” The regulations define the term “virtual currency business activity” as the conduct of any one of the following types of activities involving New York or a New York Resident:

(1) receiving Virtual Currency for Transmission or Transmitting Virtual Currency, except where the transaction is undertaken for non-financial purposes and does not involve the transfer of more than a nominal amount of Virtual Currency;

(2) storing, holding, or maintaining custody or control of Virtual Currency on behalf of others;

⁸³⁴ *Id.*

⁸³⁵ *Id.* The regulations define a “Prepaid Card” to mean an electronic payment device that:

- (1) is usable at a single merchant or an affiliated group of merchants that share the same name, mark, or logo, or is usable at multiple, unaffiliated merchants or service providers;
- (2) is issued in and for a specified amount of Fiat Currency;
- (3) can be reloaded in and for only Fiat Currency, if at all;
- (4) is issued and/or reloaded on a prepaid basis for the future purchase or delivery of goods or services;
- (5) is honored upon presentation; and
- (6) can be redeemed in and for only Fiat Currency, if at all.

N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2(j).

- (3) buying and selling Virtual Currency as a customer business;
- (4) performing Exchange Services⁸³⁶ as a customer business; or
- (5) controlling, administering, or issuing a Virtual Currency.⁸³⁷

The development and dissemination of software in and of itself does not constitute a virtual currency business activity.⁸³⁸

If a business is found to be engaged in a virtual currency business activity, the final analysis is whether any of the exemptions apply. Exemptions are available to (1) persons that are chartered under the New York Banking Law and are approved by the superintendent to engage in Virtual Currency Business Activity; and (2) Merchants and consumers that utilize Virtual Currency solely for the purchase or sale of goods or services or for investment purposes.⁸³⁹

(b) Application Requirements

In addition to the payment of a nonrefundable \$5,000 fee, a license application must include, among other things, (1) information about the licensee and its affiliates, including business descriptions, a projected customer base, and specific marketing targets; (2) detailed biographical information, an independent investigatory agency background report, and a set of completed fingerprints for each principal of the licensee; (3) a current financial statement for the licensee and each principal; (4) details of the licensee's banking arrangements and insurance policies; (5) a copy of written policies and procedures related to the DFS BitLicense regulations; and (6) an explanation of the methodology used to calculate the applicable virtual currency's

⁸³⁶ "Exchange Service" means "the conversion or exchange of Fiat Currency or other value into Virtual Currency, the conversion or exchange of Virtual Currency into Fiat Currency or other value, or the conversion or exchange of one form of Virtual Currency into another form of Virtual Currency." *Id.* § 200.2(d).

⁸³⁷ *Id.* § 200.2(q).

⁸³⁸ *Id.*

⁸³⁹ *Id.* § 200.3(c).

value in fiat currency.⁸⁴⁰ The regulations establish a 90-day application review period, subject to extensions at the discretion of the superintendent of DFS.⁸⁴¹

To the extent that an applicant cannot satisfy all of the regulatory requirements, the regulations permit the superintendent of DFS, in his or her sole discretion, to grant a “conditional license” to such an applicant.⁸⁴² The DFS, however, has not publicly disclosed the factors it considers in exercising that discretion and whether it has granted a conditional license to any applicant.

Although a conditional license is potentially available, a number of virtual currency businesses, particularly smaller firms and start-up ventures, left New York rather than undergo the BitLicense application process that requires significant expenses in time and money.⁸⁴³

As of July 1, 2018, a search of the DFS’s database listed seven BitLicense holders: Coinbase, Inc.; Circle Internet Financial, Inc.; Ripple affiliate XRP II, LLC;⁸⁴⁴ bitFlyer USA, Inc.; Genesis Global Trading, Square Inc.; and Xapo. In addition, the DFS has granted limited purpose trust company banking charters under the New York Banking Law to Gemini Trust Company and Paxos Trust Company, formerly known as itBit Trust Company.

⁸⁴⁰ *Id.* §§ 200.4–5.

⁸⁴¹ *Id.* § 200.6(b).

⁸⁴² *Id.* § 200.4(c).

⁸⁴³ See Daniel Roberts, *Behind the ‘exodus’ of bitcoin startups from New York*, FORTUNE (Aug. 14, 2015), <http://fortune.com/2015/08/14/bitcoin-startups-leave-new-york-bitlicense/>.

⁸⁴⁴ On May 5, 2015, FinCEN, along with the U.S. Attorney’s Office for the Northern District of California, assessed a \$700,000 civil money penalty against XRP II, LLC and its parent company Ripple Labs Inc. The former willfully violated the Bank Secrecy Act by failing to implement an effective AML program and to report suspicious activity related to several financial transactions. See FinCEN Press Release, *supra* note 626.

(c) Ongoing Compliance Obligations

A BitLicense licensee is subject to DFS examination and ongoing compliance obligations. Each licensee must have a compliance program that ensures compliance with the BitLicense regulations and applicable federal and state laws and regulations.⁸⁴⁵ The compliance program must be reviewed and approved by the licensee's board of directors and overseen by a designated compliance officer.⁸⁴⁶ The regulations impose capital and custody requirements on licensees (capital requirements may be satisfied in the form of cash and virtual currency); the amount of capital required is left to the superintendent's discretion based on a list of outlined factors.⁸⁴⁷ Additionally, the regulations require (1) books and records similar to those in place for most financial firms; (2) licensees to deliver quarterly and audited annual financial reports to the superintendent; (3) superintendent approval for certain changes to the business or in control of the licensee; (4) advertising, marketing, and consumer protection measures, including

⁸⁴⁵ *Id.* § 200.7.

⁸⁴⁶ *Id.*

⁸⁴⁷ *Id.* § 200.8(a). The factors DFS considers when determining minimum capital requirements include:

- the composition of the Licensee's total assets, including the position, size, liquidity, risk exposure, and price volatility of each type of asset;
- the composition of the Licensee's total liabilities, including the size and repayment timing of each type of liability;
- the actual and expected volume of the Licensee's Virtual Currency Business Activity;
- whether the Licensee is already licensed or regulated by the superintendent under the Financial Services Law, Banking Law, or Insurance Law, or otherwise subject to such laws as a provider of a financial product or service, and whether the Licensee is in good standing in such capacity;
- the amount of leverage employed by the Licensee;
- the liquidity position of the Licensee;
- the financial protection that the Licensee provides for its customers through its trust account or bond;
- the types of entities to be serviced by the Licensee; and
- the types of products or services to be offered by the Licensee.

enumerated disclosures to customers of material risks and the delivery of confirmation receipts to customers after each transaction; and (5) a customer complaints process.⁸⁴⁸

The regulations also incorporate strict AML and cybersecurity requirements for licensees, though certain relief is available to licensees that are subject to federal AML requirements. In a June 3, 2015 speech, then-DFS Superintendent Benjamin Lawsky noted that there was a significant overlap between the rules dealing with AML issues and existing FinCEN regulations.⁸⁴⁹ As a result, FinCEN registrants that already file SARs in compliance with FinCEN regulations do not need to duplicate their work by filing SARs with the DFS.⁸⁵⁰

The regulations also require a licensee to establish and maintain a written anti-fraud policy that identifies fraud-related risk areas, including market manipulation, and incorporates effective procedures and controls to protect against such risks.⁸⁵¹ The policy must allocate responsibility for monitoring these risks and provide for periodic policy evaluations and revisions.⁸⁵² After adopting the BitLicense regulations, the DFS provided guidance on the anti-fraud policy mandate, requiring that a licensee submit a report to the Department “immediately upon the discovery of any wrongdoing.”⁸⁵³ Within 48 hours of submitting the report, the licensee

⁸⁴⁸ *Id.* §§ 200.10-12, 200.14, 200.18-20. A licensee must disclose terms and conditions, as well as material risks, to customers. The regulations enumerate the minimum material risk disclosures that must be provided to customers.

⁸⁴⁹ Superintendent Lawsky’s Remarks at the BITS Emerging Payments Forum (June 3, 2015).

⁸⁵⁰ *Id.*

⁸⁵¹ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.19(g).

⁸⁵² *Id.*

⁸⁵³ N.Y. State Dep’t of Fin. Servs., From Maria T. Vullo, Superintendent of Fin. Servs., to All Virtual Currency Business Entities Licensed under 23 NYCRR Part 200 or Chartered as Limited Purpose Trust Companies under the New York Banking Law on Guidance on Prevention of Market Manipulation and Other Wrongful Activity (Feb. 7, 2018) [hereinafter NYS DFS Guidance], <https://www.dfs.ny.gov/docs/legal/industry/il180207.pdf>. The guidance applies both to persons that hold a BitLicense and those chartered as a limited purpose trust company under the New York Banking Law.

must provide a “further report” of material developments relating to the original events, including a statement of (1) the actions taken or proposed to be taken with respect to such developments; and (2) any changes in the licensee’s operations that have been put in place or are planned in order to avoid repetition of similar events.⁸⁵⁴ A licensee must maintain records of each incident of wrongdoing.⁸⁵⁵

(1) Limited Exemptions

The DFS’s BitLicense regulations only provide exemptions from the licensing requirement for entities “chartered under the New York Banking Law” and “merchants and consumers using virtual currency solely for the purchase of goods or services or for investment purposes.”⁸⁵⁶ As a result, a global investment bank headquartered in Manhattan that is a regulated national bank with the Treasury Department’s Office of the Comptroller of the Currency, a registered broker-dealer with the SEC and FINRA member, or an FCM registered with the CFTC and NFA member would still be required to obtain a BitLicense, if it wanted to allow its New York customers to hold virtual currency in accounts with it. In addition, because the exemption is only for entities chartered under the New York Banking Law, money transmitters licensed by the DFS are not exempt from the BitLicense license requirement nor are BitLicense registrants exempt from money transmitter license requirement.⁸⁵⁷ In addition, the DFS BitLicense regime does not provide for any reciprocity for persons similarly registered in other states.

⁸⁵⁴ *Id.*

⁸⁵⁵ *Id.*

⁸⁵⁶ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.3(c).

⁸⁵⁷ See *BitLicense Frequently Asked Questions*, N.Y. STATE DEP’T OF FIN. SERVS., https://www.dfs.ny.gov/apps_and_licensing/virtual_currency_businesses/bitlicense_faqs (last visited Mar. 8, 2019).

(2) A Lack of Market Conduct Standards

Although the DFS's BitLicense regulations explicitly include virtual currency "exchangers," the regulations do not expressly articulate standards relating to market conduct generally, or conduct related to fraud or market manipulation, such as front-running, wash trading or spoofing. This lack of market conduct standards was one of the reasons the SEC cited for rejecting the Bats/Winklevoss Bitcoin Trust ETF application. Although the SEC acknowledged that the Gemini Exchange was regulated by the DFS, it observed that the DFS's regulations do not require virtual currency businesses registered with it to have the kinds of safeguards national securities exchanges are mandated to have, which are "designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest."⁸⁵⁸

The DFS has attempted to address the regulations' failure to set standards for market conduct by issuing guidance in February 2018.⁸⁵⁹ The guidance requires Bitlicense holders and limited purpose trust companies ("VC Entities") "to implement measures designed to effectively detect, prevent, and respond to fraud, attempted fraud, and similar wrongdoing."⁸⁶⁰ The guidance elaborates that "market manipulation is a form of wrongdoing about which VC Entities must be

⁸⁵⁸ Winklevoss Order, *supra* note 406, at 34 (quoting 15 U.S.C. § 78f(b)(5)).

⁸⁵⁹ NYS DFS Guidance, *supra* note 853.

⁸⁶⁰ *Id.* at 1.

especially vigilant.”⁸⁶¹ VC Entities are directed to implement written policies identifying the risks of fraud the entity faces given its business model, put in place procedures and controls against the identified risks, allocate responsibility for monitoring risks, and periodically evaluate the effectiveness of the controls and monitoring mechanisms.⁸⁶²

2. New York Limited Purpose Trust Charter

In New York, virtual currency businesses are exempt from the DFS’s BitLicense requirements if they are chartered under the New York Banking Law, most commonly as a limited purpose trust company, and are approved by the superintendent to engage in Virtual Currency Business Activity.⁸⁶³ Before the DFS implemented its BitLicense regime, a firm could obtain a limited purpose trust company charter from the DFS to immediately commence its virtual currency operations.⁸⁶⁴ However, in March 2014, the DFS indicated that any virtual currency exchange licensed under the New York Banking Law would be expected to meet the substantive requirements of the BitLicense when finalized.⁸⁶⁵

Limited purpose trust companies are entities chartered under the bank and trust company provisions of the New York Banking Law. A limited purpose trust company is subject to many of the same requirements that apply to a bank operating under a New York State banking

⁸⁶¹ *Id.*

⁸⁶² *Id.* at 2.

⁸⁶³ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.3(c).

⁸⁶⁴ Press Release, N.Y. State Dep’t of Fin. Servs., NYDFS Issues Public Order on Virtual Currency Exchanges (Mar. 11, 2014), https://www.dfs.ny.gov/reports_and_publications/press_releases/pr1403111.

⁸⁶⁵ *Id.*

charter.⁸⁶⁶ Under New York law, a trust company has general powers available to banks and trust companies, including:

- the power to discount, purchase and negotiate promissory notes, drafts, bills of exchange and other written obligations for the payment of money;
- the power to purchase accounts receivable;
- the power to borrow and lend money on a secured or unsecured basis;
- the power to buy and sell exchange, coin and bullion;
- the power to receive deposits of money, personal property and securities; and
- the power to exercise all other incidental powers that are necessary to carry on the business of banking.⁸⁶⁷

While a limited purpose trust company, unlike a trust company, is not allowed to make loans or take deposits, it can still serve as the custodian of customer funds.⁸⁶⁸ In practice, most limited purpose trust companies typically engage in activities such as employee benefit trust, personal trust, corporate trust, transfer agency, securities clearance, investment management and custodial services.⁸⁶⁹ Because of the limited nature of its activities, however, a limited purpose trust company is not eligible for FDIC deposit insurance.⁸⁷⁰ At the same time, limited purpose trust companies can indirectly provide FDIC insurance to their clients by holding the deposits at an FDIC-insured institution.⁸⁷¹

⁸⁶⁶ See Houman Shadab, *What itBit's Banking Law Charter Really Means*, COINDESK, <https://www.coindesk.com/in-itbit-we-trust/> (last updated May 19, 2015, 4:34 AM).

⁸⁶⁷ N.Y. BANKING LAW § 96 (McKinney).

⁸⁶⁸ *Organization of a Trust Company for the Limited Purpose of Exercising Fiduciary Powers*, N.Y. STATE DEP'T OF FIN. SERVS. [hereinafter NYS DFS Trust Co. Org.], <https://www.dfs.ny.gov/banking/iaus1b.htm> (last visited Mar. 8, 2019).

⁸⁶⁹ *Id.*

⁸⁷⁰ *Id.*

⁸⁷¹ Shadab, *supra* note 866.

(a) Similarities to DFS BitLicense Regulations

Like the BitLicense regulations, the regulations require an entity chartered as a New York limited purpose trust company to obtain approval from the DFS when there is a change in the general character of its business or a change in its corporate structure or control.⁸⁷² Under the limited purpose trust charter, an entity must comply with similar regulatory compliance requirements as required by the BitLicense, including AML requirements;⁸⁷³ Office of Foreign Assets Control of the U.S. Treasury Department requirements;⁸⁷⁴ cybersecurity requirements and programs;⁸⁷⁵ anti-fraud requirements;⁸⁷⁶ disclosure requirements;⁸⁷⁷ and reporting requirements.⁸⁷⁸

(b) Key Differences Between the Limited Purpose Trust Charter and the DFS BitLicense Regime

Unlike the BitLicense regime, the limited purpose trust charter does not have uniform application processes and fees.⁸⁷⁹ Fees vary based on the type and purpose of the applicant. Because the limited purpose trust charter does not have a conditional license like that of the BitLicense regime, all limited purpose trust company applicants must be ready to comply with the full set of requirements when applying with the DFS.

⁸⁷² NYS DFS Trust Co. Org., *supra* note 868.

⁸⁷³ N.Y. COMP. CODES R. & REGS. tit. 3, § 504.1.

⁸⁷⁴ N.Y. COMP. CODES R. & REGS. tit. 3, § 504.1.

⁸⁷⁵ N.Y. COMP. CODES R. & REGS. tit. 23, §§ 500.00, 500.03 (including the cybersecurity requirement for a written disaster recovery and business continuity plan).

⁸⁷⁶ NYS DFS Guidance, *supra* note 853.

⁸⁷⁷ *See, e.g.*, N.Y. COMP. CODES R. & REGS. tit. 3, § 13.2.

⁸⁷⁸ *See, e.g.*, N.Y. COMP. CODES R. & REGS. tit. 3, § 24.1.

⁸⁷⁹ *See Application Fee Schedule*, N.Y. STATE DEP'T OF FIN. SERVS., https://www.dfs.ny.gov/apps_and_licensing/application_fee_schedule (last visited Mar. 8, 2019).

Additionally, the limited purpose trust charter provides chartered entities with powers generally associated with trustees and other fiduciaries that the BitLicense regime does not provide to its licensees.⁸⁸⁰ Activities specifically identified in the statute as activities that New York trust companies may conduct with respect to their fiduciary accounts include:

- the power to accept deposits exclusively in a fiduciary capacity, including in the capacity to receive and disburse money, to transfer, register and countersign evidences of indebtedness or other securities, and to act as attorney-in-fact or agent;⁸⁸¹ and
- the power to accept appointment as receiver, trustee, or committee of the property or estate of any person in insolvency or bankruptcy proceedings.⁸⁸²

While BitLicense capital requirements only mandate the maintenance of sufficient capital (with no set minimum), the limited purpose trust charter sets a minimum of \$2,000,000 in Tier 1 capital for the initial capitalization of chartered entities.⁸⁸³ Limited purpose trust companies must maintain their Tier 1 capital at a level no less than 0.25% of discretionary assets.⁸⁸⁴

3. New York Attorney General Virtual Markets Integrity Initiative

On April 17, 2018, following the adoption of the BitLicense regulations, former New York Attorney General Eric T. Schneiderman sent letters to 13 major virtual currency businesses as part of the Virtual Markets Integrity Initiative, which was “a fact-finding inquiry into the

⁸⁸⁰ N.Y. BANKING LAW § 100 (McKinney).

⁸⁸¹ N.Y. BANKING LAW § 96 (McKinney).

⁸⁸² N.Y. BANKING LAW § 100 (McKinney).

⁸⁸³ NYS DFS Trust Co. Org., *supra* note 868 (“Tier 1 capital will consist of permanent core capital elements (common stockholders’ equity, noncumulative perpetual preferred stock, a limited amount of cumulative preferred stock, and minority interest in the equity of consolidated subsidiaries) less goodwill and other intangible assets that are required to be deducted.”).

⁸⁸⁴ NYS DFS Trust Co. Org., *supra* note 868.

policies and practices of platforms used by consumers to trade virtual or ‘crypto’ currencies like bitcoin and [E]ther.”⁸⁸⁵ The letters included a questionnaire that requested the recipients “to disclose information falling within six major topic areas, including (1) Ownership and Control, (2) Basic Operation and Fees, (3) Trading Policies and Procedures, (4) Outages and Other Suspensions of Trading, (5) Internal Controls and (6) Privacy and Money Laundering.”⁸⁸⁶ In addition to virtual currency businesses that operate under the BitLicense or New York limited purpose trust charter, virtual currency businesses that did not operate in New York also received Schneiderman’s request.⁸⁸⁷ One such recipient, California-based cryptocurrency exchange Kraken, publicly stated that it will not respond to the request because it no longer operates in New York.⁸⁸⁸

4. State Securities Regulation of Virtual Currencies and Initial Coin Offerings

Most states currently lack comprehensive statutes that address the regulation of virtual currency businesses, the offer and sale of virtual currencies, or both. While many states have imposed regulations to address the virtual currency context, such as money transmitter regulations on offerors of virtual currency,⁸⁸⁹ most states have not focused on the issuance of novel virtual currencies or tokens through ICOs.

⁸⁸⁵ Press Release, N.Y. State Office of the Att’y Gen., A.G. Schneiderman Launches Inquiry Into Cryptocurrency “Exchanges,” <https://ag.ny.gov/press-release/ag-schneiderman-launches-inquiry-cryptocurrency-exchanges>.

⁸⁸⁶ *Id.*

⁸⁸⁷ *Id.*

⁸⁸⁸ Matthew Leising, *Kraken Defies N.Y. Attorney General’s Cryptocurrency Inquiry*, BLOOMBERG (Apr. 20, 2018, 11:17 AM), <https://www.bloomberg.com/news/articles/2018-04-20/kraken-ceo-reaffirms-schneiderman-snub-despite-n-y-registration>.

⁸⁸⁹ See Appendix for 50 state survey of virtual currency regulation.

(a) The Uniform Law Commission Attempts to Establish a Uniform Framework

Recognizing the importance of creating a uniform virtual currency framework at the state level, the ULC attempted to bridge the regulatory gap between states at its annual conference in July 2017. The ULC adopted and recommended for enactment in all states a URVCBA.⁸⁹⁰ The URVCBA aims to form a common statutory framework for states to regulate virtual currency-related activity.⁸⁹¹ Once an entity is deemed to be engaging in regulated activity, the URVCBA imposes many of the same requirements as the DFS's BitLicense regime.⁸⁹² Under the URVCBA, an entity must apply for a license and be approved following a thorough review of the applicant's policies, procedures and background.⁸⁹³ Once licensed, an entity is subject to examinations⁸⁹⁴ and recordkeeping requirements,⁸⁹⁵ and must maintain compliance programs and procedures including information security and operational security, business continuity, disaster recovery, anti-fraud, AML, and prevention of terrorist financing programs.⁸⁹⁶ To date, three states (Connecticut, Hawaii, and Nebraska) have introduced the bill on their floors, but no state has yet adopted the model law.

⁸⁹⁰ *Uniform Regulation of Virtual-Currencies Businesses Act* (ULC July 2017), <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=ef45a10b-ac62-ad3d-2f42-588d7eac3e40&forceDialog=0>.

⁸⁹¹ ULC, *UNIFORM REGULATION OF VIRTUAL CURRENCY BUSINESSES ACT* UNIFORM LAW COMMISSION (2017), <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=cdee1c95-3cfc-690f-5beb-f982935337f8&forceDialog=0>.

⁸⁹² A few key differences are that the URVCBA provides (i) for a *de minimis* threshold under which licensure is not required (URVCBA § 103(b)(8)), (ii) reciprocity if licensed in another state under that state's version of the URVCBA (URVCBA § 204), and (iii) an exemption for *all* banks from the licensure requirements, not just banks chartered in that state (URVCBA § 103(b)(2)).

⁸⁹³ URVCBA Article 2 Licensure.

⁸⁹⁴ *Id.* Article 3 Examination; Examination Fees; Disclosure of Information Obtained During Examination.

⁸⁹⁵ *Id.* § 302.

⁸⁹⁶ *Id.* § 601.

(b) State Regulation of ICOs

ICOs' unique characteristics create a gray area for federal and state legislators. The SEC has been clear that it considers the majority of ICOs to be security offerings and expects the issuers of ICOs to comply fully with federal securities laws. In addition, states have begun to bring their own actions against issuers of ICOs under state law, for fraudulent securities offerings. In 2018, nine states' securities regulatory bodies have issued at least one summary cease and desist order, with Texas issuing eight orders.⁸⁹⁷ In May 2018, the North American Securities Administrators Association announced "Operation Cryptosweep," a coordinated series of sweeps by multiple state and provincial regulators across the U.S. and Canada to check and halt false securities offerings and raise public awareness of the risks associated with ICOs and cryptocurrency-related investment products.⁸⁹⁸ The effort netted more than 70 inquiries and investigations, and 35 pending or completed enforcement actions centered on ICOs or virtual currencies.⁸⁹⁹

Currently, Wyoming is the only state that has enacted a statute to address the regulation of ICOs. In March 2018, Wyoming Governor Matt Mead signed into law Wyoming House Bill 70, known as the "Utility Token Bill."⁹⁰⁰ The bill designates certain virtual currencies as "utility tokens" that offer access to a future service or product.⁹⁰¹ As such, utility tokens are considered a

⁸⁹⁷ See Jason P. Gottlieb, *MoCo Cryptocurrency Litigation Tracker—Summary Suspensions / Cease and Desist Orders*, MORRISON COHEN LLP, <https://www.morrisoncohen.com/news-page?itemid=471> (last visited Mar. 8, 2019).

⁸⁹⁸ *State and Provincial Securities Regulators Conduct Coordinated International Crypto Crackdown*, N. Am. Sec. Adm'rs Ass'n (May 21, 2018), <http://www.nasaa.org/45121/state-and-provincial-securities-regulators-conduct-coordinated-international-crypto-crackdown-2/>.

⁸⁹⁹ *Id.*

⁹⁰⁰ WYO. STAT. ANN. § 17-4-206 (West).

⁹⁰¹ *Id.*

means of exchange for these products or services or a type of a discount coupon, rather than an investment. The bill allows virtual currency companies to qualify their offerings as utility tokens and exempts them from state security laws if the tokens and their issuers meet the following requirements:

- (1) The token is not marketed by its developers as an investment opportunity;
- (2) The token is able to be exchanged for goods and services; and
- (3) Developers have not agreed to repurchase the tokens.⁹⁰²

The Utility Token Bill gives companies freedom to act broadly in the virtual currency sphere—as issuers, exchanges, wallet providers—without meeting the licensing requirements of laws.

⁹⁰² *Id.*

APPENDIX: 50-STATE VIRTUAL CURRENCY REGULATION SURVEY (AS OF JANUARY 23, 2019)

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This Cryptocurrency Money Transmitter Licensing Survey is split into two parts. Part 1 is a summary chart that briefly identifies what legislative or regulatory steps, if any, a state has taken with respect to the licensing or regulation of cryptocurrency. It does not identify every cryptocurrency activity that may be subject to licensure in a particular state; reference to Part 2 is required for such an analysis. Part 2 is a detailed chart that provides key provisions of the state law that applies to cryptocurrency activity, which is usually the state’s money transmitter law, for those states in which there is a licensing obligation. Part 2 does not contain every provision of the applicable state law. The detailed chart also has provisions from the Uniform Regulation of Virtual Currency Businesses Act.

This Survey provides information on laws, regulations, and guidance that already exist as well as proposed state bills or regulations that contemplate some sort of cryptocurrency regulation. It is intended to address state efforts aimed at requiring (or not requiring) licensing or otherwise regulating cryptocurrency businesses. It does not cover every state law that discusses or addresses cryptocurrency, such as, for example, statutes or regulations (enacted or proposed) concerning tax treatment of cryptocurrency, requesting studies of cryptocurrency, regulatory sandboxes, state securities’ law implications, or the treatment of cryptocurrency under abandoned property laws. It also does not discuss every state enforcement action that has addressed cryptocurrencies, though it notes any of particular importance.

This Survey uses the term “cryptocurrency” as a generally-applicable term intended to include other, similar currencies addressed in state regulatory regimes, such as virtual currency or digital currency.

PART 1: SUMMARY CHART

Standalone Cryptocurrency Regulation		Is License Required? ⁹⁰³
New York	New York Department of Financial Services promulgated rules that require licensing for any entity engaging in the following: • Receiving virtual currency for transmission or transmitting virtual currency, except where the transaction is undertaken for non-financial purposes and does not involve the transfer of more than a nominal amount of virtual currency; • Storing, holding or maintaining custody or control of virtual currency on behalf of others; • Buying and selling virtual currency as a customer business; • Performing exchange services as a customer business; or • Controlling, administering or issuing a virtual currency N.Y. COMP. CODES R. REGS. tit. 23, Part 200.	Yes, license required for at least some cryptocurrency activity
Guidance on Cryptocurrency Through Existing Legal Frameworks		Is License Required?
Alabama	Effective August 1, 2017, Alabama repealed its Sale of Checks Act and replaced it with a Monetary Transmission Act. Under the new law, a license is required to, <i>inter alia</i>, receive monetary value for transmission, and <i>monetary value</i> is defined as a “medium of exchange, including virtual or fiat currencies, whether or not redeemable in money.” ALA. CODE § 8-7A-2(8).	Yes, license required for at least some cryptocurrency activity
Alaska	The Division of Banking and Securities of the Department of Commerce, Community, and Economic Development appears to require licensed money transmitters or applicants for a money transmitter license to enter into a “Limited License Agreement” if they will provide transmission services for cryptocurrency or incorporate cryptocurrency into their transmission services for fiat currencies. The agreements state that a money transmitter license does <u>not</u> permit the licensee to transmit cryptocurrency, and the licensee may not state or imply that it is licensed to transmit cryptocurrency. Moreover, a licensee must disclose the following statement whenever it discloses that it holds a money transmission license: “Please note that this license does not cover the transmission of virtual currency.” The license agreement states that the Division is unable under state law to license an entity to transmit cryptocurrency, but the indication is that the Division will not prevent such transmission if the licensee has entered into the Limited License Agreement.	No

⁹⁰³ In this Part 1, the summary analysis of whether a license is required assumes the business is engaging in the relevant licensable activity, if any, involving only cryptocurrency. If the business engages in the same activity involving fiat currency (*e.g.*, fiat currency is exchanged for cryptocurrency), the licensing determination would likely differ. For example, states that are listed as “no” may require a money transmitter license where the entity is receiving and transmitting fiat currency (or sovereign currency) in connection with a cryptocurrency transaction or exchange. A further analysis would be needed.

Arkansas	The Arkansas Securities Department (“Department”) issued a no-action letter for CEX.IO, which is “an online virtual currency exchange allowing buyers and sellers of Bitcoin and other virtual currencies to trade with one another over the Internet.” The letter simply concludes it is agreeing with the company that a license is not required, but it does not provide further detail on the regulator’s rationale. Notably, the letter attaches the request from the company, and the request notes that several other states also provided the company with a no-action position.	Not for a cryptocurrency exchange (as detailed in the no-action letter)
Colorado	In September 2018, the Colorado Department of Regulatory Agencies (“Department”) issued guidance that cryptocurrency is not money because it is not legal tender. Therefore, transmission of cryptocurrency, and only cryptocurrency, between two consumers does not require a license. Neither does transmission of cryptocurrency between two consumers through a third-party, when no fiat currency is involved in the transmission. However, “the presence of fiat currency during a transmission may be subject to licensure.” Specifically, the guidance says a license is required if an entity (1) “engage[s] in the business of selling and buying cryptocurrencies for fiat currency”; and (2) “[a] Colorado customer can transfer cryptocurrency to another customer within the exchange”; and (3) “[t]he exchange has the ability to transfer fiat currency through the medium of cryptocurrency.” The guidance also suggests contacting the Department for a licensing determination if a “business model has the ability to transfer fiat currency through the medium of cryptocurrency.”	Yes, license required for at least some cryptocurrency activity
Connecticut	The Connecticut Money Transmission Act requires a license “to engage in the business of money transmission.” CONN. GEN. STAT. § 36a-597. The phrase <i>money transmission</i> is defined as “issuing or selling payment instruments or <u>stored value</u> ” or “receiving money or <u>monetary value</u> for current or future transmission.” The phrase <i>monetary value</i> is defined as “a <u>medium of exchange</u> , whether or not redeemable in money”; <i>virtual currency</i> is defined, in part, as “any type of digital unit that is used as a <u>medium of exchange</u> or a form of digitally <u>stored value</u> or that is incorporated into payment system technology.” The Act also requires applicants and licensees to specify whether their activities will involve the transmission of monetary value in the form of cryptocurrency. The Commissioner may take certain actions, such as denying an application or imposing additional restrictions, if cryptocurrency transmission will occur. <i>Id.</i> § 36a-600.	Yes, license required for at least some cryptocurrency activity
Florida	In September 2014, the Florida Office of Financial Regulation issued a consumer alert on cryptocurrency. The alert noted that “[v]irtual currency and the organizations using them are not regulated by the OFR.”	No
Georgia	Effective July 1, 2016, Georgia added the term <i>virtual currency</i> as a defined term in its Money Transmitter Law and defined it as “a digital representation of <u>monetary value</u> that does not have legal tender status as recognized by the United States government.” GA. CODE ANN. § 7-1-680(26). A license is required under the law to, <i>inter alia</i> , receive “money or <u>monetary value</u> for transmission.”	Yes, license required for at least some cryptocurrency activity
Hawaii	In private discussions that have since been made public, the Hawaii Division of Financial Institutions indicated that cryptocurrency businesses must be licensed under the state’s Money Transmission Act and must meet the Act’s permissible investments requirement with cash reserves. Previously, the Hawaii Division of Financial Institutions stated that the “DFI licenses money transmitters in Hawaii and has not licensed any crypto-currency companies to do bitcoin exchanges, wallets or ‘mining’ activity. If companies are offering to transmit bitcoins, they are doing so in violation of Hawaii’s money transmitter laws.” Hawaii Department of Commerce and Consumer Affairs, State Warns Consumers on Potential Bitcoin Issues (February 26, 2014).	Yes, license required for at least some cryptocurrency activity

Idaho	On its website, the Idaho Department of Finance has noted that “[i]f you act as a virtual/digital currency exchanger and accept legal tender (<i>e.g.</i> , government backed/issued ‘fiat’ currencies) for later delivery to a third party in association with the purchase of a virtual currency, then you must be licensed as a money transmitter with the Department of Finance.” The Department has also issued a substantial number of no-action letters relating to cryptocurrency detailing the circumstances under which licensure is (or is not) required.	Yes, license required for at least some cryptocurrency activity
Illinois	In June 2017, the Illinois Department of Financial and Professional Regulation issued a guidance document explaining its view on how the state’s Transmitters of Money Act applied to cryptocurrency. The guidance distinguishes “centralized virtual currencies” from “decentralized.” For centralized virtual currencies, the guidance concludes that the Department will have to make individual licensing determinations. For decentralized currencies, however, the guidance concludes that the Transmitters of Money Act does not apply to the transmission of decentralized cryptocurrencies. The guidance provides additional examples explaining when the Act would apply. Illinois Department of Financial and Professional Regulation, Digital Currency Regulatory Guidance (June 13, 2017)	No, for decentralized cryptocurrencies; individual determinations required for centralized cryptocurrencies
Kansas	In June 2014, the Kansas Bank Commissioner issued a guidance document explaining its view on how the state’s Money Transmitter Act applied to cryptocurrency. The guidance distinguishes “centralized virtual currencies” from “decentralized.” For centralized virtual currencies, the guidance concludes that the department will have to make individual licensing determinations. For decentralized currencies, however, the guidance concludes that the Money Transmitter Act does not apply to the transmission of decentralized cryptocurrencies. The guidance provides additional examples explaining when the Act would apply. Kansas Office of the State Bank Commissioner, Guidance Document MT 2014-01 (June 6, 2014)	No, for decentralized cryptocurrencies; individual determinations required for centralized cryptocurrencies
Louisiana	In August 2014, the Louisiana Office of Financial Institutions issued an advisory on cryptocurrency. The advisory discussed, in part, FinCEN’s guidance on cryptocurrency, noting that the guidance defined “users,” “administrators,” and “exchangers.” The advisory then states that “[f]or purposes of the Louisiana Sale of Checks and Money Transmission Act, an exchanger is the only party who may be subject to licensure as a money transmitter by this Office at this time.”	Maybe, but only if an exchanger
Maryland	In April 2014, the Maryland Commissioner of Financial Regulation issued an advisory notice on cryptocurrency. The advisory states that “[c]urrently, Maryland does not regulate virtual currencies.”	No
Massachusetts	In December 2017, the Secretary of the Commonwealth of Massachusetts issued a warning about Bitcoin. The warning noted that “Bitcoin and other virtual currencies are not regular money, as they are not backed by the United States or any other government or central bank.” While Secretary Galvin did not mention whether the Commonwealth intends to regulate cryptocurrency, he noted the “unregulated . . . nature of Bitcoin”	No
New Hampshire	In 2015, New Hampshire amended its Money Transmitter Act to include cryptocurrency. Under the law, a license is required to act as a “money transmitter,” which was, in turn, defined to include “receiving currency or monetary value for transmission to another location,” and “monetary value” includes “convertible virtual currency.” N.H. REV. STAT. ANN. §§ 399-G:1, 2. However, effective August 1, 2017, a new bill went into effect that, although it does not alter the 2015 changes, provides a cryptocurrency exemption to the Act. Under the new law, the Money Transmitter Act does not apply to “Persons who engage in the business of selling or issuing payment instruments or stored value solely in the form of convertible virtual currency or receive convertible virtual currency for	No

	transmission to another location. Such persons shall be subject to the provisions of RSA 358-A.” [Chapter 358-A regulates unfair business practices.]	
New Mexico	The Division of Financial Institutions of New Mexico’s Regulation and Licensing Department posted FAQs on its website that address cryptocurrencies. For “virtual currency exchanges or other businesses engaged in the exchange of crypto currency for monetary value,” the FAQs state that “any entity engaged in the business of providing the exchange of virtual currency for money or any other form of monetary value or stored value to persons located in the State of New Mexico must be licensed by the FID as a money transmitter.” However, the “exchange of crypto currencies, such as Bitcoin,” does not require an entity to obtain a “currency exchange” license (as opposed to a money transmitter license). <i>Monetary value</i> is defined as “a medium of exchange, whether or not redeemable in money.” N.M. STAT. ANN. § 58-32-102(N). <i>Money</i> is defined as “a medium of exchange that is authorized or adopted by the United States or a foreign government. ‘Money’ includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more governments.” <i>Id.</i> § 58-32-102(O).	Yes, license required for at least some cryptocurrency activity
North Carolina	A license is required to engage in money transmission, which is defined to include “maintaining control of virtual currency on behalf of others.” N.C. GEN. STAT. § 53-208.42(13). <i>Virtual currency</i> is defined as a “digital representation of value that can be digitally traded and functions as a medium of exchange, a unit of account, or a store of value but only to the extent defined as stored value under [the Money Transmitter Act], but does not have legal tender status as recognized by the United States Government.” <i>Id.</i> § 53-208.42(20). The North Carolina Commissioner of Banks has also provided detailed guidance on cryptocurrency in the form of FAQs, which describe the varying licensing treatment of cryptocurrency businesses.	Yes, license required for at least some cryptocurrency activity
North Dakota	The North Dakota Department of Financial Institutions has indicated in an FAQ that it “does not consider the control or transmission of virtual currency to fall under the scope of” the state’s money transmitter law, so long as the company does not also hold or transmit fiat currency.	No
Ohio	The Ohio MY Application (available via NMLS) includes the following (however, no further written clarification or requirements have been identified): “ Virtual Currency: If the applicant will engage in the transaction of virtual currency in the course of money transmission activities, provide a current third party security audit of all relevant computer and information systems.”	Unclear, though arguably no
Oregon	A license is required to engage in <i>money transmission</i> , which is defined as “selling or issuing payment instruments or engaging in the business of receiving money for transmission, or transmitting money within the United States or to locations abroad by any and all means, including but not limited to payment instrument, wire, facsimile or electronic transfer.” OR. REV. STAT. § 717.200(10). Oregon defines <i>money</i> as “a medium of exchange that: (a) The United States or a foreign government authorizes or adopts; or (b) Represents value that substitutes for currency but that does not benefit from government regulation requiring acceptance of the medium of exchange as legal tender.” OR. REV. STAT. § 717.200(11). In its Spring 2018 newsletter entitled <i>Common Ground</i> , the Department of Consumer and Business Services (Oregon Division of Financial Regulation) stated that “[c]urrently, cryptocurrency is not regulated by the federal government or by the State of Oregon.” It went on to	Unclear, though arguably yes for at least some cryptocurrency activity

	state, however, that “Oregon law requires companies that transfer digital currency from one person to another to be licensed as money transmitters. Digital currency exchange companies that only turn cash into digital currency are not required to be licensed.” In addition, the Department encouraged consumers wishing to “transmit cryptocurrency to someone else, [to] use a digital currency exchange that is licensed with the state.”	
Pennsylvania	In October 2014, the Pennsylvania Department of Banking and Securities stated the following in its newsletter: “The Department of Banking and Securities has received several requests for opinions on whether the Money Transmitter Act (MTA) and the Pennsylvania Securities Act of 1972 (1972 Act) apply to virtual currencies such as Bitcoin. As a general matter, the MTA applies to persons engaged in the business of transmitting money. The MTA does not define the term “money.” However, Pennsylvania law defines money generally as “lawful money of the United States,” referring to the legal tender designated by federal law (the Federal Reserve notes and coin that are commonly used). To date, Bitcoin and other virtual currencies have not been designated by federal law as legal tender. Thus, virtual currencies like Bitcoin are not “money,” and their transmittal is not subject to the licensing requirements of the MTA. While virtual currencies such as Bitcoin are not currently viewed as “securities” in and of themselves under the 1972 Act, investments in pooled interests of virtual currencies may be securities and subject to registration under the 1972 Act.” We note, however, Pennsylvania amended the MTA in 2017 and now defines <i>money</i> as “currency or legal tender or any other product that is generally recognized as a medium of exchange.” In January 2019, the Department issued a new guidance stating that only fiat currency or currency issued by the U.S. government is money under the MTA; therefore, virtual currency is not money under the MTA. The guidance clarifies that virtual currency platforms that facilitate the purchase or sale of virtual currency in exchange for fiat currency are not money transmitters, provided they do not handle the fiat currency itself. The guidance noted that such platforms do not directly handle fiat currency because “any fiat currency paid by or to a user is maintained in a bank account in the Platform’s name at a depository institute.” Moreover, virtual currency ATMs, kiosks, and vending machines are not money transmitters because the consumer “merely exchanges fiat currency for virtual currency and vice versa.”	No, in most cases
South Carolina	In 2016, South Carolina enacted the South Carolina Anti-Money Laundering Act (the “Act”), and the regulations implementing the Act became effective in May 2018. In response to a FAQ asking if the transmission of cryptocurrency is regulated under the Act, the South Carolina Attorney General has indicated that it will issue further guidance “in the near future.”	Arguably no, pending further guidance
Tennessee	In December 2015, the Tennessee Department of Financial Institutions issued a memorandum concluding that the transmission of cryptocurrency is not subject to regulation under the State’s Money Transmitter Act if the transmission does not also involve sovereign currency. The memorandum also discusses other common scenarios. Tennessee Department of Financial Institutions, Memorandum (Dec. 16, 2015)	No
Texas	In April 2014, the Texas Department of Banking issued guidance on the application of the Money Services Act to cryptocurrency activities. The guidance distinguishes between (a) centralized cryptocurrencies, which it explains are created and issued by a specified source and rely on an entity with some form of authority or control over the currency, and (b) decentralized cryptocurrencies, which are not created or	No, for decentralized cryptocurrencies, absent involvement of fiat currency or

	issued by a particular person or entity, have no administrator and have no central repository. For centralized cryptocurrencies, the guidance concludes that the department will have to make individual licensing determinations. For decentralized currencies, however, the guidance concluded that some, but not all, cryptocurrency activities are subject to the Money Services Act. The Department revised its guidance in Jan. 2019. The revised guidance still takes the position that individual licensing determinations must be made for centralized cryptocurrency activity. As for decentralized cryptocurrency activities, exchanging cryptocurrency for sovereign currency is <u>not</u> currency exchange or money transmission. Decentralized cryptocurrencies (which the guidance defines to include Ripple’s XRP) are <u>not</u> money or monetary value, except for stablecoins (cryptocurrencies that are pegged to a sovereign currency) to which there is a redemption right. Therefore, activities involving only decentralized cryptocurrency do <u>not</u> trigger money transmission licensing requirements, unless a sovereign currency is involved. Selling cryptocurrency for fiat currency is <u>not</u> money transmission; selling cryptocurrency for cryptocurrency is <u>not</u> money transmission. However, exchanging sovereign currency for cryptocurrency via a third-party is money transmission because the third-party receives the sovereign currency in exchange for a promise to make it available to the seller. Cryptocurrency ATMs are <u>not</u> money transmission if the ATM sells the proprietor’s cryptocurrency. If the ATM receives the buyer’s fiat in exchange for a seller’s cryptocurrency, the ATM conducts money transmission. Texas Department of Banking, Supervisory Memorandum 1037 (Jan. 2, 2019)	the cryptocurrency is a sovereign-backed stablecoin; individual determinations required for centralized cryptocurrencies
Vermont	Effective May 2017, Vermont amended its Money Transmitter Act. The new law defines <i>virtual currency</i> as “<u>stored value</u> that: (A) can be a medium of exchange, a unit of account, or a store of value; (B) has an equivalent value in money or acts as a substitute for money; (C) may be centralized or decentralized; and (D) can be exchanged for money or other convertible virtual currency.” A license is required to “engage in money transmission”; <i>money transmission</i> is defined as engaging “in the business of selling or issuing payment instruments, selling or issuing <u>stored value</u>, or receiving money or monetary value for transmission.” It also contains provisions regarding cryptocurrency and the permissible investment requirement.	Yes, license required for at least some cryptocurrency activity
Virginia	The Virginia Bureau of Financial Institutions (“Bureau”) does not currently regulate cryptocurrency; however, to the extent cryptocurrency transactions also involve the transfer of fiat currency (currency declared by a government to be legal tender), they may be regulated under Chapter 19 of Title 6.2 of the Code of Virginia (Money Order Sellers and Money Transmitters), VA. CODE ANN. § 6.2-1900, <i>et seq.</i> Notice to Virginia Residents Regarding Virtual Currency “Monetary value” means a medium of exchange, whether or not redeemable in money. <i>Id.</i> § 6.2-1900	No
Washington	Effective July 23, 2017, the Washington legislature amended the WUMSA. The new law amends the definition of “money transmission” to include “receiving money or its equivalent value (equivalent value includes virtual currency) to transmit” WASH. REV. CODE § 19.230.010(18). The term <i>virtual currency</i> is defined as “a digital representation of value used as a medium of exchange, a unit of account, or a store of value, but does not have legal tender status as recognized by the United States government,” but it “does not include the software or protocols governing the transfer of the digital representation of value.” <i>Id.</i> § 19.230.010(30). The new law amends other	Yes, license required for at least some cryptocurrency activity

	WUMSA provisions based on an entity’s cryptocurrency activities. (Because of the statutory amendments, Washington regulators withdrew guidance they had previously issued in December 2014 relating to cryptocurrency.) Effective August 1, 2018, DFI finalized regulations to implement the changes to WUMSA, along with accompanying guidance. Most of the changes mirror those found in the statute. Notably, the regulations clarify that the following does not require licensing: “storage of virtual currency by a person when the virtual currency is owned by others and the person storing the virtual currency does not have the unilateral ability to transmit the value being stored.”	
Wisconsin	The Wisconsin Department of Financial Institutions has indicated it does not have the authority to regulate cryptocurrency and it is therefore unable to license or supervise companies whose business activities are limited to those involving cryptocurrency. However, should the transmission of cryptocurrency include the involvement of sovereign currency, it may be subject to licensure depending on how the transaction is structured. <i>See</i> Agreement between the WDFI and CoinX Inc.; <i>see also</i> Agreement between the WDFI and Circle Internet Financial Inc. In both instances, the WDFI issued “a Wisconsin seller of checks license to sell or issue checks or receive fiat currency for transmission” and the licensee agreed that it shall “not use its Wisconsin seller of checks license to transmit virtual currency” and shall “not state, imply, or infer that it is licensed by the division to transmit virtual currency.” In each instance, the license applicant indicated that it was applying for a license to provide traditional money transmission of fiat currency, as well as the transmission of cryptocurrency.	No
Wyoming	In 2018, the Governor signed into law House Bill 19, which amended Wyoming’s Money Transmitters Act to exempt from the Act “[b]uying, selling, issuing, or taking custody of payment instruments or stored value in the form of virtual currency or receiving virtual currency for transmission to a location within or outside the United States by any means.” WYO. STAT. § 40-22-104(vi). The bill defines <i>virtual currency</i> as “any type of digital representation of value that: (A) Is used as a medium of exchange, unit of account or store of value; and (B) Is not recognized as legal tender by the United States government.” <i>Id.</i> § 40-22-102(a)(xxii).	No
Proposed Cryptocurrency Legislation/Regulation		Would License Be Required?
Alaska	House Bill 180 would amend the money transmission law to address cryptocurrency activity. It was introduced in March 2017 and was referred to committee in January 2018.	Yes, license would be required for at least some cryptocurrency activity
Colorado	CO HB 1426 would define “open blockchain token” and exempts certain open blockchain tokens from the definition of “security” for purposes of the “Colorado Securities Act.” SB 277 would exempt the transmission of cryptocurrency from regulation under the Colorado “Money Transmitters Act.”	Under HB 1426, certain open blockchain tokens would be exempt from the definition of security Under SB 277, transmission of

		cryptocurrencies would be exempt from money transmitter act
Connecticut	HB 5496 was introduced on March 8, 2018 and would adopt the Uniform Regulation of Virtual Currency Businesses Act.	Yes, license would be required for at least some cryptocurrency activity
Hawaii	HB 2257 would adopt the Uniform Regulation of Virtual Currency Businesses Act; amend the Money Transmitters Act to expressly apply to persons engaged in the transmission of cryptocurrency; and require licensees under the Money Transmitters Act to warn consumers about the financial risks of purchasing cryptocurrency prior to contracting with them. SB 3082 would amend the Money Transmitters Act to expressly apply to persons engaged in the transmission of virtual currency, and require licensees under the Money Transmitters Act to warn consumers about the financial risks of purchasing virtual currency prior to contracting with them. SB 2129 would adopt the Uniform Regulation of Virtual Currency Businesses Act. HB 2225 would amend the Money Transmitters Act to govern the transmission of virtual currency. Extends the Money Transmitters Act to expressly apply to persons engaged in the transmission of virtual currency. Requires licensees dealing with virtual currency to provide a warning to consumers prior to entering into an agreement with them. “Exchange,” in reference to virtual currency, means to assume control of virtual currency from, or on behalf of, a person in the State, at least momentarily, to sell, trade, or convert: (1) Virtual currency for money, monetary value, or one or more forms of virtual currency; or (2) Money or monetary value for one or more forms of virtual currency. SB 2853 would exempt virtual currency from the Money Transmitters Act’s requirement that a licensee hold permissible investments worth the aggregate market value of the aggregate amount of all outstanding payment obligations, and hold those investments in trust for the benefit of purchasers and holders of those outstanding payment obligations. Defines “virtual currency” as any type of digital unit that is used as a medium of exchange or a form of digitally stored value or that is incorporated into payment system technology. The term “virtual currency” shall be broadly construed to include digital units of exchange that have a centralized repository or administrator, are decentralized and have no centralized repository or administrator, or may be created or obtained by computing or manufacturing effort. The term “virtual currency” shall not be construed to include digital units that are used solely within online gaming platforms with no	Yes, license would be required for at least some cryptocurrency activity

	market or application outside these gaming platforms, or used exclusively as part of a consumer affinity or rewards program and can be applied solely as payment for purchases with the issuer or other designated merchants but cannot be converted into or redeemed for fiat currency.” Note: Permissible investment requirements do not apply to “transmissions of virtual currency.”	
Indiana	2019 Senate Resolution 9 urges the Indiana Legislative Council to assign a committee the task of determining whether to consider the enactment of the Uniform Regulation of Virtual Currency Businesses Act or other cryptocurrency regulation.	
New Jersey	NJ A3817, An Act Concerning Digital Currency. New VCB business law: Regulates and establishes certain consumer protections concerning digital currencies. A person who engages in digital currency must register and maintain certain business practices under the Act. “Digital currency” shall not include: (1) digital units that have nominal or no value as a currency or medium of exchange and are not used as a substitute for government currency; (2) digital units that can be used solely with a gift card program; (3) digital units that are used solely within online gaming platforms and have no market or application outside of those gaming platforms, or can be redeemed for real-world goods, services, discounts, or purchases, but cannot be converted into, or redeemed for government currency or digital currency; or (4) digital units that are used solely within an affinity program but do not otherwise meet the definition of digital currency as defined herein. “Digital currency business activity” means any person who conducts any one of the following activities involving a New Jersey person: (1) receiving digital currency for transmission or transmitting digital currency, except where the transaction is undertaken for non-financial purposes and does not involve the transfer of more than a nominal amount of digital currency; (2) storing, holding, or maintaining custody or control of digital currency on behalf of others; (3) buying or selling digital currency as a customer business; (4) performing exchange services as a customer business; or (5) controlling or issuing a digital currency. Noteworthy requirements: 1. Capital Requirement: The registrant shall hold digital currency of the same type and amount as that which it has custody from any New Jersey person. Each registrant shall be prohibited from selling, transferring, assigning, lending, hypothecating, pledging, or otherwise using or encumbering any digital currency, the custody of which is maintained for a New Jersey person, except for the sale, transfer, or assignment of such assets at the direction of the New Jersey person. 2. General ledger of all transactions 3. Detailed consumer disclosure (broader than Washington requirements) 4. Consumer complaints policy	Yes, registration would be required for at least some cryptocurrency activity
North Dakota	H.B. 1043 would exclude “open blockchain tokens” and “virtual currency” from regulation under the state’s Money Transmitter Act. An “open blockchain token” is “a digital unit that is created in response to the verification or collection of a specified number of transactions	No

	relating to a digital ledger or database or which is based on random selection or the possession or age of existing units, or a combination of those methods; is recorded in a digital ledger or database that is chronological, consensus-based, decentralized, and mathematically verified in nature, especially relating to the supply of units and their distribution; and are capable of being traded or transferred without an intermediary or custodian of value.” “Virtual currency” is defined as “a type of digital representation of value that is used as a medium of exchange, unit of account, or store of value; and not recognized as legal tender by the United States government.” A person that “develops, sells, or facilitates the exchange of an open blockchain token” and a “person that buys, sells, issues, or takes custody of payment instruments or stored value in the form of virtual currency, or receives virtual currency for transmission to a location within or outside the United States by any means” would be exempt from the law.	
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PART 2: DETAILED CHART

State	Relevant Licensable Activity	Important Definition(s)	Exemption(s) or Exclusion(s)	Other Notes
Alabama	“A person may not engage in the business of money transmission or advertise, solicit or hold itself out as providing money transmission unless the person” is licensed or is an authorized delegate of a licensee. ALA. CODE § 8-7A-5	Agent or authorized delegate means any person designated or employed by a licensee under this chapter to provide monetary transmission services on behalf of the licensee. Bank means an institution organized under federal or state law which meets any of the following requirements: (a) Accepts demand deposits or deposits that the depositor may use for payment to third parties and engages in the business of making loans. (b) Engages in credit card operations and maintains only one office that accepts deposits, does not accept demand deposits or deposits that a depositor may use for payments to third parties, does not accept a savings or time deposit less than one hundred thousand dollars (\$100,000), and does not engage in the business of making commercial loans. (c) Is a trust company subject to the jurisdiction of the Alabama State Banking Department, or subject to another state or federal banking regulatory authority. Monetary value means a medium of exchange, including <u>virtual</u> or fiat currencies, whether or not redeemable in money. [Note, the new law does not define virtual currencies or fiat currencies.] Money means a medium of exchange that is authorized or adopted by the United States or a foreign government. The term includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more governments. Money transmission means selling or issuing payment	The following are excluded from the Alabama Monetary Transmission Act: (1) The U.S. or a department, agency, or instrumentality thereof. (2) The transmission of money by the USPS or by a contractor on behalf of the USPS. (3) A state, county, city, or any other governmental agency or governmental subdivision of a state. (4) Electronic funds transfer of governmental benefits for a federal, state, or governmental agency by a contractor on behalf of the U.S. or a department, agency, or instrumentality thereof, or a state governmental subdivision, agency, or instrumentality thereof. (5) A board of trade designated as a contract market under the federal Commodity Exchange Act, 7 U.S.C. §§ 1–25 (1994), or a person that, in the ordinary course of business, provides clearance and settlement services for a board of trade to the extent of its operation as or for such a board. (6) A registered futures commission merchant under the federal commodities laws to the extent of its operation as such a merchant. (7) A bank, bank holding company, office of an international banking corporation, or a branch of a foreign bank, provided that such international banking corporation or foreign bank is subject to regulation significantly similar to US or state chartered banks and deposits are insured.	

State	Relevant Licensable Activity	Important Definition(s)	Exemption(s) or Exclusion(s)	Other Notes
		instruments, stored value, or receiving money or <u>monetary value</u> for transmission. The term does not include the provision solely of delivery, online or telecommunications services, or network access. Payment instrument means a check, draft, money order, traveler's check, or other means utilized for the transmission or payment of money or monetary value, whether or not negotiable. The term does not include a credit voucher, letter of credit, or instrument that is redeemable by the issuer in goods and services. Person means any individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, government, governmental subdivision, agency or instrumentality, public corporation, or any other legal or commercial entity. Stored value means monetary value that is evidenced by an electronic record. ALA. CODE § 8-7A-2	ALA. CODE § 8-7A-3 The following are exempt from the licensing requirements: (1) A person that provides clearance or settlement services pursuant to a registration as a clearing agency or an exemption from such registration granted under the federal securities laws. (2) An operator of a payment system to the extent that it provides processing, clearing, or settlement services, between or among persons excluded by this section, in connection with wire transfers, credit card transactions, debit card transactions, stored-value transactions, automated clearing house transfers, or similar funds transfers. (3) A person registered as a securities broker-dealer under federal or state securities laws to the extent of its operation as such a broker-dealer. (4) Any person collecting, forwarding, or submitting payments to the state, a state agency, board, or commission, a quasi-governmental agency, or to persons in state custody, provided the person does all of the following: (a) Operates in this state exclusively for such purpose. (b) Has entered into a binding contract with the governmental entity or entities to provide money transmittal services to third parties. (c) Files a notice with the commission identifying all governmental agencies for who the person has contracted to provide money transmittal services.	

State	Relevant Licensable Activity	Important Definition(s)	Exemption(s) or Exclusion(s)	Other Notes
			(d) Has an independent audit performed on a yearly basis. (e) Immediately notifies the commission if any financial or other condition arises which would compromise the person's ability to perform the services for which the person has been contracted. (f) Maintains a segregated account or accounts for the deposit and transmittal of third-party payments which will not be comingled with any other funds. (g) Upon request, makes its books and records available for examination by the commission. ALA. CODE § 8-7A-4	
Arkansas	"A person may not engage in the business of money transmission or advertise, solicit, or hold itself out as providing money transmission . . ." ARK. CODE ANN. § 23-55-101	Money services means money transmission or currency exchange. Money transmission means selling or issuing payment instruments, stored value, or receiving money or monetary value for transmission. "Money transmission" does not include providing delivery services such as courier or package delivery services or acting as a mere conduit for the transmission of data. Money Services Rules § 214.00.3-102. Definitions. Engaged in the business of money services. The term "engaged in the business of money services," unless otherwise provided, includes any person who holds himself out as being a currency dealer or exchanger; an issuer of traveler's checks, money orders, prepaid access, or stored value; a seller or redeemer of traveler's checks, money orders, prepaid access, or stored value; or who receives money or monetary value for the purpose of transmitting said money or monetary value using a	This chapter does not apply to: (1) the United States or a department, agency, or instrumentality thereof; (2) money transmission by the United States Postal Service or by a contractor on behalf of the United States Postal Service; (3) a state, county, city, or any other governmental agency or governmental subdivision of a State; (4) a bank, bank holding company, office of an international banking corporation, branch of a foreign bank, corporation organized pursuant to the Bank Service Company Act, 12 U.S.C. §§ 1861–1867 (Supp. V 1999), or corporation organized under the Edge Act, 12 U.S.C. §§ 611–633 (1994 & Supp. V 1999) under the laws of a State or the United States if it does not issue, sell, or provide payment instruments, stored value, or prepaid access through an authorized delegate that is not such a person;	

State	Relevant Licensable Activity	Important Definition(s)	Exemption(s) or Exclusion(s)	Other Notes
		system outside that of a conventional financial institution. Medium of exchange. The term “medium of exchange” connotes that the value is accepted by a larger group than the two parties to the change. Therefore, no monetary value, as that term is defined in the Act, would exist if the product (<i>i.e.</i>, gift certificate) or payment mechanism (<i>i.e.</i>, universal payment card) is only accepted by one merchant.	(5) electronic funds transfer of governmental benefits for a federal, state, county, or governmental agency by a contractor on behalf of the United States or a department, agency, or instrumentality thereof, or a State or governmental subdivision, agency, or instrumentality thereof; (6) a board of trade designated as a contract market under the federal Commodity Exchange Act, 7 U.S.C. §§ 1–25 (1994), or a person that, in the ordinary course of business, provides clearance and settlement services for a board of trade to the extent of its operation as or for such a board; (7) a registered futures commission merchant under the federal commodities laws to the extent of its operation as such a merchant; (8) a person that provides clearance or settlement services pursuant to a registration as a clearing agency or an exemption from such registration granted under the federal securities laws to the extent of its operation as such a provider; (9) an operator of a payment system to the extent that it provides processing, clearing, or settlement services, between or among persons excluded by this section, in connection with wire transfers, credit card transactions, debit card transactions, stored-value transactions, automated clearing house transfers, similar funds transfers, or prepaid access; (10) a person registered as a securities broker-dealer under federal or state securities laws to the extent of its operation as such a broker-dealer; or (11) a credit union regulated and insured by the National	

State	Relevant Licensable Activity	Important Definition(s)	Exemption(s) or Exclusion(s)	Other Notes
			Credit Union Administration	
Colorado	“A person shall not engage in the business of money transmission without first procuring a license from the board; except that an agent, subagent, or representative of a licensee or an employee of an agent, subagent, or representative who acts on behalf of a licensee in the transmission of money by the licensee is not required to be licensed under this article 110.” COLO. REV. STAT. § 11-	Money transmission means the sale or issuance of exchange or engaging in the business of receiving money for transmission or transmitting money within the U.S. or to locations abroad by any and all means including but not limited to payment instrument, wire, facsimile, or electronic transfer.	Nothing in this article 110 shall apply to: Departments or agencies of the United States of America, or to any state or municipal government, or to corporations organized under the general banking, savings and loan, or credit union laws of this state or of the United States, or to the receipt of money by an incorporated telegraph or cable company at any office or agency thereof for immediate transmission by telegraph or cable.	

State	Relevant Licensable Activity	Important Definition(s)	Exemption(s) or Exclusion(s)	Other Notes
	110-101			
Connecticut	“License required to engage in the business of money transmission in this state, or advertise or solicit such services,” except as an authorized delegate. “A person engaged in the business of money transmission is acting in this state under this section if such person: (1) Has a place of business located in this state, (2) receives money or monetary value in this state or from a person	Authorized Delegate means a person designated by a person licensed [under the money transmitters act] to provide money transmission services on behalf of such licensed person. Monetary value means a medium of exchange, whether or not redeemable in money. Money transmission means engaging in the business of issuing or selling payment instruments or stored value, receiving money or monetary value for current or future transmission or the business of transmitting money or monetary value within the United States or to locations outside the United States by any and all means including, but not limited to, payment instrument, wire, facsimile or electronic transfer. Payment Instrument means a check, draft, money order, traveler’s check or electronic payment instrument that evidences either an obligation for the transmission of money or monetary value or payment of money, or the purchase or the deposit of funds for the purchase of such check, draft, money order, traveler’s check or electronic payment instrument. Stored value means monetary value that is evidenced by an electronic record. For the purposes of this subdivision, “electronic record” means information that is stored in an electronic medium and is retrievable in perceivable form. Virtual currency means any type of digital unit that is used as a medium of exchange or a form of digitally stored value or that is incorporated into payment system technology. Virtual currency shall be construed to	The following entities are exempt: (1) Any federally insured federal bank, out-of-state bank, Connecticut bank, Connecticut credit union, federal credit union or out-of-state credit union, provided such institution does not engage in the business of money transmission in this state through any person who is not (A) a federally insured federal bank, out-of-state bank, Connecticut bank, Connecticut credit union, federal credit union or out-of-state credit union, (B) a person licensed pursuant to CONN. GEN. STAT. §§ 36a-595 to 36a-612, inclusive, or an authorized delegate acting on behalf of such licensed person, or (C) a person exempt pursuant to subdivision (2) or (3) of this section; (2) The United States Postal Service and any contractor that engages in the business of money transmission in this state on behalf of the United States Postal Service; and (3) A person whose activity is limited to the electronic funds transfer of governmental benefits for or on behalf of a federal, state or other governmental agency, quasi-governmental agency or government sponsored enterprise. CONN. GEN. STAT. § 36a-609.	The commissioner may, in the commissioner’s discretion, place additional requirements, restrictions or conditions upon the license of any applicant who will or may engage in the business of transmitting monetary value in the form of virtual currency, including the amount of surety bond required by section 36a-602. CONN. GEN. STAT. § 36a-600.

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	located in this state, (3) transmits money or monetary value from a location in this state or to a person located in this state, (4) issues stored value or payment instruments that are sold in this state, or (5) sells stored value or payment instruments in this state.” CONN. GEN. STAT. § 36a-597	include digital units of exchange that (A) have a centralized repository or administrator; (B) are decentralized and have no centralized repository or administrator; or (C) may be created or obtained by computing or manufacturing effort. Virtual currency shall not be construed to include digital units that are used (i) solely within online gaming platforms with no market or application outside such gaming platforms, or (ii) exclusively as part of a consumer affinity or rewards program, and can be applied solely as payment for purchases with the issuer or other designated merchants, but cannot be converted into or redeemed for fiat currency. CONN. GEN. STAT. § 36a-596.		
Georgia	No person may “engage in the sale of payment instruments or money transmission without having first obtained a	Monetary value means a medium of exchange, whether or not redeemable in money. Money transmission ‘transmit money’ or ‘transmission of money’ means engaging in the business of receiving money or monetary value for transmission or transmitting money or monetary value . . . by any and all means including, but not limited to, an order, wire,	The requirement for licensure set forth in this article shall not apply to: (1) Any state or federally chartered bank, trust company, credit union, savings and loan association, or savings bank with deposits that are federally insured; (2) Any authorized agent of a licensee; (3) The United States Postal Service; (4) A state or federal governmental department, agency, authority, or instrumentality and its authorized agents;	

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	license authorizing such activity under this article. This prohibition applies whether or not a person utilizes a branch, subsidiary, affiliate, or agent in this state. A person is deemed to be engaged in the sale of payment instruments or money transmission if the person advertises any of those services, provides any of those services with or without compensation, solicits to provide any of those services,	facsimile, or electronic transfer. The term does not include closed-loop transactions.	(5) Any foreign bank that establishes a federal branch pursuant to the International Bank Act, 12 U.S.C. § 3102; or (6) An individual employed by a licensee or any person exempted from the licensing requirements of this article when acting within the scope of employment and under the supervision of the licensee or exempted person as an employee and not as an independent contractor.	

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	or holds itself out as providing any of those services to or from this state, even if the person has no physical presence in this state.” GA. CODE ANN. § 7-1-680			
Hawaii	No person “shall engage in the business of money transmission without a license as provided in this chapter.” HAW. REV. STAT. § 489D-1	Monetary value means a medium of exchange, whether or not redeemable in money. Money transmission means to engage in the business of: (1) Selling or issuing payment instruments; or (2) Receiving money or monetary value for transmission to a location within or outside the United States by any and all means, including wire, facsimile, or electronic transfer. . . . Payment instrument means any electronic or written check, draft, money order, traveler’s check or other electronic instrument or written instrument or order for the transmission or payment of money, sold or issued to one or more persons, whether or not the instrument is negotiable. The term “payment instrument” does not include . . . any instrument that is redeemable by the issuer in goods or services.	Authorized delegates of a licensee acting within the scope of authority conferred by a written contract under section 489D-21 shall not be required to obtain a license pursuant to this chapter. § 489D-9.5 <i>Limited exemption for financial institutions; financial institutions as authorized delegates.</i> (a) Banks, bank holding companies, credit unions, savings banks, financial services loan companies, and mutual banks organized under the laws of the United States or any state shall be exempt from the licensing and examination provisions of this chapter. (b) An applicant or licensee may appoint an entity described in subsection (a) as an authorized delegate. . . .	

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		“Stored value” means monetary value that is evidenced by an electronic record.		
Idaho	“[N]o person . . . shall engage in the business of money transmission without a license . . . “ IDAHO CODE § 26-2901	Money transmission means the sale or issuance of payment instruments or engaging in the business of receiving money for transmission or the business of transmitting money within the United States or to locations outside the United States by any and all means including, but not limited to, payment instrument, wire, facsimile or electronic transfer. Payment instrument means any check, draft, money order, traveler’s check or other instrument or written order for the transmission or payment of money, sold or issued to one (1) or more persons, whether or not such instrument is negotiable. The term “payment instrument” does not include . . . any instrument which is redeemable by the issuer in goods or services.	This chapter shall not apply to . . . (d) Banks, credit unions, savings and loan associations, savings banks or mutual banks organized under the laws of any state or the United States, provided that they do not issue or sell payment instruments through authorized delegates who are not banks, credit unions, savings and loan associations, savings banks or mutual banks; and Authorized representatives of a licensee, acting within the scope of authority conferred by a written contract conforming to the requirements of section 26-2918, Idaho Code, shall not be required to obtain a license pursuant to this chapter.	
Illinois	“No person may engage . . . in the business of selling or issuing payment instruments, transmitting money, or exchanging, for compensation,	Money means a medium of exchange that is authorized or adopted by a domestic or foreign government as a part of its currency and that is customarily used and accepted as a medium of exchange in the country of issuance. Money transmitter means a person who is located in or doing business in this State and who directly or through authorized sellers does any of the following in this State: (1) Sells or issues payment instruments; (2) Engages in the business of receiving money for transmission or transmitting money; or (3) Engages in the business of exchanging, for compensation, money of the United States Government or a foreign government to or from	The following are exempt from the licensing requirements of this Act: (1) The United States and any department or agency of the United States; (2) This State and any political subdivision of this State; (3) Banks, trust companies, building and loan associations, savings and loan associations, savings banks, or credit unions, licensed or organized under the laws of any state or of the United States and any foreign bank maintaining a branch or agency licensed or organized under the laws of any state or of the United States;	

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	payment instruments . . . without first obtaining a license under this Act. Separate licenses shall not be required, however, for persons acting as authorized sellers of licensees under this Act.” 205 ILL. COMP. STAT. § 657	money of another government. Transmitting money means the transmission of money by any means, including transmissions to or from locations within the United States or to and from locations outside of the United States by payment instrument, facsimile or electronic transfer, or otherwise, and includes bill payment services.	(4) Currency exchanges licensed under the Currency Exchange Act are exempt from licensing only for (i) the issuance of money orders or (ii) the sale, loading, or unloading of stored value cards. (5) Corporations and associations exempt under item (3) or (4) from the licensing requirements of this Act are not exempt from approval by the Director as authorized sellers. Nothing in this Act shall be deemed to enlarge the powers of those corporations and associations.	
Kansas	“No person shall engage in the business of selling, issuing or delivering its payment instrument, check, draft, money order, personal money order, bill of exchange, evidence of	Money transmission means “to engage in the business of receiving money or monetary value for transmission to a location within or outside the US by electronic means or any other means.” Monetary value is defined in the Kansas Money Transmitter Act as “a medium of exchange, whether or not redeemable in money.” Virtual currency is not defined in the guidance. The guidance provides that in broad terms, a virtual currency is an electronic medium of exchange typically used to purchase goods and services from certain merchants or to exchange for other currencies, either virtual or sovereign, and exists outside established financial institution	(a) The Kansas Money Transmitter Act does not apply to transmission of “decentralized cryptocurrencies” (because “cryptocurrencies” as currently in existence are not considered “money” or “monetary value” by the Office of the State Bank Commissioner, as they (i) are not generally accepted as payment in the current economy and (ii) do not have a recognized standard of value). (b) The Kansas Money Transmitter Act does not cover the act of two-party currency exchange regardless of whether it is “sovereign currency” being exchanged for “virtual currency” (but the presence of a third party involved in a currency exchange transaction will likely subject the transaction to the KMTA as “money transmission”).	

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	indebtedness or other instrument for the transmission or payment of money or otherwise engage in the business of money transmission with a resident of this state . . . as a service or for a fee or other consideration, unless such person files a complete application and obtains a license from the commissioner. ” KAN. STAT. ANN. § 9-509	systems. Centralized virtual currencies are created and issued by a specified source; decentralized virtual currencies are not created or issued by a particular person or entity, have no administrator, and have no central repository. Thus far, decentralized currencies are all cryptocurrencies such as Bitcoin, Litecoin, Peercoin, and Namecoin.	(c) Activities not qualifying as money transmission and thus are excluded from the licensing requirement include: (1) exchange of “cryptocurrency” for “sovereign currency” between two parties; (2) exchange of one “cryptocurrency” for another “cryptocurrency”; and (3) transfer of “cryptocurrency” by itself.	
Louisiana	No person ... shall engage in the business of	Money or monetary value means currency or a claim that can be converted into currency through a financial institution, electronic payments network, or other formal	The following persons shall not be required to be licensed under this Chapter:	

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	money transmission or selling checks as a service or for a fee or other consideration without having first obtained a license pursuant to this Chapter. LA. STAT. ANN. § 6:1031	or informal payment system. Money transmission means to engage in the business of the sale or issuance of payment instruments or of receiving money or monetary value for transmission to a location within or outside the United States by any and all means, including but not limited to wire, facsimile, or electronic transfer. The term includes: (a) Selling or issuing stored value or payment instruments including checks, money orders, and traveler’s checks; (b) Receiving money or monetary value for transmission including by payment instrument, wire, facsimile, electronic transfer, or Automated Clearing House (ACH) debit; and (c) Providing third-party bill paying services.	(1) The United States or an instrumentality of the United States government, including the United States Postal Service or a contractor acting on behalf of the United States Postal Service. (2) A state or an agency, political subdivision, or other instrumentality of a state. (3) A federally insured depository financial institution that is organized under the laws of this state, another state, or the United States. (4) A wholly owned subsidiary of a federally insured depository institution that is organized under the laws of this state, another state, or the United States. (5) A foreign bank branch or agency in the United States established under the federal International Banking Act of 1978, 12 U.S.C. 3101 et seq. (6) A person acting as an agent for an entity excluded under Paragraphs (3) and (4) of this Section, to the extent of the person’s actions in that capacity provided that: (a) The entity is liable for satisfying the money services obligation owed to the purchaser on the person’s receipt of the purchaser’s money. (b) The entity and person enter into a written contract that appoints the person as the entity’s agent and the person acts only within the scope of authority conferred by the contract. (7) A person that, on behalf of the United States or a department, agency or instrumentality of the United States, or a state, parish, city, or any other governmental agency or political subdivision of this state, provides electronic funds transfer services of governmental benefits for a federal, state,	

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			parish, or local governmental agency. (8) A person that acts as an intermediary on behalf of and at the discretion of a licensee in the process by which the licensee, after receiving money or monetary value from a purchaser, either directly or through an agent, transmits the money or monetary value to the purchaser's designated recipient, provided that the licensee is liable for satisfying the obligation owed to the purchaser. (9) An attorney or title company that in connection with an immovable property transaction receives and disburses domestic currency or issues an escrow or trust fund check only on behalf of a party to the transaction. (10) A person engaged in the business of currency transportation who is both a registered motor carrier and a licensed armored car company or courier company, provided that the person does not engage in the money transmission business without a license under this Chapter. (11) A licensed lender using stored value cards or debit cards or electronic cash for loan disbursement under the Louisiana Consumer Credit Law. (12) Any other person approved by the commissioner on a finding that the licensing of the person is not necessary to achieve the purposes of this Chapter.	
New Mexico	A person shall not engage in the business of money transmission or advertise, solicit or hold	Monetary value means a medium of exchange, whether or not redeemable in money Money services means money transmission, check cashing or currency exchange; Money transmission means selling or issuing payment instruments, stored value or receiving money or	The Uniform Money Services Act does not apply to: A. the United States or a department, agency or instrumentality thereof; B. money transmission by the United States Postal Service or by a contractor on behalf of the United States Postal Service;	

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	itself out as providing money transmission . . . N.M. STAT. ANN. § 58-32-101	monetary value for transmission. “Money transmission” does not include the provision solely of delivery, online or telecommunications services or network access.	C. a state, county, city or any other governmental agency or governmental subdivision of a state; D. a bank, bank holding company, office of an international banking corporation, branch of a foreign bank, corporation organized pursuant to the federal Bank Service Company Act or corporation organized pursuant to the federal Edge Act; E. electronic funds transfer of governmental benefits for a federal, state, county or governmental agency by a contractor on behalf of the United States or a department, agency or instrumentality thereof, or a state or governmental subdivision, agency or instrumentality thereof; F. a board of trade designated as a contract market pursuant to the federal Commodity Exchange Act or a person that, in the ordinary course of business, provides clearance and settlement services for a board of trade to the extent of its operation as or for such a board; G. a registered futures commission merchant under the federal commodities laws to the extent of its operation as such a merchant; H. a person that provides clearance or settlement services pursuant to a registration as a clearing agency or an exemption from such registration granted under the federal securities laws to the extent of its operation as such a provider; I. an operator of a payment system to the extent that it provides processing, clearing or settlement services, between or among persons excluded by this section, in connection with wire transfers, credit card transactions, debit card transactions, stored-value transactions, automated	

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			clearinghouse transfers or similar funds transfers; J. a person registered as a securities broker-dealer under federal or state securities laws to the extent of its operation as such a broker-dealer; K. an attorney or title company that, in connection with a real property transaction, receives and disburses domestic currency or issues an escrow or trust fund check only on behalf of a party to the transaction; L. a credit union regulated and insured by the national credit union association; or M. any other person, transaction or class of persons or transactions exempted by the director's rule or any other person or transaction exempted by the director's order pursuant to a finding that the licensing of the person or transaction is not necessary to achieve the purposes of the Uniform Money Services Act.	
New York	No person shall, without a license obtained from the superintendent as provided in this part, engage in any Virtual Currency Business Activity. N.Y. COMP.	Transmission means the transfer, by or through a third party, of Virtual Currency from a Person to a Person, including the transfer from the account or storage repository of a Person to the account or storage repository of a Person. Virtual Currency means any type of digital unit that is used as a medium of exchange or a form of digitally stored value. Virtual Currency shall be broadly construed to include digital units of exchange that (1) have a centralized repository or administrator; (2) are decentralized and have no centralized repository or administrator; or (3) may be created or obtained by computing or	The following persons are exempt from the licensing requirements otherwise applicable under this part: (1) persons that are chartered under the New York Banking Law and are approved by the superintendent to engage in Virtual Currency Business Activity; and (2) merchants and consumers that utilize Virtual Currency solely for the purchase or sale of goods or services or for investment purposes. N.Y. COMP. CODES R. & REGS. tit. 23, § 200.3	

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	CODES R. & REGS. tit. 23, § 200.3(a)	manufacturing effort. Virtual Currency shall <u>not</u> be construed to include any of the following: (i) Digital units that (a) are used solely within online gaming platforms, (b) have no market or application outside of those gaming platforms, (c) cannot be converted into, or redeemed for, Fiat Currency or Virtual Currency, and (d) may or may not be redeemable for real-world goods, services, discounts, or purchases; (ii) digital units that can be redeemed for goods, services, discounts, or purchases as part of a customer affinity or rewards program with the issuer and/or other designated merchants or can be redeemed for digital units in another customer affinity or rewards program, but cannot be converted into, or redeemed for, Fiat Currency or Virtual Currency; or (iii) digital units used as part of Prepaid Cards. Virtual Currency Business Activity is defined as any one of the following types of activities involving New York or a New York Resident (a) receiving Virtual Currency for Transmission or Transmitting Virtual Currency, unless the transaction is undertaken for non-financial purposes or involves the transfer of more than a nominal amount of Virtual Currency; (b) storing, holding, or maintaining custody or control of Virtual Currency on behalf of others; (c) buying and selling Virtual Currency as a customer business; (d) performing Exchange Services as a customer business; or (e) controlling, administering, or issuing a Virtual Currency. The development and dissemination of software in and of		

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		itself does not constitute Virtual Currency Business Activity. N.Y. COMP. CODES R. & REGS. tit. 23, § 200.2		
North Carolina	(a) No person except those exempt pursuant to N.C. GEN. STAT. § 53-208.44 shall engage in the business of money transmission in this State without a license as provided in this Article. [. . .] (c) For the purposes of this Article, a person is considered to be engaged in the business of money transmission in this State if that person	Authorized delegate.--An entity designated by the licensee under the provisions of this Article to engage in the business of money transmission on behalf of a licensee in this State Depository institution.--Any bank, savings association, mutual savings bank, savings bank, or other institution as defined in Section 3 of the Federal Deposit Insurance Act and any credit union whose share and deposit accounts are insured by the National Credit Union Administration under the Federal Credit Union Act Money transmission.--To engage in the business of any of the following: a. Sale or issuance of payment instruments or stored value primarily for personal, family, or household purposes; or b. Receiving money or monetary value for transmission or holding funds incidental to transmission within the United States or to locations abroad by any and all means, including payment instrument, stored value, wire, facsimile, or electronic transfer, primarily for personal, family, or household purposes. This includes maintaining control of virtual currency on behalf of others Payment instrument.--A check, draft, money order, traveler's check, or other instrument for the transmission or payment of money or monetary value, whether or not negotiable. The term does not include a credit card	(a) This Article shall not apply to any of the following: (1) The United States or any department, agency, or instrumentality or by a contractor thereof. (2) The United States Postal Service. (3) The State or any political subdivisions or by a contractor thereof. (4) Banks, credit unions, savings and loan associations, savings banks, or mutual banks organized under the laws of any state or the United States. (5) A person registered as a securities broker-dealer under federal or state securities laws to the extent of its operation as a broker-dealer. (6) The provision of electronic transfer of government benefits for any federal, state, or county governmental agency as defined in Regulation E, 12 C.F.R. § 1005 et seq., by a contractor for and on behalf of the United States or any department, agency, or instrumentality thereof, or any state or any political subdivisions thereof. (7) A person that is engaged exclusively in any of the following: a. Delivering wages or salaries on behalf of employers to employees. b. Facilitating the payment of payroll taxes to State and federal agencies.	

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	solicits or advertises money transmission services from a Web site that North Carolina citizens may access in order to enter into those transactions by electronic means. N.C. GEN. STAT. ANN. § 53-208.43	voucher, letter of credit, or any other instrument that is redeemable by the issuer exclusively in goods or services Stored value.--Monetary value representing a claim against the issuer that is stored on an electronic or digital medium and is evidenced by an electronic or digital record, and that is intended and accepted for use as a means of redemption for money or monetary value or payment for goods or services. The term does not include stored value that is redeemable by the issuer exclusively in goods or services; stored value that is redeemable exclusively in goods or services limited to transactions involving a defined merchant or location or set of locations, such as a specific retailer or retail chain, college campus, or subway system; or program points, miles, or other units issued in connection with a customer affinity or rewards program, even if there is a secondary market for the stored value. Virtual currency.--A digital representation of value that can be digitally traded and functions as a medium of exchange, a unit of account, or a store of value but only to the extent defined as stored value under subdivision (19) of this section, but does not have legal tender status as recognized by the United States Government N.C. GEN. STAT. ANN. § 53-208.42	c. Making payments relating to employee benefit plans. d. Making distribution of other authorized deductions from employees' wages or salaries. e. Transmitting other funds on behalf of an employer in connection with transactions related to employees. (8) A person appointed by a payee to collect and process payments as the bona fide agent of the payee, provided the person can demonstrate to the Commissioner all of the following: a. There exists a written agreement between the payee and agent directing the agent to collect and process payments on the payee's behalf. b. The payee holds the agent out to the public as accepting payments on the payee's behalf. c. Payment is treated as received by the payee upon receipt by the agent This exemption extends to those otherwise engaged in money transmission as set forth in N.C. GEN. STAT. § 53-208.42(13)b., including those transactions conducted in whole or in part in virtual currency. N.C. GEN. STAT. ANN. § 53-208.44	
Oregon	(1) A person, other than a person that is exempt under OR. REV. STAT.	Authorized delegate means a person that a licensee designates under the provisions of OR. REV. STAT. §§ 717.200 to 717.320, 717.900 and 717.905 to sell or issue payment instruments or engage in the business of transmitting money on the licensee's behalf.	(1) OR. REV. STAT. §§ 717.200 to 717.320, 717.900 and 717.905 do not apply to: (a) Any company that accepts deposits in this state and that is insured under the Federal Deposit Insurance Act, 12	

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	§ 717.210, may not conduct a money transmission business without a license that the Director of the Department of Consumer and Business Services issues in accordance with OR. REV. STAT. §§ 717.200 to 717.320, 717.900 and 717.905. OR. REV. STAT. § 717.205	Electronic instrument means a card or other tangible object for transmitting or paying money that contains a microprocessor chip, magnetic stripe or other means for storing information, that is prefunded and for which the value is decremented upon each use. (b) “Electronic instrument” does not include a card or other tangible object that the issuer may redeem in the issuer’s goods or services. Money means a medium of exchange that: (a) The United States or a foreign government authorizes or adopts; or (b) Represents value that substitutes for currency but that does not benefit from government regulation requiring acceptance of the medium of exchange as legal tender. Money transmission means selling or issuing payment instruments or engaging in the business of receiving money for transmission, or transmitting money within the United States or to locations abroad by any and all means, including but not limited to payment instrument, wire, facsimile or electronic transfer. Payment instrument means any electronic or written check, draft, money order, traveler’s check or other electronic or written instrument or order for transmitting or paying money, sold or issued to one or more persons, whether or not the instrument is negotiable. Payment instrument does not include any credit card voucher, any letter of credit or any instrument that is redeemable by the issuer in goods or services. OR. REV. STAT. § 717.200.	U.S.C. 1811 et seq., as amended. (b) Credit unions or trust companies. (c) The United States Government or any department, agency or instrumentality thereof. (d) The United States Postal Service. (e) Any state or political subdivision of a state. (f) The provision or electronic transfer of government benefits for any federal, state or county government or other agency as defined in the Federal Reserve Board Regulation E (12 C.F.R. part 205), by a contractor for and on behalf of the United States Government or any department, agency or instrumentality of the United States, or any state or any political subdivision of a state. (g) The provision or handling of electronic or other transfer of escrowed moneys by an escrow agent licensed under OR. REV. STAT. § 696.511 to the extent that the escrow agent is: (A) Closing an escrow, as defined in OR. REV. STAT. § 696.505; (B) Engaging in activity related to a collection escrow, as defined in OR. REV. STAT. § 696.505; or (C) Serving as a trustee of a trust deed in accordance with OR. REV. STAT. § 86.713. (h) Authorized delegates of a licensee, acting within the scope of authority conferred by a written contract as described in OR. REV. STAT. § 717.270. (i) Any bank holding company as defined in the federal Bank Holding Company Act of 1956, 12 U.S.C. 1841 et seq., as	

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			amended, or any financial holding company as defined in OR. REV. STAT. § 706.008. (j) Any savings and loan holding company as defined in 12 U.S.C. 1467a (a)(1)(D), as amended. (2) The Director of the Department of Consumer and Business Services by rule or order may modify or waive the application of OR. REV. STAT. §§ 717.200 to 717.320, 717.900 and 717.905 to any person or group of persons if the director determines that adequate regulation of the person or group of persons is provided by law or by another agency of this state. OR. REV. STAT. § 717.210.	
Pennsylvania	(a) No person shall engage in the business of transmitting money by means of a transmittal instrument for a fee or other consideration with or on behalf of an individual without first having obtained a license from	Agent means any person that provides money transmission services on behalf of another person. Stored value means money or monetary value in a digital electronic format, stored or capable of storage on an electronic medium in such a manner as to be retrievable and transferable electronically. Tangible net worth means an entity's net worth less intangible assets as determined by generally accepted accounting principles. Transmittal instrument means any check, draft, money order, personal money order, debit card, stored value card, electronic transfer or other method for the payment of money or transmittal of credit, other than a merchandise gift certificate or instrument with a similar purpose sold in the regular course of business by a vendor of personal property or services in a closed loop system or hybrid closed loop system.	(b) This act does not apply to money transmission between business entities in connection with commercial contracts, unless the contracts involve money transmission for personal or household purposes involving individuals. 77 PA. CONS. STAT. § 6102 No license shall be required for any of the following: (1) Banks, bank and trust companies, credit unions, savings banks and private banks organized under the laws of this Commonwealth; similar banking institutions organized under the laws of the United States or of any other state which are insured by the Federal Deposit Insurance Corporation; similar credit unions organized under the laws of the United States or another state, and insured by the National Credit Union Share Insurance Fund; and savings and loan associations and building and loan associations organized under the laws of another state or of the United States; or	

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	the department. 7 7 PA. CONS. STAT. § 6102.	7 7 PA. CONS. STAT. § 6101	their agents. (2) Agents of a person licensed under this act. (3) Agents of a Federal, State or local government agency, to the extent that such agents are disbursing government benefits. (4) Agents that receive payments from individuals on behalf of persons that are creditors, public utilities or providers of goods or services. 7 7 PA. CONS. STAT. § 6103	
South Carolina	(A) A person may not engage in the business of money transmission or advertise, solicit, or hold himself out as providing money transmission unless the person is: (1) licensed under this chapter or approved to	Authorized delegate means a person a licensee designates to provide money services on behalf of the licensee. Bank means an institution organized under federal or state law which: (a) accepts demand deposits or deposits that the depositor may use for payment to third parties and which engages in the business of making commercial loans; or (b) engages in credit card operations and maintains only one office that accepts deposits, does not accept demand deposits or deposits that the depositor may use for payments to third parties, does not accept a savings or time deposit less than one hundred thousand dollars, and does not engage in the business of making commercial loans Monetary value means a medium of exchange, whether	This chapter does not apply to: (1) the United States or a department, agency, or instrumentality of the United States; (2) money transmission by the United States Postal Service or by a contractor on behalf of the United States Postal Service; (3) a state, county, city, or another governmental agency or governmental subdivision of a state; (4) a bank, bank holding company, office of an international banking corporation, branch of a foreign bank, corporation organized pursuant to the Bank Service Corporation Act, 12 U.S.C. §§ 1861–1867 (Supp. V 1999), or corporation organized under the Edge Act, 12 U.S.C. §§ 611–633 (1994 & Supp. V 1999), under the laws of a state or the United States if it does not issue, sell, or provide payment	

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	engage in money transmission pursuant to S.C. CODE ANN. § 35-11-210; (2) an authorized delegate of a person licensed pursuant to this article; or (3) an authorized delegate of a person approved to engage in money transmission pursuant to S.C. CODE ANN. § 35-11-210. S.C. CODE ANN. § 35-11-200	or not redeemable in money. Money means a medium of exchange that is authorized or adopted by the United States or a foreign government. The term includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more governments. Money services means money transmission or currency exchange. Money transmission means selling or issuing payment instruments, stored value, or receiving money or monetary value for transmission. The term does not include the provision solely of delivery, online or telecommunications services, or network access. Payment instrument means a check, draft, money order, traveler’s check, or other instrument for the transmission or payment of money or monetary value, whether or not negotiable. The term does not include a credit card voucher, letter of credit, or instrument that is redeemable by the issuer in goods or services. Stored value means monetary value that is evidenced by an electronic record S.C. CODE ANN. § 35-11-105	instruments or stored value through an authorized delegate who is not such a person; (5) electronic funds transfer of governmental benefits for a federal, state, county, or governmental agency by a contractor on behalf of the United States or a department, agency, or instrumentality of the United States, or a state or governmental subdivision, agency, or instrumentality of a state; (6) a board of trade designated as a contract market under the federal Commodity Exchange Act, 7 U.S.C. § 1–25 (1994), or a person that, in the ordinary course of business, provides clearance and settlement services for a board of trade to the extent of its operation as or for a board of trade; (7) a registered futures commission merchant under the federal commodities laws to the extent of its operation as a futures commission merchant; (8) a person who provides clearance or settlement services pursuant to a registration as a clearing agency or an exemption from that registration granted under the federal securities laws to the extent of its operation as a provider of clearance or settlement services; (9) an operator of a payment system to the extent that it provides processing, clearing, or settlement services, between or among persons excluded by this section, in connection with wire transfers, credit card transactions, debit card transactions, stored-value transactions, automated clearing house transfers, similar funds transfers;	

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			(10) a person registered as a securities broker-dealer under federal or state securities laws to the extent of his operation as a securities broker-dealer; or (11) a credit union regulated and insured by the National Credit Union Association. S.C. CODE ANN. § 35-11-110	
Texas	(a) A person may not engage in the business of money transmission in this state or advertise, solicit, or represent that the person engages in the business of money transmission in this state unless the person: (1) is licensed under this subchapter; (2) is an	Electronic instrument means a card or other tangible object for the transmission, transfer, or payment of money or monetary value, that contains an electronic chip or strip for the storage of information or that provides access to information. Money transmission means the receipt of money or monetary value by any means in exchange for a promise to make the money or monetary value available at a later time or different location. The term: (A) includes: (i) selling or issuing stored value or payment instruments, including checks, money orders, and traveler’s checks; (ii) receiving money or monetary value for transmission, including by payment instrument, wire, facsimile, electronic transfer, or ACH debit; (iii) providing third-party bill paying services; or (iv) receiving currency or an instrument payable in currency to physically transport the currency or its equivalent from one location to another by motor vehicle or other means of transportation or through the use of the	Subject to Subchapter J, the following persons are not required to be licensed under this chapter: (1) the United States or an instrumentality of the United States, including the United States Post Office or a contractor acting on behalf of the United States Post Office; (2) a state or an agency, political subdivision, or other instrumentality of a state; (3) a federally insured financial institution, as that term is defined by TEX. FIN. CODE 201.101, that is organized under the laws of this state, another state, or the United States; (4) a foreign bank branch or agency in the United States established under the federal International Banking Act of 1978 (12 U.S.C. § 3101 et seq.); (5) a person acting as an agent for an entity excluded under Subdivision (3) or (4), to the extent of the person’s actions in that capacity, provided that: (A) the entity is liable for satisfying the money services obligation owed to the purchaser on the person’s receipt of the purchaser’s money; and	

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	authorized delegate of a person licensed under this subchapter, appointed by the license holder in accordance with TEX. FIN. CODE § 151.402; (3) is excluded from licensure under TEX. FIN. CODE § 151.003; (4) is licensed as a depository agent under Subchapter J and only engages in the business of money transmission in connection with, and to the extent	mail or a shipping, courier, or other delivery service; and (B) does not include the provision solely of online or telecommunication services or connection services to the Internet. Payment instrument means a written or electronic equivalent of a check, draft, money order, traveler's check, or other written or electronic instrument, service, or device for the transmission or payment of money or monetary value, sold or issued to one or more persons, regardless of whether negotiable. The term does not include an instrument, service, or device that: (A) transfers money directly from a purchaser to a creditor of the purchaser or to an agent of the creditor; (B) is redeemed by the issuer in goods or services or a cash or credit refund under circumstances not designed to evade the obligations and responsibilities imposed by this chapter; or (C) is a credit card voucher or letter of credit. Stored value means monetary value evidenced by an electronic record that is prefunded and for which value is reduced on each use. The term includes prepaid access as defined by 31 C.F.R. § 1010.100(ww). The term does not include an electronic record that is: (A) loaded with points, miles, or other nonmonetary value; (B) not sold to the public but distributed as a reward or	(B) the entity and person enter into a written contract that appoints the person as the entity's agent and the person acts only within the scope of authority conferred by the contract; (6) a person that, on behalf of the United States or a department, agency, or instrumentality of the United States, or a state or county, city, or any other governmental agency or political subdivision of a state, provides electronic funds transfer services of governmental benefits for a federal, state, county, or local governmental agency; (7) a person that acts as an intermediary on behalf of and at the direction of a license holder in the process by which the license holder, after receiving money or monetary value from a purchaser, either directly or through an authorized delegate, transmits the money or monetary value to the purchaser's designated recipient, provided that the license holder is liable for satisfying the obligation owed to the purchaser; (8) an attorney or title company that in connection with a real property transaction receives and disburses domestic currency or issues an escrow or trust fund check only on behalf of a party to the transaction; (9) a person engaged in the business of currency transportation who is both a registered motor carrier under Chapter 643, Transportation Code, and a licensed armored car company or courier company under Chapter 1702, Occupations Code, provided that the person: (A) only transports currency from a person to:	

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	necessary for, the performance of depository agent activities; or (5) has been granted an exemption under Subsection (c). (b) For purposes of this chapter, a person engages in the business of money transmission if the person receives compensation or expects to receive compensation, directly or indirectly, for conducting money transmission.	charitable donation; or (C) redeemable only for goods or services from a specified merchant or set of affiliated merchants, such as: (i) a specified retailer or retail chain; (ii) a set of affiliated companies under common ownership; (iii) a college campus; or (iv) a mass transportation system. TEX. FIN. CODE. § 151.301.	(i) the same person at another location; or (ii) a financial institution to be deposited in an account belonging to the same person; and (B) does not otherwise engage in the money transmission or currency exchange business or depository agent services business without a license issued under this chapter; and (10) any other person, transaction, or class of persons or transactions exempted by commission rule or any other person or transaction exempted by the commissioner's order on a finding that the licensing of the person is not necessary to achieve the purposes of this chapter. TEX. FIN. CODE. § 151.003. (c) On application and a finding that the exemption is in the public interest, the commissioner may exempt a person that: (1) incidentally engages in the money transmission business only to the extent reasonable and necessary to accomplish a primary business objective unrelated to the money transmission business; (2) does not advertise or offer money transmission services to the public except to the extent reasonable and necessary to fairly advertise or offer the person's primary business services; and (3) transmits money without a fee as an inducement for customer participation in the person's primary business.	

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	TEX. FIN. CODE § 151.302.		TEX. FIN. CODE § 151.302.	
Vermont	(a) A person shall not engage in money transmission without: (1) obtaining a license under subchapter 2 of this chapter; or (2) being an authorized delegate of a person licensed under subchapter 2 of this chapter. (c) A person not licensed under this chapter or not an authorized delegate of a licensee is engaged in providing	Authorized delegate means a person located in this State that a licensee designates to provide money services on behalf of the licensee. Monetary value means a medium of exchange, whether or not redeemable in money Money means a medium of exchange that is authorized or adopted by the United States or a foreign government. The term includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more governments. Money services means money transmission, check cashing, or currency exchange. Money transmission means to engage in the business of selling or issuing payment instruments, selling or issuing stored value, or receiving money or monetary value for transmission to a location within or outside the United States Payment instrument means a check, draft, money order, traveler's check, or other instrument for the transmission or payment of money or monetary value, whether or not negotiable. The term does not include a credit card voucher, letter of credit, or instrument that is redeemable by the issuer in goods or services. Stored value means monetary value that is evidenced by	(a) This chapter does not apply to: (1) the United States or a department, agency, or instrumentality thereof; (2) the sale or issuance of payment instruments or stored value, or money transmission, by the U.S. Postal Service or by a contractor on behalf of the U.S. Postal Service; (3) a state, county, city, or any other governmental agency or governmental subdivision within a state; (4) a financial institution as defined in subdivision 11101(32) of this title, a financial institution holding company as defined in subdivision 11101(33) of this title, a credit union, an office of an international banking corporation, a branch of a foreign bank, a corporation organized pursuant to the Bank Services Company Act, or a corporation organized under the Edge Act under the laws of a state or the United States if the person does not issue, sell, or provide payment instruments or stored value through an authorized delegate that is not such a person; (5) electronic funds transfer of governmental benefits for a federal, state, or governmental agency by a contractor on behalf of the United States or a department, agency, or instrumentality thereof, or a state or governmental subdivision, agency, or instrumentality thereof; (6) a board of trade designated as a contract market under the	

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	money services if the person advertises those services, solicits to provide those services, or holds itself out as providing those services. VT. STAT. ANN. tit. 8, § 2502	an electronic record. Virtual currency means stored value that: (A) can be a medium of exchange, a unit of account, or a store of value; (B) has an equivalent value in money or acts as a substitute for money; (C) may be centralized or decentralized; and (D) can be exchanged for money or other convertible virtual currency 8 VT. STAT. ANN. tit. 8, § 2500	Commodity Exchange Act or a person that, in the ordinary course of business, provides clearance and settlement services for a board of trade to the extent of its operation as or for such a board of trade; (7) a registered futures commission merchant under the federal commodities laws to the extent of its operation as such a merchant; (8) a person that provides clearance or settlement services pursuant to a registration as a clearing agency or an exemption from such registration granted under the federal securities laws to the extent of its operation as such a provider; (9) an operator of a payment system that provides processing, clearing, or settlement services, between or among persons excluded by this section or licensees, in connection with wire transfers, credit card transactions, debit card transactions, stored-value transactions, automated clearing house transfers, or similar funds transfers to the extent of its operation as such; (10) a person registered as a securities broker-dealer under federal or state securities laws to the extent of its operation as such a broker-dealer; (11) the sale or issuance of stored value by a school to its students and employees; (12) a seller of goods or services that cashes payment instruments incidental to or independent of a sale and does not charge for cashing the payment instrument in excess of \$1.00 per instrument; or (13) a debt adjuster licensed pursuant to chapter 133 of this	

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			title when engaged in the business of debt adjustment. (b) The Commissioner may issue an order exempting any person from this chapter when such person is performing services for the benefit of the United States or a department, agency, or instrumentality thereof, or for the benefit of any state, county, city, or any other governmental agency or governmental subdivision within a state. VT. STAT. ANN. tit. 8, § 2501	
Washington	(1) A person may not engage in the business of money transmission, or advertise, solicit, or hold itself out as providing money transmission, unless the person is: (a) Licensed as a money transmitter under this chapter; (b) An authorized delegate of a	Financial institution means any person doing business under the laws of any state or the United States relating to commercial banks, bank holding companies, savings banks, savings and loan associations, trust companies, or credit unions Money means a medium of exchange that is authorized or adopted by the United States or a foreign government or other recognized medium of exchange. “Money” includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more governments. Money services means money transmission or currency exchange. Money transmission means receiving money or its equivalent value (equivalent value includes virtual currency) to transmit, deliver, or instruct to be delivered to another location, inside or outside the United States, by any means including but not limited to by wire, facsimile, or electronic transfer. Money transmission includes selling, issuing, or acting as an intermediary for open loop prepaid access and payment instruments, but	This chapter does not apply to: (1) The United States or a department, agency, or instrumentality thereof; (2) The United States Postal Service or a contractor on behalf of the United States Postal Service; (3) A state, county, city, or a department, agency, or instrumentality thereof; (4) A financial institution or its subsidiaries, affiliates, and service corporations, or any office of an international banking corporation, branch of a foreign bank, or corporation organized pursuant to the Bank Service Corporation Act (12 U.S.C. §§ 1861–1867) or a corporation organized under the Edge Act (12 U.S.C. §§ 611–633); (5) Electronic funds transfer of governmental benefits for a federal, state, county, or governmental agency by a contractor on behalf of the United States or a department, agency, or instrumentality thereof, or a state or governmental subdivision, agency, or instrumentality thereof; (6) A board of trade designated as a contract market under the federal Commodity Exchange Act (7 U.S.C. §§ 1–25) or	

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	person licensed as a money transmitter under this chapter; or (c) Excluded under WASH. REV. CODE § 19.230.020. WASH. REV. CODE § 19.230.030	not closed loop prepaid access. Money transmission does not include: The provision solely of connection services to the internet, telecommunications services, or network access; units of value that are issued in affinity or rewards programs that cannot be redeemed for either money or virtual currencies; and units of value that are used solely within online gaming platforms that have no market or application outside of the gaming platforms. Money transmitter means a person that is engaged in money transmission. Payment instrument means a check, draft, money order, or traveler's check for the transmission or payment of money or its equivalent value, whether or not negotiable. "Payment instrument" does not include a credit card voucher, letter of credit, or instrument that is redeemable by the issuer in goods or services. Virtual currency means a digital representation of value used as a medium of exchange, a unit of account, or a store of value, but does not have legal tender status as recognized by the United States government. Virtual currency does not include the software or protocols governing the transfer of the digital representation of value or other uses of virtual distributed ledger systems to verify ownership or authenticity in a digital capacity when the virtual currency is not used as a medium of exchange. WASH. REV. CODE § 19.230.010	a person that, in the ordinary course of business, provides clearance and settlement services for a board of trade to the extent of its operation as, or for, a board of trade; (7) A registered futures commission merchant under the federal commodities laws to the extent of its operation as such a merchant; (8) A person that provides clearance or settlement services under a registration as a clearing agency, or an exemption from that registration granted under the federal securities laws, to the extent of its operation as such a provider; (9) A person: (a) Operating a payment system that provides processing, clearing, or settlement services, between or among persons who are all excluded by this section, in connection with wire transfers, credit card transactions, debit card transactions, prepaid access transactions, automated clearinghouse transfers, or similar funds transfers; (b) Who is a contracted service provider of an entity in subsection (4) of this section that provides processing, clearing, or settlement services in connection with wire transfers, credit card transactions, debit card transactions, prepaid access transactions, automated clearinghouse transfers, or similar funds transfers; or (c) That facilitates payment for goods or services (not including money transmission itself) or bill payment through a clearance and settlement process using bank secrecy act regulated institutions pursuant to a written contract with the payee and either payment to the person facilitating the payment processing satisfies the payor's obligation to the	

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			payee or that obligation is otherwise extinguished; (10) A person registered as a securities broker-dealer or investment advisor under federal or state securities laws to the extent of its operation as such a broker-dealer or investment advisor; (11) An insurance company, title insurance company, or escrow agent to the extent that such an entity is lawfully authorized to conduct business in this state as an insurance company, title insurance company, or escrow agent and to the extent that they engage in money transmission or currency exchange as an ancillary service when conducting insurance, title insurance, or escrow activity; (12) The issuance, sale, use, redemption, or exchange of closed loop prepaid access or of payment instruments by a person licensed under chapter 31.45 RCW; (13) An attorney, to the extent that the attorney is lawfully authorized to practice law in this state and to the extent that the attorney engages in money transmission or currency exchange as an ancillary service to the practice of law; (14) A seller or issuer of prepaid access when the funds are covered by federal deposit insurance immediately upon sale or issue; (15) A person that transmits wages, salaries, or employee benefits on behalf of employers when the money transmission or currency exchange is an ancillary service in a suite of services that may include, but is not limited to, the following: Facilitate the payment of payroll taxes to state and federal agencies, make payments relating to employee benefit plans, make distribution of other authorized deductions from an employees' wages or salaries, or transmit	

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			other funds on behalf of an employer in connection with transactions related to employees; or (16) The lawful business of bookkeeping or accounting to the extent the money transmission or currency exchange is an ancillary service. WASH. REV. CODE § 19.230.020	