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# Charity Law & Blockchain Technology: Using Old Wineskins for New Wine?

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**Abstract**

Whenever something new emerges, the question of how existing law applies arises. Sometimes it is both easy to answer that question and the answer is consistent with the policy goals of existing law. But sometimes the answer to that question is uncertain, does not fit well with those policy goals, or reflects a mixture of these two issues.

This question is particularly vexing today with respect to new assets facilitated by blockchain technology. These new assets include cryptocurrencies, non-fungible tokens (NFTs), and ownership interests in decentralized autonomous organizations (DAOs). Commentators have written about how certain laws, particularly securities law, apply to these new assets. However, there is one legal area that commentators have yet to fully address: charity law, especially the federal tax laws relating to charities. Charities and donors are increasingly involved in transactions involving these new assets, with little guidance about how this law applies to those transactions.

This Article considers how existing charity law applies to these new assets and, to the extent that application is either uncertain or inconsistent with the policy goals underlying charity law, how charity law should be modified to accommodate these new assets. It concludes that existing law provides sufficiently certain answers regarding its application to these new assets and that that application is consistent with the goals underlying that law. But two areas may require further guidance or modification of existing law in the foreseeable future: first, should certain cryptocurrencies be treated as readily valued for charitable contribution tax deduction purposes if sufficiently reliable cryptocurrency exchanges emerge; and second, if charities increasingly use blockchain technology, and particularly DAO governance structures, to further their exempt purposes, when is that use consistent with exemption under federal tax law?

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## I. Introduction

Anything new—a new activity, asset, conduct, technology, etc.—presents a legal challenge for regulators, practitioners, and affected parties because the application of the law may be uncertain in two respects. First, how existing law applies is often uncertain, given that legislators, regulators, and courts created or interpreted existing law without the new matter in mind. Second, whether existing law should be modified to take the new matter into account is also often uncertain, depending on the interaction of the relevant law's policy goals and the new matter.

To address both areas of uncertainty, regulators and practitioners usually start with proceeding by analogy.[1] For existing law, they attempt to fit the new matter into one or more existing categories for which the law provides applicable rules. For proposed modifications to existing law, they consider whether the existing categories should be modified to include or exclude the new matter, and whether one or more new categories or sets of rules should be developed to encompass the new matter. This consideration of modifications also requires articulating the underlying policy goals of the relevant law and determining how those goals relate to the new matter.

These legal uncertainties have been particularly evident with respect to several new assets that have become significant in their scale or public prominence during the first part of the 21st century. These new assets are cryptocurrencies, non-fungible tokens (NFTs), and ownership interests in decentralized autonomous organizations (DAOs).[2] These assets owe their existence to blockchain technology, which permits the creation of decentralized, distributed ledgers for the verification of asset characteristics and ownership without the need for a central party.[3]

One specific area of legal uncertainty is how charity law, and especially federal tax law provisions relating to charities, apply to these new assets. All these assets share with other kinds of property the ability to be dedicated to charitable purposes, whether through ownership by a charity or other means, such as creation of a charitable trust. Such dedication, whether through

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[1] *See* Billy Abbott, *The Anything Asset: The Tax Classification of Cryptocurrency, NFTs, DAOs and Other Digital Assets*, 26 CHAPMAN L. REV. 459, 460 (2023) ("Unless and until the U.S. government provides more specificity in its rules, the analogy method of analysis will likely be the most viable for transactions involving digital assets.").

[2] For legal uncertainty these assets raise outside of the charity law context, see, e.g., EUROPEAN PARLIAMENTARY RESEARCH SERVICE, BLOCKCHAIN AND THE GENERAL DATA PROTECTION REGULATION: CAN DISTRIBUTED LEDGERS BE SQUARED WITH EUROPEAN DATA PROTECTION LAW? (2019) (European Union privacy law), *available at* https://www.europarl.europa.eu/RegData/etudes/STUD/2019/634445/EPRS_STU(2019)634445_EN.pdf [https://perma.cc/B226-SGVP]; Frank Emmert, *The Regulation of Cryptocurrencies in the United States,* EUR. J. L. REFORM (forthcoming 2023) (federal laws); Christa J. Laser, *Legal Issues in Blockchain, Cryptocurrency, and Non-Fungible Tokens (NFTs),* 102 NEB. L. REV. (forthcoming 2023) (securities law, intellectual property law, and contract law); Faten Sabry & Ignacio Franceschelli, *Cryptos Are Not All the Same, and the Market Knows It,* BUS. L. TODAY, Jan. 12, 2023 (securities law and commodities law); J.P. Schmidt & Tung Chan, *The Future Infrastructure of Business: A Primer on Blockchain and the Evolving Regulations*, HAW. BAR J., Apr. 24, 2020, at 13 (various areas of law in the United States and other countries).

[3] *See* Reuven Avi-Yonah & Mohanad Salaimi, *A New Framework for Taxing Cryptocurrencies*, 77 TAX LAW. 1, 7 (describing blockchain technology and its relationship to cryptocurrencies), 9 (describing NFTs and their relationship to blockchain technology) (2023); Samuel D. Brunson, *Standing on the Shoulders of LLCs: Tax Entity Status and Decentralized Autonomous Organizations,* 57 GA. L. REV. 603, 612-13 (2023) (describing DAOs and their relationship to blockchain technology).

donation, purchase, or otherwise, raises the full range of federal tax issues applicable to charitable assets. These issues include the ability and extent to which donors of these assets can claim a charitable contribution deduction and whether receipt, purchase, ongoing ownership, or disposition of such assets could affect the tax exemption of a charity or have other federal tax ramifications.[4] The resolution of some of these federal tax law issues relate, in turn, to how the duties owed by charity leaders under state law apply to these new assets. And a related issue is how the use of blockchain technology, and especially a DAO governance structure, interacts with the requirements for federal tax exemption as a charity under section 501(c)(3).[5]

The limited guidance and literature addressing these new assets that have been given to, purchased by, and owned by charities or dedicated to charitable purposes in some other way follows the reasoning-by-analogy pattern. The Internal Revenue Service (the Service) has drawn on general guidance placing these new assets in existing tax categories to provide guidance specifically with respect to donations of these assets to charities.[6] State authorities do not yet appear to have provided any charity-specific guidance relating to these new assets, although some states have enacted more general legislation relating to these assets, issued guidance relating to the application of other laws to these assets, or engaged in fraud and state securities law enforcement actions relating to cryptocurrency.[7] And several commentators have considered how

[4] *See* I.R.C. §§ 170, 501(c)(3).

[5] *See* Rustin Diehl, *How to Use Charitable and Nonprofit DAOs Tax-Efficiently,* 181 TAX NOTES FED. (TA) 2127, 2129-31 (Dec. 18, 2023). All section references are to a section of the Internal Revenue Code of 1986, as amended (the Code), unless otherwise indicated.

[6] *See* C.C.A.. 202302012 (Jan. 13, 2023); I.R.S., FREQUENTLY ASKED QUESTIONS ON VIRTUAL CURRENCY TRANSACTIONS (Q34 to Q37), last accessed Mar. 13, 2024, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions [https://perma.cc/DZY4-9VS5]. As of January 2023, the few states that had issued tax law guidance relating to cryptocurrencies followed the federal tax law treatment. Carol Kokinis-Graves & Max Traphagan, *Cryptocurrency and State Legislation: The Current State of Crypto State Taxes in 2023,* WOLTERS KLUWER TAX & ACCOUNTING, Jan. 27, 2023, https://www.wolterskluwer.com/en/expert-insights/cryptocurrency-and-state-legislation-the-current-state-of-crypto-state-taxes-in-2023 [https://perma.cc/368K-95JJ]; *see generally* JEROME R. HELLERSTEIN, WALTER HELLERSTEIN & ANDREW D. APPLEBY, STATE TAXATION ch. 23 (Taxation of Crypto-Assets).

[7] *See Cryptocurrency Laws and Regulations by State,* BLOOMBERG LAW, May 26, 2022, https://pro.bloomberglaw.com/brief/cryptocurrency-laws-and-regulations-by-state/ [https://perma.cc/CW6V-Q9BE]; Heather Morton, *Cryptocurrency 2022 Legislation,* NAT'L CONF. OF STATE LEGISLATORS, June 7, 2022, https://www.ncsl.org/financial-services/cryptocurrency-2022-legislation [https://perma.cc/XX7E-X9UB]; Abbott, *supra* note 1, at 467 & n.49 (state DAO legislation); Stefanie Boss, *DAOs: Legal and Empirical Review* (manuscript at 7) (2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4503234 [https://perma.cc/5GUN-WAW7] (same); Press Release, *DFPI Continues Actions To Protect Investors from Crypto Scams*, CALIFORNIA DEPARTMENT OF FINANCIAL PROTECTION &

existing charitable assets law applies to these new assets, primarily cryptocurrency, including identifying areas of uncertainty.[8]

Part I of this paper describes these new assets, including their increasing prominence both generally and with respect to charities specifically. Part II explores how existing legal scholarship has framed the problem that any new matter may create in terms of both the uncertain application of existing law and uncertainty regarding whether existing law should be modified given the new matter, and how that framing should apply in this specific context. Part III then considers whether the old wineskins of existing charity law can appropriately regulate these new assets. Part IV addresses whether and to what extent new wineskins—new laws—are required to appropriately regulate them in the charitable context.[9]

I conclude that, while for the most part the application of existing charity law to these new assets is straightforward, there are two federal tax areas where there are reasonable arguments that modification of existing law is needed. The first area is whether cryptocurrencies regularly traded on exchanges should be considered readily valued and therefore not require a qualified appraisal for charitable contribution deduction purposes even if the donor seeks a deduction of more than $5,000. The second area is whether an organization that wants to educate the public about specific uses of blockchain technology should be able to qualify for tax exempt status under section 501(c)(3).

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INNOVATION (Aug. 9, 2023) https://dfpi.ca.gov/2023/08/09/dfpi-continues-actions-to-protect-investors-from-crypto-scams/ [https://perma.cc/2F27-HAKE]; Press Release, *Attorney General James Recovers $1.7 Million from Cryptocurrency Platform for Operating Illegally*, OFFICE OF THE NEW YORK STATE ATTORNEY GENERAL (June 15, 2023), https://ag.ny.gov/press-release/2023/attorney-general-james-recovers-17-million-cryptocurrency-platform-operating#:~:text=In%20October%202021%2C%20Attorney%20General,failing%20to%20register%20cryptocurrency%20sales [https://perma.cc/2X3J-YF4Y]; Press Release, *Attorney General James Secures $4.3 Million from Cryptocurrency Company for Defrauding Investors*, OFFICE OF THE NEW YORK STATE ATTORNEY GENERAL (May 18, 2023) https://ag.ny.gov/press-release/2023/attorney-general-james-secures-43-million-cryptocurrency-company-defrauding [https://perma.cc/AY87-ZZM6]. The federal government is also issuing guidance and engaging in enforcement actions outside of the tax law area. *See, e.g.,* U.S. SECURITIES AND EXCHANGE COMMISSION (SEC), CRYPTO ASSETS AND CYBER ENFORCEMENT ASSETS, last accessed Dec. 1, 2023, https://www.sec.gov/spotlight/cybersecurity-enforcement-actions) [https://perma.cc/HV43-CLVL]; Jonathan Stempel, Hannah Lang & John Mccrank, *US tightens crackdown on crypto with lawsuits against Coinbase, Binance,* REUTERS (June 7, 2023).

[8] *See, e.g.,* Jeremy T. Coffey, *Virtual Currency—What Charities and Donors Need to Know,* 29 TAX'N EXEMPTS 36 (2017); Christopher N. Moran, *Charitable Donations of Cryptocurrency: Is a Qualified Appraisal Necessary?,* 31 TAX'N EXEMPTS 24 (2019); Sanford J. Schlesinger & Andrew S. Auchincloss, *Review of Charitable Planning for Cryptocurrency,* 33 TAX'N EXEMPTS 35 (2022).

[9] *See Matthew* 9:17 (New International Version) ("'Neither do people pour new wine into old wineskins. If they do, the skins will burst; the wine will run out and the wineskins will be ruined. No, they pour new wine into new wineskins, and both are preserved.'").

On the first topic, I conclude that existing uncertainty about the reliability and consistency of cryptocurrency exchanges supports the current Service position that a qualified appraisal is required for donors who want to claim a more than $5,000 deduction for a cryptocurrency charitable contribution. This is particularly true given the ongoing litigation regarding whether such exchanges are subject to securities law and U.S. Securities and Exchange Commission (SEC) authority.[10] That said, I believe the federal government should be open to the possibility that those exchanges may in the future become sufficiently reliable that the list of readily valued assets exempt from the qualified appraisal requirement should be expanded to include cryptocurrencies that are regularly traded on those exchanges or, alternatively, that an otherwise qualified appraisal should be sufficient if it relies on exchange-reported values.

On the second topic, I conclude that the Service is correct that developing and promoting a particular application of blockchain technology, such as a specific cryptocurrency, does not qualify an organization for tax exempt status under section 501(c)(3) because of the inherent and significant private benefit provided by such activity. That said, I also conclude that an otherwise qualified section 501(c)(3) organization may use blockchain technology, whether in the form of cryptocurrencies, NFTs, or a DAO governance structure, to further a recognized charitable purpose, such as facilitating charitable giving, without threatening its tax exempt status under section 501(c)(3). The Service should therefore continue to treat this new technology, and the new assets it helps create, as an acceptable means for furthering charitable purposes.

## II. The New Assets

The new assets I consider in this article owe their existence to the development of blockchain technology. Blockchain technology relies on open source software to create a decentralized, distributed ledger of property or rights ownership. (Open source software is software that operates under an open source license, which means it is made freely accessible and usable by anyone, subject to them in turn making any of their modifications of the original software also freely accessible and usable by anyone.) This ledger is characterized as "decentralized" in that it is not held or maintained by any specific person or entity, but instead is recorded in immutable "blocks" that are shared and synchronized across multiple, independent digital systems.[11]

[10] *See* SEC, *supra* note 7; Stempel, Lang & Mccrank, *supra* note 7.

[11] For detailed descriptions of how blockchain technology functions, see, e.g., ANDREW HAYNES & PETER YEOH, CRYPTOCURRENCIES AND CRYPTOASSETS: REGULATORY AND LEGAL ISSUES 11-13 (2020); Robby Houben & Alexander Snyers, *Cryptocurrencies and Blockchain: Legal Context and Implications for Financial Crime, Money Laundering and Tax Evasion*, European Parliament Study, at 15-17 (July 2018), https://www.europarl.europa.eu/cmsdata/

This technology is innovative because it does not require the recording of property ownership (or other rights) with one or more centralized entities to conclusively establish both the scope of the property (or other right) and its current and past ownership. It therefore contrasts with the government deed recording system used in the United States and elsewhere to provide constructive notice to the public of ownership changes for real property,[12] with the securities ownership recording system involving brokerage record departments and a central entity such as the Depository Trust Company in the United States,[13] and with the use of banks to track monetary transactions, to name several examples.

Supporters of blockchain technology argue this lack of centralization eliminates the need for owners to trust the central registries or even the counterparties to a transaction; they also argue it increases efficiency because ownership changes are automatically and instantaneously recorded and publicly visible without centralized entities and other intermediaries charging fees and with little to no risk of unauthorized charges.[14] They further argue it prevents government interference or manipulation.[15] A further potential advantage is that blockchain technology allows anonymity to transaction participants because an owner is identified by a public "key" that does not contain any personal information, with exercise of ownership rights—such as transferring the asset to another person—limited to a person with a specific private "key," knowledge of which that person can keep to themselves.[16] More specifically, the private key gives access to the digital "wallet" that allows exercise of ownership rights over the digital assets contained in that wallet.[17]

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150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf. [https://perma.cc/8EPL-4W4Q]; Brian L. Frye, *A Brief History of NFTs* (manuscript at 4) (2023), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4577014 [https://perma.cc/ M627-CCA5].

[12] *See* Chad J. Pomeroy, *Ending Surprise Liens on Real Property,* 11 NEV. L.J. 139, 141-42 (2010) (describing the real property recording system in the United States).

[13] *See* David Brooks, Comment, *Depository Trust Company and the Omnibus Proxy: Shareholder Voting in the Era of Share Immobilization,* 56 S. TEX. L. REV. 205, 209-11 (2014) (describing the securities ownership recording system in the United States).

[14] *See* Gross Proceeds and Basis Reporting by Brokers and Determination of Amount Realized and Basis for Digital Asset Transactions, 88 Fed. Reg. 59576, 59580 (proposed Aug. 29, 2023) [hereinafter Proposed Reporting Regulations]; JERRY BRITTO & ANDREA CASTILLO, BITCOIN: A PRIMER FOR POLICYMAKERS 13-14 (2016), *available at* https://www.mercatus.org/research/books/bitcoin-primer-policymakers [https://perma.cc/9DJJ-9N9L]; HAYNES & YEOH, *supra* note 11, at 8; Adam Chodorow, *Bitcoin and the Definition of Foreign Currency,* 19 FLA. TAX REV. 365, 384-85 (2016).

[15] *See* HAYNES & YEOH, *supra* note 11, at 7; Chodorow, *supra* note 14, at 384.

[16] *See* Proposed Reporting Regulations, *supra* note 14, at 59580.

[17] For a more detailed description of digital wallets as they relate to digital assets, see Proposed Reporting Regulations, *supra* note 14, at 59577; Frye, *supra* note 11, at 4.

However, blockchain technology is not an unalloyed good. The combination of anonymity and regulatory uncertainty can be used to conceal illegal transactions and allow tax evasion.[18] For example, the cryptocurrency Bitcoin was initially associated with illegal transactions on the dark web Silk Road market, and hackers that demand ransom to unlock victim's computers often demand payment in cryptocurrency because it is untraceable.[19] The private key requirement can also lead to owners irretrievably losing access to the relevant asset if they misplace or forget the private key, or if the private key is not passed on when someone dies or otherwise becomes unavailable.[20] In 2017, a study estimated that millions of Bitcoins had been lost forever, including 7,500 Bitcoins that one person lost in 2013 when he threw out a hard drive that contained the relevant private key.[21] And exchanges that hold cryptocurrency on behalf of individuals may be vulnerable to theft, including through hacking and outright fraud, as illustrated by the collapse of cryptocurrency exchange FTX.[22]

In theory, ownership of any property or right could be "tokenized"—that is, tracked using blockchain technology.[23] Such tokenization creates a "digital

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[18] *See* EXECUTIVE ORDER 14067, Mar. 9, 2022, § 2(c) ("[d]igital assets may pose significant illicit finance risks, including money laundering, cybercrime and ransomware, narcotics and human trafficking, and terrorism and proliferation financing"); Proposed Reporting Regulations, *supra* note 14, at 59580 ("pseudo anonymity creates a significant risk to tax administration"); Chodorow, *supra* note 14, at 386; Omni Marian, *Are Cryptocurrencies* Super *Tax Havens?,* 112 MICH. L. REV. FIRST IMPRESSIONS 38 (2013); Noam Noked, *Ending the Crypto Tax Haven,* 15 HARV. BUS. L. REV. (forthcoming 2024).

[19] *See* BRITTO & CASTILLO, *supra* note 14, at 37-38; Eric D. Chason, *Crypto Assets and the Problem of Tax Classifications*, 100 WASH. U. L. REV. 765, 768 (2023); Chodorow, *supra* note 14, at 386-87; Frye, *supra* note 11, at 5.

[20] Vincent Ooi, *A Framework for Understanding the Taxation of Digital Tokens,* 50 AUSTL. TAX REV. 260, 268 (2021).

[21] *See* Jeff John Roberts & Nicolas Rapp, *Exclusive: Nearly 4 Million Bitcoins Lost Forever, New Study Says,* FORTUNE (Nov. 25, 2017).

[22] *See* BRITTO & CASTILLO, *supra* note 14, at 35-36 (describing security and fraud issues at Bitcoin exchanges); Coffey, *supra* note 8, at 37-38 (noting one early Bitcoin exchange that allegedly lost approximately $350 million in Bitcoin in 2014 because of a theft by its manager, and another Bitcoin exchange that was hacked in 2016, leading to the loss of about $60 million in Bitcoin); Amanda Hetler, *FTX Scam Explained: Everything you need to know,* TECHTARGET, Apr. 17, 2023, https://www.techtarget.com/whatis/feature/FTX-scam-explained-Everything-you-need-to-know#:~:text=FTX%20was%20one%20of%20the,directly%20in%20a%20personal%20account [https://perma.cc/7WPY-HLYL].

[23] Tracking using blockchain technology is usually divided between "coins" that run on their own blockchain—which is usually the case for cryptocurrency—and "tokens" that use existing blockchains—which is usually the case for NFTs and digital assets that represent ownership of a non-digital asset, such as an equity interest in a company. *See, e.g.,* Loon v. Dept. of Treasury, 2023 U.S. Dist. LEXIS 144035, at *5 (No. 1:23-CV-312, W.D. Tex., Aug. 17, 2023); Chason, *supra* note 19, at 771-72; Coryanne Hicks, *Different Types of Cryptocurrencies,* FORBES, Mar 15, 2023, https://www.forbes.com/advisor/investing/cryptocurrency/different-types-of-crypto-

asset," which Congress has defined for certain reporting purposes as any digital representation of value which is recorded on a cryptographically secured distributed ledger or any similar technology."[24] Cryptocurrencies, NFTs, and DAO interests are all digital assets under this definition.

In practice, both existing law and public perceptions limit the ability to tokenize ownership of many kinds of property and other rights.[25] For example, attempts to tokenize equity interests in traditional companies presumably have to comply with securities laws, which likely inhibits tokenization because compliance with such laws reduces or eliminates the decentralization and efficiency benefits attributed to blockchain technology.[26] It is therefore not surprising that the most prominent application of blockchain technology has been to a new type of property—cryptocurrency. That said, blockchain technology has also been applied to ownership of, or rights relating to, certain intellectual property, in the form of non-fungible tokens or NFTs.[27] And there is now an attempt to apply this

currencies/#:~:text=How%20Many%20Cryptocurrencies%20Are%20There,market%20capitalization%20of%20%241.1%20trillion [https://perma.cc/K3SK-WZ8M]. However, and in the interests of simplicity, for purposes of this article the term tokens will be used for all ownership tracking using blockchain technology. *See generally* Andrew Appleby, *Taxing Tokens,* 91 TENN. L. REV. 321 (2024).

[24] *See* I.R.C. § 6045(g)(3)(D). The Financial Action Task Force (FATF) uses a broader definition for "virtual asset" that is not limited to assets using blockchain technology: "a digital representation of value that can be digitally traded, or transferred, and can be used for payment or investment purposes." *International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation*, FIN. ACTION TASK FORCE, at 135 (2019), https://www.fatf-gafi.org/content/dam/fatf-gafi/recommendations/FATF%20Recommendations%202012.pdf.coredownload.inline.pdf [https://perma.cc/SWV4-SB86]. FATF also excludes from this definition digital representations of currencies, securities, and other financial assets that it addresses in other materials. *Id.*

[25] While well beyond the scope of this article, blockchain technology may also have potential as a regulatory tool itself. *See, e.g.,* Charles J. Delmotte, *Toward a Blockchain-Driven Tax System,* 43 VA. TAX REV. 37 (2023). *See generally* REGULATING TECHNOLOGIES: LEGAL FUTURES, REGULATORY FRAMES AND TECHNOLOGICAL FIXES 49-218 (Roger Brownsword & Karen Yeung eds., 2008) [hereinafter REGULATING TECHNOLOGIES] (chapters discussing new technology as a regulatory tool).

[26] *See* Hicks, *supra* note 23 (noting that a token that represents an equity stake in a company is a financial security and so subject to SEC regulation); *supra* notes 14-16 and accompanying text (discussing the claimed benefits of tokenization). Securities law regulation issues drove the first widely adopted classification of tokens, by the Swiss Financial Market Supervisory Authority (FINMA) in 2018, but that classification scheme is not necessarily well suited to resolving other legal issues. *See* Ooi, *supra* note 20, at 3-4 (citing Press Release, *FINMA Publishes ICO Guidelines*, FINMA, Feb. 16, 2018, *available at* https://www.finma.ch/en/news/ 2018/02/20180216-mm-ico-wegleitung/ [https://perma.cc/GRT5-MMN8]); *infra* note 31 (describing this classification system).

[27] For more details regarding the creation of NFTs, see, e.g., Christopher Odinet, Andrea Tosato & Jordan Jenquin, *How to Create a Floating Lien on Digital Assets,* BUSINESS LAW TODAY,

technology to equity ownership through the creation of decentralized autonomous organizations or DAOs, which use layers of "smart contracts."[28] Smart contracts use blockchain technology to be self-executing, in that if certain data are received then some action (for example, the transfer of a certain amount of a specific cryptocurrency to a specific person) is recorded on a blockchain ledger.[29] Because DAOs are contractually created, they usually are not incorporated or otherwise dependent on a government filing for their existence.[30] Other potential applications of this technology exist to create other kinds of new assets, but these three types—cryptocurrencies, NFTs, and DAOs—are currently the most prominent.

### A. *Cryptocurrency*

For purposes of this article, cryptocurrency is a digital asset that can be converted into (or substitute for) fiat currencies—that is, legal tender recognized by one or more governments—but that is not itself issued by a government.[31] For this reason, cryptocurrencies are referred to by the Service and other regulators as a type of "convertible virtual currency."[32] The

June 14, 2023, https://businesslawtoday.org/2023/06/how-to-create-floating-lien-digital-assets/ [https://perma.cc/VJB4-DEBC]. This use of the term NFTs tracks the usual public understanding, although it could be argued that any unique token is an NFT. *See* Frye, *supra* note 11, at 5.

[28] *See* Boss, *supra* note 7, at 3-4 (2023); Brunson, *supra* note 3, at 614. Technically, all NFTs are tracked using smart contracts. *See* Frye, *supra* note 11, at 1; Michael D. Murray, *Transfers and Licensing of Copyrights to NFT Purchasers,* 6 STANFORD J. BLOCKCHAIN L. & POL'Y 119, 120-21 (2023).

[29] Brunson, *supra* note 3, at 614; Frye, *supra* note 11, at 8-9. For a discussion of the intersection of smart contracts and contract law, see ROGER BROWNSWORD, LAW, TECHNOLOGY AND SOCIETY: RE-IMAGINING THE REGULATORY ENVIRONMENT 287-93 (2019).

[30] Brunson, *supra* note 3, at 614-15.

[31] *But see* Avi-Yonah & Salaimi, *supra* note 3, at 6 (also including within the definition of cryptocurrency digital representations of value that are only recognized within a virtual world, not the real-world economy). Cryptocurrencies are also generally classified as "payment tokens," which contrast with "security (or asset and financial) tokens," which are usually classified as a securities, and "utility (or consumer) tokens," which can be exchanged for a specific good or service. *See* FINMA, *supra* note 26; OECD, TAXING VIRTUAL CURRENCIES: AN OVERVIEW OF TAX TREATMENTS AND EMERGING TAX POLICY ISSUES 12 (2020), https://www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emerging-tax-policy-issues.pdf [https://perma.cc/R7RX-RWTE]; Ooi, *supra* note 20, at 6-7.

[32] Notice 2014-21, 2014-16 I.R.B. 938, 938 (defining "virtual currency" as "a digital representation of value that functions as a medium of exchange, a unit of account, and/or store of value" and a "convertible virtual currency" as "[v]irtual currency that has an equivalent value in real currency, or that acts as a substitute for real currency," citing FIN. CRIMES ENFORCEMENT NETWORK (FINCEN), FIN-2013-G001, GUIDANCE ON THE APPLICATION OF FINCEN'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES (2013). The convertibility distinguishes cryptocurrency from other virtual assets that only have value in a virtual realm, such as a video game, which may lead to different tax consequences. *See,*

"crypto" part of cryptocurrency comes from the fact that cryptocurrencies use encryption to provide security and verify transactions.[33] The "currency" part of the name comes from the fact that cryptocurrencies are meant to be substitutes for government-issued mediums of exchange, such as United States dollars, Euros, and Chinese renminbi/yuan. However, as a practical matter the use of cryptocurrencies as a medium of exchange is currently limited.[34] Cryptocurrencies are usually created by "mining," a process by which computers solve complex equations to verify cryptocurrency transfers and maintain the blockchain, and for which in return the individual or entity owning the computers receives new cryptocurrency tokens.[35]

Bitcoin was the first cryptocurrency and is the largest cryptocurrency in terms of asset value.[36] An anonymous developer or group of developers introduced it in 2008.[37] The global total market cap for Bitcoin has at times exceeded $1 trillion and as of late 2023 was over $750 billion.[38] The value of a single Bitcoin has varied from a fraction of a penny (pre-2010) to a high of over $60,000 in 2021.[39] Individuals and entities can readily purchase Bitcoin with fiat currency and sell it for fiat currency through various cryptocurrency exchanges and can also use it in transactions involving various goods and

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*e.g.,* Young Ran Kim, *Taxing the Metaverse,* 112 GEO. L.J. (forthcoming 2024) (discussing the tax treatment of virtual assets that only are sold or exchanged in the Metaverse); Leandra Lederman, *Stranger than Fiction: Taxing Virtual Worlds,* 82 N.Y.U. L. REV. 1620 (2007) (discussing the tax treatment of virtual assets that are primarily (if not exclusively) traded in a virtual setting and not for fiat currency). It is unclear what assets other than cryptocurrencies the Service would consider to be convertible virtual currency.

[33] *See* HAYNES & YEOH, *supra* note 11, at 7.

[34] *See* OECD, *supra* note 31, at 20 ("[a]lmost all countries appear to take the view that virtual currencies are not equivalent to sovereign currencies"); U.S. DEPT. OF THE TREAS., CRYPTO-ASSETS: IMPLICATIONS FOR CONSUMERS, INVESTORS, AND BUSINESSES 20 (2022), https://home.treasury.gov/system/files/136/CryptoAsset_EO5.pdf____[https://perma.cc/RHG2-P6EH] ("crypto-assets have not become widely adopted as a medium of exchange in the real economy"); Notice 2023-34, 2023-19 I.R.B. 837, 837 & n.2 ("the use of virtual currency . . . to perform 'real' currency functions is limited" (citing OECD, *supra*, and U.S. DEPT. OF TREAS., *supra*)).

[35] *See* Ooi *supra* note 20, at 8. Cryptocurrency tokens can also be created through "forging" or "staking," which provides cryptocurrency tokens to individuals or entities that expend effort to verify blockchain transactions through means other than using mathematical equations. *See id.* at 9.

[36] *See* HAYNES & YEOH, *supra* note 11, at 9; Chason, *supra* note 19, at 772.

[37] *See* HAYNES & YEOH, *supra* note 11, at 9; Frye, *supra* note 11, at 3.

[38] COINMARKETCAP, BITCOIN, last accessed Dec. 1, 2023, https://coinmarketcap.com/currencies/bitcoin/ [https://perma.cc/46FU-3U5L].

[39] *See* Abbott, *supra* note 1, at 461; John Edwards, *Bitcoin's Price History,* INVESTOPEDIA, May 24, 2023, https://www.investopedia.com/articles/forex/121815/bitcoins-price-history.asp [https://perma.cc/T6Z3-V673]; James Royal, *Bitcoin's price history: 2009 to 2023,* BANKRATE, June 14, 2023, https://www.bankrate.com/investing/bitcoin-price-history/ [https://perma.cc/WUV4-GHX9].

services if the other party to the transaction is willing to accept it.[40] Only a relatively small proportion of vendors are willing to accept Bitcoin or other cryptocurrencies in exchange for goods or services, limiting its use as a medium of exchange.[41]

Another form of cryptocurrency, exemplified by Ether, can be used to facilitate smart contracts, where receipt of certain data automatically triggers a specific transaction.[42] For example, "a simple vendor smart contract could create and assign ownership of a digital asset if the caller sends [Ether] to a specific recipient."[43] Other common types of cryptocurrency include stablecoins such as Tether, which purportedly peg their value to another asset—for example, the U.S. dollar—either through a collateral pool or an algorithm that controls their supply,[44] and meme coins such as Dogecoin, which depend solely on public popularity and so tend to have values even more volatile than for other types of cryptocurrencies.[45]

All told, there are tens of thousands of cryptocurrencies with an aggregate market capitalization of more than $1 trillion, although many have relatively small total market caps and limited acceptance and utility.[46] This figure, while large in an absolute sense, is only about two percent of the estimated value of money in circulation globally (excluding cryptocurrencies) and less than 0.1 percent of the estimated value of investments globally (including cryptocurrencies).[47]

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[40] *See, e.g.,* BINANCE.US, last accessed Mar. 5, 2024, https://www.binance.us/ [https://perma.cc/8GZR-C2NK] (cryptocurrency exchange); COINBASE, https://www.coinbase.com/ [https://perma.cc/QD3B-GW8E] (same); *How to Quickly and Security Pay with Bitcoin & Crypto,* BITPAY BLOG, Feb. 21, 2023, https://bitpay.com/blog/how-to-pay-with-crypto/ [https://perma.cc/2A7F-8V4X] (explaining how to purchase goods and services with cryptocurrency).

[41] *See* Maddie Shepherd, *How Many Businesses Accept Bitcoin? Full List,* FUNDERA, Oct. 20, 2022, https://www.fundera.com/resources/how-many-businesses-accept-bitcoin#:~:text=the%20bitcoin%20landscape%3A-,15%2C174%20businesses%20worldwide%20accept%20bitcoin.,%5B1%5D [https://perma.cc/3E4P-NPUB] (only slightly more than 15,000 businesses worldwide accept Bitcoin).

[42] *See* Schmidt & Chan, *supra* note 2, at 14-15 (describing Ether).

[43] *Intro toEthereum*, ETHEREUM.ORG, last accessed Mar. 24, 2024, https://ethereum.org/en/developers/docs/intro-to-ethereum/#:~:text=For%20example%2C%20a%20simple%20vendor,fee%20paid%20to%20the%20network [https://perma.cc/QK9W-YENY].

[44] Hicks, *supra* note 23.

[45] Hicks, *supra* note 23.

[46] Hicks, *supra* note 23 (citing a CoinMarketCap report stating there are approximately 22,932 cryptocurrencies with a total market capitalization of $1.1 trillion).

[47] *See How Much Money Is There In The World? 2024 Edition,* RANKRED, Mar. 25, 2024, https://www.rankred.com/how-much-money-is-there-in-the-world/ [https://perma.cc/BXL4-HTDP].

While cryptocurrency is not currently utilized for a significant portion of contributions to charities—the best estimate is cryptocurrency donations represent considerably less than one percent of the almost half a trillion dollars in annual donations to U.S. charities[48]—such contributions are common enough that several web platforms have emerged to facilitate them.[49] Those platforms accept contributions involving approximately 100 different types of cryptocurrencies and work with thousands of charities.[50] They charge a modest fee—1-4 percent—to convert the contributions into U.S. dollars, transfer the resulting funds to the recipient charities, and provide the required paperwork to substantiate the contributions for federal tax purposes.[51] One platform, the Giving Block, reported in 2023 that, over the five years since its launch, it had processed $125 million in cryptocurrency contributions.[52]

Many charities also accept cryptocurrency contributions directly. For example, Fidelity Charitable, the largest donor advised fund sponsor, accepts Bitcoin and other cryptocurrencies.[53] It reported receiving $331 million in digital assets, primarily Bitcoin, in 2021, although this declined to $38 million in 2022.[54] Fidelity Charitable also reported that in 2020 nearly half of cryptocurrency investors donated $1,000 or more to charity.[55]

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[48] *See* Michael J. Bologna, *Crypto Donations to Charity Falter on Fuzzy Rules, Dip in Value*, BLOOMBERG LAW, Apr. 13, 2023.

[49] *See, e.g.,* ENGIVEN, last accessed Mar. 24, 2024, https://www.engiven.com/ [https://perma.cc/7QRP-27YX]; EVERY.ORG, last accessed Mar. 24, 2024, https://www.every.org/ [https://perma.cc/6AHY-STRX]; THE GIVING BLOCK, last accessed Mar. 24, 2025, https://thegivingblock.com/ [https://perma.cc/5SMM-UXSC]; *see also* Bologna, *supra* note 48. For a discussion of giving platforms organized outside of the United States, see Peter Howson, *Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits,* 31 NONPROFIT MGMT. & LEADERSHIP 805 (2021).

[50] Bologna, *supra* note 48.

[51] Bologna, *supra* note 48.

[52] Pat Duffy, *The Giving Block Celebrates 5 Years,* THE GIVING BLOCK: THEGIVINGBLOG, May 22, 2023, https://thegivingblock.com/resources/the-giving-block-celebrates-5-years/ [https://perma.cc/D3X6-ZH7D].

[53] *Donating Bitcoin and Other Cryptocurrency to Charity,* FIDELITY CHARITABLE, last accessed Mar. 24, 2024, https://www.fidelitycharitable.org/giving-account/what-you-can-donate/donating-bitcoin-to-charity.html [https://perma.cc/599X-Z99A].

[54] *See* FIDELITY CHARITABLE, 2023 GIVING REPORT 17 (2023), *available at* https://www.fidelitycharitable.org/insights/2023-giving-report.html [https://perma.cc/MC4B-ABN6]; FIDELITY CHARITABLE, 2022 GIVING REPORT 20 (2022), *available at* https://www.fidelitycharitable.org/insights/2022-giving-report.html [https://perma.cc/SX6G-ST5V]; Ben Steverman & Sophie Alexander, *Crypto Gifts Surge 1,082% at Fidelity's Philanthropic Powerhouse,* BLOOMBERG, Feb. 15, 2022.

[55] *Cryptocurrency and philanthropy,* FIDELITY CHARITABLE, last accessed Mar. 24, 2025, https://www.fidelitycharitable.org/insights/cryptocurrency-and-philanthropy.html [https://perma.cc/UU7M-3N68].

B. *Non-Fungible Tokens*

Non-fungible tokens or NFTs are tokens with a unique number or other unique data attached to them, which renders each NFT itself unique and so non-fungible.[56] Each NFT's unique data and the person with whom it is associated is recorded in a blockchain, using the public key/private key system discussed previously.[57] What ownership rights in other assets NFTs represent varies.[58] For example, an NFT may coincide with copyright ownership over a digital image.[59] But an NFT may instead simply point to a URL where a specific digital image is located but may not be associated with copyright ownership of the image or, if the image is of a painting or other physical property, ownership over the physical property pictured in the image.[60] As Billy Abbott notes, such NFTs are therefore "in many ways similar to a baseball card."[61] Or, as Brian Frye has discussed, such NFTs are essentially the equivalent of artwork, with the NFT being a certificate of authenticity for the (digital) art associated with the NFT.[62]

That said, there may be norms that, if followed, limit the ability of others to use the image even if the applicable law does not. For example, the Bored Ape Yacht Club is an NFT collection consisting of 10,000 JPEG images of monkeys, some of which sell for millions of dollars (to the bewilderment of many).[63] While ownership of the NFT associated with a particular image does

[56] *See* Notice 2023-27, I.R.B. 2023-15, at 634, 634; Frye, *supra* note 11, at 1 ("NFTs are 'non-fungible' because each NFT is unique, unlike blockchain entries that represent a quantity of cryptocurrency."), 5.

[57] *See* Murray, *supra* note 28, at 121.

[58] *See* Murray, *supra* note 28, at 121-22.

[59] *See* Abbott, *supra* note 1, at 471; *see generally* Sebastian Pech, *Unchain My Art—Copyright Implications of Tokenized Artworks Under US and EU Law* (Stanford Law School Working Paper No. 106, 2023), *https://law.stanford.edu/wp-content/uploads/2023/09/TTLF-WP-106-Pech.pdf* [https://perma.cc/EPW9-22VJ].

[60] *See* Abbott, *supra* note 1, at 471; Frye, *supra* note 11, at 15 (describing how one creator of an NFT collection said it was selling only NFTs, not any copyright or trademark interest relating to them).

[61] Abbott, *supra* note 1, at 471.

[62] Brian L. Frye, *Luxury Tokens* 2 (Aug. 29, 2023) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4541913 [https://perma.cc/X864-R8YR]; Frye, *supra* note 11, at 1 ("The NFT Market is essentially the cryptographic equivalent of the art market."), 7-8 (describing emergence of NFTs as certificates of authenticity for digital art); *see also* Murray, *supra* note 28, at 120 ("NFTs are not artworks. An NFT records the creation and ownership of an asset that could be an artwork." (citation omitted)); *see also* Sebeom Oh, Samuel Rosen & Anthony Lee Zhang, Digital Veblen Goods (Dec. 2023) (unpublished manuscript) (arguing that consumers demand NFTs partly because other consumers do), https://anthonyleezhang.github.io/pdfs/nft.pdf [https://perma.cc/HU9Z-P3S3].

[63] *See* BORED APE YACHT CLUB, https://boredapeyachtclub.com/#/ [https://perma.cc/52P7-GFAN]; James Harrison, *Cartoon Apes Worth Millions Are Flooding the Internet and Have Left a Lot of Us Confused*, B&T, Nov. 16, 2021, https://www.bandt.com.au/cartoon-apes-worth-

not provide copyright ownership of that image, there are club norms that appear to effectively limit use. For example, two related club norms are that "It is cool to use a picture of your ape as your Twitter profile picture" and "It is *not* cool to use a picture of an ape you *don't* own as your Twitter profile picture."[64]

Various websites track transactions by NFT collections, such as the Bored Ape Yacht Club, and estimate the total market cap for NFTs. For example, CoinMarketCap reported that, as of late 2023, NFTs had a total market cap of over $5.3 billion and have had a total sales volume of over $72 billion spread over more than 71 million sales since the inception of NFTs.[65] The highest value NFT sale appears to have been of the "Merge" NFT project by digital artist Pak, which sold for a total of $91.8 million in December 2021 to almost 29,000 collectors.[66] The likely highest price paid for a single NFT

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millions-are-flooding-the-internet-and-have-left-a-lot-of-us-confused/ [https://perma.cc/69FH-9ZMU]; Matt Levine, *The Crypto Story*, BLOOMBERG BUSINESSWEEK, Oct. 31, 2022, § II.F.2; *Bored Ape Yacht Club*, FORTUNE, https://fortune.com/crypto/crash-course/bored-ape-yacht-club/ [https://perma.cc/Z7A3-ZBGG]. The creator of the Bored Ape Yacht Club NFT collection stated owners had "commercial rights" in their NFTs, but was vague on what that meant. Frye, *supra* note 11, at 15.

[64] Levine, *supra* note 64, § II.F.2. While the focus of this article is on regulation through (charity) law, as Lawrence Lessig has highlighted regulation can also come through non-legal means, specifically social norms (as is the case with the Board Ape Yacht Club NFTs), markets, and the "architecture" of the world as it is. *See* Lawrence Lessig, *The New Chicago School,* 27 J. LEG. STUD. 660, 662-63 (1998). Similarly, the focus of this article is not on other ways that governments affect behavior, which Christopher C. Hood and Helen Z. Margetts characterize as nodality (being in the middle of information or social networks), treasure, and organization. CHRISTOPHER C. HOOD & HELEN Z. MARGETTS, THE TOOLS OF GOVERNMENT IN THE DIGITAL AGE 5-6 (2007). For a discussion of these broader conceptions of regulation with respect to new technology, see, e.g., Charles D. Raab & Paul de Hert, *Tools for Technology Regulation: Seeking Analytical Approaches Beyond Lessig and Hood, in* REGULATING TECHNOLOGIES, *supra* note 25, at 263. Finally, and as Roger Brownsword has observed, in some instances technology itself may replace law as the primary regulator. BROWNSWORD, *supra* note 29, at vii-viii.

[65] COINMARKETCAP, HIGHEST PRICE NFT STATS, last accessed Dec. 1, 2023, https://coinmarketcap.com/nft/ [https://perma.cc/ZE9G-BP7T].

[66] *See* Frye, *supra* note 11, at 20; Duncan Foster & Griffin Cock Foster, *Pak's "Merge" Drop on Nifty Gateway Breaks Records in Largest-Ever Public Sale of an Artwork by a Living Artist,* GEMINI, Dec. 8, 2021, https://www.gemini.com/blog/paks-merge-drop-on-nifty-gateway-breaks-records-in-largest-ever-public-sale_[https://perma.cc/7GZU-8VR6]; Eric N. Mann & Jacob H. Calvert, *Charitable deductions: donating cryptocurrency and NFTs for tax purposes,* REUTERS, July 25, 2022; *The Most Expensive NFTs Ever Sold,* CRYPTO.COM, Jan. 4, 2023, https://crypto.com/university/most-expensive-nfts [https://perma.cc/95SW-29SF]. The project involved the sale of "mass" NFT tokens (more 312,000 of them) that "merge" with each other if held in the same digital asset wallet using a smart contract mechanism; for more details, see Rupal Sharma, *Decoding the Smart Contract of Pak's Merge NFT Project,* THE CRYPTO TIMES, Jan. 24, 2023, https://www.cryptotimes.io/decoding-smart-contract-of-pak-merge-nft/#:~:text=This%20_merge%20function%20first%20checks,increment%20of%20the%20smaller%20mass [https://perma.cc/W7AR-S43N].

was $69.3 million for *Everydays: the First 5000 Days* (2021) by Mike "Beeple" Winkelman, which combined 5,000 digital artworks into a single digital image.[67] That said, a recent report found that 95 percent of NFT collections were worthless as of mid-2023.[68] This includes many collections that never sold all their NFTs.[69]

The web platforms that accept cryptocurrency contributions on behalf of charities also accept NFT contributions.[70] None of them appear to have reported the volume of such contributions. Nor does there appear to be any public estimates of the overall volume of NFT contributions to charities. Finally, some charities have raised funds by selling NFTs they have created themselves or, alternatively, by working with other parties who sell NFTs they have created and then donate all or a portion of the proceeds to the charities.[71] Again, there do not appear to be any reports on the overall volume of such activity.

### C. *Decentralized Autonomous Organizations*

Decentralized autonomous organizations, or DAOs, are groups formed for a common purpose that use blockchain technology to create smart contracts ensuring decisions made by the DAO members are then executed.[72] This mechanism eliminates the potential for human managers to act contrary to the wishes of the members. For example, the DAOs members—each of whom owns one or more DAO-issued tokens that represents the right to vote on matters relating to the DAO—might decide through a vote to purchase a particular NFT if it becomes available for no more than X Bitcoins.[73] A smart contract is then created that executes this purchase automatically when the Bitcoin price of the NFT falls below the trigger amount. The organizers could then decide how to use the NFT, such as whether to share it with the public, sell it when its Bitcoin price reaches a certain level, or to hold it privately for

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[67] *See* Frye, *supra* note 11, at 18.

[68] *See Dead NFTs: The Evolving Landscape of the NFT Market*, DAPPGAMBL, last accessed Mar. 24, 2024, https://dappgambl.com/nfts/dead-nfts/ [https://perma.cc/QGM3-SAJV] [hereinafter DAPPGAMBL REPORT]; Phil Rosen, *Remember when NFTs sold for millions of dollars? 95% of the digital collectibles may now be worthless,* BUSINESS INSIDER, Sept. 20, 2023.

[69] DAPPGAMBL REPORT, *supra* note 68 (79 percent of all NFT collections have not sold 100 percent of their NFTs).

[70] Bologna, *supra* note 48.

[71] Joan MacLeod Heminway, *Non-Investment Finance in an NFT World, in* THE CAMBRIDGE HANDBOOK ON LAW AND POLICY FOR NFTS (Nizan Geslevich Packin ed., forthcoming), at 7-10. These activities implicate state charitable solicitation laws, but given the (apparently) small scale of such activities, those laws are beyond the scope of this article. *See id.* at 17.

[72] *See* Abbott, *supra* note 1, at 464; Brunson, *supra* note 3, at 612-13; Mark Cianci, Evan Gourvitz & Kelley Chandler, *Legal Implications of Decentralized Autonomous Organizations*, BLOOMBERG LAW PRACTICAL GUIDANCE (April 2022).

[73] *See* Abbott, *supra* note 1, at 464.

some period. Again, these decisions could be memorialized through smart contracts, rather than having to rely on a human manager or managers to comply with them.[74] Most jurisdictions have no laws specifically relating to DAOs, but a few states have enacted or introduced DAO-specific legislation.[75]

While it is difficult to track DAOs, by one estimate there were at least 4,000 DAOs holding in the aggregate over $13 billion in assets.[76] Perhaps the most prominent DAO was ConstitutionDAO, which received Ether cryptocurrency contributions valued at more than $45 million in a failed attempt to buy an original copy of the U.S. Constitution at auction.[77] Another prominent example is PleasrDAO, which bids on NFTs created by high-profile digital artists, sometimes to the tune of millions of dollars, and on which the above example is loosely based.[78]

DAOs can and are used for charitable activities, primarily pooling funds that are then given away pursuant to the decisions of the DAO owners. Perhaps the most prominent is the Big Green DAO, formed by the existing Big Green tax exempt section 501(c)(3) nonprofit and apparently operated as part of that nonprofit organization.[79] While the nonprofit created the DAO, it is the members of the DAO—consisting of both donors and previous grantees—who collectively select where to donate the millions of dollars in funds accumulated in the DAO.[80] Or a DAO could facilitate a charity obtaining a valuable asset, as ConstitutionDAO reportedly intended to do if it had been successful in purchasing a copy of the U.S. Constitution.[81]

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[74] This example is loosely based on PleasrDAO, a DAO formed to purchase NFTs. *See* Kevin Roose, *What are DAOs?*, N.Y. TIMES, Mar. 22, 2022.

[75] Abbott, *supra* note 1, at 467 & n.49; Boss, *supra* note 7, at 7; Cianci et al., *supra* note 72 ("a handful of U.S. jurisdictions, such as Wyoming and Vermont, and non-U.S. jurisdictions including the Marshall Islands, have provided a clear pathway for DAOs to be integrated into traditional legal structures").

[76] Brunson, *supra* note 3, at 618.

[77] See Kevin Roose, *What Are DAOs?,* N.Y. TIMES, Mar. 18, 2022; ConstitutionDAO, Wikipedia, last accessed Mar. 24, 2004, https://en.wikipedia.org/wiki/ConstitutionDAO [https://perma.cc/AX9H-JQF3].

[78] *See* Roose, *supra* note 77.

[79] *See* BIG GREEN DAO, *What is the Big Green DAO,* last accessed Mar. 25, 2024, https://biggreen.org/grantmaking/#section-3 [https://perma.cc/KFJ4-ZUPR] (stating that the Big Green DAO "operates under the umbrella of Big Green's 501c3"); Yonca Braeckman, *Philanthropy DAOs—The future of giving?,* MEDIUM, Feb. 18, 2022, https://medium.com/impact-shakers/philanthropy-daos-the-future-of-giving-608cc7a829b4 [https://perma.cc/3H56-3ZEQ].

[80] *See* BIG GREEN DAO, last accessed Mar. 25, 2024, https://dao.biggreen.org/home [https://perma.cc/5J9M-CNUR]; Braeckman, *supra* note 79.

[81] *See DAOs and the Nonprofit Sector—How Can they Work Together,* PERLMAN+PERLMAN, Jan. 25, 2022, https://perlmanandperlman.com/daos-and-the-nonprofit-sector-how-can-they-work-together/#:~:text=The%20ConstitutionDAO%2C%20while%20operated%20as,the%20copy%20of%20the%20Constitution [https://perma.cc/D5UJ-F576] (reporting that ConstitutionDAO

There also are at least a few stand-alone DAOs that the Service has recognized as tax exempt section 501(c)(3) organizations. A search of the Service's Tax Exempt Organization database identified three such organizations with "dao" in their name.[82] Anchor DAO describes itself on LinkedIn as "a 501(c)(3) nonprofit DAO LLC registered in Tennessee" that is "a student-run, community governed organization that operates on a blockchain network" and part of the Accelerating Vanderbilt Blockchain project.[83] AntidoteDAO describes itself on its website as "[t]he first DAO exclusively funding cancer research initiatives."[84] And according to a news report, ApostolicDAO devotes itself to funding Christian projects, with DAO participants and funders receiving images from a collection based on saints.[85]

One commentator has characterized philanthropy DAOs as a 21st century version of giving circles.[86] There do not appear to be any estimates or even

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intended to transfer the Constitution to a section 501(c)(3) charity named EnDAOment). Despite its name, EnDAOment appears to be organized as a typical nonprofit corporation and not as a DAO. *See* ENDAOEMENT INC, Form 990 for Nov. 19, 2019 to Sept. 30, 2022 tax year (2021), at 1, *available at* https://projects.propublica.org/nonprofits/organizations/844661797/202121009349300227/full [https://perma.cc/M97Y-YPZZ].

[82] *See* Tax Exempt Organization Search, https://apps.irs.gov/app/eos/ [https://perma.cc/TE8S-E8NG] (searched by organization name for "dao" on Oct. 4, 2023). The search yielded 138 organizations, but almost all of them appeared from their names to use the term not as an acronym for decentralized autonomous organization but instead in its more longstanding meaning as a way or path. It is not known why all three organizations that appear to be DAOs all had names beginning with "A". Organization name searches for "decentralized" and "autonomous" did not yield any organizations that, based on their names, were DAOs.

[83] Anchor DAO, LINKEDIN, last accessed Mar. 25, 2024, https://www.linkedin.com/company/anchordao/about/ [https://perma.cc/YV39-ALEW]. It appears, but is not completely clear, that this is the same entity as the "ANCHOR DAO INC" located in Memphis, Tennessee, to which the Service issued a favorable section 501(c)(3) determination letter. *See* Letter from Service to ANCHOR DAO INC, Jan. 9, 2023, *available at* https://apps.irs.gov/pub/epostcard/dl/FinalLetter_92-1465405_ANCHORDAOINC_12282022_00.pdf [https://perma.cc/QF4Z-PBMZ].

[84] Antidote Genesis. NFT, DESCI.WORLD, last accessed Mar. 25, 2024, https://desci.world/nft/antidote-genesis [https://perma.cc/QS5T-F2ZG]; *see* Letter from Service to ANTIDOTEDAO INC, Apr. 28, 2022, *available at* https://apps.irs.gov/pub/epostcard/dl/FinalLetter_88-1040229_ANTIDOTEDAOINC_04122022_00.tif [https://perma.cc/N48C-N7Q3].

[85] *ApostolicDAO Announces First-Ever Saint NFTs,* YAHOO!FINANCE, May 31, 2022, https://finance.yahoo.com/news/apostolicdao-announces-first-ever-saint-171500627.html [https://perma.cc/N2NE-GBKS]; *see* APOSTOLICDAO, https://www.apostolicdao.com/ [https://perma.cc/SZ2N-U9F5]; Letter from the Service to APOSTOLICDAO INC., July 21, 2022, *available at* https://apps.irs.gov/pub/epostcard/dl/FinalLetter_88-3004715_APOSTOLICDAOINC_06282022_00.tif [https://perma.cc/94AA-6WYY].

[86] Emily RASMUSSEN, *Philanthropy on the Blockchain: Giving DAOs and the Next Generation of Giving Circles,* COMMUNITY PHILANTHROPY BLOG, Dec. 14, 2021,

any public information about contributions to charities of equity interests in (non-charitable) DAOs. There also does not appear to be any public information about the overall extent of funds controlled by philanthropy DAOs. While the Big Green DAO controls several million dollars, the three philanthropy DAOs mentioned above that are separate legal entities have not shared publicly any information about their finances and are so new that they do not yet have a publicly available Service Form 990 series return.

## III. The Law and New Matters

When anything new emerges, such as a new activity, asset, conduct, or technology, a new-wine-and-old-wineskins issue arises with respect to the application of legal rules in two ways. First, how much uncertainty is there regarding if and how existing law applies to the new matter? That is, how well do the old wineskins of existing law contain the new wine? Second, does existing law correctly apply to the new matter from a policy standpoint? If not, how should policymakers change the law to better regulate the new matter? That is, are new wineskins needed in part or in whole to contain the new wine appropriately?

Legal scholarship regarding how to frame discussions of the interaction between law and new matters tends to focus on new technologies. While most such scholarship focuses on a particular new technology, a few scholars have considered the legal issues raised by new technologies more generally. For example, Lyria Bennett Moses has identified four legal problems that tend to arise from technological change:

> (1) the potential need for laws to ban, restrict, or, alternatively, encourage a new technology;
>
> (2) uncertainty in the application of existing legal rules to new practices;
>
> (3) the possible over-inclusiveness or under-inclusiveness of existing legal rules as applied to new practices; and
>
> (4) alleged obsolescence of existing legal rules.[87]

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https://johnsoncenter.org/blog/philanthropy-on-the-blockchain-giving-daos-and-the-next-generation-of-giving-circles/#:~:text=Philanthropy%20on%20the%20Blockchain%3A%20The%20Exciting%20Potential%20of%20Giving%20DAOs,are%20increasingly%20accepting%20cryptocurrency%20donations [https://perma.cc/HU8M-RARD].

[87] Lyria Bennett Moses, *Recurring Dilemmas: The Law's Race to Keep up with Technological Change*, 2007 U. ILL. J.L. TECH. & POL'Y 239, 243 (2007). A larger, related issue that is beyond the scope of this article is whether legislators and regulators should favor a minimalist approach when adapting existing laws to new technology or not. *Compare, e.g.,* Frank H. Easterbrook, *Cyberspace and the Law of the Horse,* 1996 U. CHI. LEGAL F. 207 (1996) (arguing for a minimalist

Similarly, Roger Brownsword characterizes the legal issues raised by new technology as the challenge of "regulatory connection," with mismatches between existing law and new technology requiring regulators to reconnect the law with the new, and often quickly developing, technology.[88]

Recognizing the uncertainty associated with both the application of existing law and the possible need to modify relevant laws also highlights a couple of related challenges. One challenge is that of "pacing"—the difficulty regulators have in keeping up with fast-changing technology.[89] Another challenge is the "Collingridge dilemma"—the dilemma regulators face given that usually they initially lack information about the likely impact of new technology.[90] On the one hand, if they act quickly based on little or no information about that impact, they risk being ineffective or even harmful (perhaps even to the point of preventing the adoption of beneficial technology).[91] On the other hand, if they wait for more data about the technology's impact to accumulate, they risk the technology developing momentum in the form of complexity, widespread adoption, or both, which then creates resistance to even beneficial regulatory change.[92] More fundamentally, the new matter may raise questions about the factual and policy assumptions underlying existing law or the goals of existing law and, if those assumptions prove to be no longer accurate, require modification or replacement of that law or those goals for that reason. Finally, it should be acknowledged that a new matter may fade in importance and even disappear, in which case any effort spent on designing regulation specifically for it is ultimately wasted.[93]

These issues suggest a straightforward way of considering the interaction of charity law with new types of assets. Since it is not a function or goal of charity law to ban, restrict, or encourage the development of these new assets, the first legal problem identified by Moses can be set aside for the purposes of this article. Instead, we can begin by asking what are the goals of charity law with respect to assets dedicated to charitable purposes, and should those

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approach) *with, e.g.,* Lawrence Lessig, *The Law of the Horse: What Cyber Law Might Teach,* 113 HARV. L. REV. 501 (1999) (arguing to the contrary).

[88] *See* Roger Brownsword, *So What Does the World Need Now? Reflections on Regulating Technology, in* REGULATING TECHNOLOGIES, *supra* note 25, at 23, 26; Moses, *supra* note 87, at 7 & n.33.

[89] *See* Lyria Bennett Moses, *How to Think about Law, Regulation and Technology: Problems with Technology as a Regulatory Target*, 5 LAW INNOVATION & TECH 1, 7 (2013).

[90] *See* Moses, *supra* note 89, at 8 (citing DAVID COLLINGRIDGE, THE SOCIAL CONTROL OF TECHNOLOGY (1980)).

[91] *See* Moses, *supra* note 89, at 8.

[92] *See* Moses, *supra* note 89, at 8.

[93] This certainly seems possible for NFTs, given their sharp and broad-based decline in value, see *supra* note 68 and accompanying text; it appears less likely for cryptocurrencies, see *supra* note 46 and accompanying text; as for DAOs, it is simply too early to tell.

same goals apply to the new assets? Going beyond Moses' analysis, we can also ask whether any of the assumptions underlying existing law, and the goals implicated by existing law, are put into doubt because of these new assets, requiring either revision of those goals or existing law generally. Once those questions are answered, we can ask whether existing charity law applies to the new assets in a manner that achieves those (perhaps revised) goals with sufficient certainty and comprehensiveness. And if the answer to this second inquiry is negative, at least in part, we can ask how existing law should be modified or replaced to better achieve those goals with respect to the new assets or perhaps more broadly.[94] In answering these questions, the related issues of pacing and the Collingridge dilemma also need to be addressed.

## IV. Old Wineskins: Existing Law and the New Assets

Two related bodies of law have particular relevance for charitable assets. The first is federal tax law, primarily the rules relating to the charitable contribution deduction, but also potentially rules regulating tax exempt organizations. The second is state law, both fiduciary duty law generally and the specific laws that impose duties on charities and their leaders relating to investments. As will been seen, the issues that arise under federal tax law are more complicated and difficult to resolve and so will be addressed separately for each type of new asset. In contrast, the issues that arise under state law are relatively simple to resolve and so all three types of new assets can be considered together when addressing them.

### A. *Federal Tax Laws*

Federal tax law governs the tax consequences for donors who contribute property to or for the use of charities. It generally allows an income tax deduction in an amount equal to either the donor's adjusted basis in the contributed property or its fair market value, depending on the type of property contributed and the type of charity receiving the contribution, with certain limitations and substantiation requirements.[95] For contributions of new types of assets, the relevant questions are therefore whether existing law provides a relatively clear answer regarding the deduction amount and the requirements for claiming that amount. And, if it does, whether that amount

[94] *See* Brownsword, *supra* note 88, at 31 ("because each technology emerges against an existing regulatory background, there will be a question about whether fresh or dedicated regulatory provisions need to be introduced for the emerging technology").

[95] I.R.C. § 170; *see generally* CONG. RES. SERV., TAX ISSUES RELATING TO CHARITABLE CONTRIBUTIONS AND ORGANIZATIONS (2020); JOINT COMM. TAX'N, PRESENT LAW AND BACKGROUND RELATING TO THE FEDERAL TAX TREATMENT OF CHARITABLE CONTRIBUTIONS, JCX-2-22 (2022). Federal tax law also generally permits donors to deduct the fair market value of charitable contributions for gift and estate tax purposes. I.R.C. §§ 2055 (estate tax), 2106(a)(2) (estate tax for nonresidents not citizens), 2522 (gift tax).

and those requirements are appropriate given Congress' twin policy goals of encouraging charitable giving to support the charitable sector while preventing abuses such as overvaluation.[96]

Ownership of property may also have other tax consequences, including potential exposure to the unrelated business income tax (UBIT) and, for private foundations, to excise taxes on excess business holdings and on investments which jeopardize the recipient's charitable purpose.[97] It is also unclear whether having a purpose directly relating to the new assets, such as developing a new cryptocurrency or operating a DAO for philanthropic purposes, might itself either qualify an entity for tax exemption as a charity under section 501(c)(3) or be considered a significant non-exempt purpose. And even if the answers to these questions are relatively clear, one must then ask whether those answers are appropriate given Congress' policy goals for these provisions. Those goals include (i) only providing exemption under section 501(c)(3) to organizations organized and operated to further the (broadly defined) charitable, educational, religious, etc. purposes of that section, (ii) taxing commercial activities not sufficiently related to exempt purposes that may compete unfairly with taxable businesses (including income from businesses and other investments purchased using debt), and (iii) limiting the permissible investments of private foundations to preserve assets for charitable purposes and to curb the use of private foundations to maintain control of businesses.[98]

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[96] *See* CONG. RES. SERV., *supra* note 95, at 1 (charitable contribution deduction support purpose), 46 (substantiation rules prevention of abuse purpose); JOINT COMM. TAX'N, *supra* note 95, at 4 (initial reasons for charitable contribution deduction), 16 (special rules for certain kinds of donated property "enacted in response to concerns that taxpayers did not accurately report—and in many instances overstated—the value of the property"), 32-33 (discussing support purpose), 39-40 (prevent overvaluation purpose); Ellen Aprill, *Reforming the Charitable Contribution Substantiation Rules,* 14 FLA. TAX REV. 275, 281-82 (2013) (describing the reasons for the charitable contribution substantiation requirements). Some commentators have argued that the charitable contribution deduction is consistent with the proper measurement of "income" for the donors and so should not be considered a subsidy to support charities (with a few caveats). *See, e.g.,* JOINT COMM. TAX'N, *supra* note 95, at 32-33 (noting these arguments); William D. Andrews, *Personal Deductions in an Ideal Income Tax*, 86 HARV. L. REV. 309, 345-46 (1972); Johnny Rex Buckles, *The Community Income Theory of the Charitable Contributions Deduction*, 80 IND. L.J. 947, 952–53 (2005).

[97] *See* I.R.C. §§ 501 (exemption), 511-514 (UBIT), 4943 (excise taxes on excess business holdings), 4944 (excise taxes on investments which jeopardize charitable purpose).

[98] *See* JOINT COMM. TAX'N, HISTORICAL DEVELOPMENT AND PRESENT LAW OF THE FEDERAL TAX EXEMPTION FOR CHARITIES AND OTHER TAX-EXEMPT ORGANIZATIONS 28 (discussing exemption under section 501(c)(3) for "charitable organizations"), 92-93 (reasons for jeopardizing investments and excess business holdings excise taxes on private foundations), 102 (legislative history of UBIT), 103-04 (legislative history for imposition of UBIT on debt-financed income) (2005).

The most significant federal tax issue for the new assets is what category of "property" they fall into under existing law for various federal tax purposes, including the specific laws relating to charitable contributions.[99] The other significant federal tax issue is whether organizations either formed to promote digital assets or that use blockchain technology to further charitable purposes can qualify as tax exempt charities under section 501(c)(3).

1. *Cryptocurrency*

The Service's first step in considering the federal tax treatment of cryptocurrency was a 2014 Notice holding that convertible virtual currency is treated as property but not as foreign currency.[100] The Service defined "virtual currency" as "a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value" and "convertible virtual currency" as "[v]irtual currency that has an equivalent value in real currency, or that acts as a substitute for real currency."[101] The Service also stated that virtual currency "operates like 'real' currency—i.e., the coin and paper money of the United States or of any other country that is designated as legal tender, circulates, and is customarily used and accepted as a medium of exchange in the country of issuance—but it does not have legal tender status in any jurisdiction."[102] In a 2019 Revenue Ruling, the Service distinguished virtual currencies from digital representations of either the United States dollar or a foreign currency, defining foreign currency as "the coin and paper money of a country other than the United States that is designated as legal tender, circulates, and is customarily used and accepted as a medium of exchange in the country of issuance."[103] And in a 2023 Notice, the Service modified the last phrase quoted above from the 2014 Notice in light of the fact that two countries (the Central African Republic and El Salvador) had enacted laws recognizing Bitcoin as legal tender to read: "in certain contexts, virtual currency may serve one or more of the functions of 'real' currency—i.e., the coin and paper money of the United States or of any other country that is designated as legal tender, circulates, and is customarily

[99] *See* Abbott, *supra* note 1, at 461 ("[s]o, the first question for any tax practitioner looking at a digital asset will be this: What is it?").

[100] Notice 2014-21, 2014-16 I.R.B. 938, 938 (Q-1 & A-1, Q-2 & A-2). While the two cited questions and answers in section 4 of the Notice use the term "virtual currency," section 3 of the Notice states that for purposes of section 4 the term "virtual currency" "refers only to convertible virtual currency." *See* Notice 2023-34, 2023-19 I.R.B. 837, 837 n.1 (making this point).

[101] Notice 2014-21, 2014-16 I.R.B. 938, 938.

[102] *Id.*

[103] Rev. Rul. 2019-24, 2019-44 I.R.B. 1004, 1004.

used and accepted as a medium of exchange in the country of issuance—but the use of virtual currency to perform 'real' currency functions is limited."[104]

The Service therefore appears to now rest its conclusion that virtual currency is not foreign currency for federal tax purposes on the fact virtual currency is not "customarily used and accepted as a medium of exchange" even in the few countries that have adopted a specific cryptocurrency as legal tender. And that position has consequences because foreign currency is subject to certain special rules. These rules include the facts that gains and losses are classified as ordinary, not capital, that there is a personal-use exemption for transactions resulting in $200 or less in gain or loss, and that taxpayers are free to use any reasonable basis accounting regime, including first-in- first-out or last-in-first-out as opposed to having to track specific units.[105]

This conclusion has not been accepted by all commentators. For example, Reuven Avi-Yonah and Mohanad Salaimi argue that cryptocurrency's high volatility and anonymity create administrative difficulty for the Service, such that gains and losses should only be recognized when cryptocurrency is exchanged for non-cryptocurrency items, whether fiat currency, goods, or services.[106] They also argue that when cryptocurrency is held for less than a year it functions as a currency and so should be treated as foreign currency, with treatment as other property only appropriate when cryptocurrency is held for more than a year and, thus, seems more like an investment.[107]

In contrast, commentators have generally agreed that cryptocurrencies are not securities, as that term is defined for purposes of federal tax laws, because they do not represent an interest—equity or debt—in a corporation.[108] (The one exception is the result of a recent legislative change and limited to certain reporting rules.[109]) That said, they have identified some ways that this

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[104] Notice 2023-34, 2023-19 I.R.B. 837, 837; *see* Katarina Hoije & Colleen Goko, *Bitcoin Declared Legal Currency in Central African Republic*, BLOOMBERG, Apr. 28, 2022; Sunil Jagtiani & Michael D. McDonald, *'Laser Eyes' El Salvador Leader Makes Bitcoin Legal Tender*, BLOOMBERG, June 9, 2021.

[105] I.R.C. § 988(a)(1) (ordinary classification), (e) (personal use exemption); Reg. § 1.988-2(a)(2)(iii)(B) (basis may be determined "under any reasonable method that is consistently applied").

[106] Avi-Yonah & Salaimi, *supra* note 3, at 5.

[107] Avi-Yonah & Salaimi, *supra* note 3, at 5. *But see* Chodorow, *supra* note 14 (arguing that the Service's conclusion was correct both under existing law and for policy reasons).

[108] *See, e.g.,* Chason, *supra* note 19, at 787 (2023) (cryptocurrency is not a security for purposes of wash sale rules, citing I.R.C. § 1236(c) (defining "security")); *see also* I.R.C. § 165(g)(2) (defining "security"). Whether cryptocurrencies are securities for federal tax law purposes is separate from the issue of whether they are securities for federal securities law purposes, which is currently the subject of litigation. *See* SEC, *supra* note 7; Stempel et al., *supra* note 7.

[109] *See* I.R.C. § 6045(g)(3) (defining "covered security" to include "any digital asset" for purposes of section 6045(g)).

conclusion may lead to incorrect results from a policy perspective. The most obvious is the non-applicability of the wash-sale rules, which means that cryptocurrency owners are free to sell cryptocurrency units to realize and recognize losses while at the same time buying an identical number of units to continue to maintain the same level of cryptocurrency ownership.[110]

Commentators are less sure whether or not cryptocurrencies are commodities, as that term is defined for purposes of the federal tax laws, because while historical definitions of commodity would appear to be limited to either items traditionally traded on a commodities exchange or tangible property and so would not include cryptocurrencies, the Commodity Futures Trading Commission (CFTC) has asserted that cryptocurrencies are commodities under a broad definition of that term.[111] The Treasury Department has proposed that, at least for reporting purposes under section 6045, digital assets should be considered commodities if classified as such under the CFTC's self-certification procedures.[112] But Treasury has further proposed that, to avoid unnecessary duplication, a sale of a digital asset that qualifies also as a commodity will only be subject to the digital asset reporting requirements, not the commodity reporting requirements.[113] Treasury and the Service have yet to issue guidance on whether cryptocurrency should be considered a commodity for purposes of other Code sections.[114]

As detailed in the 2014 Notice, in an expanded FAQ section on the Service website, and in several other documents (primarily Chief Counsel Advice), the Service and the Office of Chief Counsel have concluded that virtual currency is property but not foreign currency and have applied that conclusion to a series of common situations relating to cryptocurrency.[115] These include gain or loss from virtual currency transactions (amount realized

[110] Chason, *supra* note 19, at 788. In contrast, under existing federal tax law cryptocurrencies appear to be subject to certain anti-abuse provisions that apply to actively traded personal property, such as section 1092(a) straddling rules and section 469 passive activity loss limits. *Id.* at 805-06.

[111] Chason, *supra* note 19, at 807-09; *see also* Abbott, *supra* note 1, at 475-76 & n.94 ("[s]ome practitioners are comfortable taking the position that at least Bitcoin is a commodity eligible for" the exception from the definition of a "trade or business" for trading in commodities).

[112] *See* Proposed Reporting Regulations, *supra* note 14, at 59583-59584 (proposing this treatment for sales that occur on or after January 1, 2025).

[113] Proposed Reporting Regulations, *supra* note 14, at 59584.

[114] Lee A. Sheppard, *Proposed Crypto Broker Regulations Hit Everything,* 180 TAX NOTES FED. (TA) 1561 (Sept. 5, 2023) (quoting a practitioner citing sections 475 (relating to mark to market accounting, including the election available for dealers in commodities under sections 475(e), (f)(2)), 864(b)(2) (relating to an exclusion from the definition of a trade or business within the United States), and 7704 (relating to the definition of a publicly traded partnership)).

[115] *See* I.R.S., DIGITAL ASSETS, last accessed Mar. 25, 2024, https://www.irs.gov/businesses/small-businesses-self-employed/digital-assets [https://perma.cc/7WV3-JQ2E] (collecting Service and Chief Counsel guidance).

less adjusted basis, included acquisition costs such as fees),[116] receiving virtual currency in return for services (ordinary taxable income),[117] exchanging one type of virtual currency for another type (not qualifying as a like kind exchange under pre-2018 law),[118] and deducting losses (only permitted when the cryptocurrency has been abandoned or becomes worthless).[119] The first, second, and fourth conclusions flow from the categorization of virtual currency as property; the third turns on the differences between different types of cryptocurrency.

The federal government has also addressed the tax consequences of two unique circumstances relating to cryptocurrency. One such circumstance is a "hard fork," which occurs when new blockchain software is developed—usually because of a disagreement among developers—resulting in two different versions of a blockchain emerging (one tied to the old or "legacy" software and one tied to the new software).[120] The most notable hard fork related to Bitcoin and resulted in all Bitcoin owners receiving, in addition to their existing Bitcoin holdings, units of a new cryptocurrency identified as Bitcoin Cash.[121] The Service initially issued a Revenue Ruling concluding that a hard fork only results in gross income if the taxpayer actually receives units of the new cryptocurrency.[122] In a later document, Chief Counsel concluded that the Bitcoin Cash hard fork resulted in an accession of wealth

[116] I.R.S., *supra* note 6 (Q7, Q8). Whether the gain or loss is capital or ordinary depends on whether the virtual currency is held as a capital asset or not. C.C.A. 202302011 (Jan. 10, 2023).

[117] C.C.A. 202035011 (Aug. 28, 2020) (taxable as ordinary income). *But see* Jarrett v. United States, 79 F.4th 675 (6th Cir. 2023) (dismissing challenge to this position as moot because the Service had refunded the tax allegedly owed); Caleb Harshberger, *Crypto Tax Guidance Confusion Heralds Court Battles to Come,* Bloomberg Law, Aug. 18, 2023 (describing this decision). Virtual currency received for services can be either self-employment income or wages depending on whether the recipient is an independent contractor or employee. I.R.S., *supra* note 6 (Q10, Q11).

[118] C.C.A. 202124008 (June 8, 2021) (exchanges of Bitcoin for Ether, Bitcoin for Litecoin, or Ether for Litecoin do not qualify as like-kind exchanges under the pre-2018 version of section 1031 and so any gain or loss is recognized). *But see* Avi-Yonah & Salaimi, *supra* note 3, at 43 (proposing that section 1031 be modified to extend nonrecognition to crypto-to-crypto exchanges).

[119] C.C.A. 202302011 (Jan. 10, 2023) (not deductible under section 165 until the taxpayer has abandoned or otherwise disposed of the cryptocurrency or the cryptocurrency has become worthless, and then disallowed under current section 67(g) suspending miscellaneous itemized deductions from 2018 through 2025).

[120] *See Hard Forks and Soft Forks Explained*, BINANCE ACADEMY, Feb. 9, 2023, https://academy.binance.com/en/articles/hard-forks-and-soft-forks [https://perma.cc/7QQM-CYUS] [hereinafter, *Hard Forks and Soft Forks*].

[121] *Hard Forks and Soft Forks*, *supra* note 120.

[122] Rev. Rul. 2019-24, 2019-44 I.R.B. 1004, 1005. The taxpayer would not receive units of the new cryptocurrency if, for example, they hold the original cryptocurrency through an exchange and the exchange does not support the newly created cryptocurrency and so does not credit it to the taxpayer's account at the exchange.

under section 61 and so constituted gross income to the recipients of the Bitcoin Cash because they in fact received and controlled the new units of Bitcoin Cash, whether or not they had immediate access to it through an exchange.[123] The other unique circumstance is a protocol upgrade of a distributed ledger, which occurs when there is a change in how future transactions are validated and blocks are added to a blockchain that do not alter past transactions or validations. This is sometimes referred to as a "soft fork."[124] Chief Counsel concluded that a protocol change by itself does not cause the realization of gain or loss or result in gross income.[125]

Congress' only enacted cryptocurrency tax legislation to date is an expansion of the reporting rules for brokers and for anyone engaged in a trade or business who receives more than $10,000 in cash by providing that those rules apply to digital assets, effective after December 31, 2023.[126] For purposes of these changes and as noted previously, Congress defined the term "digital asset" to mean "any digital representation of value which is recorded on a cryptographically secured distributed ledger or any similar technology as specified by the Secretary."[127] These amendments have already been the subject of a court challenge, but the court dismissed that challenge without prejudice, principally because the claims the plaintiffs raised were not yet ripe for consideration.[128] The Treasury Department recently issued proposed regulations to start implementing these changes, which provide that exchanges for cryptocurrency and other digital assets are required to file certain information returns, among other provisions.[129]

Four instances of cryptocurrency guidance or rulings are specifically applicable to charities, two involving the charitable contribution deduction under section 170 and the other two involving tax exemption under section 501(c)(3). The first instance is Q&As relating to donations of cryptocurrency to charities found on the Service's digital assets FAQs webpage.[130] They contain several conclusions that flow from the Service classification of virtual currency as property, but not foreign currency, including that the donation does not result in the recognition of gain (or loss) to the donor, that if the

[123] C.C.A. 202114020 (Apr. 9, 2021). Avi-Yonah and Salaimi disagree with this decision, arguing that hard forks should be treated as a software upgrade that is not a tax realization event. Avi-Yonah & Salaimi, *supra* note 3, at 71.

[124] *See Hard Forks and Soft Forks, supra* note 120.

[125] C.C.A. 202316008 (Apr. 21, 2023).

[126] Infrastructure Investment and Jobs Act, Pub. L. No. 117-58 § 80603, 135 Stat. 429, 1339-41 (2021) (amending I.R.C. §§ 6045, 6045A, 6050I, 6724); *see also* Proposed Reporting Regulations, *supra* note 14; Announcement 2023-2, 2023-2 I.R.B. 344 (2023) (transitional guidance for these amendments); Announcement 2024-4, 2024-6 I.R.B. 665 (2024) (same).

[127] I.R.C. § 6045(g)(3)(D).

[128] Carman v. Yellen, Civil Action No. 5:22-149, 2023 WL 4636883 (E.D. Ky. July 19, 2023).

[129] Proposed Reporting Regulations, *supra* note 14.

[130] I.R.S., *supra* note 6.

virtual currency was held by the donor as a capital asset then the donor may be able to deduct its fair market value (as opposed to the lesser of basis or fair market value), and that recipient charities should treat such donations as non-cash donations for reporting and substantiation purposes, including reporting sales of donated cryptocurrency if completed within three years of the donation.[131]

The second instance is Chief Counsel-issued advice relating to the documentation a taxpayer is required to obtain to claim a charitable contribution deduction of more than $5,000 for a donation of cryptocurrency.[132] Relying on the general categorization of cryptocurrency as property, Chief Counsel concluded that if a donor claims a charitable contribution deduction of more than $5,000 for a donation of cryptocurrency then the taxpayer must obtain a qualified appraisal of the cryptocurrency, as would be required with a donation of any other property, except for certain readily valued property (such as a cash and publicly traded securities).[133] Chief Counsel specifically considered and rejected the argument that cryptocurrency could qualify as a publicly traded security, and thus readily valued for these purposes, because Chief Counsel concluded it did not fall within the statutory definition of that term.[134]

One issue raised by this conclusion, as Sanford J. Schlesinger and Andrew S. Auchincloss have noted, is that identifying a qualified appraiser for cryptocurrencies may be difficult.[135] That is because, to be qualified, an appraiser must be "an individual with verifiable education and experience in valuing the type of property for which the appraisal is performed."[136] The relevant regulations further state that this standard is met by either (i) successfully completing relevant professional or college-level coursework and having two or more years of experience valuing the property or (ii) earning a "recognized appraiser designation . . . for the type of property."[137] The relatively recent emergence of cryptocurrency may render appraisers with either the required education and experience or the required designation relatively rare and hard to find.[138] That said, there are at least some appraisers

[131] I.R.S., *supra* note 6 (Q34 to Q37).

[132] C.C.A. 202302012 (Jan. 13, 2023).

[133] C.C.A. 202302012.

[134] *See* Reg. § 1.170A-13(c)(7)(xi) (cross-referencing I.R.C. § 165(g)(2) for the definition of "securities"). *But see* Moran, *supra* note 8, at 25 (arguing that cryptocurrencies traded on established exchanges should be considered readily valued and so not subject to the qualified appraisal requirement).

[135] Schlesinger & Auchincloss, *supra* note 8, at 38.

[136] Reg. § 1.170A-17(b)(1).

[137] Reg. § 1.170A-17(b)(2).

[138] *See* Schlesinger & Auchincloss, *supra* note 8, at 38.

who claim to be qualified to appraise cryptocurrencies for this purpose.[139] And a related issue is that charities that choose to retain donated cryptocurrencies or purchase cryptocurrencies themselves could have difficulty valuing them for various tax purposes, such as reporting on their annual information returns and, for private foundations, calculating the required payout under section 4942, although this is (admittedly) an issue present for any hard-to-value asset.[140]

The fact that there are cryptocurrency exchanges that publish values for at least the most traded cryptocurrencies raises a question regarding whether Chief Counsel is correct that all cryptocurrencies should be considered not readily valued and that, consequently, qualified appraisals are required for charitable contribution deduction purposes. The possible lack of qualified appraisers provides a further reason to carefully consider this issue, since if the value of donated cryptocurrency is readily apparent because of these exchanges but a donor cannot claim a deduction because of the inability to identify a qualified appraiser, that would unnecessarily inhibit donations of cryptocurrencies and so would frustrate Congress' purpose of incentivizing charitable contributions. A related issue is whether regularly traded cryptocurrencies are sufficiently like publicly traded stock that donors to private foundations should be able to claim a deduction equal to their fair market value (so not limited to their adjusted basis in the donated cryptocurrency) assuming they held the cryptocurrency as a capital asset and for more than a year, which presumably would incentivize such donations.[141] I will explore these issues further in Part IV.

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[139] *See, e.g.,* CRYPTO APPRAISERS, last accessed Apr. 8, 2024, https://cryptoappraisers.com/ [https://perma.cc/G43Z-NJP5]; Todd Lindsay, *Cryptocurrency - An Appraiser's Perspective,* MPI, Mar. 14, 2023, https://mpival.com/resources/mpi-insights/cryptocurrency-an-appraisers-perspective/ [https://perma.cc/26CQ-G78B] (reporting that charitable giving represented Management Planning, Inc.'s "largest value of [cryptocurrency appraisal] projects").

[140] *See* I.R.C. §§ 4942(e)(1) (requiring private foundations to determine the aggregate fair market value of their assets other than those used directly to carry out exempt purposes), 6033(b)(3) (requiring section 501(c)(3) organizations that file annual returns to set forth a balance sheet, including assets). There also may be some ambiguity as to whether cryptocurrencies are "securities" for purposes the section 4942 valuation rules, which is relevant to how often they would have to be valued. *See* Reg. § 53.4942(a)-2(c)(4)(i) (requiring monthly valuation of securities for which market quotations are readily available), (c)(4)(iv) (requiring private foundations to annually determine the value of assets other than securities for which market quotations are readily available, cash, participating interests in common trust funds, or, under certain circumstances, real property), (c)(4)(v) (defining "securities" as including, but "not limited to, common and preferred stocks, bonds, and mutual fund shares"); *infra* note 241 (the Financial Accounting Standards Board has yet to issue specific guidance on valuing cryptocurrency for accounting purposes).

[141] *See* I.R.C. § 170(e)(1)(B)(ii), (5) (permitting deduction of long-term capital gain for property donated to a private foundation only if the donated property is corporate stock "for which . . . market quotations are readily available on established securities markets").

As for exemption, in 2020 the Service issued an adverse determination letter to an organization that was formed to support a specific cryptocurrency and that had applied for recognition of exemption under section 501(c)(3).[142] More specifically, the letter summarized the organization's activities as:

> You are formed to advance T. T is open source and is a cryptocurrency which is defined as a digital asset designed to work as a medium of exchange that uses strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets. Your software is free to download, inspect and edit. All your software and research are public and open source allowing anyone to take advantage of or contribute to your work. You work to build technology and software to support the T blockchain.[143]

The Service considered whether the organization qualified either as educational or charitable in its operations given these activities. The Service concluded it was not educational because it did not conduct any programs that educated the public or trained individuals, such as public discussion groups, forums, panels, or lectures, but was instead "best described as providing a product with product information and are analogous to a product manual," which was not sufficient.[144] The Service further concluded it was not charitable because "[m]erely providing open source webs applications to the public for free is not a charitable activity" and, furthermore, "the public who may use your programs is not a recognized charitable class."[145] Finally, the Service concluded the organization was unduly benefiting private interests because both block creators and developers received fees.[146]

Paul Streckfus, longtime reporter on tax exempt organization issues and founding editor of the *EO Tax Journal*, has criticized the Service approach to purported charities involved in open source software, including this denial, stating that "[t]he IRS' approach . . . is basically throw every possible rationale [for denial] at a wall and see if anything sticks."[147] His criticisms echo similar concerns raised by others, including that the Service approach reflects an overly narrow interpretation of "educational" and that the general public

[142] P.L.R. 2020-19-028 (Feb. 12, 2020).

[143] *Id.*

[144] *Id.*

[145] *Id.*

[146] *Id.* The Service also issued an adverse determination letter under section 501(c)(3) to another entity with activities relating in part to cryptocurrency, but in that case the Service found that the purported charity was a vehicle for promoting its president's for-profit company. P.L.R. 2021-45-029 (Aug. 17, 2021).

[147] EO TAX J. 2022-2 (Jan. 4, 2022); *see also* EO TAX J. 2022-104 (May 31, 2022) (elaborating on this criticism).

itself can be a "charitable class."[148] These criticisms have some merit, given the broad regulatory definition of educational[149] and the traditional understanding of charitable class as including the public as a whole.[150] I will therefore address these concerns further in Part IV.

In contrast, it appears that the Service has recognized the exemption under section 501(c)(3) of organizations with a more traditional charitable or educational purpose but that use blockchain technology as a means to accomplish that purpose.[151] For example, the Service has recognized the exemption under section 501(c)(3) of an organization created to receive and dispose of cryptocurrency donations on behalf of other charities, specifically web platform Every.org, which allows charities to benefit from cryptocurrency donations without having to directly receive and dispose of cryptocurrency themselves.[152] That said, Every.org, which applied under the name ECO Foundation, did not limit its planned activities to this specific task in its exemption application but instead said more generally that it "seeks to serve the general public by undertaking activities to explore and create foundational technologies that connect funders to charitable beneficiaries, including research and development of electronic platforms and related technology for the transmission of fiat and/or cryptocurrencies to indigent populations worldwide."[153] While the Service has not published any guidance supporting this decision, it presumably based it on the longstanding Service position that facilitating contributions to tax exempt, section 501(c)(3)

[148] *See* EO TAX J. 2015-27 (Feb. 10, 2015) (remarks of participants in an American Bar Association Tax Section panel on virtual currency and open source software).

[149] *See* Reg. § 1.501(c)(3)-1(d)(3) (defining educational under section 501(c)(3) as either "[t]he instruction or training of the individual for purpose of improving or developing his capabilities" or "[t]he instruction of the public on subjects useful to the individual and beneficial to the community").

[150] *See* Lloyd Hitoshi Mayer, *Public Benefit and Charitable Class, in* CHARITY LAW: EXPLORING THE CONCEPT OF PUBLIC BENEFIT 94, 98-99 (Daniel Halliday & Matthew Harding eds., 2022).

[151] *See* EO TAX J. 2015-27 (Feb. 10, 2015) (comments of Ingrid Mittermaier).

[152] *See* Service Letter to Eco Foundation, June 10, 2019, *available at* https://apps.irs.gov/pub/epostcard/dl/FinalLetter_61-1913297_ECOFOUNDATION_03252019_01.tif [https://perma.cc/4SKP-BRNT]]; EVERY.ORG, ABOUT US, last accessed Apr. 14, 2024, https://www.every.org/about-us [https://perma.cc/G7YL-6TEP]. The other cryptocurrency charitable platforms mentioned earlier, Engiven and The Giving Block, appear to be for-profit companies. *See* CRUNCHBASE, ENGIVEN, last accessed Apr. 14, 2024, https://www.crunchbase.com/organization/engiven [https://perma.cc/365R-B9A6]; CRUNCHBASE, THE GIVING BLOCK, last accessed Apr. 14, 2024, https://www.crunchbase.com/organization/the-giving-block [https://perma.cc/PEY5-LC52].

[153] ECO Foundation, Application for Recognition of Exemption Under Section 501(c)(3) of the Internal Revenue Code (Mar. 14, 2019), Attachment at 4 (on file with author).

charities is itself a qualifying charitable purpose and activity under section 501(c)(3) unless the facilitation method is unduly commercial in nature.[154]

As for charities that receive or hold cryptocurrencies but rely on other activities for their tax exempt status under section 501(c)(3), there do not appear to be any areas of major concern.[155] Income generated from selling or otherwise disposing of cryptocurrencies as investments should be exempt from UBIT, unless the acquisition of the cryptocurrency was financed with debt, in which case the debt-financed income rules should apply in the same manner as they would for any other investment.[156] While several commentators have questioned whether the debt-financed income rules further Congress' stated purposes for UBIT,[157] there is nothing unique to cryptocurrencies that suggests they should be exempted from those rules.

For the subset of charities known as private foundations, there is the possibility that holding cryptocurrency as a significant investment could subject them to the jeopardizing investment excise tax, assuming the private

[154] *See* Rev. Rul. 67-149, 1967-1 C.B. 133 (holding that an organization that only receives contributions and incidental investment income and then distributes that income to section 501(c)(3) organizations itself qualifies a exempt under section 501(c)(3)); I.R.S., *Fund Raising*, *in* EXEMPT ORGANIZATIONS CONTINUING PROFESSIONAL EDUCATION (CPE) TECHNICAL INSTRUCTION PROGRAM FOR FISCAL YEAR 1982 (1981), https://www.irs.gov/pub/irs-tege/eotopicl82.pdf [https://perma.cc/GQF2-USD3] (discussing the limits of exemption for fund-raising organizations).

[155] One potential minor issue is that the statutory exemption for gains or losses recognized from the lapse or termination of options to buy or sell securities (as defined in section 1236(c)) provided by section 512(b)(5) (flush language) is almost certainly not available for cryptocurrencies because they are not securities within the meaning of section 1236(c). *See* I.R.C. § 1236(c) (defining a security as an ownership interest in or debt of a corporation). For similar reasons, the statutory exemption for payments with respect to securities loans provided by section 512(b)(1) is also almost certainly not available. *See* I.R.C. § 512(a)(5)(A) (defining securities for these purposes by reference to section 1236(c)). So financial transactions involving cryptocurrencies that would fall within these exemptions if they were securities for these purposes could result in unrelated business income tax exposure and perhaps, for private foundations, also raise excess business holdings concerns under section 4943.

[156] *See* I.R.C. §§ 512(b)(5) (excluding gains and losses from the sale of investment property from unrelated business taxable income (UBTI)), 514(a) (including debt-financed income in UBTI).

[157] *See, e.g.,* Kathryn Fuehrmeyer, *Cutting Out the Middleman: Allowing Offshore Debt-Financed Investments by Tax Exempt Organizations* (2007) (unpublished manuscript) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1300985 [https://perma.cc/BZ5V-8DES]; Suzanne Ross McDowell, *Taxation of Debt-Financed Income* (2000) (unpublished manuscript), https://ncpl.law.nyu.edu/wp-content/uploads/pdfs/2000/Conf2000_McDowell_Final.pdf [https://perma.cc/X4HZ-CNRS]; N.Y. State Bar Ass'n Tax Section, *Report on Section 514: Debt-Financed Income Subject to UBIT* 1, n.3 (2010), https://nysba.org/app/uploads/2020/03/1217-Report.pdf [https://perma.cc/3RCC-6VFZ] (collecting recommendations to modify or repeal the debt-financed income rules).

foundation did not receive the cryptocurrency as a donation.[158] But the Service rarely invokes that tax, and the standard for its application is essentially the same standard as state law imposes on charity leaders when it comes to investments, which is relatively forgiving (as will be discussed below).[159] To the extent a private foundation violates that prudence standard because it unwisely invests, or over-invests, in cryptocurrency, application of the jeopardizing investment excise tax seems appropriate.

In summary, while the available Service guidance is limited, it generally appears sufficient to allow both donors to determine what amount they can claim as a charitable contribution (and subject to what substantiation requirements), and purported charities to determine whether involvement with cryptocurrencies could affect overall exemption, albeit based on a few examples of denials and approvals, or have other negative tax consequences. But these conclusions may not be consistent with Congress' policy goals in two respects. First, treating all cryptocurrencies as not readily valued may, for exchanged-traded cryptocurrencies, unnecessarily inhibit donations of those cryptocurrencies. Second, denying exemption under section 501(c)(3) to organizations with the purpose of developing specific cryptocurrencies may not be justified under existing law, which Congress has structured to define charitable and educational broadly. Both of these areas of possible tension between the answers provided by the Service and the goals of the relevant federal tax laws will therefore be discussed in Part IV.

### 2. *Non-Fungible Tokens*

There is almost no guidance relating to the federal tax treatment of NFTs, with only three exceptions. The first exception is that the digital asset reporting legislation mentioned above also applies to NFTs, as the now statutory definition of digital asset for reporting purposes is broad enough to encompass them.[160] Under the recently issued proposed regulations implementing this legislation, this means that exchanges and other intermediaries that facilitate trading of NFTs will be subject to certain reporting requirements.[161]

The second exception is a 2023 Service Notice stating that Treasury and the Service intend to issue guidance classifying certain NFTs as collectibles under section 408(m), which defines collectibles as including works of art, rugs, antiques, metals, gems, stamps, coins, alcoholic beverages, and "any

[158] *See* I.R.C. § 4944; Reg. § 53.4944-1(a)(2)(ii)(a) (exempting property gratuitously transferred to a private foundation from the application of section 4944).

[159] *See* Reg. § 53.4944-1(a)(2)(i) (only requiring that foundation managers exercise "ordinary business care and prudence" when making investments); *infra* Part III.B.2.

[160] *See* I.R.C. § 6045(g)(3)(D).

[161] *See* Proposed Reporting Regulations, *supra* note 14, at 59582 (proposing that NFTs be subject to the new reporting rules).

other tangible personal property specified by the Secretary."[162] The tax consequences of this classification include a higher-than-normal long-term capital gains tax rate applicable to gains recognized on such property (and related special netting rules)[163] and deemed distribution treatment if an individual retirement account (IRA) or a section 401(a) qualified plan acquires such property.[164]

The Notice states that "[p]ending the issuance of that guidance, the Service intends to determine whether an NFT constitutes a section 408(m) collectible by analyzing whether the NFT's associated right or asset is a section 408(m) collectible (referred to in this notice as the 'look-through analysis')."[165] That said, the Notice leaves open the question of whether the associated right or asset is a digital file that renders the NFT a collectible because the file is a "work of art."[166] It also raises a series of questions relating to the look-through analysis approach and to this categorization issue more generally.[167] Treasury received more than 30 comments in response to the Notice addressing these and related issues.[168]

The issue of whether some NFTs are collectibles for federal tax purposes may have an indirect ramification for charitable contribution deduction purposes. If the Service also applies its proposed look-through analysis approach to such deductions, then donations of NFTs with an associated asset that is tangible personal property will be subject the statutory rule that contributions of such property are only deductible at fair market value (if greater than adjusted basis) if that property is used by the recipient charity to

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[162] I.R.C. § 408(m)(2); *see* Notice 2023-27, I.R.B. 2023-15, 634.

[163] I.R.C. § 1(h)(4) & (5) (imposing a 28 percent long-term capital gains tax rate on collectibles); *see generally* Troy K. Lewis, Brian C. Spilker & Kamri S. Call, *The Taxation of Collectibles,* THE TAX ADVISOR, Nov. 1, 2019, https://www.thetaxadviser.com/issues/2019/nov/taxation-collectibles.html [https://perma.cc/AFG9-3JQ3] (discussing higher longer-term capital gains tax rate, including effective marginal rates of more than 28 percent if the alternative minimum tax applies to the taxpayer or the taxpayer claims the qualified business income deduction, and the related netting rules).

[164] I.R.C. § 408(m)(1).

[165] Notice 2023-27, I.R.B. 2023-15, at 634, 635.

[166] *Id.* at 635.

[167] *See* T.A.M. 200801809 (May 2, 2008) (using a look-through analysis to conclude that precious metal exchange-traded funds are considered collectibles); Abbott, *supra* note 1, at 473 (discussing application of the look-through approach when an NFT is issued to verify ownership of real-world assets); Kathryn S. Windsor, *When Is a Collectible Not a "Collectible"? NFTs and Internal Revenue Code Section 408(m)(2),* THE PRACTICAL TAX LAWYER, May 2022, at 17, 19 (raising the question of whether an NFT can ever be considered a collectible given it itself is not "tangible personal property"). Congress has explicitly provided that gain from the sale of an interest in a passthrough entity that is attributable to unrealized appreciation in collectibles held by that entity shall be treated as gain from the sale or exchange of a collectible. I.R.C. § 1(h)(5)(B).

[168] *See* Notice 2023-27, NFTs under 408(m)(2), https://www.regulations.gov/document/IRS-2023-0011-0001 [https://perma.cc/GQ7V-UEH5] (36 comments received).

further its exempt purposes.[169] However, it appears that most if not almost all of the subset of NFTs associated with a particular asset are associated with intangible assets in the form of digital images.[170] If that is accurate, then resolution of the collectibles issue will not be relevant for almost all contributions of NFTs to charities.

That said, there is another possible ramification of the proposed look-through analysis. If a donated NFT is associated with copyright or other intellectual property rights, this analysis would presumably lead to the application of the special rules limiting the permitted deduction for donations of such property.[171] But as mentioned earlier many, perhaps most, NFTs are not associated with any intellectual property rights.[172] And to the extent they are, it seems appropriate to make them subject to the special rules Congress created for donations of intellectual property to prevent incorrect—and often overstated—valuations.[173]

The third exception is an extension of the Chief Counsel Advice requiring a qualified appraisal for cryptocurrency donations of more than $5,000 to donations of NFTs.[174] Perhaps to an even greater extent than with cryptocurrencies, such donors could have difficulty finding a qualified appraiser for these purposes, although it may be possible for traditional art appraisers to be considered qualified with respect to NFTs.[175] In addition, the non-fungible nature of NFTs may make it particularly tempting for donors—with the help of a willing qualified appraiser—to claim relatively high valuations that the Service would have difficulty challenging, even with NFT exchanges.[176]

While the treatment of NFTs for charitable contribution purposes is the same as for cryptocurrencies, in contrast to the situation with cryptocurrencies, there does not appear to be any significant tension between that treatment and the goals underlying the existing federal tax laws for charitable contributions. That is because, unlike at least some cryptocurrencies, there is no mechanism that could render NFTs readily valued or similar to publicly traded securities. Indeed, the non-fungible nature of NFTs makes them instead particularly vulnerable to overvaluation and so strongly supports their current treatment, including the requirement

[169] *See* I.R.C. § 170(e)(1)(B)(i).

[170] *See* Frye, *supra* note 11, at 1 ("most NFTs . . . represent ownership of a digital artwork").

[171] *See* I.R.C. § 170(e)(1)(B)(iii), (m).

[172] *See supra* notes 59-60 and accompanying text.

[173] JOINT COMM. TAX'N, *supra* note 95, at 16.

[174] *See* C.C.A. 20230212 (Jan. 10, 2023).

[175] *See* Kevin T. Dugan, *How Museums Are Trying to Figure Out What NFT Art is Worth: Determining value in the age of Bored Apes is a work in progress,* N.Y. MAGAZINE, Jan. 23, 2022 (describing art appraisers valuing NFTs, including problems arising from fake trades and resulting inflated values).

[176] *See* Dugan, *supra* note 175 (describing NFT exchanges).

of qualified appraisals—however difficult to obtain—if the donor wishes to deduct more than $5,000.[177] This conclusion is further supported by the much smaller overall market cap for NFTs as compared to cryptocurrencies, thereby resulting in limited potential for increasing overall charitable contributions significantly if it were easier to claim a deduction for donating NFTs, not to mention the lack of any evidence of a significant volume of NFT donations.[178]

As for exemption, there also do not appear to be any significant areas of uncertainty with respect to NFTs for two reasons. First, and unlike cryptocurrencies, there do not appear to have been attempts to claim tax exempt status under section 501(c)(3) (or any paragraph of section 501(c)) for organizations solely promoting NFTs. While it appears at least two of the charitable DAOs identified plan to distribute or sell NFTs to help fund their operations, the NFT images are substantially related to their exempt purposes and so would not appear to raise UBIT issues.[179] Second, and for the same reasons as detailed with respect to cryptocurrencies, other applications of UBIT and the private foundation jeopardizing investment excise tax rules appear to be the same as for any other possible investment, and that sameness does not conflict with the goals underlying those tax rules.[180]

### 3. *Decentralized Autonomous Organizations*

No published federal tax guidance relates specifically to DAOs.[181] It is not clear if this is because they are a relatively new and, to date, small scale phenomenon, or instead because Treasury and the Service view the treatment of DAO ownership interests as not requiring specific, new guidance. Support

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[177] *See* Linda M. Beale et al., *Common Sense Recommendations for the Application of Tax Law to Digital Assets* (2023) (manuscript at 15), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4576425 [https://perma.cc/FTA8-RM8J] (noting the potential for valuation issues for digital assets, especially with respect to NFTs). An additional valuation complication is that owners of NFTs who have lost access to the digital wallet containing them might still be able to find a charity willing to accept a "contribution" of the NFTs, raising the question of whether the lack of access renders those NFTs valueless or not. *See* Brian Frye, *Why Not Donate Dead NFT Wallets?,* COINDESK, Feb. 28, 2023, https://www.coindesk.com/consensus-magazine/2023/02/28/why-not-donate-dead-nft-wallets/ [https://perma.cc/K33W-J5HM] (discussing this issue).

[178] *Compare supra* note 46 and accompanying text (cryptocurrency market cap of over $1.1 trillion) *with supra* note 65 and accompanying text (NFT market cap of over $5.3 billion).

[179] See Rev. Rul. 73-104, 1973-1 C.B. 263 (sale of greeting card reproductions of museum's art works is not an unrelated trade or business); ANTIDOTEDAO, *supra* note 84 (antidote-themed NFT collection); APOSTOLICDAO, *supra* note 85 (saints-themed NFT collection); *ApostolicDAO Announces First-Ever Saint NFTs, supra* note 85 (same).

[180] *See supra* notes 156, 158-159 and accompanying text.

[181] *See* Brian D. Lauter, *The* DE *of DAO in Law,* L.A. LAWYER, Nov. 2022, at 16, 20 ("[t]he IRS has not released official guidance on how DAOs will be taxed").

for the latter position can be found in the parallels between the federal tax definition of a partnership and the definition of a DAO, which suggests that DAOs should simply be considered partnerships and so subject to Subchapter K unless a DAO is incorporated under state law or elects to be treated as a corporation, in which case either the C corporation or S corporation rules would apply.[182] This result is also supported by the check-the-box regulations, which make partnership the default tax classification for domestic entities (other than corporations) with more than one owner.[183] And if DAOs are treated as partnerships, then DAO token holders will have the taxable income of the DAO, if any, attributed to them for federal income tax purposes.[184]

However, commentators have identified several areas of tax law uncertainty that the emergence of DAOs may create. One is that because DAOs only have owners but no managers—blockchain technology instead automatically executing the owners' decisions—it is unclear who has responsibility for fulfilling partnership tax filing, reporting, and withholding obligations, including those relating to Form 1065, Schedule K-1 to Form 1065, and other tax forms such as Form 1099s.[185] The Treasury Department is also seeking input on how the newly enacted legislation modifying certain broker reporting requirements to include digital assets should apply to digital asset trading platforms operated as DAOs.[186]

With respect to charitable contribution deductions of interests in DAOs, the lack of any Service guidance is not particularly troubling given the number and market capitalization of DAOs—and so the potential for donations of interests in them—appears relatively small.[187] Moreover, their similarity to other types of closely held entities suggests that any such donations should be treated in a similar manner as interests in such entities and so in a similar manner as cryptocurrencies and NFTs. That is, the deduction amount for such donations should only be fair market value if given to charities that are not private, non-operating foundations, and subject

[182] *See* I.R.C. § 7701(a)(2) (defining a partnership as including "a syndicate, group, pool, joint venture, or other unincorporated organization, through or by means of which any business, financial operation, or venture is carried on"); Reg. § 301.7701-1(a)(2) (certain joint undertakings give rise to a separate entity for federal tax purposes); Abbott, *supra* note 1, at 467-68; Brunson, *supra* note 3, at 633; Cianci et al., *supra* note 72 (concluding that under state law a DAO not specifically formed as a specific type of entity may be considered a general partnership as a matter of law).

[183] *See* Reg. § 301.7701-3 (governing tax classification of separate entities under federal tax law); Brunson, *supra* note 3, at 630. This assumes that DAOs are domestic entities, but it may not always be clear if the identities of the DAO's owners are not known. Brunson, *supra* note 3, at 647-48.

[184] I.R.C. § 702(a).

[185] *See* Abbott, *supra* note 1, at 468-69; Brunson, *supra* note 3, at 635.

[186] *See* Proposed Reporting Regulations, *supra* note 14, at 59587.

[187] *See supra* note 76 and accompanying text.

to substantiation requirements including supplying a qualified appraisal. And for the same reasons as for NFTs, this treatment appears consistent with the underlying goals of the charitable contribution deduction.[188]

As for exemption, law professor Sam Brunson has flagged the issue of whether a DAO could itself qualify for exemption under section 501(c)(3).[189] The one scenario where this seems likely is if the DAO is a giving platform, such as Every.org or, if spun off as a separate legal entity, like Big Green DAO. That appears to be the approach of the stand-alone, section 501(c)(3) DAOs identified previously.[190] This apparent position—that the use of a DAO governance structure to further an accepted charitable purpose does not undermine the otherwise available section 501(c)(3) exemption—could be problematic if that structure is somehow inconsistent with the requirements of section 501(c)(3). This issue will therefore be discussed further in Part IV.

As for UBIT and private foundation excise tax issues, there does not appear to be any reason why the presumed treatment of DAO interests like any other investment when it comes to the debt-financed rules and the jeopardizing investment excise tax should be questioned. As for the private foundation excess business holdings excise tax, there also does not appear to be any reason for DAO ownership to be treated differently than the ownership of any other business.

### B. *State Laws*

State laws impose both general fiduciary duties of care and loyalty on charity leaders that extend to their handling of charitable assets, and specific duties with respect to management of investments.[191] State attorneys general have the primary and sometimes exclusive authority to enforce these duties.[192] The goals of these state law duties with respect to charitable assets is to ensure that decisions by charity leaders regarding them—including acceptance, acquisition, retention, and disposition—are done with appropriate care for the financial health and mission of the charity and in furtherance of the interests of the charity as opposed to the interests of the charity leaders.[193]

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[188] *See supra* notes 177-178 and accompanying text.

[189] Samuel D. Brunson, *One Last Charitable DAO Post,* NONPROFIT LAW PROF BLOG, Dec. 2, 2021, https://lawprofessors.typepad.com/nonprofit/2021/12/one-last-charitable-dao-post.html [https://perma.cc/AC23-52KH].

[190] *See supra* notes 82-85 and accompanying text.

[191] *See* RESTATEMENT (CHARITABLE NONPROFIT ORGANIZATIONS) § 2.04(a) & Comments a, b (Am. L Inst. 2021) [hereinafter RESTATEMENT].

[192] *See* NATIONAL CONFERENCE OF COMMISSIONERS OF UNIFORM STATE LAWS, MODEL PROTECTION OF CHARITABLE ASSETS ACT § 3 & Comment (2011).

[193] *See* MARION R. FREMONT-SMITH, GOVERNING NONPROFIT ORGANIZATIONS: FEDERAL AND STATE LAW AND REGULATION 187 (2004).

The key questions are therefore whether existing law provides sufficient clarity regarding how it applies to the new assets and, if it does, whether that application is consistent with these overall goals. The answers to these questions are in some instances relevant to the federal tax law issues discussed previously, particularly the issue of whether ownership of these assets by a private foundation could be considered a jeopardizing investment.[194]

1. *General Fiduciary Duties*

Charity leaders, that is those with "substantial powers with respect to a charity," owe fiduciary duties with respect to their charity.[195] These include duties of care and loyalty, which apply both generally and with respect to management, investment, and expenditure of a charity's assets.[196] These duties require the leaders to act in good faith, with prudence, and in the best interests of the charity.[197]

The primary challenge charity leaders likely face when considering whether to accept, acquire, or retain these new assets is therefore whether it is prudent to do so given their novelty, complexity, and, especially for cryptocurrencies and NFTs, volatility. With respect to novelty, the newness of these assets and the related unfamiliarity of most charity leaders with them suggest that most charity leaders should, given their duty of care, employ intermediaries or advisors who are more familiar with them. For example, if a charity is interested in accepting cryptocurrency or NFT contributions, it probably will be advisable in most instances to use one of the available intermediary platforms discussed earlier that can accept the contribution on the charity's behalf and immediately sell it so that the charity receives fiat currency.[198] This is in part because of the regulatory uncertainty surrounding digital assets, particularly cryptocurrencies and NFTs, not only with respect to federal tax law but also with respect to federal securities law.[199]

As for complexity, there already have been prominent examples of individuals and entities losing access to, or being defrauded with respect to, new assets, and particularly cryptocurrency.[200] Something as simple as losing track of the private key associated with a digital wallet, if the charity takes direct ownership of a digital asset, could cause the charity to lose that asset forever.[201] And the recent FTX cryptocurrency exchange collapse and previous exchange failures demonstrate that even relatively sophisticated

[194] *See supra* notes 158-159 and accompanying text.
[195] RESTATEMENT, *supra* note 191, § 2.01(a), (c).
[196] RESTATEMENT, *supra* note 191, §§ 2.02, 2.03, 2.04(a).
[197] RESTATEMENT, *supra* note 191, §§ 2.02(a), 2.03(a).
[198] *See supra* notes 49-52 and accompanying text.
[199] *See* HAYNES & YEOH, *supra* note 11, at 18-19.
[200] *See supra* note 21 and accompanying text.
[201] *See supra* note 20 and accompanying text.

parties have difficulty fully understanding, and therefore protecting themselves, from fraud and theft when dealing with these types of assets.[202] There also is a related risk that it may come to light that the donor obtained the donated assets through questionable or even criminal means, creating potential reputational harm or liability for the recipient charity. For example, Stanford University agreed to return gifts it received from the bankrupt FTX exchange and related entities in the wake of a lawsuit by FTX accusing Sam Bankman-Fried's parents of using their influence to cause the donations, among other actions.[203] A less high-profile situation involved the apparent collapse of an NFT marketplace, but reportedly only after it had used the funds it raised to fund various philanthropic projects.[204]

With respect to volatility, while equity holdings in existing businesses can also have volatile prices, those prices, at least in the long-term, reflect changing expectations regarding the earnings of the underlying business.[205] In contrast, cryptocurrencies have "no consensus valuation framework" but instead depend for their valuations on "the waxing and waning of enthusiasm for a potentially revolutionary assets class for which at times the sky might seem to be the limit."[206] And this is even more true for NFTs.[207]

All that said, there do not appear to be any new issues when it comes to considering what is needed to satisfy the duty of care when it comes to these new assets. If anything, their novelty, complexity, and volatility strongly indicate that most charity leaders should either avoid having their charities involved with them at all or should only do so through experienced intermediaries. Similarly, the application of the duty of loyalty in this area does not appear complicated either, in that charity leaders should (as always) be sensitive to possible conflicts of interest—such as a board member who wants the charity to invest in a cryptocurrency in which the board member has a personal financial stake.

There is one caveat to this conclusion. Some charity leaders may want to consider whether to create a philanthropic DAO, along the lines of what Big

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[202] *See supra* note 22 and accompanying text.

[203] *See* Amelia Pollard & Jonathan Randles, *Stanford Says It Will Return Entirety of Gifts Received from FTX,* BLOOMBERG, Sept. 19, 2023.

[204] *See* Tom Blackstone, *Tragedy or rug pull? Inside the collapse of a "charitable" NFT project,* COINTELEGRAPH, Aug. 17, 2023 (describing the apparent collapse of NFT marketplace Orica, but only after it had apparently fulfilled its commitments to fund various charities)

[205] *See* HAYNES & YEOH, *supra* note 11, at 14.

[206] HAYNES & YEOH, *supra* note 11, at 14; *see also* BRITTO & CASTILLO, *supra* note 14, at 31-33 (describing Bitcoin volatility); Xuan-Thao Nguyen & Jeffrey A. Maine, *Crypto Losses,* 2024 U. ILL. L. REV. (forthcoming 2024), at 1 (cryptocurrencies lost in the aggregate $1.3 trillion in value during the "[c]rypto winter" of 2022), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4431079 [https://perma.cc/VJ8J-GEPD].

[207] *See supra* note 68 and accompanying text.

Green has done.[208] As with any new venture, and particularly one using novel technology, they should do so with caution to ensure that any assets controlled by the DAO can only be used for permitted, charitable purposes consistent with the mission of the charity. The Big Green model is quite detailed in terms of its governance structure and grant-making process, and leaders of other charities considering something similar will need to carefully consider the structure of any DAO they create.[209] But again, the relatively permissive and vague standards imposed by the duty of care would seem to apply to such a venture as much as to any new activity.

2. *Investment Responsibility*

With respect to investments, charity leaders are subject to the general fiduciary duties described in the previous section.[210] They also are subject to state laws specifically imposing duties with respect to charity investments, which most states base on the Uniform Prudent Investor Act (UPIA) and the Uniform Prudent Management of Institutional Funds Act (UPMIFA).[211] While these sources vary in their details, they generally require that charity leaders manage a charity's investment portfolio in a prudent manner in light of the charity's purposes, any donor-imposed restrictions, and other relevant circumstances.[212] This duty extends to property received as a donation.[213] The identified circumstances that are most relevant for the new assets discussed in this article are the role that an investment in one of these assets plays in the charity's overall investment portfolio and the expected total return from the new asset.[214] Charity leaders also have a general duty to diversity investments.[215]

The same considerations that urge caution under the general duty of care—novelty, complexity, and volatility—strongly suggest that charity leaders should be wary of viewing any of these new assets as an appropriate part of their investment portfolio. And even if those leaders, or their advisors, have the expertise to accurately evaluate the risk/return tradeoff for these

[208] *See supra* note 79-80 and accompanying text.

[209] *See supra* note 80.

[210] *See* RESTATEMENT, *supra* note 191, § 2.04(a).

[211] *See* RESTATEMENT, *supra* note 191, § 2.04 cmt. b.

[212] *See* RESTATEMENT, *supra* note 191, § 2.04(b); NATIONAL CONFERENCE OF COMMISSIONERS OF UNIFORM STATE LAWS, UNIFORM PRUDENT INVESTOR ACT (UPIA) § 2(a); NATIONAL CONFERENCE OF COMMISSIONERS OF UNIFORM STATE LAWS, UNIFORM PRUDENT MANAGEMENT OF INSTITUTIONAL FUNDS ACT (UPMIFA) § 3(a), (b); *see also* NATIONAL CONFERENCE OF COMMISSIONERS OF UNIFORM STATE LAWS, UNIFORM TRUST CODE Art. 9 (encouraging states to adopt the UPIA as part of the UTC); RESTATEMENT (THIRD) TRUSTS §§ 90-92 (Am. L. Inst. 2007).

[213] *See* UPIA, *supra* note 212, § 4; UPMIFA, *supra* note 212, cmt. to § 3(e)(5).

[214] *See* UPIA, *supra* note 212, § 2(c)(4), (5); UPMIFA, *supra* note 212, § 3(e)(1)(D), (E), (2).

[215] *See* UPIA, *supra* note 212, § 3; UPMIFA, *supra* note 212, § 3(e)(4).

assets, they should be only a very small part of charity's portfolio even for the wealthiest and most future-focused charities, such as large foundations or universities with large endowments. That is because of the need both to consider the overall investment portfolio and to maintain diversification.

## V. New Wineskins: Do the New Assets Need New Law?

### A. *Cryptocurrencies Should Not Be Treated as Readily Valued Property (At Least Not Yet)*

As noted above, Chief Counsel has taken the position that charitable contributions of cryptocurrencies with a claimed value of more than $5,000 can only be deducted if the donor obtains a qualified appraisal.[216] Congress enacted the qualified appraisal requirement, along with other substantiation requirements, to prevent abuse of the charitable contribution deduction, and particularly overvaluation of donated property.[217] This requirement does not apply, however, to "readily valued property," which Congress identified as cash and publicly traded securities, as well as certain types of property (intellectual property, inventory, and vehicles) that are covered by special deduction rules.[218] The definition of "publicly traded securities" for these purposes is "securities for which . . . market quotations are readily available on an established securities market."[219] The relevant regulations further provide that "securities" are defined as provided in section 165(g)(2).[220] Chief Counsel correctly concluded that cryptocurrencies cannot therefore fall within this definition because they are not securities within the meaning of that last section, which is limited to equity or debt interests in a corporation (or to government debt instruments).[221]

The question is whether Congress should modify the list of readily valued property to include convertible virtual currency—that is, cryptocurrencies—for which market quotations are readily available on an exchange. In that situation an appraisal is arguably not required to reliably determine the value

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[216] *See supra* notes 132-134 and accompanying text; I.R.C. § 170(f)(11)(A)(i), (C).

[217] *See supra* note 96 and accompanying text.

[218] I.R.C. § 170(f)(11)(A)(ii)(I). The relevant regulations relax this requirement for nonpublicly traded stock, but only if the claimed deduction does not exceed $10,000, pursuant to instructions from Congress. *See* Reg. § 1.170A-13(c)(2)(ii); Deficit Reduction Act of 1984, P.L. 98-369, § 155(a)(2) (flush language), 98 Stat. 494, 691 (1984) (directing the Secretary of the Treasury to issue regulations adding the qualified appraisal requirement with this exception). The regulation still contains this exception even though it was not included when Congress codified the qualified appraisal requirement. *See* American Jobs Creation Act of 2004, P.L. 108-357, § 883(a), 118 Stat. 1418, 1631-32 (2004) (codifying the qualified appraisal requirement in I.R.C. § 170(f)(11)).

[219] *See* I.R.C. §§ 170(f)(11)(ii)(I) (cross-referencing section 6050L(a)(2)(B) for the definition of publicly traded securities), 6050L(a)(2)(B).

[220] Reg. § 1.170A-13(c)(7)(xi)(A).

[221] *See supra* note 108 and accompanying text.

of the donated cryptocurrencies, and therefore imposing that requirement unnecessarily inhibits cryptocurrency donations and creates a trap for the unwary donor.[222] The American Institute of Certified Public Accountants (AICPA) also proposed in 2018 that the Service could (and should) interpret the relevant statute to treat virtual currencies as readily valued property and so not subject to the qualified appraisal requirement if the donor could identify two "established exchanges" that valued the donated virtual currency at the day and time of the donation.[223] The reasons the AICPA gave for requiring two exchanges (and averaging the value provided by them) were that "the value of virtual currency can vary slightly among different published exchanges" and being listed on two exchanges "provides support that the donated currency is widely recognized."[224]

The problem with expanding the list of readily valued property to include cryptocurrencies, or at least cryptocurrencies for which one or more exchanges provide a value as of the date and time of the charitable contribution, is it relies on the uncertain accuracy of those exchanges with respect to reporting valuation. While the relevant regulations do not explicitly require that "established securities markets" used for valuing publicly traded securities meet certain reliability criteria, they appear to assume that such markets will be subject to federal securities laws or foreign equivalents.[225] That assumption, however, cannot be extended to cryptocurrency exchanges, even "established" ones (whatever that means), given that several of those exchanges are in the midst of litigation with the SEC challenging that agency's attempt to apply securities laws to them.[226] And the reliability of such exchanges absent SEC oversight is questionable, as illustrated by both the collapse of the FTX exchange in the face of fraud allegations[227] and a recent report questioning the stability of the largest remaining exchange,

[222] *See* Moran, *supra* note 8, at 25 (making this argument).

[223] Letter from AICPA to Service, May 30, 2018, at 5-6, *available at* https://us.aicpa.org/content/dam/aicpa/advocacy/tax/downloadabledocuments/20180530-aicpa-comment-letter-on-notice-2014-21-virtual-currency.pdf [https://perma.cc/F5T2-6ZBZ]. The cryptocurrency and NFT donation platform The Giving Block made a similar proposal to the Senate Committee on Finance in 2023. Letter from The Giving Block to Senators Ron Wyden and Mike Crapo, Sept. 8, 2023, *available at* https://thegivingblock.com/resources/leading-the-charge-on-eliminating-the-appraisal-requirements-for-crypto-donations/ [https://perma.cc/3PL4-BZ2F].

[224] Letter from AICPA to Service, *supra* note 223, at 5.

[225] *See* Reg. § 1.170A-13(c)(7)(xi)(A) (describing acceptable "established securities markets"); Reg. § 1.401(a)(35)-1(f)(5) (in the qualified-retirement-plans context, defining an "established securities market" by reference to registration under federal securities laws or comparable foreign government supervision).

[226] *See* SEC, *supra* note 7; Stempel et al., *supra* note 7.

[227] *See* Hetler, *supra* note 22. The durability of exchanges is also unclear; for example, the sharp decline in cryptocurrency values starting in late 2021 led to many exchanges shutting down. *Id.*

Binance, which is facing not only SEC but also Department of Justice investigations and whose founder has pled guilty to money laundering.[228]

Even if one or more exchanges are deemed to be reliable, the value provided by different exchanges can vary, as the AICPA proposal notes. Likely for this reason, one appraiser of cryptocurrencies stated that its valuation methodology involves considering all the exchanges on which a cryptocurrency trades and then using "the average of all the pricing indicators to arrive at a fair market value price on the valuation date."[229] For publicly traded securities such variations are very small and disappear very quickly because computerized trading programs quickly arbitrage any such differences (and thereby eliminate them).[230] But while the AICPA assumed any such variations for cryptocurrency exchanges would be slight, it is certainly possible they would be significant enough that a donor might be able to cherry pick among exchanges to claim a substantially higher valuation than is justified (a problem that would be compounded if the donor had some type of influence over a particular exchange, as Sam Bankman-Fried—a major cryptocurrency donor—had over FTX[231]). And the problem is not completely avoided even for stablecoins, as they do not always maintain their pegged value despite attempts to do so.[232] Also for these reasons, the treatment of cryptocurrency donations to private foundations, for which at this point the amount of donation is limited to lower of basis or fair market value, is also correct absent the valuation of cryptocurrencies becoming as reliable and transparent as the valuation of publicly traded corporate stock. I therefore believe a recent recommendation that "for more liquid and well-recognized digital assts, the Service could allow a simplified valuation process" is premature.[233]

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[228] *See* Patricia Kowsmann, Caitlin Ostroff & Angus Berwick, *The World's Biggest Crypto Firm Is Melting Down,* WALL ST. J., Sept. 26, 2023; David Yaffe-Bellany, Emily Flitter, Matthew Goldstein & Glenn Thrush, *Binance Founder Pleads Guilty to Violating Money Laundering Rules,* N.Y. TIMES, Nov. 21, 2023.

[229] Lindsay, *supra* note 139.

[230] *See* Matteo Aquilina, Eric Budish & Peter O'Neill, *Quantifying the High-Frequency Trading "Arms Race,"* Nat'l Bur. Of Econ. Res. Working Paper 29011 (2021), *available at* https://www.nber.org/papers/w29011 [https://perma.cc/9E7C-58SL].

[231] *See* John Hyatt, *Sam Bankman-Fried's Donations to Effective Altruism Nonprofits Tied to An Oxford Professor Are At Risk of Being Clawed Back,* FORBES, Nov. 17, 2022, https://www.forbes.com/sites/johnhyatt/2022/11/17/disgraced-crypto-trader-sam-bankman-fried-was-a-big-backer-of-effective-altruism-now-that-movement-has-a-big-black-eye/?sh=73bda534ce78 [https://perma.cc/6T9E-KKMJ].

[232] *See* Hicks, *supra* note 23 (noting how a panic caused stablecoin values to decline from their purported pegged value, including causing an algorithmic stablecoin to lose almost all its value and a collateralized stablecoin to suffer a small but notable decline in value (from $1 to $0.94 per coin)).

[233] Beale et al., *supra* note 177, at 16.

All that said, the unreliability of exchange-determined values may disappear over time, and so Congress should be open to revisiting this issue if that were to occur. For example, if the SEC ultimately wins the litigation challenging whether cryptocurrencies are securities and so the exchanges on which they trade are subject to federal securities laws and the SEC's authority, that may render all (or at least domestic United States) cryptocurrency exchanges relatively reliable.[234] An alternative approach would be for Congress to explicitly give Treasury the discretion to add to the list of readily valued property and so delegate the ability to address any such changes.[235] As for donations of cryptocurrency to private foundations, Congress would also need to alter the relevant statute if it wanted to extend publicly traded stock treatment to donations of certain cryptocurrency, as that statute currently limits such treatment to corporate stock.[236]

The AICPA's proposal notwithstanding, it does not appear that Treasury or the Service are currently free to add cryptocurrencies to the statutory list of readily valued property for charitable contribution deduction purposes absent congressional action or modification of a longstanding regulation.[237] Congress defined "publicly traded securities" by cross-reference to section 6050L(a)(2)(B), which simply provides that this term means "securities for which (as of the date of the contribution) market quotations are readily available on an established securities market."[238] But as noted previously, Treasury has refined this definition in longstanding regulations that further defined "securities" by cross-reference to section 165(g)(2), thereby limiting that term to equity or debt interests in a corporation (or to government debt instruments).[239] Treasury could presumably modify this regulation to drop the latter cross-reference and so open the possibility that cryptocurrency could be considered public traded securities under the statute, but Treasury may be reluctant to change this longstanding rule. However, an alternative approach that would avoid the need for congressional action would be for Treasury to instead provide that, in the context of regularly traded cryptocurrencies, an appraisal would be sufficient if it relied on exchange-

[234] Foreign exchanges may raise distinct reliability concerns, especially if exchanges relocate outside the United States specifically to avoid the reach of United States laws. *See* David Canedo, *Treasury's Plan for Crypto Brokers Threatens the Future of DefFi*, BLOOMBERG TAX, Sept. 13, 2023 (in connection with tax reporting rules, arguing that some exchanges may attempt to avoid United States jurisdiction).

[235] *See* Brownsword, *supra* note 88, at 27 (delegation of such authority can "soften" the edges of otherwise hard law to help manage the tension between "the need for flexibility (if regulation is to move with the technology)" and "the demand for predictability and consistency (if regulates are to know where they stand)").

[236] *See supra* note 141 and accompanying text.

[237] *See supra* note 223 and accompanying text.

[238] *See supra* note 219 and accompanying text.

[239] *See supra* notes 220-221 and accompanying text.

reported prices on the donation date (and otherwise satisfied the qualified appraisal requirements).

A related issue is the possibility that cryptocurrencies could come to resemble foreign currency more closely if they start not only to be legally recognized but also to be used as mediums of exchange. In that situation, a reclassification as foreign currency would hinder charitable contributions of cryptocurrency because the amount of any deductions would be limited to the donor's basis, since gain on foreign currencies is considered ordinary gain and so not deductible.[240] Again, if this were to happen Congress would need to consider whether to permit the deduction of the fair market value of cryptocurrencies even if they are properly classified as foreign currencies.

Finally, providing a negative answer today with respect to the readily valued issue does not necessarily create either a pacing problem or a regulator dilemma problem. The volume of cryptocurrency donations—reaching overall valuation of hundreds of millions of U.S. dollars in 2021—is such that it is necessary to have an answer for donors now, as Chief Counsel has provided, and there is enough information about the unreliability of exchanges to support that answer for the time being.[241] That said, Chief Counsel guidance based—correctly—on existing law does not foreclose Congress in the future from amending section 170 to add cryptocurrencies traded on reliable exchanges to the list of readily valued assets or foreclose Treasury from creating a simplified appraisal rule for cryptocurrencies regularly traded on reliable exchanges, if circumstances warrant doing so. That guidance is therefore unlikely to have much staying power in that situation, especially since presumably the AICPA, other commentators, and promoters of cryptocurrency are likely to push for such a change.

### B. *Blockchain as a Means But Not an End Under Section 501(c)(3)*

While we do not have the benefit of seeing all Service determinations with respect to recognition of exemption under section 501(c)(3) for organizations using blockchain technology in some manner, it appears that the Service has so far taken the position that promoting blockchain technology as an end does not qualify for such recognition, but using blockchain technology as a means to further a more traditional charitable purpose does qualify. For example, the one denial on record involved an organization that existed to develop and promote a particular cryptocurrency, including educating the

[240] *See supra* note 105 and accompanying text.

[241] *See* Nicola M. White, *Long-Awaited Bitcoin Accounting Rules to Capture Rises, Dips,* DAILY TAX REPORT, Sept. 6, 2023 (reporting that the Financial Accounting Standards Board is expected to issue accounting rules specifically relating to cryptocurrency after having resisted doing so for years based on the apparently now incorrect "reasoning that too few companies use Bitcoin in a material way").

public about it.[242] In contrast, we know that the Service has recognized the exempt status under section 501(c)(3) of at least one platform that focuses on facilitating charitable contributions of cryptocurrencies and NFTs and of at least three DAOs, one associated with a blockchain project at Vanderbilt University and the other two involved in funding various charitable projects.[243]

The Service's conclusion that the organization formed to promote a particular cryptocurrency does not qualify for recognition of exemption under section 501(c)(3) is correct, although the Service's reasoning is overbroad and incorrect in several respects.[244] The Service was incorrect to attempt to narrowly define "educational" in this particular context—in tension with the broad regulatory definition—and to refuse to recognize the public as a whole is an acceptable charitable class. However, the Service was correct to identify private benefit as the disqualifying aspect of this organization, and indeed should have relied on that concept more heavily in that not only did the individuals involved stand to benefit directly from the organization's activities, but also by developing and promoting a specific cryptocurrency the organization essentially was simply the marketing arm for a non-charitable, commercial asset. The organization therefore resembled other situations where an individual or group of individuals uses a purported charity to promote their particular product, which disqualifies that organization from section 501(c)(3) status.[245]

By comparison, there is nothing about blockchain technology that makes its use the basis for disqualifying an otherwise qualified section 501(c)(3) organization from that tax status. The Service was therefore correct in its determination with respect to the giving platform designed to facilitate charitable contributions of cryptocurrencies and NFTs, since facilitating charitable contributions is itself a charitable purpose (and assuming all the other requirements for section 501(c)(3) status were satisfied, as they apparently were).[246] The Service was also correct that simply having a DAO governance structure is not disqualifying if, again, the relevant organization furthers a charitable purpose—education, cancer research, and religious projects in the three examples known to date—and otherwise satisfies the organizational and operational tests under section 501(c)(3). More specifically, all three appear to have been formed as (presumably nonprofit)

[242] *See supra* notes 142-143 and accompanying text.

[243] *See supra* notes 83-85 and accompanying text.

[244] *See supra* notes 144-146 and accompanying text.

[245] *See, e.g.,* Reg. § 1.501(c)(3)-1(d)(1)(iii), Example 2 (art museum that promotes art of specific artists); Est of Hawaii v. Comm'r, 71 T.C. 1067 (1979) (nonprofit that promoted program owned by for-profit company), *aff'd*, 647 F.2d 170 (9th Cir. 1981).

[246] *See supra* note 154 and accompanying text.

corporations,[247] although it is not entirely clear what is the exact legal form of ApostolicDAO, but presumably it similarly satisfies the relevant requirements.[248] And there is nothing to indicate that accepting cryptocurrency or NFTs (or an interest in a for-profit DAO) as a donation or investing in such assets (subject to the state law duties discussed previously) would disqualify an otherwise qualified section 501(c)(3) organization. What is not yet completely clear is how federal tax law would treat a charitable DAO if its organizers wanted to forgo any formal state law legal form (which choice would also raise interesting questions regarding who would be subject to state law fiduciary duties), but a possible approach would be to apply the same rules the Service applies to unincorporated nonprofit associations.[249]

That said, there appear to only be relatively few organizations seeking to use blockchain technology, including a DAO governance structure, to further charitable purposes.[250] There therefore does not appear to be any need for the Service or Chief Counsel, much less Congress, to issue any guidance on this issue beyond the Service making individualized determinations as needed in response to recognition of exemption applications. And given the still developing nature of this technology, particularly with respect to DAOs, it is advisable for the Service and Chief Counsel to avoid issuing any—so far not needed—guidance on these issues to avoid unduly hindering developments in this area. As for the one area where there is significant activity—charitable contributions—the existing guidance should be sufficient for current donors and recipient charities.

## VI. Conclusion

The old wineskin of existing charity law holds up well to the new wine of cryptocurrencies, NFTs, and DAOs. This result flows from the comprehensiveness of federal tax law and the relative vagueness of state law, both of which lead to these laws being "future-proofed" to a large extent in that they are able to accommodate these new assets. For these reasons,

[247] *See supra* notes 83-85 and accompanying text. As noted previously, there is some ambiguity regarding whether Anchor DAO may have instead been formed as a liability company. *See supra* note 83 and accompanying text. But if it was instead formed as a limited liability company, presumably it satisfied the requirements for such an entity to qualify for exemption under section 501(c)(3). *See* Notice 2021-56, 2021-45 I.R.B. 716 (requirements for a limited liability company to be recognized by the Service as tax-exempt under section 501(c)(3))

[248] The fact that all three section 501(c)(3) DAOs successfully filed applications for recognition of exemption (Form 1023 or Form 1023-EZ) with the Service also indicates that whatever tax reporting issues may arise with DAOs generally, these entities have found a way to ensure one or more individuals have responsibility for making the tax filings required for tax-exempt organizations. *See supra* note 185 and accompanying text.

[249] *See* Reg. § 1.501(c)(3)-1(b)(1) to (2) (for purposes of the organizational test under section 501(c)(3), allowing the required statements to be included "any . . . written instrument by which an organization is created").

[250] *See supra* note 82 and accompanying text.

regulators and practitioners can, for the most part, readily discern how these existing laws apply to these new assets, and legislators and regulators do not need to revisit those existing laws at this time to properly accommodate these new assets.

That said, there are two federal tax areas where the fit of existing law could eventually be in tension with underlying policy goals and so may need to be modified. The first area is with respect to readily valued property that does not require a qualified appraisal to support a more than $5,000 charitable contribution deduction. The exclusion of frequently traded cryptocurrencies from this category is appropriate now, given the uncertain reliability of cryptocurrency exchanges, but may not be in the future if that reliability improves.

The second area is the need for the Service to continue to differentiate when it comes to section 501(c)(3) tax exemption between organizations formed to promote a particular subset of these new assets—such as a particular cryptocurrency or NFT collection—for its own sake, which would provide a significant and so disqualifying private benefit to the developers and owners of that subset, and organizations that use these new assets to further recognized charitable purposes. The limited information available indicates the Service is correctly applying this distinction, even if its arguments in support of it are not always correct. Furthermore, the relatively few instances where it appears this distinction needs to be applied argue against the issuance of formal guidance on this point. However, if the volume of exemption applications implicating this issue increases significantly, the Service should then consider issuing such guidance.