

The Anything Asset: The Tax Classification of Cryptocurrency, NFTs, DAOs and Other Digital Assets

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INTRODUCTION

The rapid rise (and, in some cases, swift fall) of the digital asset economy has been incessantly chronicled in the business and legal press for a decade.¹ From Bitcoin and other cryptocurrencies, to decentralized autonomous entities (“DAOs”) and non-fungible tokens (“NFTs”),² new asset classes and business models have burst onto the scene, with lawmakers and government regulators

* O’Melveny & Myers LLP. I owe special thanks to Luc Moritz and Richard Demak for their valuable input.

¹ See, e.g., Wulf A. Kaal, *Digital Asset Market Evolution*, 46 J. CORP. L. 909, 910 (2021); Ari Levy & MacKenzie Sigalos, *Crypto Peaked a Year Ago — Investors Have Lost More Than \$2 Trillion Since*, CNBC (Nov. 14, 2022, 3:07 AM), <http://www.cnbc.com/2022/11/11/crypto-peaked-in-nov-2021-investors-lost-more-than-2-trillion-since.html> [<http://perma.cc/QZ8D-8F22>].

² In this Article, these and similar assets are referred to collectively as “digital assets.”

struggling to keep up. In some cases, the lack of a legal framework is precisely what “Web3” proprietors want; but, it should come as no surprise that governments do not view digital assets as exempt from the rules that apply to familiar financial products and transactions. Of course, deciding whether digital assets should be regulated is the easy part for governments—the thorny question is *how* should they be regulated.

One area in which lawmakers may wish to move quickly is in taxes. But drafting tax rules requires attention to a number of often conflicting principles. Income tax law must be drafted so broadly that transactions do not unfairly escape its scope. But it also must be drafted with enough specificity to prevent taxpayers from exploiting loopholes to avoid paying appropriate tax. The best tax statutes and regulations are practical; tax law should not deter commercially desirable transactions unless those transactions should be discouraged for some other compelling reason.

The “quickest” avenue for promulgating new tax rules in the United States is through the Internal Revenue Service (“IRS”), but such rules are often challenged.³ Regulatory action is also possible, but the process takes longer and is more cumbersome. And any action, short of an act of Congress, is limited by the Internal Revenue Code (“the Code”)⁴ and judicial interpretations.

Perhaps because of these challenges, the United States has addressed the taxation of digital assets in only very limited ways.⁵ It is, of course, not uncommon for tax laws to lag behind cutting-edge technologies. As a result, tax advisors are often left to apply existing laws to new situations through analogy; in those situations, the question is not what rules apply to a particular asset or transaction, but rather what previously addressed situation—with rules to manage it—is most similar to the one at hand. From there, a tax advisor can determine what direction or principle can be derived from those rules to inform how to evaluate the new circumstances. 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.

³ See Kristin E. Hickman, *The Federal Tax System's Administrative Law Woes Grow*, 41 A.B.A. TAX TIMES, 6 (2022), http://www.americanbar.org/content/dam/aba/publishing/aba_tax_times/22winspr/att-22winspr-000-complete-issue.pdf [<http://perma.cc/GZ8F-AJQF>].

⁴ All references to the Code in this Article are to the Internal Revenue Code of 1986, as amended.

⁵ See generally David C. McDonald, *Coining New Tax Guidance: How the IRS is Falling Behind in Crypto*, 28 U. MIA. INT'L & COMP. L. REV. 152, 152–54 (2021).

So, the first question for any tax practitioner looking at a digital asset will be this: What is it? Given the flexibility of digital assets as evidenced by their already varied use, in a sense, a digital asset can be almost anything. Although tax advisors are used to applying old rules to classify new assets, the versatility of digital assets will stretch that approach and change the practice of tax law. This Article will explore the interesting and challenging issue of classifying digital assets: first, through specifically considering the tax classification of common categories of digital assets—cryptocurrency, DAOs, and NFTs—and second, by asking whether any or all of those assets can be classified as “securities” or “commodities” under a few key provisions of the Code.

I. VIRTUAL CURRENCY: IRS’S INITIAL APPROACH TO CLASSIFICATION

The first digital asset to reach the popular consciousness was Bitcoin.⁶ First mined in 2009, Bitcoin slowly increased in value through 2013, reaching around \$150; its value increased significantly in 2014, rising to \$1000; and in 2017, it began its meteoric rise, topping out at \$68,789 in November 2021.⁷ It subsequently fell to around \$16,000, where it stood in December of 2022.⁸ Since the birth of Bitcoin, more than 20,000 other cryptocurrencies have been created.⁹ Bitcoin’s shift in value in 2014 coincided with (or perhaps caused) the IRS to pay more attention to cryptocurrency, resulting in the first specific, substantive guidance regarding the tax classification of digital assets.

In Notice 2014-21,¹⁰ the IRS first acknowledged it was aware of the development of what it referred to as “virtual currency,” which it defined as “a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value”

⁶ See James Royal & Brian Beers, *Bitcoin’s Price History: 2009 to 2023*, BANKRATE (Jan. 24, 2023), <http://www.bankrate.com/investing/bitcoin-price-history/> [<http://perma.cc/7A9G-FRA8>].

⁷ *Id.*

⁸ *Historical Data for Bitcoin*, COIN MKT. CAP, <http://coinmarketcap.com/currencies/bitcoin/historical-data/> [<http://perma.cc/PK8H-VPJW>] (last visited Jan. 19, 2023). Of course, neither the rise nor the fall has been completely steady, but rather famously subject to significant swings.

⁹ See Coryanne Hicks & Farran Powell, *Different Types of Cryptocurrencies*, FORBES (Dec. 7, 2022, 11:01 AM), <http://www.forbes.com/advisor/investing/cryptocurrency/different-types-of-cryptocurrencies/> [<http://perma.cc/UD9S-CHCK>].

¹⁰ I.R.S. Notice 2014-16, I.R.B. 938.

without a designation as legal tender by any jurisdiction.¹¹ The Notice was intended to provide initial guidance regarding the taxation of “convertible” virtual currency—meaning virtual currency that has an equivalent value in real currency or acts as a substitute for real currency.¹² The IRS issued its substantive guidance in the form of frequently asked questions (“FAQs”), and the first two spoke directly to how convertible virtual currency should be classified for U.S. tax purposes.¹³

In its answer to its second FAQ, the IRS concluded that at the most basic level, virtual currency is to be classified as property.¹⁴ Although the Notice does not include any detailed discussion on this high-level analysis, the purpose of this conclusion is perhaps to clarify that virtual currency is subject to taxation like any other asset. Although many early cryptocurrency adopters welcomed the fact that the asset existed largely outside of government regulation, the IRS made clear that the asset would not avoid the U.S. income tax net.¹⁵

But simply being classified as “property” yields only the most basic guidance about rules. There are many types of property that are subject to special rules based on their particular characteristics.¹⁶ For example, stock in a corporation is a form of property that is subject to expansive special rules that do not apply to any other form of property—e.g., stock can be exchanged by a shareholder without incurring tax through the tax-free reorganization and other provisions of the Code.¹⁷ And another type of property, real estate, is the only type of property that can be part of a tax-free like-kind exchange.¹⁸

¹¹ *Id.* Since the issuance of Notice 2014-21, Bitcoin has become legal tender in both El Salvador and the Central African Republic in September 2021 and April 2022, respectively. Similar designations are being considered in Saint Kitts and Nevis, Paraguay and potentially elsewhere. *See 5 Countries that Could be Next in Line to Adopt Bitcoin as a Legal Tender*, CNBC TV18 (Nov. 22, 2022, 3:57 PM), <http://www.cnbc.tv/18.com/cryptocurrency/bitcoin-as-legal-tender-5-countries-that-could-be-next-in-line-to-adopt-15228761.htm> [<http://perma.cc/CT8B-2X65>]. This raises the possibility that Bitcoin would no longer be subject to the Notice as a result of no longer meeting the definition of “virtual currency,” but the IRS has not given any indication that this will be the case.

¹² I.R.S. Notice 2014-16, I.R.B. 938.

¹³ *See Frequently Asked Questions on Virtual Currency Transactions*, INTERNAL REVENUE SERV. (Jan. 13, 2023), <http://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions> [<http://perma.cc/7FBH-Y2JR>].

¹⁴ *See id.*

¹⁵ *See id.*

¹⁶ *See, e.g.*, I.R.C. §§ 355, 1031.

¹⁷ *See, e.g.*, I.R.C. §§ 332, 351, 355, 361.

¹⁸ *See* I.R.C. § 1031.

The existing tax law applicable to foreign currency—another form of property—might have provided tax practitioners with analogies when analyzing transactions involving Bitcoin and other cryptocurrencies.¹⁹ But, in its response to the second FAQ in Notice 2014-21, the IRS foreclosed that possibility, stating only that it had reached its finding pursuant to “currently applicable law.”²⁰ That said, the IRS has defined 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.”²¹ Thus, it stands to reason that since cryptocurrency lacked coin and paper, legal tender status, and a country of issue at the time Notice 2014-21 debuted, the IRS would not treat it as foreign currency.²²

The other FAQs in Notice 2014-21 and additional FAQs released in 2019 with Revenue Ruling 2019-24²³ (addressing “airdrops” and “hard forks”) are consistent with the classification described above, and do not indicate that cryptocurrency will have any special classification for tax purposes. Indeed, the IRS’s clear position is that payment for services in cryptocurrency is taxable compensation subject to self-employment taxes and wage withholding.²⁴ Payments made in virtual currency are subject to information reporting and backup withholding.²⁵ Virtual currency received through mining will constitute trade or business income if that mining activity reaches the thresholds applicable to any other trade or business.²⁶ All of these rules apply to the tax classification of most ordinary forms of property, from trucks to televisions to digital assets.

Any guidance from the IRS in this area is useful to tax advisors, and acknowledging that virtual currency is not foreign currency for U.S. tax purposes is helpful. But, unfortunately, the limited and bare statements in Notice 2014-21 and subsequent guidance do not help tax advisors classify other forms of digital assets.

¹⁹ Foreign currency is subject to additional rules not applicable to other forms of property. See I.R.C. §§ 985–988.

²⁰ I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, Q&A (Q–2).

²¹ Rev. Rul. 2019-24, 2019-44 I.R.B. 1004 (citing 31 C.F.R. § 1010.100(m) (2022)).

²² The designation of Bitcoin as the legal tender of certain foreign jurisdictions could call into question whether it will still fall outside the definition of foreign currency. Compare CNBC TV18, *supra* note 11, with I.R.C. §§ 985–988.

²³ See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, Q&A; Rev. Rul. 2019-24, 2019-44 I.R.B. 1004.

²⁴ See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, Q&A (Q–9, Q–10, Q–11).

²⁵ See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, Q&A (Q–12, Q–14).

²⁶ See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938, Q&A (Q–9).

II. DAOS: ENTITIES OR NOT?

Cryptocurrency is not the only digital asset class to burst onto the scene in recent years. Another use for blockchain technology has become part of the digital economy. A decentralized autonomous organization or DAO is governed by “smart contracts” on a blockchain network.²⁷ A smart contract is similar to a standard legal contract, but the smart contract is carried out through self-executing rules on a computer network.²⁸ In a DAO, those smart contracts permit members to act collectively, without necessarily requiring a centralized governance structure.²⁹ An individual or entity becomes a member of the DAO by purchasing a token issued by the DAO, which represents the right to vote on the DAO’s activities and/or an economic share of the DAO’s assets.³⁰ Like other smart contracts, a DAO’s transactions take place on a blockchain so the record can be publicly viewed and verified.³¹ DAOs have often focused primarily on making investments as determined by a vote of their token-holders, but theoretically a DAO could operate a business or do anything that a corporation or limited liability company (“LLC”) could do.

This Article will focus in particular on investment DAOs, but DAOs have also been used to organize social clubs and govern the development of other digital asset platforms and tokens. There are two essential tax classification issues with DAOs: how to classify the DAO itself, and how to classify the token held by a DAO’s members.

A. Tax Classification of Entities³²

The application of U.S. tax law varies significantly depending on whether a taxpayer is an individual or an entity. An individual citizen or resident of the United States is generally subject to tax on their worldwide income at the applicable federal, state and local income-tax rates.³³ Similarly, a corporation organized under the laws of the United States, any state, or the

²⁷ See generally William K. Pao, Scott Sugino, Wenting Yu, Luc Moritz, Bill Martin, Billy Abbott, Laura Smith, Emma Persson, Damilola G. Arowolaju, *Decentralized Autonomous Organizations (DAOs): Overview*, PRACTICAL LAW FINANCE, at 1 (2022).

²⁸ See *id.*

²⁹ *Id.* at 2.

³⁰ *Id.*

³¹ *Id.*

³² See generally *id.* at 5.

³³ See, e.g., *U.S. Citizens and Resident Aliens Abroad*, INTERNAL REVENUE SERV. (Nov. 29, 2022), <http://www.irs.gov/individuals/international-taxpayers/us-citizens-and-resident-aliens-abroad> [<http://perma.cc/5ECZ-EQ7V>].

District of Columbia is generally subject to income tax at the rates applicable to corporations.³⁴

Other common forms of business entities are “pass-through” in nature—generally such entities are not subject to U.S. income tax themselves, but rather the owners of those entities pay U.S. income tax on their share of the entities’ income.³⁵ If an entity is a pass-through entity, the Treasury Regulations generally classify it, by default, as disregarded if it has only a single member and as a partnership if it has more than one equity-holder.³⁶ Other than for actual corporations, the same Treasury regulations—often referred to as “check-the-box” rules—allow an entity formed in the United States to choose its own tax classification.³⁷ Thus, for example, an LLC, which by default would be classified as either disregarded or as a partnership, may elect to be treated as a corporation instead.

Perhaps it is important for classifying a DAO that an entity can exist for U.S. tax purposes even when no legal entity has been formed. Treasury Regulations provide that an entity will exist for tax purposes if participants in a joint venture or similar arrangement—in what is often referred to as a “contractual partnership”—carry on a trade, business, financial operation, or venture and divide the profits.³⁸ Such arrangements will then be subject to all the rules applicable to partnerships or, if so elected, as corporations.

The classification questions become more complex for entities not formed under domestic law, which are therefore considered foreign entities under the Code.³⁹ Subject to a list of exceptions,⁴⁰ under the “check-the-box” regulations, a foreign entity’s default

³⁴ See, e.g., CT Corporation Staff, *What Are the Corporate Tax Filing and Reporting Requirements?*, WOLTERS KLUWER (Feb. 17, 2023), <http://www.wolterskluwer.com/en/expert-insights/corporate-tax-and-reporting-requirements> [http://perma.cc/6NXK-9Q8V].

³⁵ See, e.g., Heather Huston, *Compare Tax Considerations by Business Type*, WOLTERS KLUWER (Jan. 22, 2021), <http://www.wolterskluwer.com/en/expert-insights/compare-tax-considerations-by-business-type> [http://perma.cc/3TFA-SQKR].

³⁶ See Treas. Reg. § 301.7701-3(a)–(b)(1) (1996). In some cases, U.S. tax law offers other forms of specialized pass-through entities—for example, corporations meeting certain technical requirements are pass-through in nature, such as “S corporations.” See, e.g., Huston, *supra* note 35.

³⁷ See *Classification of Taxpayers for U.S. Tax Purposes*, INTERNAL REVENUE SERV. (Nov. 16, 2022), <http://www.irs.gov/individuals/international-taxpayers/classification-of-taxpayers-for-us-tax-purposes> [http://perma.cc/LEW4-9GYP].

³⁸ See Treas. Reg. § 301.7701-1(a)(2) (1996).

³⁹ See Treas. Reg. § 301.7701-5(a).

⁴⁰ See Treas. Reg. § 301.7701-2(b)(8) (1996) (providing that certain foreign entities are “per se” corporations that may not elect any other classification).

classification for U.S. tax purposes is generally a disregarded entity or a partnership if none of its owners or members has unlimited liability for its debts, or a corporation if all its owners or members have limited liability for its debts.⁴¹ Like U.S. entities, however, most foreign entities may elect a different tax classification.⁴²

Once it is established that an entity exists, the responsibilities of that entity under U.S. tax law reach beyond the requirement to pay income tax. Both corporations and partnerships are subject to extensive tax- and information-return filing requirements.⁴³ Partnerships in particular may be responsible for distributing to their partners the information necessary for those partners to pay tax on their pass-through share of income (i.e., Schedule K-1s).⁴⁴ Also, entities of any kind are often required to collect tax forms and withhold taxes from their members, employees, and consultants, among others. The specific requirements differ somewhat if the entity is foreign. For example, a domestic partnership is required to file an IRS Form 1065 and distribute Schedule K-1s in all cases; a foreign partnership is generally only required to file a return with the IRS if it is engaged in a trade or business in the U.S. or has earned certain other forms of income from U.S. sources.⁴⁵ Assuming an investment DAO is not operating its own trade or business directly, it would also be treated as an entity engaged in a trade or business in the United States if it invested in a pass-through entity that itself was so engaged.⁴⁶

B. Applying Classification Rules to DAOs

Given the clear importance of entity classification to the U.S. tax system, how DAOs are classified will have far-reaching implications for both the government's efforts to collect revenue and for the DAO's and its members' ability to comply with their respective tax obligations.

Some DAOs have chosen to make the entity classification issues easier for tax advisors by pursuing a traditional route of legal-entity formation.⁴⁷ Forming a legal entity offers a number of

⁴¹ See Treas. Reg. § 301.7701-3(b)(2).

⁴² See *id.*

⁴³ See, e.g., CT Corporation Staff, *supra* note 34; *About Form 1065, U.S. Return of Partnership Income*, INTERNAL REVENUE SERV. (Feb. 24, 2023), <http://www.irs.gov/forms-pubs/about-form-1065> [<http://perma.cc/E8F5-RBD8>].

⁴⁴ *2022 Partner's Instructions for Schedule K-1 (Form 1065)*, INTERNAL REVENUE SERV. 1 (Jan. 17, 2023), <http://www.irs.gov/pub/irs-pdf/i1065sk1.pdf> [<http://perma.cc/3VZV-ATST>].

⁴⁵ See Treas. Reg. § 1.6031-1(b).

⁴⁶ See I.R.C. § 875(1).

⁴⁷ See generally Pao et al., *supra* note 27.

benefits to its members, including certainty of limited liability and a greater ability to enter into transactions with actors in the traditional economy that may not be open to, or capable of, operating solely through the movement of cryptocurrency.⁴⁸ LLCs, in particular, are quite flexible in their governance structure, and they would lend themselves well to being governed through a system of smart contracts, since state laws generally do not require them to have a board of directors, hold shareholder meetings, or follow other formalities. Some states have even enacted LLC laws tailored for DAOs.⁴⁹

If a DAO operates as an LLC, the tax classification questions are relatively simple. A DAO formed as an LLC under state law will, by default, be a disregarded entity if it has one equity-holder and a partnership otherwise.⁵⁰ It can elect to be classified as a corporation if it so chooses. A DAO using another form of domestic entity should similarly be able to get a clear classification answer from its tax advisors under the existing legal framework.

Yet for many Web3 actors and investors, one of the primary benefits of the digital economy is the ability to remain unencumbered by the regulatory state.⁵¹ That's why many DAOs will reject the traditional wrapper of an LLC or other legal entity. But, choosing another path by no means removes the DAO from the income tax net—it just makes a DAO's tax compliance (and tax advisor's job) harder.

As described, an entity may exist for tax purposes without having the legal personality of a corporation or LLC. A typical investment DAO would seem to fit within the contractual partnership framework. Take one of the earliest DAOs—simply named “The DAO”—for example.⁵² The DAO was intended to operate like a venture capital firm; it raised \$150 million in cryptocurrency and intended to invest in start-ups as directed by The DAO's token-holders.⁵³ This seems clearly to be a “venture” carried out by the DAO token-holders in order to “divide profits”—

⁴⁸ See Miles Brooks, *Starting a Crypto LLC or Corporation: Tax Benefits and Drawbacks*, COINLEDGER, <http://coinledger.io/blog/crypto-llc-or-corporation-taxes> [<http://perma.cc/VFR9-6QBG>] (last visited Mar. 5, 2023).

⁴⁹ See, e.g., VT. STAT. ANN. tit. 11, § 4173 (West 2018).

⁵⁰ But, as discussed *infra*, determining the number of equity holders may not be so simple for a DAO.

⁵¹ See Julien Chaisse, *Toward a Big Bang for the Taxation of the Digitalized Economy: Business Retrospective, Perspective, and Prospective*, 41 VA. TAX REV. 345, 347 (2022).

⁵² See Robbie Morrison et al., *The DAO Controversy: The Case for a New Species of Corporate Governance?*, 3 FRONTIERS BLOCKCHAIN 1, 1 (2020).

⁵³ See *id.* at 5–6.

in other words, a contractual partnership.⁵⁴ A typical venture capital fund set up through a limited partnership or LLC under Delaware or other state law looks quite similar to this (though its investments are often less investor-directed). If The DAO had survived a hack that ultimately brought it down, it is certainly possible that the IRS could have reached that conclusion.⁵⁵

But the classification challenge wouldn't have ended there. The next step would have been to determine whether The DAO was a domestic or foreign entity. The DAO had not been formed using a legal wrapper, so looking to the law of the jurisdiction of formation would not have been an option. Under the applicable Treasury Regulations, it appears that The DAO would likely have been considered a foreign entity for tax purposes. That would, in part, have been good news for The DAO—had it actually made investments. The DAO would only have been required to file a U.S. federal income tax return if it had been engaged in a trade or business in the United States, and if The DAO had limited its activities to buying and selling stocks in corporations, this would not have been the case.⁵⁶ Indeed that is the approach that venture capital funds often take to minimize tax compliance issues for themselves and their investors.⁵⁷ But a typical venture capital fund has sophisticated professionals focused on the tax consequences of its investments. A DAO by nature does not have such centralized management, so it is quite likely that The DAO's owners would not have obtained tax advice before recording a vote calling for The DAO to invest in an LLC. Without tax advice, The DAO's owners might have unwittingly caused The DAO or its owners to have an undesirable U.S. income-tax filing obligation.

The DAO would also have had withholding obligations. At the very least, it would have been required to collect IRS Forms W-9 or W-8 from its investors to determine its withholding

⁵⁴ The Lummis-Gillibrand Responsible Financial Innovation Act, S. 4356, 117th Cong. § 204(a) (2022), would have declared that the default classification of a DAO, once certain requirements are met, was "a business entity which is not a disregarded entity." While this would have made clear that a DAO is in fact a business entity for tax purposes, it is unclear what is the purpose of stating that is not a disregarded entity. *See id.* This is contrary to standard entity classification principles that would determine whether an entity is disregarded based on whether it is classified as a corporation or not and thereafter based on the number of its equity holders.

⁵⁵ *See Morrison et al., supra* note 52, at 6.

⁵⁶ *See infra* text accompanying note 92.

⁵⁷ *See Why VCs Only Invest in C Corporations*, LIGHTER CAP., <http://www.lightercapital.com/blog/why-vc-only-invest-in-c-corporations> [http://perma.cc/7T9W-MYBZ] (last visited Apr. 2, 2023).

obligations and to comply with reporting regimes, such as the Foreign Account Tax Compliance Act (“FATCA”).⁵⁸ Failure to comply with any reporting obligation would result in significant penalties on any entity,⁵⁹ and there is no reason to believe the IRS would have carved out an exception for The DAO. And meeting those obligations would have undoubtedly posed a significant practical problem for The DAO, whose owners are recorded anonymously on the blockchain. An exhaustive list of the compliance challenges of tax-entity classification is beyond the scope of this Article, but even this short list illustrates the significant challenges facing any tax lawyer—even after the classification question has been answered.

C. What About the Tokens?

The classification of a DAO as an entity is only half of the story; DAO token-holders must comply with their own tax obligations as well. And for the holders, a key question is how to classify a DAO’s tokens.

Before even considering how a DAO may be different, the tax classification of financial instruments issued by an entity involves a complicated and intensive analysis derived from a long history of case law and IRS guidance. The most common situation tax advisors encounter in this area is the classification of an instrument as either debt or as equity of the issuer. While not conclusive,⁶⁰ some of the hallmark characteristics of equity include (1) the ability to share in the profits and losses of the business enterprise, (2) the right to participate in its management, and (3) treatment of the instrument as equity for accounting, securities, and other non-tax purposes.⁶¹ Debt, on the other hand, typically (1) consists of an unconditional right to receive a fixed amount on the maturity date, (2) carries a right to interest payments, and (3) has a higher priority right to the assets of the entity.⁶² Other forms of financial instruments are also possible depending on the terms—options, derivatives, futures contracts, etc.⁶³ All have

⁵⁸ See I.R.C. §§ 1471–1474.

⁵⁹ See *id.*

⁶⁰ See generally I.R.S. Notice 94-47, 1994-1 C.B. 357.

⁶¹ See *id.*

⁶² See *id.*

⁶³ See generally Karnika Agarrwal & Aashika Jain, *Futures and Options Trading – A Beginner’s Guide*, FORBES ADVISOR (Aug. 27, 2021, 3:30 PM), <http://www.forbes.com/advisor/in/investing/how-does-trading-in-futures-and-options-work/> [<http://perma.cc/7555-MBW3>].

distinguishing characteristics and are often subject to special treatment under the Code.

An investment DAO's tokens typically represent voting and economic rights with respect to the DAO's operations and assets. On its face, it seems quite clear that a typical DAO token has the characteristics of equity described above. Thus, if a DAO is treated as an entity for tax purposes, the typical tokens it issues will likely be treated as equity in that entity.

This carries significant consequences for the token-owner's tax position. If a DAO is treated as a partnership for tax purposes, the token/equity holder would be required to include their share of the DAO's income on their own tax return each tax period they hold the tokens. If the DAO does not send the token-holder a Schedule K-1 (e.g., if the DAO is not required to file a U.S. tax return or simply does not file one), then the token-holder is left to determine how to report their share of the DAO's income. While the blockchain ledger is intended to contain all information relating to the DAO's activities and investments, translating that information into information that can be reported on a tax return may prove quite challenging.

III. NFTS: PROPERTY OR EVIDENCE OF PROPERTY

NFTs have taken popular culture by storm. The cartoon images of monkeys issued by Bored Ape Yacht Club were highly prized symbols of the Web3 economy to some and worthless to others.⁶⁴ Celebrities from former President Trump to Justin Bieber rushed to issue or purchase their own NFTs.⁶⁵ But while NFTs as status symbols and talismans of fandom garnered the most attention, NFTs have more versatile potential, and that versatility makes the tax classification question more challenging—and interesting—to tax advisors.⁶⁶

⁶⁴ James Harrison, *Cartoon Apes Worth Millions Are Flooding the Internet and Have Left a Lot of Us Confused*, B&T (Nov. 16, 2021), <http://www.bandt.com.au/cartoon-apes-worth-millions-are-flooding-the-internet-and-have-left-a-lot-of-us-confused/> [<http://perma.cc/NLB9-KM5L>].

⁶⁵ See Andrew Hayward, *Justin Bieber Paid \$1.3 Million for a Bored Ape NFT. It's Now Worth \$69K*, YAHOO! NEWS (Nov. 16, 2022), <http://news.yahoo.com/justin-bieber-paid-1-3-195705336.html> [<http://perma.cc/L9UG-9QE6>]; Ken Bensinger, *Selling Trump Isn't What It Used to Be*, N.Y. TIMES (Feb. 4, 2023), <http://www.nytimes.com/2023/02/04/us/politics/trump-cards-nfts.html> [<http://perma.cc/99BR-AK24>].

⁶⁶ See generally Billy Abbott, Luc Moritz & William K. Pao, *The Taxonomy of NFTs*, O'MELVENY & MYERS LLP (Aug. 31, 2022), <http://www.omm.com/resources/alerts-and-publications/alerts/nfts-and-taxonomy/> [<http://perma.cc/GV5Q-HX3X>].

A. NFTs as Baseball Cards

The NFTs that seem to attract the most public attention are those issued for and acquired by collectors (“Collection NFTs”).⁶⁷ A Collection NFT is essentially a newly created piece of property that has intrinsic value (to some); buying, selling, and collecting the NFT is the point.⁶⁸ Although it is possible for a creator to attach some intellectual property rights to that NFT, in many cases no such rights are represented by Collection NFTs.

For example, the Associated Press (“AP”) kindled some debate when it issued NFTs associated with its historic photo library.⁶⁹ The AP created a marketplace for the trading of digital assets attached to some of its most famous photographs.⁷⁰ The NFTs did not include any copyright to the photographs themselves; instead, the NFTs conveyed “a rich set of original metadata offering collectors awareness of the time, date, location, equipment and technical settings used for the shot.”⁷¹ Thus, purchasing the NFT gave the purchaser a collectible asset to add to his or her blockchain wallet, but little else. The NFT holder did not gain the right to commercialize the underlying photograph or any other intellectual property right.

A Collection NFT is in many ways similar to a baseball card. When a collector purchases a tangible baseball card, the collector owns just that piece of paper with the photograph printed on it—the piece of paper’s value is tied to how much another collector may want to add that baseball card to their collection. But the collector did not acquire any intellectual property associated with that baseball card—the collector does not have a license to print additional copies to sell to the public. The same idea applies to the AP’s NFTs. The AP hoped that an NFT connected to one of its photographs would prove collectible, but it did not permit the owner to make or sell copies of its photos.

⁶⁷ James Kelly, *NFT Collections Explained – the Ultimate Guide for Beginners*, NFT GATORS (July 3, 2022), <http://www.nftgators.com/nft-collections/> [<http://perma.cc/8H8F-RFL3>].

⁶⁸ Dilip Kumar Patairya, *How Do You Assess the Value of an NFT?*, COINTELEGRAPH (Mar. 12, 2022), <http://cointelegraph.com/news/how-do-you-assess-the-value-of-an-nft> [<http://perma.cc/2XTM-CLM4>].

⁶⁹ David Guido Pietroni, *AP’s NFT Sale of Migrants at Sea Image Faces Backlash*, THE ART INSIDER (Feb. 25, 2022), <http://www.art-insider.com/aps-nft-sale-of-migrants-at-sea-image-faces-backlash/3554> [<http://perma.cc/4L3H-8BU5>].

⁷⁰ *See id.*

⁷¹ *AP to Launch NFT Photography Marketplace Built by Xooa*, ASSOCIATED PRESS (Jan. 10, 2022), <http://www.ap.org/press-releases/2022/ap-to-launch-nft-marketplace-built-by-xooa> [<http://perma.cc/QT2M-TDND>].

So, if Collection NFTs are similar to baseball cards (or postage stamps or other collectibles), then how would a Collection NFT be classified under U.S. tax law? Under the baseball card analogy, the Collection NFT will be considered to be property subject to tax like any other property—a purchaser will have a basis in the Collection NFT equal to the amount paid for it and will recognize capital gain or loss depending on its eventual disposition.⁷²

If property is treated as a “collectible” for tax purposes, then any long-term capital gain would be taxed at a less favorable rate than most other capital assets; currently, the maximum federal income tax rate applicable to collectibles is twenty-eight percent rather than a maximum rate of twenty percent for most long-term capital gains for individuals.⁷³ The Code defines “collectibles” through a list of items: works of art, rugs or antiques, metals or gems, stamps or coins, alcoholic beverages, or any other tangible personal property specified in regulations or other Treasury guidance.⁷⁴ And now another classification question: Despite being an asset that is a quintessential collectible in American culture, neither the statutory rule nor subsequent guidance specifically states that a baseball card is a “collectible.”⁷⁵ Nevertheless, it seems unlikely the IRS would *not* view baseball cards as collectibles (perhaps by including them as “works of art”?). By extension, a Collection NFT could be viewed as a digital work of art and treated as a “collectible” for tax purposes. But this is no sure thing. Unlike a baseball card, a Collection NFT is an *intangible* asset. The statutory definition of “collectible” refers to “other *tangible* . . . property,” suggesting that only tangible assets may be characterized as “collectibles.”⁷⁶ If so, Collection NFTs would not constitute “collectibles” and individual collectors’ gains from their sales might be eligible for taxation at the favorable twenty percent rate.⁷⁷

⁷² See I.R.C. §§ 1011(a), 1012(a).

⁷³ I.R.C. § 1(h)(5)(A).

⁷⁴ I.R.C. § 408(m). Proposed regulations would also add musical instruments and historical objects (documents, clothes, etc.) to the statutory list of collectibles. Prop. Treas. Reg. § 1.408-10, 49 Fed. Reg. 2794, 2801 (Jan. 23, 1984).

⁷⁵ Michael A. Curatola, *Tax Considerations for the Sports Card Market*, FALCON RAPPAPORT & BERKMAN LLP (Jan. 4, 2022), <http://frblaw.com/tax-considerations-for-the-sports-card-market/> [<http://perma.cc/B57X-SCRL>].

⁷⁶ *Id.* (emphasis added) (quoting I.R.C. §408(m)(2)).

⁷⁷ *Id.*

B. When an NFT Is Not an Asset

Digital collections are not the only use for NFTs. Certain NFTs are issued to verify ownership and document transfers of real-world assets.⁷⁸ For example, “physical NFTs” have been used to transfer ownership of physical pieces of art. In 2021, the artist Beeple sold a physical “kinetic video sculpture” via the transfer of an NFT; the auction at Christie’s brought a price of \$28.9M for the NFT, which also provided the buyer with ownership of the sculpture.⁷⁹ But physical NFTs are not limited to transfers of art. The Web3 startup company Propy has created a marketplace for (real) real estate to be bought and sold via NFT.⁸⁰

The value of an NFT comes from the asset the NFT represents. The NFT is simply a method of proving ownership and executing a “smart contract” to transfer property, in the same way that a piece of paper can contain a contract that transfers property from one person to another. A deed is not a house and vice-versa. The tax classification of an NFT real-estate transaction should not look at the Code provisions applicable to a sale of paper; it should look to those applicable to the sale of real estate. If the sale of an NFT linked to physical real estate in the United States were to be analyzed as a sale of a digital asset rather than as the real estate asset itself, a foreign non-resident selling that NFT would escape the U.S. income and withholding taxes that apply to the sale of U.S. real estate—any gain would typically be considered non-taxable U.S. source capital gain.⁸¹ A failure to classify a physical NFT according to the asset it represents would mean that tokenizing assets on the blockchain would convey enormous potential tax benefits—a consequence that the Treasury would be unlikely to permit or ignore.

⁷⁸ See Scott Sugino et al., *NFT: A Token of Corporate Affection*, O’MELVENY & MYERS LLP (Jan. 23, 2023), <http://www.omm.com/resources/alerts-and-publications/alerts/nft-a-token-of-corporate-affection/> [<http://perma.cc/UFG8-36HZ>].

⁷⁹ See Jamie Redman, *Beeple’s Latest NFT ‘Human One’ Sells for \$29M, Artist Plans to ‘Enhance the Displayed Artwork’ During His Lifetime*, BITCOIN.COM (Dec. 9, 2021), <http://news.bitcoin.com/beeples-latest-nft-human-one-sells-for-29m-artist-plans-to-enhance-the-displayed-artwork-during-his-lifetime/> [<http://perma.cc/8579-WYLN>]; Jeff Benson, *NFT Artist Beeple Sells Latest Work for \$29 Million at Auction*, DECRYPT (Nov. 9, 2021), <http://decrypt.co/85704/nft-artist-beeple-sells-latest-work-29-million-auction> [<http://perma.cc/AN7R-RJKS>].

⁸⁰ Peter Grant, *An Entire Real Estate Deal Takes Place Online, Using Cryptocurrency Technology*, WALL ST. J. (Sept. 26, 2017, 5:49 PM), <http://www.wsj.com/articles/an-entire-real-estate-deal-takes-place-online-using-cryptocurrency-technology-1506462545> [<http://perma.cc/3RU5-M427>].

⁸¹ See I.R.C. §§ 897, 1445.

C. Notice 2023-27

In March 2023, the IRS took its first stab at addressing these very questions when it released Notice 2023-27.⁸² The Notice first defines an NFT as “a unique digital identifier that is recorded using distributed ledger technology and may be used to certify authenticity and ownership of an associated right or asset.”⁸³ It further notes that ownership of an NFT may convey a right with respect to a “digital file” that “typically is separate from the NFT,” or it may convey a right to an asset that is not a digital file, including a ticketed event or a physical item.⁸⁴ While the former seems to address Collection NFTs, the statement that the digital file “typically is separate from the NFT” seems somewhat incomplete.⁸⁵ With respect to NFTs such as the ones AP issued, for example, the NFT conveys no rights with respect to a separate digital file—the NFT is a digital asset in itself.⁸⁶ The initial definitions for that reason appear not to be fully comprehensive.

The Notice then goes on to approach NFTs in a manner similar to the approach discussed *supra* with respect to physical NFTs, but on a very limited basis. Pending future guidance, the IRS will use a “look-through analysis” whereby an NFT is tested for collectible status by considering whether the underlying asset is a collectible.⁸⁷ That analysis could (and perhaps should) apply by analogy to an NFT representing a right to a piece of real property or other physical asset; however, the Notice does not go beyond assessing whether or not the asset is a collectible.

Finally, the Notice raises, but does not answer, the question of whether what it has defined as a digital file constitutes a “work of art” under Code Section 408(m).⁸⁸ Nevertheless, it does state that the right to use or develop a “plot of land” in a virtual environment does not constitute a collectible, without any real analysis; presumably, this means that it is not a work of art, but why that should be assumed while the question remains open for NFTs associated with other digital files remains unclear.⁸⁹

While perhaps not as comprehensive as practitioners might prefer, the Notice does evidence that the IRS has begun looking at

⁸² I.R.S. Notice 2023-27 (Mar. 21, 2023).

⁸³ *Id.* at 1.

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ See *supra* text accompanying notes 67–77.

⁸⁷ I.R.S. Notice 2023-27 (Mar. 21, 2023).

⁸⁸ *Id.*

⁸⁹ *Id.*

classifying Collection NFTs by looking to the underlying asset. But until the IRS issues more detailed guidance, practitioners seeking to classify NFTs under other parts of tax law—beyond the question of their classification as a collectible—will be left to compare the treatment of NFTs to the treatment of other assets, albeit armed with the clues provided by the Notice.

IV. SECURITIES AND COMMODITIES: SPECIAL CLASSIFICATION ISSUES

The question of whether transfers of cryptocurrency or other digital assets are subject to the jurisdiction of the Securities and Exchange Commission or the Commodity Futures Trading Commission is the subject of intense debate.⁹⁰ This question turns, in no small part, on whether those digital assets constitute “securities,” “commodities,” or neither. This question has arisen under U.S. tax law as well, though the definitions of securities and commodities are different there and serve different purposes.⁹¹ Even within the Code, there are different definitions of the same term, making the classification of digital assets by tax advisors all the more challenging.

Here are two contexts for illustrative purposes, but securities and commodities classification would impact many other taxpayers as well:

Trade or Business in the United States. Non-U.S. investors holding interests in partnerships that are engaged in a trade or business in the U.S. are required to file income tax returns and pay income tax on any income that is “effectively connected” with that trade or business.⁹² Whether an activity constitutes a trade or a business is a complex question, but of key importance to foreign investors is the exception for trading in stock, securities, and commodities, among other assets.⁹³ Non-U.S. investors prefer to avoid filing a U.S. income tax return, so they hope that by investing in a partnership that trades digital assets, they might be

⁹⁰ See, e.g., C. Brophy Christensen, et al., *Crypto Roundup: SEC and CFTC Chairs, Commissioners, and Enforcement Directors Issue Stern Public Statements on Cryptographic and Virtual Assets*, O'MELVENY & MYERS LLP (Jan. 18, 2018), <http://www.omm.com/resources/alerts-and-publications/alerts/crypto-roundup-sec-and-cftc-chairs-commissioned-enforcement-directors-issue-stern-public-statements/> [<http://perma.cc/ZT4B-UF9A>].

⁹¹ 28 U.S.C. § 864(b)(2)(A)–(B).

⁹² See I.R.C. §§ 865, 876; *Effectively Connected Income (ECI)*, INTERNAL REVENUE SERV. (July 27, 2022), <http://www.irs.gov/individuals/international-taxpayers/effectively-connected-income-eci> [<http://perma.cc/23WB-MNA6>].

⁹³ See I.R.C. § 864(b)(2).

able to rely on this safe harbor. But that will only be possible if digital assets are considered securities or commodities—a question that remains unanswered.⁹⁴

Worthless Security Losses. The Code provides a deduction to taxpayers who hold a security as a capital asset if that security becomes worthless during the taxable year.⁹⁵ If an investor holds cryptocurrency that becomes worthless, the investor might want to take advantage of this deduction. But the Code specifically defines “security” in this context as the following:

- (A) a share of stock in a corporation;
- (B) a right to subscribe for, or to receive, a share of stock in a corporation; or
- (C) a bond, debenture, note, or certificate, or other evidence of indebtedness, issued by a corporation or by a government or political subdivision thereof, with interest coupons or in registered form.⁹⁶

So, in recent guidance, the IRS was able to swiftly conclude that cryptocurrency was *not* a security for this purpose.⁹⁷ Nevertheless, that answer likely would be different if asked about an investment fund’s worthless DAO token, which is classified as equity for tax purposes.

CONCLUSION

The classification issues described in this Article merely scratch the surface of those that will arise when tax advisors seek to apply existing tax law to the wide variety of digital assets out there—not to mention those that have yet to be invented. But classification has always been a mainstay of tax practice. The addition of digital assets to the economy will impact the way tax law is practiced to be sure, but it will also only be the latest in a long history of challenges faced by advisors confronting novel situations.

⁹⁴ Some practitioners are comfortable taking the position that at least Bitcoin is a commodity eligible for this safe harbor. Under IRS guidance, the term “commodities” includes “all products that are traded in and listed on commodity exchanges located in the United States,” and includes futures contracts for such products as well. Rev. Rul. 73-158, 1973-1 C.B. 337. Bitcoin futures being traded on several commodity markets would suggest that at least trading in Bitcoin would satisfy this safe harbor. Jim Calvin, *Taxation of Cryptocurrencies*, 190 TAX MGMT. PORT. (BNA) § IV.F.

⁹⁵ I.R.C. § 165(g).

⁹⁶ 26 U.S.C. § 165(g)(2).

⁹⁷ I.R.S. Tech. Adv. Mem. 202302011 (Jan. 10, 2023). The IRS does, however, provide that an investor holding worthless cryptocurrency is not entirely precluded from a deduction if it is able to demonstrate it is entitled to a loss under I.R.C. § 165(a). *See id.*

Fintech Regulation in the Catawba Digital Economic Zone

Tom W. Bell*

The Catawba Digital Economic Zone (“CDEZ”) achieved a number of firsts when it launched in late 2022: the world’s first entirely virtual special jurisdiction devoted to financial services using technologies like blockchains, cryptocurrencies, digital assets, and artificial intelligence (fintech); the first time that a Native American tribe has claimed exclusive jurisdiction over a broad field of commerce; and the first special jurisdiction in the United States to offer its own civil laws and legal system. If all proceeds as planned, the Zone will soon also host the first Native American public bank in the United States. These firsts follow naturally from the CDEZ’s pioneering mission: to bring the rule of law to the fintech frontier. This paper, written by one of a team of coders hired to help build the zone’s legal framework, reviews the project’s recent progress. The CDEZ launched with a comprehensive Civil Ordinance and quickly added to it: an Administrative Procedure Regulation to regulate the issuance of new rules; a Digital Assets Regulation legally defining Blockchain, Non-Fungible Token, and other fintech entities; and a Resolution making the Uniform Law Institute’s newly published Uniform Commercial Code Article 12 for digital assets locally binding. The Zone Authority has begun rulemaking proceedings for regulations addressing distributed autonomous organizations, stablecoins, and banking and commercial services. These efforts show a strong start for the CDEZ, a Native American special jurisdiction that aims to become the first choice for fintech.

* Professor, Chapman University, Fowler School of Law. The author thanks Joseph McKinney and his team at the CDEZ for research assistance; Haley Ritter, Jared Shahar, and the *Chapman Law Review* for inviting, editing, and publishing this paper; and The Catawba Nation for making history worth writing about. Opinions expressed herein represent those of the author only, who bears sole responsibility for their submission for publication, and do not represent the opinions of any employer, client, or associate. Disclosures: The author helped create the CDEZ legal code under contract with the Catawba Indian Nation via intermediaries eTribe LLC and Archer Sage Ventures, thereby earning a small unvested interest in the project, and the Zone incorporates version 1.2 of Ulex, the open source legal system he created. Copyright 2023 Tom W. Bell.

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INTRODUCTION

When it launched in late 2022, the Catawba Digital Economic Zone (“CDEZ”) achieved a number of notable firsts.¹ Other special jurisdictions predate it in serving the financial technology (a.k.a. fintech) sector.² The CDEZ is first to operate entirely online, though. Physically, it exists solely on computer servers located within the territory of the Catawba Indian Nation, which has reservation lands in North and South Carolina.³ Other special jurisdictions with a fintech focus include offices, parking, and amenities of the sort demanded by flesh-and-blood entrepreneurs.⁴ The CDEZ, because it hosts only legal persons, has no need for the real estate required by real people.

The CDEZ also represents a first in terms of an assertion of sovereignty. Other Native American tribes have of course set up

¹ See Joseph McKinney, *Catawba Digital Economic Zone Now Incorporating Companies*, EIN PRESSWIRE (Nov. 16, 2022, 1:17 PM), http://world.einnews.com/pr_news/601614281/catawba-digital-economic-zone-now-incorporating-companies [<http://perma.cc/M4R3-ADAX>].

² For an exhaustive study of “fintech” culminating in the definition, “[f]intech is a new financial industry that applies technology to improve financial activities,” see Patrick Schueffel, *Taming the Beast: A Scientific Definition of Fintech*, 4 J. INNOVATION MGMT. 32, 45 (2016), http://journalsojs3.fe.up.pt/index.php/jim/article/view/2183-0606_004.004_0004/262 [<http://perma.cc/V7Y6-4G97>].

³ See *About*, CATAWBA DIGIT. ECON. ZONE, <http://catawbadigital.zone/about/> [<http://perma.cc/8L5N-B6TL>] (last visited Mar. 3, 2023).

⁴ See Tom W. Bell, *The Catawba Digital Economic Zone: A Native American SEZ*, 3 J. SPECIAL JURISDICTIONS 25, 26–27 (2022) (cataloging zones specializing in fintech).

casinos, firework stands, and tobacco stores on their reservations.⁵ But no tribe in living memory has claimed exclusive jurisdiction over so broad a range of commerce as the Catawba have with their CDEZ. Setting aside the states themselves, never before has the United States hosted a special jurisdiction exercising such wide authority to regulate all commercial exchange within its borders.⁶

The CDEZ has even outpaced the states in some respects, confidently proclaiming itself “the first jurisdiction within the United States created for Fintech and Digital Asset growth.”⁷ Other jurisdictions in the United States were created long ago to deal with a physical people interacting in a physical world, giving rise to problems as various as assault and battery, zoning violations, and the inadequate labeling of packaged foods. Though a few states have tried to attract fintech and digital commerce with special legislation, they remain distracted by other concerns and slowed down by legacy government processes. Being built from scratch and given a narrow focus has allowed the CDEZ to speed ahead of other jurisdictions in the United States.

Although its banking regulations remain in development, informed third parties report that the Zone will soon host the first Tribal Public Bank in the United States.⁸ As such, it will join just two other government-owned banks, the Federal Reserve and the Public Bank of North Dakota.⁹ In addition to enhancing Tribe members’ access to capital and economic opportunities, the Nation’s public bank will play a regulatory role, issuing banking charters to qualified financial institutions that want to do business in the CDEZ and overseeing their operation.¹⁰

These pioneering achievements of the CDEZ reflect its bold and innovative overarching goal: to bring the rule of law to financial businesses operating on the virtual frontier. It thus disavows any

⁵ See, e.g., *Foxwoods Resort Casino*, FOXWOODS RESORT CASINO, <http://www.foxwoods.com/> [<http://perma.cc/LH6E-QBR8>] (last visited Mar. 13, 2023) (casinos); Alyssa Kelly, *Firework Sales a Booming Reservation Business*, CHAR-KOOSTA NEWS (July 12, 2018), http://www.charkoosta.com/news/firework-sales-a-booming-reservation-business/article_59a060a0-8527-11e8-a6bc-6f2c8e6a516d.html [<http://perma.cc/ZY8C-7S5F>] (firework stands); *Ohosa Tobacco Shop*, RIVER ROCK CASINO, <http://www.riverrockcasino.com/visiting/ohosa-tobacco-shop/> [<http://perma.cc/4WX9-UMYK>] (last visited Mar. 13, 2023) (tobacco).

⁶ See Bell, *supra* note 4, at 44.

⁷ *Catawba Digital Economic Zone*, CATAWBA DIGIT. ECON. ZONE, <http://catawbadigital.zone/> [<http://perma.cc/N853-UW5J>] (last visited Dec. 7, 2022).

⁸ W. Gregory Guedel & Philip H. Viles Jr., *Digital Economic Zones: A Program for Comprehensive Tribal Economic Sovereignty*, 57 TULSA L. REV. 591, 603 (2022).

⁹ *Id.*

¹⁰ *Id.* at 604.

intention to let greed or recklessness run rampant; to the contrary, those who register to do business in the Zone will have to go through know-your-customer and anti-money laundering (“KYC” and “AML,” respectively) checks in compliance with international and federal law and also satisfy the CDEZ’s own comprehensive regulations.¹¹ But the CDEZ does not want to tie up the industry in red tape, either. It instead promises “[a] commercial code created by builders and inventors, not special interests,” and explains that “CDEZ regulations are created and implemented with a focus on enabling innovation, not forbidding it.”¹² It has tasked itself with keeping up with the rapid pace of technological development, too, requiring its regulators “to meet every two weeks to quickly adapt regulation as market needs dictate.”¹³

How does the CDEZ plan to fulfill its goal of governing fintech rigorously, efficiently, and responsively? Through rules, published and proposed, that adapt existing standards to the Zone’s special needs. In this way, it aims to offer prospective customers “[w]orld-class laws optimized for digital service industries, finance, and digital assets that enhance your business success.”¹⁴ Those CDEZ regulations provide the subject of this paper.

This Paper opens in Part I with a background about how governance in the Zone works. It then examines two kinds of CDEZ regulations: Those already adopted, covered in Part II; and those currently pending in the CDEZ’s notice-and-comment rulemaking procedures, covered in Part III. This Paper concludes that the CDEZ, while still a jurisdiction-in-the-making, has made a solid start toward regulating fintech carefully, comprehensively, and effectively.

I. GOVERNANCE IN THE CDEZ

The Catawba Nation governs itself through the personal participation of the Tribe’s members in a General Council.¹⁵ This qualifies the Catawba Nation as a *direct* or *pure democracy*, wherein the electorate sets public policies by popular vote, without

¹¹ See *Become an eResident*, CATAWBA DIGIT. ECON. ZONE, <http://catawbadigital.zone/become-an-eresident/> [<http://perma.cc/VHX7-E4T2>] (last visited Dec. 7, 2022).

¹² *The Catawba Digital Economic Zone*, *supra* note 7..

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *General Council*, CATAWBA NATION, <http://www.catawba.com/general-council> [<http://perma.cc/FP4M-8BN3>] (last visited Dec. 6, 2022).

using elected representatives as proxies.¹⁶ Through the General Council, the Nation passes ordinances, creates administrative bodies, and otherwise exercises its sovereign power.¹⁷ It has created two such administrative bodies: an Executive Committee, which manages the Tribe’s government and territory on a day-to-day basis,¹⁸ and the Catawba Corporations, which manage the Tribe’s economic interests.¹⁹ Together, through means described next, these two bodies effectively control the Zone Authority, which in turn controls the CDEZ.

The General Council created the CDEZ on February 19, 2022, by passing the Zone Resolution²⁰ and Zone Civil Ordinance.²¹ These have the combined effect of establishing a Zone Authority—an unincorporated governmental instrumentality of the Catawba Indian Nation that shares the Tribe’s privileges and immunities.²² The Zone Authority passes regulations for and otherwise governs the CDEZ.²³ As the Zone Civil Ordinance specifies, “[r]egulations properly promulgated by the Zone Authority shall have the force of law” in the CDEZ with respect to those who have availed themselves of its jurisdiction.²⁴

The Zone Authority consists of five members. The Executive Committee appoints two, the Catawba Corporations appoint two, and a private Nation-majority-owned management company, the Green Earth Zone Services Corporation (“Zone Corporation”), appoints one.²⁵ Because the Zone Authority acts by a 4/5 vote of its

¹⁶ Theo Schiller, *Direct Democracy*, BRITANNICA, <http://www.britannica.com/topic/direct-democracy> [<http://perma.cc/D3DX-YQFR>] (last updated Oct. 7, 2022).

¹⁷ *General Council*, *supra* note 15.

¹⁸ See *The Catawba Nation Executive Committee*, CATAWBA NATION, <http://www.catawba.com/executive-committee> [<http://perma.cc/NNT7-LRXQ>] (last visited Dec. 6, 2022).

¹⁹ See CATAWBA CORPS., <http://catawbacorps.com/> [<http://perma.cc/PKY2-49YT>] (last visited Dec. 6, 2022).

²⁰ See GEN. COUNCIL OF THE CATAWBA INDIAN NATION, RES. NO. 20220219, RESOLUTION OF THE GENERAL COUNCIL OF THE CATAWBA INDIAN NATION ESTABLISHING THE GREEN EARTH ZONE, APPROVING THE GREEN EARTH ZONE CIVIL ORDINANCE, AND DESIGNATING INITIAL PROPERTY FOR THE ZONE, (2022) [hereinafter ZONE RESOLUTION], <http://zoneauthority.io/wp-content/uploads/2022/05/Signed-Resolution-establishing-GEZ-with-Ordinance.pdf> [<http://perma.cc/HC3A-ZH2T>].

²¹ See GEN. COUNCIL OF THE CATAWBA INDIAN NATION, GREEN EARTH ZONE CIVIL CODE ORDINANCE (2022) [hereinafter ZONE CIVIL ORDINANCE], <http://zoneauthority.io/wp-content/uploads/2022/06/GEZ-ORDINANCE-clean.pdf> [<http://perma.cc/AT2S-RV9L>].

²² See ZONE RESOLUTION, *supra* note 20, at ll. 38–41, 65–70; ZONE CIVIL ORDINANCE, *supra* note 21, tit. II, ch. 1, §§ 1–3.

²³ See ZONE CIVIL ORDINANCE, *supra* note 21, tit. II, ch. 1, §§ 2–3.

²⁴ *Id.* tit. II, ch. 1, § 2.C.

²⁵ *Id.* tit. II, ch. 1, § 2.B.

members, the Tribe's two administrative bodies effectively control of the CDEZ.²⁶ The Tribe, through its control of the Zone Corporation, also controls the fifth vote on the Zone Authority.²⁷

The Corporate Nation starts out as the sole owner of the Zone Corporation.²⁸ A majority of the Board of Directors of the Zone Corporation must be appointed by the Corporate Nation or, if Corporate Nation ceases to own a majority of the Zone Corporation's shares, some other entity owned by the Nation must.²⁹ The Zone Corporation must therefore "at all times be majority owned by the Nation or a wholly owned entity of the Nation."³⁰ These measures ensure that the Catawba Indian Nation at all times retains control of the Zone Authority, Zone Corporation, and CDEZ.³¹

II. ENACTED CDEZ RULES

The CDEZ has, in its short history, already seen the issuance of several new rules. This section focuses on the three Zone Authority actions that most directly affect fintech, reviewing them in order of their dates of adoption. The list includes:

- The Administrative Procedure Regulation;³²
- The Digital Assets Regulation;³³ and the
- Resolution Adopting U.C.C. Article 12 for Digital Assets.³⁴

In addition to those three rulemakings, the Zone Authority took two other official actions. Via the first, it appointed Mr. Leon

²⁶ *Id.* tit. II, ch. 2, § 3(1).

²⁷ *Id.*

²⁸ *Id.* tit. II, ch. 2, § 3.A.

²⁹ *Id.* tit. II, ch. 2, § 7.A.

³⁰ *Id.* tit. II, ch. 2, § 3.A.

³¹ See *Catawba Digital Economic Zone Appoints Zone Authority Commission*, CATAWBA DIGIT. ECON. ZONE (May 4, 2022), <http://catawbadigital.zone/catawba-digital-economic-zone-appoints-zone-authority-commission-2/> [<http://perma.cc/4V7J-2D8S>].

³² Green Earth Zone Administrative Procedure Regulation, Reg. No. 001-22 (May 18, 2022) [hereinafter *Administrative Procedure Regulation*], <http://zoneauthority.io/wp-content/uploads/2022/06/GEZ-APR-clean-1.pdf> [<http://perma.cc/6QY4-YBJV>] (adopted by the Zone Authority Commission).

³³ Digital Assets Regulation, Reg. No. 002-22 (July 6, 2022), <http://zoneauthority.io/wp-content/uploads/2022/07/002-22.-Digital-Assets-Regulation.-.pdf> [<http://perma.cc/C2MX-ZCBJ>].

³⁴ ZONE AUTH. COMM'N, CATAWBA DIGIT. ECON. ZONE, RES. NO. 001, FOR THE ADOPTION OF THE UCC AMENDMENTS AND ARTICLE 12 ADDRESSING DIGITAL ASSETS (2022) [hereinafter *RESOLUTION ADOPTING U.C.C. ARTICLE 12*], <http://zoneauthority.io/rs001-for-the-adoption-of-the-ucc-amendments-and-article-12-addressing-digital-assets/> [<http://perma.cc/YEX2-ZHS4>].

Shaffer as the Interim Zone Secretary.³⁵ The second concerned CDEZ compliance with Tribal employment preferences.³⁶

Because the appointment and compliance order should have only a tangential impact on fintech regulation in the CDEZ, they receive no further scrutiny here, except for this observation: the latter resolution provides that firms operating in the zone will enjoy reduced administrative charges if they hire Catawba citizens or other Native Americans.³⁷ In this way, fintech firms might congratulate themselves on saving money while simultaneously rectifying historical injustices.

A. Administrative Procedure Regulation

The Zone Authority passed its Administrative Procedure Regulation on May 18, 2022, with the aim of ensuring that the CDEZ rulemaking processes operate transparently and predictably.³⁸ The regulation governs the process by which the Zone Authority develops and issues rules applicable to the CDEZ. It includes requirements for the Zone Authority to publish notices of proposed rulemakings, to provide opportunities for the public to comment on proposed regulations, and to publish final versions of CDEZ regulations.

The Administrative Procedure Regulation evidently took as its model the Revised Model State Administrative Procedure Act published by the National Conference of Commissioners on Uniform State Laws (a.k.a. Uniform Law Commission).³⁹ The two sets of rules mirror each other in almost all particulars. The details of the CDEZ's Administrative Procedure Regulation matter less for present purposes than its meta-effect on later regulations. The Zone Authority effectively promises, with enactment of the Administrative Procedure Regulation, to issue future rules, including those relating to fintech, in a predictable and transparent manner.

³⁵ ZONE AUTH. COMM'N, CATAWBA DIGIT. ECON. ZONE, RES. NO. 003, FOR THE APPOINTMENT OF THE INTERIM ZONE SECRETARY (2022), <http://zoneauthority.io/rs003-for-the-appointment-of-the-interim-zone-secretary/> [<http://perma.cc/56ER-6HBU>].

³⁶ See ZONE AUTH. COMM'N, CATAWBA DIGIT. ECON. ZONE, RES. NO. 002, FOR COMPLIANCE OF ENTITIES UNDER THE CATAWBA INDIAN PREFERENTIAL HIRING ORDINANCE (2022), <http://zoneauthority.io/rs002-for-compliance-of-entities-under-the-catawba-indian-preferential-hiring-ordinance/> [<http://perma.cc/RR44-JBSZ>].

³⁷ See *id.* resolve 3.

³⁸ See Administrative Procedure Regulation, *supra* note 32.

³⁹ See REVISED MODEL STATE ADMIN. PROC. ACT (UNIF. L. COMM'N 2010), <http://www.uniformlaws.org/committees/community-home?CommunityKey=f184fb0c-5e31-4c6d-8228-7f2b0112fa42> [<http://perma.cc/8849-RTVX>].

Why did the Zone Authority thereby bind itself? No legislative history accompanied the issuance of the CDEZ Administrative Procedure Regulation, nor did the regulation include any “whereas” clauses. It seems safe to say, however, that the Zone Authority wanted to reassure investors, resident businesses, Tribe members, and third parties that it would not govern the CDEZ arbitrarily or capriciously. With the Administrative Procedure Regulation, the Zone Authority effectively pledges to bring the rule of law to the fintech frontier.

The Administrative Procedure Regulation specifies that it does not apply to proceedings that had already begun on its effective date.⁴⁰ It also clarifies that its requirements for notices of and public participation in proceedings, and for a thirty-day delay in the effective date of any newly issued rule, do not apply to rulemakings that have no effect on any person domiciled in the Zone.⁴¹ A rulemaking cannot have any effect on a person domiciled in the Zone if no such person exists, and the CDEZ registered its first business only on September 29, 2022.⁴² As a consequence, the discussion immediately below of the Digital Assets Regulation and the Resolution Adopting U.C.C. Article 12 for Digital Assets shows them issuing directly from the Zone Authority without notice or public participation and having immediate effect. Only more recently has the Administrative Procedure Regulation begun having fuller effect, as demonstrated by the currently pending regulations discussed later in the paper.

B. Digital Assets Regulation

With its second regulation, the Digital Assets Regulation it adopted on July 6, 2022, the Zone Authority focused on fintech.⁴³ The Zone Authority judged regulations elsewhere “not optimally suited for the advent of technically innovative forms of commerce”⁴⁴ and discriminatory on the principle that “businesses using innovative technology for benign purposes should be treated equally to other businesses in similar sectors using traditional means of commerce.”⁴⁵ The Digital Assets Regulation aims to

⁴⁰ Administrative Procedure Regulation, *supra* note 32, § 103(b).

⁴¹ *See id.* § 304(c) (notice requirements); *id.* § 306(f) (public participation); *see also id.* § 305(g) (allowing waiver of the requirement for preparation of a regulatory analysis for regulations adopted within one year of the adoption of the Administrative Procedure Regulation).

⁴² Letter from Joseph McKinney, CEO of CDEZ, to author (Dec. 14, 2022) (on file with author).

⁴³ *See* Digital Assets Regulation, *supra* note 33.

⁴⁴ *Id.* pmb., para. 2.

⁴⁵ *Id.* pmb., para. 3.

rectify the failings of legacy jurisdictions. The regulation’s preamble explains that it “aims to offer all engaged in peaceful trade a safe haven for legal digital commerce”⁴⁶ by providing “a framework for trade in intangible properties and services by clarifying their treatment under the Zone Civil Code.”⁴⁷

The Digital Assets Regulation largely limits itself to fine-tuning pre-existing laws in the CDEZ. This it can do because the Zone launched with a full suite of rules for regulating commerce, including a wide selection of *Restatements of the Common Law* and Uniform Commercial Codes.⁴⁸ It acquired these trusted and tested rule sets by incorporating version 1.2 of Ulex, an open-source legal system.⁴⁹

The Zone Authority subsequently repealed most of the Digital Assets Regulation in its Resolution Adopting U.C.C. Article 12 for Digital Assets, which addresses many of the same topics.⁵⁰ After that fine-tuning to harmonize CDEZ law with U.C.C. Article 12, the Digital Assets Regulation consists for the most part of definitions of legal terms crucial to fintech and clarifications of the classifications of different kinds of digital assets. The definitions, appearing in Section 102, run as follows:

1. “Blockchain” means a distributed ledger database that uses a consensus-based, decentralized, and mathematically verifiable process to reliably record an ordered sequence of transactions in Digital Assets.
2. “Digital Asset” means a machine-readable representation of rights to access, use, control, erase, or transfer information, and is either a Digital Consumer Asset, Digital Security, or Virtual Currency.
3. “Digital Consumer Asset” means a Digital Asset used, borrowed, or bought primarily for consumptive, personal or household purposes and that does not fall within the meaning of Digital Security or Virtual Currency under this section.
4. “Digital Security” means a Digital Asset that is a security, and that is not a Digital Consumer Asset or Virtual Currency.
5. “Virtual Currency” means a Digital Asset that is:
 - (A) Used as a medium of exchange, unit of account, or store of value;
 - (B) Not recognized as legal tender by the United States government; and

⁴⁶ *Id.* pmb., para. 1.

⁴⁷ *Id.* pmb., para. 4.

⁴⁸ See ZONE CIVIL ORDINANCE, *supra* note 21, tit. III–VIII.

⁴⁹ *Ulex Open Source Legal Operating System Version 1.2*, GITHUB (2022), <http://github.com/ulex-opensource/Ulex/tree/master/versions/1.2#ulex-open-source-legal-operating-system-version-12-2022> [<http://perma.cc/BGP5-6K2D>].

⁵⁰ See RESOLUTION ADOPTING U.C.C. ARTICLE 12, *supra* note 34, at 2 (repealing Digital Assets Regulation Sections 103(a)(3) and 104–105).

(C) Not a Digital Consumer Asset or Digital Security.

6. “Non-Fungible Token” or “NFT” means a type of indivisible Digital Asset verified by a Blockchain to have unique attributes and associated with an electronic signature.⁵¹

Most of those definitions draw on examples from Wyoming’s recent path-breaking fintech legislation. The Wyoming Digital Asset Statute, passed in 2019 and subsequently amended, defines digital assets and classifies them as a form of general intangible property subject to the same laws of acquisition, keeping, and transfer applicable to other forms of intangible property.⁵² It also makes digital assets subject to Uniform Commercial Code provisions allowing for the perfection of security interests in digital assets, recognizes smart contracts as means for controlling digital assets, and provides a framework for banks to establish custodial services for digital assets.⁵³

With its Digital Asset Statute, Wyoming became the first jurisdiction in the United States to offer comprehensive fintech legislation.⁵⁴ The CDEZ followed close behind. The self-proclaimed “Cowboy State”⁵⁵ must therefore now share the legal frontier with a small but daring Native American Tribe.

The CDEZ drew its definitions of “Digital Asset,” “Digital Consumer Asset,” “Digital Security,” and “Virtual Currency” from definitions in the Wyoming Digital Asset Statute.⁵⁶ For its definition of “blockchain,” the CDEZ evidently drew on the version that Wyoming used in its 2019 Utility Token Act⁵⁷ and 2020 Financial Technology Sandbox Act,⁵⁸ eschewing the slightly different definition in the state’s later Digital Asset Statute.⁵⁹ Wyoming apparently offers no example at all for the last of the terms defined

⁵¹ Digital Assets Regulation, *supra* note 33, § 102.

⁵² WYO. STAT. ANN. §§ 34-29-101–104 (2022).

⁵³ See WYO. STAT. ANN. § 34-29-101 *et seq.* (2022).

⁵⁴ *Digital Assets a General Intangible Under Wyoming’s UCC*, NCS CREDIT (Apr. 12, 2019), <http://www.ncscredit.com/education-center/blog/digital-assets-general-intangible-ucc/> [<http://perma.cc/BP7T-4N3B>].

⁵⁵ *Cowboy Culture*, Travel Wyoming, <http://travelwyoming.com/things-to-do/western-culture/cowboy-culture/> [<http://perma.cc/28EH-G2K3>] (last visited Mar. 14, 2023).

⁵⁶ See WYO. STAT. ANN. § 34-29-101(a)(i) (2022) (“digital asset”); *id.* § 34-29-101(a)(ii) (“digital consumer asset”); *id.* § 34-29-101(a)(iii) (“digital security”); *id.* § 34-29-101(a)(iv) (“virtual currency”).

⁵⁷ See *id.* § 34-29-106(g)(i) (defining “blockchain” as “a digital ledger or database which is chronological, consensus-based, decentralized and mathematically verified in nature”).

⁵⁸ See *id.* § 40-29-102(a)(i) (defining “blockchain” as “a digital ledger or database which is chronological, consensus-based, decentralized and mathematically verified in nature”).

⁵⁹ See *id.* § 34-29-106(g)(i) (defining “blockchain” as in Wyoming Statutes Annotated Section 40-29-102(a)(i)).

in the CDEZ's Digital Asset Regulation, "Non-Fungible Token" ("NFT").⁶⁰ For that, the CDEZ had to blaze its own trail.

The CDEZ represents one of the first U.S. jurisdictions to define "non-fungible token" by statute, regulation, or other executive action, and it appears to be the first to use the term in the context of comprehensive fintech regulations. Tennessee defined the term in a statute passed April 14, 2022,⁶¹ but put it to work only in requiring that the state treasurer give prior written approval to any attempt to pay funds due in the form of an NFT.⁶² Arizona also approved a definition on July 6, 2022, which became effective on January 1, 2023.⁶³ However, the state uses the term only in the narrow context of calculating gains and losses under its tax code.⁶⁴

In addition to legally defining the building blocks of the fintech universe, the CDEZ's Digital Regulation Act clarifies which laws apply to each.⁶⁵ In this, the Digital Regulation Act followed up on a provision in the Zone Civil Ordinance, fulfilling a mandate that the Zone Authority had been born with. The Zone Civil Ordinance launched fintech regulation in the Zone by classifying each kind of "Digital Asset" as intangible personal property.⁶⁶ The same provision empowered and ordered the Zone Authority to "define, classify, and regulate Digital Assets and their treatment under" the CDEZ's Commercial Code.⁶⁷ The Zone Authority began filling in those details with the Digital Regulation Act, which clarifies the law applicable to four of the terms defined above: Digital Assets; Digital Consumer Assets; Digital Securities; and Non-Fungible Tokens.⁶⁸ More specifically, the Digital Assets Regulation clarifies that:

⁶⁰ *Id.* § 34-29-106.

⁶¹ TENN. CODE ANN. § 9-3-602(4) (2022) (repealed effective June 30, 2025) (defining "non-fungible token" as "a non-fungible cryptographic asset on a blockchain that possesses unique identifiers or other metadata that distinguishes the asset from another token or asset in a manner that makes the asset irreplaceable and non-exchangeable for a similar token or asset").

⁶² *See id.* § 9-3-601.

⁶³ *See* ARIZ. REV. STAT. ANN. § 43-1028(B)(3) (2023) (defining "non-fungible token" as "a non-fungible cryptographic asset on a blockchain that possesses unique identifiers or other metadata that distinguishes the asset from another token or asset in a manner that makes the asset irreplaceable and nonexchangeable for a similar token or asset").

⁶⁴ *See id.* §§ 43-1022(29)–(30), 43-1028(A).

⁶⁵ *See* Digital Assets Regulation, *supra* note 33.

⁶⁶ ZONE CIVIL ORDINANCE, *supra* note 21, tit. VI, ch. 10.

⁶⁷ *Id.*

⁶⁸ *See* Digital Assets Regulation, *supra* note 33, at § 103(a)–(c).

- A Digital Consumer Asset is a general intangible under U.C.C. Article 9;⁶⁹
- A Digital Security is a security under U.C.C. Article 8 and investment property under U.C.C. Article 9;⁷⁰
- A Digital Asset may qualify as a financial asset under U.C.C. Article 8 if its owner so agrees;⁷¹ and
- A Non-Fungible Token may be classified as a Digital Consumer Asset or Digital Security depending on its use.⁷²

The first three of these provisions largely duplicate provisions of the Wyoming Digital Asset Statute.⁷³ The fourth and last could hardly do likewise, given the silence of Wyoming law about non-fungible tokens. The Zone Authority's classification of non-fungible tokens thus apparently represents another of its many firsts.

The CDEZ's Digital Asset Regulation contains a smattering of other terms. Again following Wyoming law, one of these stipulates that a bank providing custodial services for digital assets qualifies as a "securities intermediary" under the Zone's version of U.C.C. Article 8.⁷⁴ That proves notable because, as discussed below, the CDEZ has initiated a rulemaking proceeding comprehensively regulating banking in the Zone.⁷⁵ The rest of the Digital Asset Regulation concerns what might be called "regulatory housekeeping" matters and a great many provisions were negated and superseded by the Resolution Adopting U.C.C. Article 12 for Digital Assets, discussed next.

C. Resolution Adopting U.C.C. Article 12 for Digital Assets⁷⁶

The Uniform Law Commission recently approved the final version of its much anticipated U.C.C. article 12.⁷⁷ This, the latest of the U.C.C.'s 14 articles (they number more than 12 thanks to U.C.C. articles 2A and 4A), focuses on digital assets. U.C.C. Article 12 provides rules for commerce in cryptocurrencies, non-fungible tokens, digital assets, and other intangible bundles of rights

⁶⁹ *Id.* § 103(a)(1).

⁷⁰ *Id.* § 103(a)(2).

⁷¹ *Id.* § 103(b).

⁷² *Id.* § 103(c).

⁷³ See WYO. STAT. ANN. § 34-29-102(a)–(b) (2022).

⁷⁴ Compare Digital Assets Regulation, *supra* note 33, § 103(d), with WYO. STAT. ANN. § 34-29-102(c) (2021).

⁷⁵ See *infra* note 159 and accompanying text.

⁷⁶ RESOLUTION ADOPTING U.C.C. ARTICLE 12, *supra* note 34.

⁷⁷ See generally UNIF. COM. CODE AMENDS. (UNIF. L. COMM'N & AM. L. INST. 2022) (containing prefatory notes and comments).

created and traded on the fintech frontier. The Zone Authority wasted little time in adopting the new article and amendments to related articles of the U.C.C.⁷⁸ This subsection reviews what that means for fintech in the CDEZ.

U.C.C. Article 12 addresses objects of central concern to fintech and, thus, the CDEZ. The Uniform Law Commission describes the aim of U.C.C. Article 12 thusly:

The amendments respond to market concerns about the lack of definitive commercial law rules for transactions involving digital assets, especially relating to (a) negotiability for virtual (non-fiat) currencies, (b) certain electronic payment rights, (c) secured lending against virtual (non-fiat) currencies, and (d) security interests in electronic (fiat) money, such as central bank digital currencies.⁷⁹

The adoption package for Article 12 includes amendments to a good many other U.C.C. Articles, including 1, 2, 2A, 3, 4, 4A, 5, 7, 8, and 9.⁸⁰ These amendments ensure that the new provisions for digital assets interface well with older provisions that address such matters as: money; sales and leases of goods; negotiable instruments; bank deposits and collections; funds transfers; letters of credit; documents of title; securities; chattel paper; secured transactions; controllable accounts or payment intangibles; deposit accounts; investment property; and transferable records under the federal E-SIGN law or the Uniform Electronic Transactions Act (“UETA”).⁸¹ Article 12 and the other amendments in its adoption package thus upgrade the Uniform Commercial Code to handle fintech.

Given the widespread popularity of the U.C.C. among the many jurisdictions that have adopted its Articles and their proven success over many decades, the CDEZ could hardly have gone wrong in adopting Article 12. Existing CDEZ law already included U.C.C. Articles 1, 2, 2A, 3, 4, 4A, 5, 7, 8, and 9.⁸² The amendment package accompanying Article 12 calls for amending select parts of those Articles, too. The Zone Authority followed suit, thereby ensuring that old and new Commercial Codes would work together

⁷⁸ See RESOLUTION ADOPTING U.C.C. ARTICLE 12, *supra* note 34.

⁷⁹ UNIF. L. COMM’N & AM. L. INST., A SUMMARY OF THE 2022 AMENDMENTS TO THE UNIFORM COMMERCIAL CODE 1 (2022), <http://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=2a18c952-5db5-ca16-2274-8c7531990903&forceDialog=0> [http://perma.cc/4J7Y-6TXA].

⁸⁰ See UNIF. COM. CODE AMENDS., *supra* note 77, at 1–4.

⁸¹ See A SUMMARY OF THE 2022 AMENDMENTS TO THE UNIFORM COMMERCIAL CODE, *supra* note 79, at 3.

⁸² ZONE CIVIL ORDINANCE, *supra* note 21, tit. VI ch. 1–9.

in support of fintech.⁸³ Happily for the clarity of CDEZ law, none of these edits alter provisions used in the classifications made by its Digital Assets Regulation.⁸⁴

The Nation and Zone Authority thereby had good reason to adopt U.C.C. Article 12 and its accompanying amendments and duly did so, the former by Ordinance and the latter by Resolution.⁸⁵ Left unvoiced was another reason to favor Article 12 and the other Articles, when building out the Zone's legal system, over the statutes of any particular state. Being a creation of the Uniform Law Commission, a nonprofit unincorporated association, and the American Law Institute, a private nonprofit organization, the Uniform Commercial Code implies no unseemly dependence on the laws of another sovereign. The Catawba have doubtless had enough of that.

U.C.C. Article 12 takes as its central concern what it calls "controllable electronic records" ("CERs") and what others call "digital assets": cryptocurrencies, non-fungible tokens and other bundles of intangible rights.⁸⁶ It defines *control* of a CER as "a record stored in an electronic medium that can be subjected to control under Section 12-105."⁸⁷ Article 12 excludes from the definition of CER these digital equivalents of conventional financial instruments: "a controllable account, a controllable payment intangible, a deposit account, an electronic copy of a record evidencing chattel paper, an electronic document of title, electronic money, investment property, or a transferable record."⁸⁸ That still leaves CER applicable to not just cryptocurrencies and

⁸³ RESOLUTION ADOPTING U.C.C. ARTICLE 12, *supra* note 34, at resolve 2 ("To adopt the UCC Amendments and the new Article 12 - Controllable Electronic Records, as approved and recommended for enactment in all the states by the Uniform Law Commission on July 13, 2022 at its 131st annual meeting."). Note that the apparent effect of this Resolution is to adopt all the amendments set forth for recommended enactment with Article 12, and not just the amendments for Articles 1 and 9, notwithstanding that "whereas" clause 6 in the same Resolution cites only the latter two Articles. It did so in quoting the CDEZ Civil Ordinance's earlier preparation for adopting Article 12: "[t]his update shall include all changes affecting Chapters 1 and 9 of this Title and the addition to this Chapter of proposed UCC Article 12: Controllable Electronic Records." ZONE CIVIL ORDINANCE, *supra* note 21, tit. VI, ch. 10, § 2. The Nation evidently did not foresee when it passed the Ordinance in February 2022, that the U.C.C. Article 12 amendment package that issued in July, 2022, would amend Articles besides 1 and 9. Saying that the Ordinance "shall include" Articles 1 and 9 by no means forbids amending other Articles, too.

⁸⁴ Compare Digital Assets Regulation, *supra* note 33, §§ 101, 102(a), (d), with UNIF. COM. CODE AMENDS., *supra* note 77, at 11–12.

⁸⁵ See RESOLUTION ADOPTING U.C.C. ARTICLE 12, *supra* note 34, at resolve 2; ZONE CIVIL ORDINANCE, *supra* note 21, tit. VI, ch. 10, § 2.

⁸⁶ See U.C.C. § 12-102(a)(1) (AM. L. INST. & UNIF. L. COMM'N 2022).

⁸⁷ *Id.*

⁸⁸ *Id.*

NFTs, but to digital assets more generally, including the Digital Consumer Assets and Digital Securities recognized in the CDEZ's Digital Assets Regulation.⁸⁹

A CER functions legally like tangible personal property, with “control” substituting for “possession” when it comes to establishing a presumption of ownership. Article 12 says that a person has control of a CER if the electronic record associated with it gives the person: substantially all the benefits of the CER; exclusive power to deny others substantially all of the CER's benefits; and exclusive power to transfer control to another person.⁹⁰ Control of a CER also entails having the power to identify oneself as the party with benefits to and powers over it.⁹¹ Exclusivity generally obtains even if control might be subject to change as part of a protocol built into the system in which the CER is recorded, as with digital assets subject to a smart contract, and if others share control of the CER, as in a multi-signature arrangement.⁹²

For example, a person who owned the private key to a digital wallet containing cryptocurrencies would ordinarily thereby have control over the assets therein, making them CERs under Article 12. That control allows the person to use digital locks to prevent others from using the digital asset.⁹³ It also allows the owner of the CER to spend the cryptocurrencies by transferring their control to another person.⁹⁴

Article 12 makes “control” the determining factor in determining ownership in a CER in almost all cases.⁹⁵ It gives the controlling person a claim superior to one who asserts a security or other interest in the CER⁹⁶ and even to one who has perfected such an interest through filing.⁹⁷ Commentators describe this as giving the claim of one with control over a CER “super-priority”

⁸⁹ See Digital Assets Regulation, *supra* note 33, § 103(a)–(b).

⁹⁰ See U.C.C. § 12-105(a)(1) (AM. L. INST. & UNIF. L. COMM'N 2022).

⁹¹ See *id.* § 12-105(a)(2).

⁹² See *id.* § 12-105(b)–(c).

⁹³ See A Summary of the 2022 Amendments to the Uniform Commercial Code, *supra* note 79, at 2–3.

⁹⁴ *Id.*

⁹⁵ See generally U.C.C. § 12 (AM. L. INST. & UNIF. L. COMM'N 2022) (detailing how “control” factors into ownership of CERs).

⁹⁶ See U.C.C. § 12-104(e) (AM. L. INST. & UNIF. L. COMM'N 2022) (“A qualifying purchaser acquires its rights in the [CER] free of a claim of a property right in [it].”); see also *id.* § 9-326A (2022 amendments) (noting that the security interest of a party having control of digital asset has priority over a conflicting security interest held by a secured party without control).

⁹⁷ U.C.C. § 12-104(h) (AM. L. INST. & UNIF. L. COMM'N 2022) (providing that filing of a financing statement under Article 9 is not notice of a claim to a CER).

over any other claimant to it.⁹⁸ It has the practical effect of allowing a “qualifying purchaser”—one who takes control of a CER “for value, in good faith, and without notice of a claim of a property right” by another in the CER—the benefit of the same “take free” rule that applies to tangible personal property.⁹⁹ The same holds true under the amendments suggested to Article 9 for an electronic copy of a record evidencing chattel paper, a controllable account, or a controllable payment intangible.¹⁰⁰ Similarly, the new amendments give priority to security interests in a CER, controllable account, or controllable payment intangible to a party having control of it.¹⁰¹

These rules greatly decrease uncertainty in fintech transactions by making it relatively easy to establish uncontested property rights in a CER and other digital assets. In the CDEZ, for example, a person who purchases an NFT innocent of any awareness that it was stolen or pledged as security for a loan can rest assured that nobody else has better claim to it.¹⁰² Only a purchaser who had actual knowledge that the NFT was stolen or pledged as security would have reason to worry. Constructive knowledge, such as that ordinarily provided by the filing of a finance statement, would not suffice.¹⁰³ These rules strike a balance between discouraging illegal activity and encouraging honest trade, lowering transaction costs for commerce in the Zone.

Relevant to cryptocurrencies, a topic of central concern to fintech, the post-Article 12 U.C.C. distinguishes between fiat and non-fiat versions. Only the former now qualifies as “money”—a medium of exchange that is currently authorized or adopted by a domestic or foreign government.”¹⁰⁴ In the newly revised U.C.C., money may exist in its traditional tangible form or, for the first time, in electronic form.¹⁰⁵ Security interests in electronic money

⁹⁸ Andrew Hinkes, *Why Crypto Needs UCC Article 12*, COINDESK (Oct. 28, 2022), <http://www.coindesk.com/layer2/2022/10/28/why-crypto-needs-ucc-article-12/> [perma.cc/R3VV-TKDE].

⁹⁹ U.C.C. § 12-102(2) (AM. L. INST. & UNIF. L. COMM’N 2022) (defining “qualifying purchaser”).

¹⁰⁰ U.C.C. § 9-105 (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (outlining the amendments regarding electronic copy of a record evidencing chattel paper); U.C.C. § 9-107A(b) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (outlining the amendments regarding controllable account and controllable payment intangible).

¹⁰¹ U.C.C. § 9-326A (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments).

¹⁰² See generally RESOLUTION ADOPTING U.C.C. ARTICLE 12, *supra* note 34.

¹⁰³ U.C.C. § 12-104(h) (AM. L. INST. & UNIF. L. COMM’N 2022).

¹⁰⁴ U.C.C. § 1-201(24) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments).

¹⁰⁵ U.C.C. § 9-102(a)(31A) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (defining “electronic money” as “money in an electronic form”).

may be perfected only by the same sort of control required for perfection of interests in CERs.¹⁰⁶

The new definition of “money” goes on to expressly exclude Bitcoin and other cryptocurrencies not created by governments: “The term does not include an electronic record that is a medium of exchange recorded and transferable in a system that existed and operated for the medium of exchange before the medium of exchange was authorized or adopted by the government.”¹⁰⁷ Non-fiat cryptocurrencies like Bitcoin and Ether qualify as CERs, however, making the rules for perfecting security interests the same for all electronic media of exchange, fiat or otherwise.¹⁰⁸ As with digital assets in general, these rules ensure that electronic money and cryptocurrencies flow smoothly in the CDEZ, unhindered by doubts about who owns what.

Because the disembodied nature of fintech transactions makes it difficult to determine where they happen, several of the new U.C.C. rules aim to make it easy to define the applicable law and forum in advance. A CER can be made subject to a jurisdiction that it or the system in which it is recorded expressly designates.¹⁰⁹ The law of the CERs with which they are associated govern controllable accounts or controllable payment intangibles, making them susceptible to a similar treatment.¹¹⁰ Enforceable choice of law and choice of forum clauses can also be built into negotiable instruments¹¹¹ and letters of credit.¹¹²

Article 12 and the other 2022 amendments effectuated other changes to the U.C.C. Provisions that originally described transactions on paper, such as “sign” and “writing,” were updated to also apply to electronic transactions.¹¹³ The treatment of hybrid

¹⁰⁶ Compare U.C.C. § 9-105A (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (outlining the control of electronic money), with U.C.C. § 12-105 (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (outlining control of CERs); see also U.C.C. § 9-312(b)(4) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (limiting perfection of security interest in electronic money to means described in § 9-314); U.C.C. § 9-314 (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (referencing Section 9-105A standards of control for perfection of security interest in electronic money).

¹⁰⁷ U.C.C. § 1-201(24) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments).

¹⁰⁸ See A SUMMARY OF THE 2022 AMENDMENTS TO THE UNIFORM COMMERCIAL CODE, *supra* note 79, at 6–7.

¹⁰⁹ U.C.C. § 12-107(c) (AM. L. INST. & UNIF. L. COMM’N 2022).

¹¹⁰ U.C.C. § 9-306B(a) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments).

¹¹¹ U.C.C. § 3-104(a)(3)(iv)–(v) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments).

¹¹² U.C.C. § 5-116 (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments).

¹¹³ U.C.C. § 1-201(37) (AM. L. INST. & UNIF. L. COMM’N 2022) (2022 amendments) (substituting “record” for “writing” in definition of “sign”); see also U.C.C. § 1-201(10) (AM.

transactions that combine aspects of a sale or lease of goods with the sale, lease, or licensing of other property or with the provision of services was clarified.¹¹⁴ Thanks to the Zone Authority's Resolution Adopting U.C.C. Article 12 for Digital Assets, these became part of the CDEZ's law, too.

III. PENDING CDEZ REGULATIONS

The Zone Authority continued to build the CDEZ legal system in 2022 by launching proceedings for three additional rules:

- A Distributed Autonomous Organization (“DAO”) Regulation;¹¹⁵
- A Stablecoin Regulation;¹¹⁶ and
- A Banking and Commercial Services Code.¹¹⁷

The Zone Authority has published drafts of each prospective rule but as yet has finalized none.¹¹⁸

In each case, it appears that the Zone Authority largely complied with the Administrative Procedure Regulation that it issued earlier in 2022. Indeed, the Zone Authority exceeded the requirements of that regulation in the case of the DAO Regulation and Stablecoin Regulation by issuing advanced notices of proposed

L. INST. & UNIF. L. COMM'N 2022) (2022 amendments) (redefining “conspicuous”); U.C.C. § 1-201(36) (AM. L. INST. & UNIF. L. COMM'N 2022) (2022 amendments) (redefining “send”).

¹¹⁴ See U.C.C. § 2-106(5) (AM. L. INST. & UNIF. L. COMM'N 2022) (defining “hybrid transaction”); U.C.C. § 2A-103(1)(h.1) (AM. L. INST. & UNIF. L. COMM'N 2022) (defining “hybrid lease”); see also U.C.C. § 2-102 (AM. L. INST. & UNIF. L. COMM'N 2022) (2022 amendments) (defining scope of Article); U.C.C. § 2A-102 (AM. L. INST. & UNIF. L. COMM'N 2022) (2022 amendments) (same).

¹¹⁵ Draft Decentralized Autonomous Organization Regulation, Reg. 003-022 (draft Aug. 13, 2022) [hereinafter DAO Regulation Draft], http://zoneauthority.io/wp-content/uploads/2022/08/DAO-Rule-Notice-of-Proposed-Rule_.pdf [<http://perma.cc/BB2X-Q3KC>]; *PR004 – Catawba Digital Economic Zone Issues Proposed Regulation on DAOs*, CATAWBA DIGIT. ECON. ZONE (Aug. 13, 2022), <http://catawbadigital.zone/pr004-catawba-digital-economic-zone-issues-proposed-regulation-on-daos> [<http://perma.cc/A67U-P3X3>] (dating issuance of draft regulation).

¹¹⁶ Draft Stablecoin Regulation, Reg. 004-22 (draft Oct. 27, 2022), <http://zoneauthority.io/stablecoin-regulation-draft/>; *PR007 – Stablecoin Regulation: Draft*, CATAWBA DIGIT. ECON. ZONE (Oct. 27, 2022), <http://catawbadigital.zone/pr007-stablecoin-regulation-draft/> [<http://perma.cc/Q2MJ-PLDB>] (dating issuance of draft Stablecoin Regulation).

¹¹⁷ Draft Banking and Commercial Services Code (draft Oct. 27, 2022) <http://zoneauthority.io/banking-and-financial-services-code/> [<http://perma.cc/A87A-2AGD>]; *PR007 – Stablecoin Regulation: Draft*, CATAWBA DIGIT. ECON. ZONE (Oct. 27, 2022), <http://catawbadigital.zone/pr007-stablecoin-regulation-draft/> [<http://perma.cc/R3MV-4CTW>] (dating issuance of draft Banking and Commercial Services Code).

¹¹⁸ *Banking and Financial Services Code*, Catawba Digit. Econ. Zone, <http://zoneauthority.io/banking-and-financial-services-code> [<http://perma.cc/A87A-2AGD>] (last visited Mar. 16, 2023).

rulemakings for each, on June 1 and September 7, respectively.¹¹⁹ That was strictly speaking unnecessary because, as discussed above, the Administrative Procedure Regulation imposed no requirements for notices of or public participation in rulemakings before the Zone won its first resident, on September 29.¹²⁰ In the case of the Banking and Commercial Services Code, the Zone Authority went straight to issuing a draft rule and soliciting public commentary on that.¹²¹ While skipping an advance notice of rulemaking did not violate the as-yet inoperative Administrative Procedure Regulation, the Zone Authority appears to have published an incomplete version of the Code, thereby marring its otherwise impressive performance.¹²²

This section briefly reviews each of the three pending rules listed above, in order. It would hardly repay the effort to scrutinize them closely given that none have yet reached their final and binding form. Instead, the discussion aims to discern from these ongoing proceedings the future of fintech in the CDEZ.

A. DAO Regulation Draft

Though the fintech world very much wants distributed autonomous organizations, the legal world has struggled to figure them out. The Zone Authority has taken up that challenge. It began on June 1, 2022, by giving advance notice of an upcoming regulation for DAOs.¹²³ The Zone Authority described DAOs as:

blockchain-based, decentralized, distributed organizations, shaped more as a network than a traditional corporate hierarchy or pyramid. DAOs are organized via smart contracts. They are a way for parties with a mutual goal to coordinate, share resources, and distribute benefits. Even without traditional hierarchical structures, DAOs can provide democratic mechanisms of decision making. They also provide novel ways of structuring membership shares, voting rights, and contributions, compared to traditional organizations. DAOs can use

¹¹⁹ See *Advance Notice on Upcoming DAO Regulation*, CATAWBA DIGIT. ECON. ZONE (June 1, 2022), http://zoneauthority.io/wp-content/uploads/2022/06/DAO_ANPRM_with_Letterhead-3.pdf [<http://perma.cc/FT7L-7UP3>]; *Advance Notice of Proposed Rulemaking (ANPRM) on Stablecoins*, CATAWBA DIGIT. ECON. ZONE (Sept. 7, 2022), <http://zoneauthority.io/advance-notice-of-proposed-rulemaking-anprm-on-stablecoins/> [<http://perma.cc/D3DT-KRBC>].

¹²⁰ Administrative Procedure Regulation, *supra* note 32, § 103(b).

¹²¹ See generally, *Banking and Financial Services Code*, *supra* note 118.

¹²² After this Paper was submitted for publication and the author had notified the CDEZ of the incomplete publication, it vowed to remedy the mistake and reopen the draft regulations for public commentary. Letter from Joseph McKinney, CEO of CDEZ, to author (Dec. 23, 2022) (on file with author).

¹²³ *Advance Notice on Upcoming DAO Regulation*, *supra* note 119.

tokens to vote, incentivize and pay members, among many other activities normally performed by organizations.¹²⁴

As the Zone Authority's description makes clear, DAOs seem optimized for fintech. They do not easily fit into legacy legal systems, however.

The Advance Notice reviewed the state of the art in regulating DAOs and suggested that the CDEZ might again, as in enacting rules for digital assets, follow Wyoming's lead. One of the few states to offer legal personhood to DAOs, Wyoming allows them to take the form of a kind of limited liability company ("LLC").¹²⁵ The Advance Notice hinted that the Zone Authority might go beyond Wyoming, however, by allowing DAOs the alternative of forming as cooperative organizations ("co-ops").¹²⁶ The Zone Authority also welcomed the public to suggest still other classification options. Comments on the Advance Notice closed on July 15, 2022.¹²⁷

The Zone Authority issued its Decentralized Autonomous Organization Regulation Draft ("DAO Regulation Draft") on August 13, 2022.¹²⁸ The draft regulation offers DAOs two options for their form of organization: an LLC or an unincorporated nonprofit association ("UNA").¹²⁹ The Civil Ordinance that established the basic legal framework of the CDEZ recognizes both forms of legal person.¹³⁰ On top of these frameworks, the draft regulation imposes a number of conditions adapting them for life as a DAO.

Each such entity must, for example, register under a name including "DAO LLC" or "DAO UNA".¹³¹ Its governing public documents must furthermore include this disclosure: "The rights of members in a decentralized autonomous organization may differ materially from the rights of members in other limited liability companies or unincorporated nonprofit associations," and that zone law, underlying smart contracts, and internal governance "may define, reduce, or eliminate fiduciary duties and may restrict transfer of ownership interests, withdrawal, or resignation from the decentralized autonomous organization, return of capital contributions and dissolution of the decentralized autonomous

¹²⁴ *Id.* at 2.

¹²⁵ WYO. STAT. ANN. § 17-31-104 (2022).

¹²⁶ See generally *Advance Notice on Upcoming DAO Regulation*, *supra* note 119, at 4.

¹²⁷ See *Advance Notice on Upcoming DAO Regulation*, *supra* note 119, at 4.

¹²⁸ DAO Regulation Draft, *supra* note 115; *Catawba Digital Economic Zone Issues Proposed Regulation on DAOs*, *supra* note 115 (providing date of DAO Regulation Draft's issuance).

¹²⁹ DAO Regulation Draft, *supra* note 115.

¹³⁰ See ZONE CIVIL ORDINANCE, *supra* note 21, tit. II, ch. 7 (LLCs), ch. 9 (UNAs).

¹³¹ DAO Regulation Draft, *supra* note 115, § 104(d).

organization.”¹³² So that prospective members can understand the rights they will have in the organization, the founding documents of each DAO LLC or DAO UNA must “establish how the decentralized autonomous organization shall be managed by the members, including to what extent the management will be conducted algorithmically.”¹³³ In these, as in many other particulars, the CDEZ’s draft DAO regulations follow the lead of Wyoming DAO legislation.¹³⁴

The CDEZ draft regulations impose still other requirements on DAOs that want to form as LLCs or UNAs in the CDEZ. These, too, tend to mirror those of Wyoming’s DAO legislation. Both require that an applicant DAO provide digital identifiers for any smart contracts used to manage it, for instance.¹³⁵ It appears, however, that the CDEZ draft regulations go further than Wyoming law in requiring digital identifiers for all of the DAO’s members.¹³⁶ That is not necessarily to say, however, that these identifiers must disclose who stands behind them; they might conceivably function as mere pseudonyms.

The CDEZ’s DAO Regulation Draft also improvises in allowing to DAOs to take the form of UNA. That such an entity is called “nonprofit” suggests that it might not offer an attractive platform for fintech. The DAO Regulation Draft offers a partial fix of that seeming deficiency. Although the CDEZ’s framework for UNAs forbids them from paying dividends or making distributions to members or managers, it allows a UNA to “pay reasonable compensation or reimburse reasonable expenses to a member or manager for services rendered” and confer benefits consistent with its nonprofit purpose.¹³⁷ The DAO Regulation Draft clarifies that this exception “includes, but is not limited to, payments and compensations for potential staking and the assumption of risk in regard to the staking of a token being held in relation to the DAO UNA governance, . . . which shall not be construed as a distribution of profits to the members” in contravention of the

¹³² *Id.* § 104(c).

¹³³ *Id.* § 104(e).

¹³⁴ Compare DAO Regulation Draft, *supra* note 115, § 104, with WYO. STAT. ANN. § 17-31-104 (2022).

¹³⁵ Compare WYO. STAT. ANN. § 17-31-106(b) (2022), with DAO Regulation Draft, *supra* note 115, § 105(a)(4) (DAO LLC smart contracts), and DAO Regulation Draft, *supra* note 115, § 105(b)(5) (DAO UNA smart contracts respectively).

¹³⁶ See DAO Regulation Draft, *supra* note 115, § 105(a)(1) (DAO LLC members); *id.* § 105(b)(2) (DAO UNA members).

¹³⁷ ZONE CIVIL ORDINANCE, *supra* note 21, at tit. VII, ch. 9, § 25(a)–(b)(2) (forbidding dividends or distributions but allowing reasonable compensation and reimbursement).

limits imposed on UNAs.¹³⁸ In this way, the draft regulation leaves room for DAO UNA members to make money from participating in the governance of their nonprofit organization.

Why would any DAO bother complying with these requirements? Because doing so would afford its individual members the protection of limited liability for acts of the DAO.¹³⁹ Without that shelter, DAOs would likely qualify as partnerships or joint ventures, the members of which would bear joint and several liability for debts of the entity.¹⁴⁰ Whatever the form of its final regulations for DAOs, the CDEZ will doubtless want to ensure that they provide both commercial opportunities and protections from personal liability.

B. Stablecoin Regulation Draft

The Zone Authority gave advance notice of a proposed rulemaking for stablecoins on September 7, 2022.¹⁴¹ Comments on that notice closed on September 30, 2022.¹⁴² The Zone Authority published its Stablecoin Regulation Draft on October 27, 2022, concurrent with publication of the Banking and Commercial Services Code Draft discussed in the next subsection.¹⁴³ As the Zone Authority explained in an accompanying press release, the framework set forth in these two drafts “is guided by financial stability and consumer protection, requiring that all stablecoins be issued by regulated entities, holding a 11 ratio of assets to stablecoin tokens, and limiting those assets only to high-quality, liquid ones.”¹⁴⁴

What motivated the Zone Authority’s interest in stablecoins? As the advance notice observed, stablecoins offer fintech a way to smooth out the high volatility characteristic of popular cryptocurrencies like Bitcoin or Ethereum.¹⁴⁵ The value of a stablecoin is pegged to a relatively stable asset such as a fiat currency, a commodity like gold, or a specially designed financial

¹³⁸ DAO Regulation Draft, *supra* note 115, § 117.

¹³⁹ See ZONE CIVIL ORDINANCE, *supra* note 21, at tit. VII, ch. 7, § 304 (providing for limited liability of member of LLC); *id.* tit. VII, ch. 9, § 8 (providing same for UNA).

¹⁴⁰ *Advance Notice on Upcoming DAO Regulation*, *supra* note 119.

¹⁴¹ *Advance Notice of Proposed Rulemaking (ANPRM) on Stablecoins*, *supra* note 119.

¹⁴² *PR006 – Tribal Nation-Backed Economic Zone Solicits Feedback for New Stablecoin Regulatory Structure*, CATAWBA DIGIT. ECON. ZONE (Sept. 8, 2022), <http://catawbadigital.zone/wp-content/uploads/2022/09/PR006-CDEZ-ANPRM-Stablecoins-Press-Release-with-letterhead.-Sep-8th-2022.docx.pdf> [<http://perma.cc/H54M-UENM>].

¹⁴³ *PR007 – Stablecoin Regulation: Draft*, *supra* note 117.

¹⁴⁴ *Id.*

¹⁴⁵ *Advance Notice of Proposed Rulemaking (ANPRM) on Stablecoins*, *supra* note 119.

instrument.¹⁴⁶ Unfortunately for the nascent fintech sector, stablecoins have proven unreliable in practice. The Zone Authority aims to correct that deficiency by providing regulatory clarity and certainty for stablecoins without stymying innovation.¹⁴⁷

How does the Stablecoin Regulation Draft try to satisfy those goals? By limiting the issuance of stablecoins to select financial entities, chosen for their capacity to deliver on their promises.¹⁴⁸ Specifically, a Zone Payment Stablecoin Regulator will assess any would-be stablecoin issuer for its ability applicant “to maintain reserves backing its outstanding payment stablecoins on an at least a 1-to-1 basis.”¹⁴⁹ These reserves shall consist of U.S. coins and currency (including Federal Reserve notes), funds held as insured deposits, and other liquid assets as defined in federal laws or regulations or as provided for in the Zone’s own banking code.¹⁵⁰ Entities that fail to meet those standards would be strictly forbidden from offering or issuing stablecoins.¹⁵¹

One stablecoin evidently already has a lead in winning approval under the pending rules. Informed third parties claim that the CDEZ “is designed to utilize a new and innovative digital currency known as Fluent.”¹⁵² This commentary, co-written by parties involved in designing CDEZ,¹⁵³ one of whom serves as Chief Legal Officer of Nest,¹⁵⁴ the company issuing Fluent,¹⁵⁵ describes the stablecoin as “a bank-led, transparent stablecoin, designed with federated custody across multiple institutions to offer maximum stability.”¹⁵⁶ In compliance with the reserve requirements of the Stablecoin Regulation Draft, “the digital currency utilized in the Fluent system is one-to-one with the U.S. dollar, with all minted tokens backed with cash and approved assets.”¹⁵⁷

Comments on the Stablecoin Regulation Draft closed on November 26, 2022.¹⁵⁸ No final rule has yet issued. Even if it had,

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ Draft Stablecoin Regulation, *supra* note 116, § 103.

¹⁴⁹ *Id.* § 104(a)(4)(A).

¹⁵⁰ *Id.* § 106.

¹⁵¹ *Id.* § 111.

¹⁵² Guedel & Viles, *supra* note 8, at 600.

¹⁵³ *Id.* at 592.

¹⁵⁴ *See id.* at 591 n.* (introducing W. Gregory Guedel).

¹⁵⁵ *FLUENT: Federated Tokenization of Currency*, NEST FIN. GRP., <http://www.nestgroup.io/products#Fluent> [<http://perma.cc/T8RM-RY7D>] (last visited Dec. 22, 2022).

¹⁵⁶ Guedel & Viles, *supra* note 8, at 600.

¹⁵⁷ *Id.* at 600–01.

¹⁵⁸ *PR007 – Stablecoin Regulation: Draft*, *supra* note 116.

the draft's reliance on the Zone's still-prospective banking code would leave it less than fully realized. The discussion now turns to that, the last of the three currently pending rulemaking proceedings.

C. Banking and Commercial Services Code Draft

The Zone Authority published its Banking and Commercial Services Code Draft¹⁵⁹ simultaneously with the publication of its Stablecoin Regulation Draft, on October 27, 2022.¹⁶⁰ That makes sense administratively, given that the two sets of rule address interrelated matters. As the Zone Authority explained, “The banking code allows a large range of regulated institutions, including trusts, Special Depository Institutions, money transmitters, and full-scale banking corporations. The stablecoin framework complements the draft banking code and specifies the regulated entities that are permitted to issue stablecoins.”¹⁶¹

More than any other prospective rule, the Banking and Commercial Service Code Draft operates at a wholesale level rather than a retail one. In other words, it aims to provide a foundation on which large regulated commercial enterprises can build the infrastructure necessary to support smaller and more freewheeling entities, such as DAO LLCs and DAO UNAs dealing in stablecoins and other digital assets.¹⁶² As one might expect of enterprise-grade code for large, regulated entities, the Banking and Commercial Service Code Draft runs long—allegedly, for 129 pages of single-spaced text.¹⁶³ So voluminous a document would defy easy summary in any event. As the use of “allegedly” suggests, however, there is another problem with assessing the Banking and Commercial Service Code Draft: it was not initially published in full. Whereas the document's table of contents indicates that it ends after Chapter 190, the document published by the Zone Authority ends part way through Chapter 150 with a notice reading, “Page 80 of 129”.¹⁶⁴

Notified of this oversight, the CDEZ pledged to set matters right by publishing the entirety of the draft regulation and reopening public comments.¹⁶⁵ For present, the Zone Authority's

¹⁵⁹ Draft Banking and Commercial Services Code, *supra* note 117.

¹⁶⁰ Though the draft Code bears no date, its issuance was announced by a separate press release. *PR007 – Stablecoin Regulation: Draft*, *supra* note 116.

¹⁶¹ *Id.*

¹⁶² See Draft Banking and Commercial Services Code, *supra* note 117.

¹⁶³ See *id.* at 95 (ending with notice, “Page 80 of 129”).

¹⁶⁴ *Id.* at 1, 95.

¹⁶⁵ Letter from Joseph McKinney, CEO of CDEZ, to author (Dec. 23, 2022) (on file with author).

own summary of the Banking and Commercial Service Code Draft will have to suffice. The press release accompanying the draft's publication says it was based on the state-level banking codes of Wyoming, South Dakota, and North Dakota.¹⁶⁶ The Zone Authority explains these choices:

Wyoming was selected because of its provisions allowing banks to conduct digital assets business. Unlike Wyoming, this ability is not limited solely to special depository institutions. The framework takes most of its inspiration from South Dakota, which is the most widely used banking framework in the United States, holding the most assets under management of any State. The code also ensures that each bank is held accountable for the highest standards of compliance, including in money laundering, financial stability, and consumer protection. The proposed banking regulation draws on North Dakota for its implementation of a Public Bank. Like North Dakota, the Catawba Public bank is a “bank of banks”, facilitating payment rails and regulation of banks chartered within the Zone. The Banking Code also provides support in engaging key financial and regulatory stakeholders.¹⁶⁷

Further commentary on the prospective Banking and Commercial Services Code comes from third parties evidently tasked to help write it, W. Gregory Guedel and Philip H. Viles, Jr.¹⁶⁸ They summarize their Code's contents and conclude that it “not only provides the Tribal government with the means of exercising sovereign governance over economic activity, but it also attract and facilitates new business within the Nation's jurisdiction, thereby serving as a substantial and effective catalyst for economic development within Native American communities.”¹⁶⁹ It is impossible to say at this time to what degree the enacted Code will embody the author's version and what effect it will have in practice.

The deadline to submit comments on the Banking and Commercial Services Code Draft originally fell on November 26th, 2022.¹⁷⁰ Having been notified that less than the entire draft was published, however, the Zone Authority pledged to publish the whole and extend the deadline for comments.¹⁷¹ It is not too late

¹⁶⁶ *PR007 – Stablecoin Regulation: Draft*, *supra* note 116.

¹⁶⁷ *PR007 – Stablecoin Regulation: Draft*, *supra* note 116 (paragraph break omitted).

¹⁶⁸ Guedel & Viles, *supra* note 8, at 605 (claiming the paper's authors developed the CDEZ's Banking and Financial Services Code).

¹⁶⁹ *Id.* at 608.

¹⁷⁰ See *PR007 – Stablecoin Regulation: Draft*, *supra* note 116 (giving the deadline for comments on both the Stablecoin Regulation Draft and the Banking and Commercial Services Code Draft of Nov. 26, 2022).

¹⁷¹ Letter from Joseph McKinney, CEO of CDEZ, to author (Dec. 23, 2022) (on file with author).

to do so; the Zone Authority has not yet issued a final version of the Banking and Commercial Services Code.

CONCLUSION

This paper has reviewed the birth and rapid maturation of the CDEZ, a special jurisdiction dedicated to bringing the rule of law to fintech. The CDEZ already boasts of a number of firsts: the first entirely virtual zone to focus on fintech; the first time that a Native American tribe has taken up the regulation of a whole field of commerce; and the first special jurisdiction in the United States to provide its own civil laws and legal system. If all goes as planned, the CDEZ will also soon host the first tribal public bank in the United States.

The CDEZ launched in the spring of 2022 with a comprehensive set of rules for commerce, borrowed from tried and trusted sources. Before the year's end, it added to these an Administrative Procedure Regulation, a Digital Asset Regulation, and a Resolution adopting as local law new U.C.C. Article 12 and related amendments. The Zone Authority has begun rulemaking proceedings for regulations addressing DAOs, stablecoins, and banking.

Though the CDEZ has made a strong start, it will face considerable challenges in its campaign to establish a thriving online commercial hub. It remains unclear how best to adapt old rules for such novelties as cryptocurrencies, NFTs, and other digital assets. The Zone Authority will likewise have to blaze trails in figuring out how to regulate DAOs, stablecoins, and a tribal public bank. The Catawba will not be entirely alone in this pioneering effort—other jurisdictions have begun trying to attract the same businesses and customers—but it can hardly expect much help. Will the CDEZ win another first in the race to bring good governance to the fintech frontier? Only time will tell.