

EMERGING TECHNOLOGY'S UNFAMILIARITY WITH COMMERCIAL LAW

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ABSTRACT—Over the course of a four-year, collaborative process that was open to the public, the Uniform Law Commission (ULC) and the American Law Institute (ALI) undertook a project to revise the Uniform Commercial Code (UCC) to account for the impact of emerging technologies on commercial transactions. The amendments, approved jointly by the ULC and ALI in July 2022, touch on aspects of the entire UCC, but one change has inspired ire and attracted national media attention: a revision to the definition of “money.” The 2022 UCC Amendments alter the definition of “money” to account for the introduction of central bank digital currencies (CBDCs), such as the Bahamian Sand Dollar, and create a separate asset classification category, a controllable electronic record, for cryptocurrencies such as bitcoin. Opponents of this change point to concerns that the UCC seeks to “ban” cryptocurrency or otherwise advantage central bank digital currencies and disadvantage cryptocurrencies. This Essay examines this dispute over the 2022 UCC Amendments and argues that it stems from a misunderstanding of core commercial law concepts. Ultimately, it seems that diminishing familiarity with commercial law—a side effect of expanding reliance on emerging financial technology products—stands as a key obstacle to the enactment of legal changes designed to give the objectors the very legal effects they desire.

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INTRODUCTION

Cryptocurrency stories of woe have dominated the news cycle since May 2022.¹ Some of this news coverage reveals the general public’s lack of familiarity with commercial law concepts. For example, when a ruling in the Celsius bankruptcy determined that certain customer deposits belonged to Celsius and relegated customers to unsecured creditor status,² people generally seemed shocked.³ Well, everyone except commercial lawyers seemed shocked. Those lawyers familiar with the Uniform Commercial Code (UCC) and its interaction with the Bankruptcy Code might have predicted such an outcome,⁴ and, indeed, had they been consulted, might have helped prevent it.⁵ Unfortunately, as the regular use of checks and other negotiable instruments dwindles in favor of emerging financial technology products, commercial law familiarity also diminishes.

¹ See, e.g., Alexander Osipovich, *Genesis Demise Marks End of Era for Crypto’s Pseudo-Banks*, WALL ST. J. (Jan. 22, 2023, 7:00 AM), <https://www.wsj.com/articles/genesis-demise-marks-end-of-era-for-cryptos-pseudo-banks-11674342330> [<https://perma.cc/BCZ7-YFDC>] (describing the “rash of failures” of crypto lenders in the first half of 2022).

² *In re Celsius Network LLC*, 647 B.R. 631, 637 (Bankr. S.D.N.Y. 2023).

³ See Steven Zeitchik, *Bad News for Thousands of Crypto Investors: They Don’t Own Their Accounts*, WASH. POST (Jan. 5, 2023, 6:51 PM), <https://www.washingtonpost.com/technology/2023/01/05/celsius-crypto-bankruptcy-ruling/> [<https://perma.cc/KPX5-XCXA>] (calling the decision a “major blow” to more than half a million people and discussing regulatory reactions); Soma Biswas, *Celsius Network Wins Ownership Rights to Customer Crypto Deposits*, WALL ST. J. (Jan. 4, 2023, 5:39 PM), <https://www.wsj.com/articles/celsius-network-wins-ownership-rights-to-customer-crypto-deposits-11672865422> [<https://perma.cc/8ZBQ-R3SK>] (discussing the decision).

⁴ Thomas Barrabi, *Coinbase Warns Customers They May Lose Crypto if Company Goes Bankrupt*, N.Y. POST (May 11, 2022, 3:34 PM), <https://nypost.com/2022/05/11/coinbase-warns-customers-they-may-lose-crypto-if-company-goes-bankrupt/> [<https://perma.cc/K8QG-S4TA>] (detailing customer panic when Coinbase disclosed that “custodially held crypto assets may be considered to be the property of a bankruptcy estate”); Adam J. Levitin, *Not Your Keys, Not Your Coins: Unpriced Credit Risk in Cryptocurrency*, 101 TEX. L. REV. 877, 880–81 (2023).

⁵ *Coinbase User Agreement*, COINBASE (Nov. 8, 2023), https://www.coinbase.com/legal/user_agreement/united_states [<https://perma.cc/9G3Y-AJBN>] (opting into UCC Article 8 to keep customer assets separate from the bankruptcy estate in the event of bankruptcy).

In a somewhat twisted turn of fate, emerging technology's unfamiliarity with commercial law now threatens the adoption of key commercial law changes designed to improve the use of emerging payment mechanisms in commerce. This Essay examines the 2022 UCC Amendments⁶ and recent claims that the amendments seek to "ban" bitcoin and facilitate the adoption of a controversial asset called central bank digital currency (CBDC).⁷ The Essay argues that such claims rest on the failure of emerging technology's advocates to understand commercial law terms of art and the purposes they serve in the UCC. Far from advantaging CBDCs, the 2022 UCC Amendments promote stability and predictability in commercial transactions involving cryptocurrency.⁸

I. THE BACKDROP: BITCOIN VS. CENTRAL BANK DIGITAL CURRENCIES

Recent concerns that the 2022 UCC Amendments push a pro-CBDC and anti-bitcoin agenda⁹ stem from a deep cultural and value clash between proponents of bitcoin and proponents of CBDCs. By way of brief background, bitcoin is a cryptocurrency intrinsic to the Bitcoin network.¹⁰ Introduced by Satoshi Nakamoto in 2008, the Bitcoin blockchain protocol provides a mechanism for recording electronic transactions through a distributed adversarial network in which it is computationally impractical for any party to retroactively modify transactions.¹¹ Bitcoin enables independent verification and relative permanency of each digital transaction, facilitates direct peer-to-peer financial transactions without intervention by a third-

⁶ U.C.C. art. 9, 12 (AM. L. INST. & UNIF. L. COMM'N 2022).

⁷ See, e.g., Daniel Horowitz, *South Dakota and Other Red States are About to Ban Bitcoin as Legal Money and Grease the Skids for CBDC*, BLAZE MEDIA (Mar. 2, 2023), <https://www.theblaze.com/oped/horowitz-south-dakota-and-other-red-states-are-about-to-ban-bitcoin-as-legal-money-cbdc> [<https://perma.cc/B3WW-79WE>].

⁸ At this juncture, a few caveats are important. The UCC is maintained as a joint project of the Uniform Law Commission (ULC) and the American Law Institute (ALI). I am neither a ULC commissioner, nor a member of the ALI. I do serve as a Research Director for the Technology Committee of the ULC and an Associate Research Director for the Permanent Editorial Board (PEB) for the UCC. However, the analysis offered in this Essay represents my thoughts on the 2022 UCC Amendments in my personal capacity, based on my professional background as a law professor, a longtime blockchain lawyer, and an Advisor to the 2022 UCC Amendments committees over the long haul of the project.

⁹ See Horowitz, *supra* note 7.

¹⁰ Carla L. Reyes, *Emerging Technology's Language Wars: Cryptocurrency*, 64 WM. & MARY L. REV. 1193, 1212 (2023). Note that, generally speaking, the Bitcoin software, protocol, and network are referenced using the uppercase "Bitcoin" while the lowercase "bitcoin" refers to individual units of cryptocurrency. Angela Walch, *The Bitcoin Blockchain as Financial Market Infrastructure: A Consideration of Operational Risk*, 18 N.Y.U. J. LEGIS. & PUB. POL'Y 837, 846 n.41 (2015).

¹¹ SATOSHI NAKAMOTO, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM 8 (2008), <https://bitcoin.org/bitcoin.pdf> [<https://perma.cc/ME5Z-KAG7>]. As the Bitcoin white paper explains, "[i]n this paper, we propose a solution to the double-spending problem using a peer-to-peer distributed timestamp server to generate computational proof of the chronological order of transactions." *Id.* at 1.

party intermediary, and incentivizes network support and security by issuing new bitcoin, subject to a cap, according to predetermined rules coded into the network.¹² Bitcoin is a medium of exchange laden with a variety of values, including preferences for deflationary monetary economics,¹³ privacy,¹⁴ autonomy,¹⁵ and freedom in financial transactions.¹⁶

These values stand in stark contrast to many of the technical and cultural elements of proposals to create CBDCs.¹⁷ The Board of Governors of the Federal Reserve System (FRB) defines CBDCs “as a digital liability of the Federal Reserve that is widely available to the general public.”¹⁸ Even while lauding potential benefits of CBDCs, such as convenience, safety, and liquidity, the FRB also expressed concern for potential negative effects.¹⁹ In particular, many worry that CBDCs may increase government financial surveillance, restrict financial autonomy, and disincentivize savings, among other economic implications.²⁰ Ultimately, as a result of these issues, the face-off between bitcoin and CBDCs acts as a battleground over important values and political differences.

While this value-laden and politically tense debate over the nature of money and alternative payment mechanisms brewed, a variety of stakeholders began a completely unrelated, deliberative, and open process to amend the UCC in light of the last decade’s technological advances.²¹ One

¹² *Id.* at 1–6.

¹³ Roger Huang, *Bitcoin vs. Inflation*, FORBES (May 18, 2020, 2:12 PM), <https://www.forbes.com/sites/rogerhuang/2020/05/18/bitcoin-vs-inflation/?sh=19f3fed81c07> [<https://perma.cc/V53L-AD4A>].

¹⁴ Primavera De Filippi, *The Interplay Between Decentralization and Privacy: The Case of Blockchain Technologies*, J. PEER PROD. (Sept. 2016), <http://peerproduction.net/issues/issue-9-alternative-internets/peer-reviewed-papers/the-interplay-between-decentralization-and-privacy-the-case-of-blockchain-technologies/> [<https://perma.cc/MV5F-4CV2>].

¹⁵ *Id.* at 9.

¹⁶ Yura Yokoyama, *From Money to Culture: The Practical Indeterminacy of Bitcoin’s Values and Temporalities*, 10 ECON. ANTHROPOLOGY 32, 37 (2022).

¹⁷ See NATALIE SMOLENSKI & DAN HELD, BITCOIN POL’Y INST., WHY THE U.S. SHOULD REJECT CENTRAL BANK DIGITAL CURRENCIES (CBDCs) 14–18 (2022), https://uploads-ssl.webflow.com/627aa615676bdd1d47ec97d4/63323238ea73aa551a769b5b_BPI%20CBDC%20Paper%20.pdf [<https://perma.cc/7AKQ-EAH6>] (arguing that the values and policies behind government interest in CBDCs include increased surveillance and restricted financial privacy).

¹⁸ BD. OF GOVERNORS OF THE FED. RSRV. SYS., MONEY AND PAYMENTS: THE U.S. DOLLAR IN THE AGE OF DIGITAL TRANSFORMATION 1 (2022).

¹⁹ *Id.* at 3.

²⁰ SMOLENSKI & HELD, *supra* note 17, at 16.

²¹ Edwin E. Smith & Steven O. Weise, *The Proposed 2022 Amendments to the Uniform Commercial Code: Digital Assets*, BUS. L. TODAY (Mar. 25, 2022), https://www.americanbar.org/groups/business_law/resources/business-law-today/2022-april/the-proposed-2022-amendments/?login [<https://perma.cc/W3UX-TPCG>] (“Since 2019, a Committee appointed by the American Law Institute and the Uniform Law Commission, the sponsoring organizations of the UCC, has been considering and

key issue posed by emerging technology centered on improving the commercial law rules for digital assets such as bitcoin.²²

II. THE PROBLEMATIC TREATMENT OF BITCOIN UNDER EXISTING UCC PROVISIONS

A variety of lenders secure loans using cryptocurrency as collateral.²³ As early as 2014, commercial lawyers and scholars pointed out the potential limiting effect of existing UCC provisions for the negotiability of encumbered cryptocurrency.²⁴ Under the existing UCC provisions, bitcoin (and other cryptocurrency) falls within the definition of a general intangible.²⁵ By way of example, the UCC offers a menu of asset definitions in the context of secured transactions. Different transaction rules apply depending upon which type of asset is pledged as collateral in the transaction.²⁶ One important rule determined by asset classification in the

formulating amendments to the UCC to address emerging technological developments. The Committee has included and worked with both lawyers experienced in UCC matters and lawyers whose practices concentrate on digital assets. The work of the Committee has benefitted enormously from the contributions of American Bar Association advisors and more than 300 observers from academia, trade groups, government agencies, law firms, private technology companies, and foreign participants from multinational law reform organizations or who are active in technology-related law reform efforts in their respective countries.”).

²² See, e.g., UNIF. L. COMM’N, A SUMMARY OF THE 2022 AMENDMENTS TO THE UNIFORM COMMERCIAL CODE (2022) (“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.”); Ronald J. Mann, *Reliable Perfection of Security Interests in Crypto-Currency*, 21 SMU SCI. & TECH. L. REV. 159, 159 (2018) (identifying “the obvious weakness” of the existing legal rules for perfecting cryptocurrency and proposing alternatives); Kevin V. Tu, *Crypto-Collateral*, 21 SMU SCI. & TECH. L. REV. 205, 207 (2018) (identifying areas for potential amendment of Article 9 to deal with crypto-collateral, but noting the difficulty of enacting a uniform amendment).

²³ See, e.g., *Bitcoin Loans*, UNCHAINED CAPITAL, <https://unchained.com/loans/> [<https://perma.cc/WE66-5M7X>]; *Crypto Loans*, BINANCE, <https://www.binance.com/en/loan> [<https://perma.cc/2V9Y-349L>] (offering bitcoin-backed loan services).

²⁴ Robert Lawless, *Is UCC Article 9 the Achilles Heel of Bitcoin?*, CREDIT SLIPS (Mar. 10, 2014, 8:17 PM), <https://www.creditslips.org/creditslips/2014/03/is-ucc-article-9-the-achilles-heel-of-bitcoin.html> [<https://perma.cc/YP9S-QZPK>]; George K. Fogg, *Perkins Coie: The UCC and Bitcoins—Solution to Existing Fatal Flaw*, COINDESK (Sept. 11, 2021, 7:29 AM), <https://www.coindesk.com/markets/2015/01/29/perkins-coie-the-ucc-and-bitcoins-solution-to-existing-fatal-flaw/> [<https://perma.cc/69VJ-R936>]; Jeanne L. Schroeder, *Bitcoin and the Uniform Commercial Code*, 24 U. MIAMI BUS. L. REV. 1, 1 (2016).

²⁵ U.C.C. § 9-102(a)(42) (AM. L. INST. & UNIF. L. COMM’N 2010); Brian M. McCall, *How El Salvador Has Changed U.S. Law by a Bit: The Consequences for the UCC of Bitcoin Becoming Legal Tender*, 74 OKLA. L. REV. 313, 321–22 (2022).

²⁶ See U.C.C. § 9-102(a) (providing definitions for use in Article 9, including definitions of asset types); see also U.C.C. § 9-308(a) (providing the general requirements for perfection: “a security interest

secured transaction context is how a lender perfects a security interest in collateral. A security interest is a property right created by contract and endowed with the special ability to bind third parties under certain circumstances.²⁷ Namely, if a secured lender follows the rules for attachment and perfection of a security interest in the asset class that forms the collateral, when the debtor defaults, the secured lender will obtain first right to recover the property over other creditors.²⁸ The rules for perfection vary by asset class: money can only be perfected by possession,²⁹ deposit accounts can only be perfected by control,³⁰ goods can be perfected by possession or filing a financing statement.³¹ Thus, a key reason for classifying assets as one type or another is to enable creditors to structure transactions in accordance with the applicable rules and assure predictability and stability of outcomes in the creditor-debtor relationship.

With regard to cryptocurrency, then, when a lender takes general intangibles as collateral for a secured loan, the lender may only perfect its security interest by filing a financing statement in the relevant filing office.³² As discussed in further depth below, cryptocurrency's treatment as a general intangible before the 2022 UCC Amendments caused two problems for those lending against cryptocurrency as collateral: (1) crypto-native lenders lacked an optimal method of perfecting cryptocurrency collateral, and (2) cryptocurrency users could only ensure they received unencumbered bitcoin by conducting a search in the Article 9 filing system.

First, crypto-native lenders have expressed concern about filing financing statements for a variety of reasons, including uncertainty regarding

is perfected if it has attached and all of the applicable requirements for perfection in Sections 9-310 through 9-316 have been satisfied"); U.C.C. § 9-310 (providing the general rule for perfection by filing and listing exceptions).

²⁷ Carla L. Reyes, *Creating Cryptolaw for the Uniform Commercial Code*, 78 WASH. & LEE L. REV. 1521, 1532–33 (2021); U.C.C. § 1-201(b)(35) (“‘Security interest’ means an interest in personal property or fixtures which secures payment or performance of an obligation.”).

²⁸ Reyes, *supra* note 27, at 1533–34.

²⁹ U.C.C. § 9-310(b)(6) (providing an exception to perfection by filing for “collateral in the secured party’s possession under Section 9-313”); U.C.C. § 9-312(b)(3) (specifying that “a security interest in money may be perfected only by the secured party’s taking possession under Section 9-313”); U.C.C. § 9-313(a) (naming money as a class of asset that can be perfected by possession).

³⁰ U.C.C. § 9-310(b)(8) (providing an exception to perfection by filing for, among other things, deposit accounts perfected by control under Section 9-314); U.C.C. § 9-312(b)(1) (specifying that “a security interest in a deposit account may be perfected only by control under Section 9-314”); U.C.C. § 9-314(a) (providing for perfection of deposit accounts by control of the collateral under Section 9-104); U.C.C. § 9-104 (defining control in the context of deposit accounts).

³¹ U.C.C. § 9-310(a) (providing the general rule that perfection should be by filing in the absence of an exception); U.C.C. § 9-310(b)(6) (providing an exception to the filing requirement for “collateral in the secured party’s possession under Section 9-313”); U.C.C. § 9-313(a) (naming goods as a class of assets that may be perfected by possession).

³² U.C.C. §§ 9-310(a), 9-313(a).

proper location of filing, issues related to identifying debtors, and concerns about access to collateral on default.³³ As a result, some lenders began taking “control” of the cryptocurrency collateral by, for example, taking the cryptocurrency into a wallet the lender controlled. While this works well for gaining access to the collateral upon default,³⁴ under the existing UCC rules, that lender, without filing a financing statement with the relevant filing office or opting into an Article 8 arrangement, remained an unperfected secured creditor.³⁵ Unperfected secured creditor status, of course, would pose a problem if the debtor defaulted to another, perfected, secured creditor with a security interest in the same collateral, or if the debtor became insolvent and filed for bankruptcy. In either case, the crypto-native lender with control of the bitcoin but no filed financing statement would lose in a contest for the value of the bitcoin collateral to a secured party who filed a financing statement³⁶ or to the bankruptcy trustee.³⁷ Second, the treatment of bitcoin as a general intangible imposes a severe limitation on the negotiability of bitcoin.³⁸ An onward transferee of bitcoin could never be sure without searching the filing system whether the bitcoin they received was encumbered or not.³⁹

Why is it the case that a recipient of cryptocurrency such as bitcoin can never be sure of good title without searching the filing system? Generally, if a debtor transfers collateral without the permission of the creditor, the security interest continues in the collateral and the recipient of the collateral takes ownership of the collateral subject to the security interest, unless

³³ See, e.g., Joseph W. Brammer & Courtney Rogers Perrin, *Lender Considerations for Cryptocurrency and Other Digital Assets*, FROST BROWN TODD: BLOCKCHAIN AND BANKING BLOG (Dec. 10, 2019), <https://frostbrowntodd.com/lender-considerations-for-cryptocurrency-and-other-digital-assets/> [<https://perma.cc/GV98-2QNV>]; Andrew Hinkes, *Why Crypto Needs UCC Article 12*, COINDESK (Oct. 28, 2022, 11:19 AM), <https://www.coindesk.com/layer2/2022/10/28/why-crypto-needs-ucc-article-12/> [<https://perma.cc/HQR4-RZRW>].

³⁴ Lance P. Martin, *Can I Secure a Loan with Bitcoin? Part I*, NAT'L L. REV. (Mar. 18, 2018), <https://www.natlawreview.com/node/94332/printable/pdf> [<https://perma.cc/RH9V-ZRP2>] (explaining that without control of digital assets like bitcoin, it will be difficult to recover from the collateral after default).

³⁵ CLIFFORD CHANCE, DISTRESSED CRYPTOASSETS: ENFORCEMENT OF SECURITY INTERESTS, RESTRUCTURING, AND BANKRUPTCY 3 (2022), <https://www.cliffordchance.com/content/dam/cliffordchance/briefings/2022/07/Distressed%20Cryptoassets%20-%20Enforcement%20Of%20Security%20Interests%2C%20Restructuring%2C%20And%20Bankruptcy.pdf> [<https://perma.cc/A8ZJ-K9L9>].

³⁶ U.C.C. § 9-322(a).

³⁷ 11 U.S.C. § 544(a).

³⁸ Schroeder, *supra* note 24, at 10.

³⁹ *Id.* at 8.

another rule, often called a take-free rule, applies.⁴⁰ General intangibles do not receive the benefit of a take-free rule,⁴¹ so without searching to know if cryptocurrency like bitcoin is potentially subject to a security interest, it is impossible to know if the recipient of any cryptocurrency owns the cryptocurrency free of prior encumbrances.⁴² When an asset such as cryptocurrency is designed to trade freely, and the community using the asset views it as a type of bearer asset, these existing rules pose a significant roadblock to the free transferability of that asset.

Many initially think the answer to the problem of treating bitcoin and other cryptocurrencies as general intangibles lies in making bitcoin “money” under the UCC. Under the UCC, “money” receives treatment as super-negotiable; a recipient of encumbered money from a debtor takes it free of a security interest granted by the debtor.⁴³ However, this solution ultimately remains suboptimal. Making intangible bitcoin “money” for UCC purposes is problematic because a security interest in “money” can only be perfected by possession.⁴⁴ Possession in the UCC is a physical, tangible concept. You must be able to hold a thing in your hands in order to possess it. So, if you make bitcoin “money” for UCC purposes, you make it impossible to perfect a security interest in bitcoin, which is worse for lenders than classifying bitcoin as a general intangible—at least as a general intangible, an actual way to perfect a security interest exists.

⁴⁰ U.C.C. § 9-315(a)(1) (providing the general rule, which is the same before and after the 2022 amendments).

⁴¹ As the ULC explains, “[t]he UCC includes rules to protect innocent parties who receive digital assets subject to competing property claims. For example, imagine a bank robber who uses stolen cash to purchase goods at a store. If the store accepted the cash in exchange for valuable goods without knowing that the cash was stolen, the store is not liable for the bank’s loss even if the cash received is later traced to the robbery. The robber remains liable for the amount stolen.” UNIF. L. COMM’N, *Overview of 2022 Amendments to the Uniform Commercial Code – Emerging Technologies 2* (2022), <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=b7ad2f94-54ff-6021-e372-5b2673385324&forceDialog=0> [<https://perma.cc/T444-VD2A>]. The store is said to “take free” of the bank’s claims to the cash. For examples of take-free principles, see U.C.C. § 9-332(a) (super-negotiability for money) and U.C.C. § 8-303 (Article 8 take-free rule for protected purchasers of certificated or uncertificated securities). For a discussion of how such principles do not apply to general intangibles, see Schroeder, *supra* note 24, at 30 (“This is because Article 9 has no negotiation rule for the buyers of general intangibles that are subject to a perfected security interest.”).

⁴² Schroeder, *supra* note 24, at 8.

⁴³ U.C.C. § 9-332(a).

⁴⁴ *Id.* § 9-312(b)(3).

III. THE 2022 UCC AMENDMENTS RESPECT BITCOIN'S NEGOTIABILITY AND DECENTRALIZATION

The 2022 UCC Amendments offer nuanced resolutions to these issues. First, the amendments create a new category of asset for UCC purposes.⁴⁵ That category of assets is called a “controllable electronic record” (CER).⁴⁶ A CER “means a record stored in an electronic medium that can be subjected to control under Section 12-105.”⁴⁷ In an innovative move, the technology-agnostic 2022 UCC Amendments defer to the technical system of the CER to determine what constitutes control as a technical matter, so that a person has control of a CER as long as the person obtains: (1) the power to enjoy substantially all the benefit of the CER, (2) the exclusive power to prevent others from enjoying “substantially all the benefit” of the CER, and (3) the exclusive power to transfer control of the CER.⁴⁸ Notably, exclusivity is not lost if it is shared by agreement (or by technology—such as multi-signature arrangements).⁴⁹

This definition of control serves two purposes: (1) it serves a definitional purpose—namely, not all electronic records are CERs, just those capable of being subject to the defined term control, and (2) lenders who take cryptocurrency, including bitcoin, as collateral, may now perfect security interests by control.⁵⁰ Indeed, the amendments make control the preferred method of perfection for CERs over filing.⁵¹ This, of course, is exactly what existing industry players had already been doing—just without the legal benefits they would have wanted under the existing provisions of the UCC. The 2022 UCC Amendments seek to bring the law up to speed with what bitcoin-native secured lenders thought was best all along.

Additionally, the 2022 UCC Amendments seek to facilitate the free transferability of CERs such as bitcoin. The 2022 UCC Amendments provide that if a purchaser of a CER is a qualifying purchaser, the purchaser will benefit from a take-free rule; the purchaser gets an unencumbered CER.⁵² Without this take-free rule, bitcoin and other CERs would be at a disadvantage to CBDCs in terms of negotiability. Instead, the 2022 UCC

⁴⁵ Despite some suggestions in the media by state lawmakers and others to the contrary, the UCC definitions apply only to transactions governed by the UCC—generally secured transactions and sales. The definitions have no bearing on the application of securities regulation, commodities regulation, tax law, or any other area of regulation.

⁴⁶ U.C.C. § 12-102(a)(1) (AM. L. INST. & UNIF. L. COMM'N 2022).

⁴⁷ *Id.*

⁴⁸ *Id.* § 12-105(a). Note that a transfer must divest the transferor of control.

⁴⁹ *Id.* § 12-105(b).

⁵⁰ *Id.* § 12-105 cmt. 1.

⁵¹ *Id.* §§ 9-326A, 12-105 cmt. 1.

⁵² *Id.* § 9-331(a).

Amendments preserve the transferability of bitcoin and other CERs in a way that should better enable individuals to freely transact in bitcoin without worrying that they are taking the bitcoin subject to a secret lien. This represents an extremely important change to commercial law rules for the maintenance of bitcoin and cryptocurrencies as freely transferable bearer-like instruments.

In contrast, the 2022 UCC Amendments do not classify CBDCs as CERs. While the 2022 UCC Amendments keep the CER classification for bitcoin and other cryptocurrencies, they create a separate concept of “electronic money” for CBDCs.⁵³ Electronic money includes any “medium of exchange that is currently authorized or adopted by a domestic or foreign government,” but excludes “an electronic record that is a medium of exchange recorded and transferable in a system that existed and operated . . . before the medium of exchange was authorized or adopted by the government” (like El Salvador and bitcoin).⁵⁴

IV. THE CONTROVERSY OVER THE 2022 UCC AMENDMENTS STEMS FROM A MISUNDERSTANDING OF COMMERCIAL LAW

In March 2023, the Governor of South Dakota (the first state government to consider adopting the 2022 UCC Amendments) vetoed the bill that the South Dakota legislature had passed to implement the amendments.⁵⁵ In a press release about her decision to veto her state’s adoption of the 2022 UCC Amendments, Governor Noem declared that her action was really a veto of an “attack on economic freedom.”⁵⁶ In the transmittal letter accompanying her veto of the bill, Noem explained her concern that the 2022 UCC Amendments “adopt[] a definition of ‘money’ to specifically exclude cryptocurrencies like Bitcoin [sic], as well as other digital assets. At the same time, these revisions include . . . [CBDCs] as

⁵³ *Id.* § 1-201(b)(24); UNIF. L. COMM’N, *supra* note 22, at 3, 6–7; UNIF. L. COMM’N, *supra* note 41, at 2; Memorandum from Steven Harris, Reporter, to Comm. on Unif. Com. Code and Emerging Technologies (Apr. 18, 2021), <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=d5260b4-723e-71b8-7bf2-921137ce3411> [https://perma.cc/UX7V-TSUU].

⁵⁴ U.C.C. § 1-201(b)(24) (AM. L. INST. & UNIF. L. COMM’N 2022).

⁵⁵ Austin Goss, *Citing Overreach, Noem Vetoes Banking Regulation Bill*, DAKOTA NEWS NOW (Mar. 10, 2023, 7:26 PM), <https://www.dakotanewsnow.com/2023/03/11/citing-overreach-noem-vetoes-banking-regulation-bill/> [https://perma.cc/GA8G-E93A].

⁵⁶ Press Release, Gov. Noem VETOES Attack on Econ. Freedom, South Dakota Off. of the Governor (Mar. 10, 2023), https://news.sd.gov/news?id=news_kb_article_view&sysparm_article=KB0039891&sys_kb_id=1d1a38781b21a15031b1ebdbac4bcbbf&spa=1 [https://perma.cc/K4XS-DP4F].

money.”⁵⁷ These changes concerned Governor Noem, the letter explained, for two key reasons. First, “excluding cryptocurrencies as money . . . would [make it] more difficult to use cryptocurrency” and thereby “put South Dakota citizens at a business disadvantage.”⁵⁸ Second, the new definition of “money,” in the Governor’s view, “opens the door to the risk that the federal government could more easily adopt a CBDC” because the 2022 UCC Amendments would “create regulations governing something that does not yet exist” in the United States.⁵⁹

These objections were quickly thrust into the national spotlight when Governor Noem took to Tucker Carlson Tonight to explain that she vetoed the bill because it “paved the way for a government-led CBDC and it also banned any other form of cryptocurrency.”⁶⁰ Later, the Heartland Institute would pick up these talking points and produce a “fact sheet” for lawmakers, alleging that the 2022 UCC Amendments “include language that unnecessarily encourages the adoption of a central bank digital currency (CBDC), by laying the foundation for the use of CBDCs in commercial transactions.”⁶¹ This so-called fact sheet also stated that the fix to these alleged deficiencies in the 2022 UCC Amendments would “include protections against the use of CBDCs” and “amend[ing] the UCC so that a CBDC deposited into a bank or Fed account could not be used for commercial purposes under the UCC.”⁶² In other words, the Heartland Institute encouraged imposing a ban on CBDCs through the UCC. Indeed, Florida Governor Ron DeSantis took this idea and ran with it, announcing that he signed a bill that allegedly “prohibits the use of a federally adopted central bank digital currency (CBDC) by excluding it from the definition of money within Florida’s Uniform Commercial Code.”⁶³ The problem with the

⁵⁷ Letter from Kristi Noem, Governor of South Dakota, to the Hon. Hugh M. Bartels, Speaker of the House of South Dakota (Mar. 9, 2023), https://governor.sd.gov/doc/1193_Veto-Letter.pdf [<https://perma.cc/56ZH-M5WL>].

⁵⁸ *Id.*

⁵⁹ *Id.* Ultimately, the South Dakota legislature did not override the veto, and South Dakota’s existing UCC rules remain in place.

⁶⁰ Tucker Carlson Tonight, *Gov. Kristi Noem: This Idea is Paving the Way for the Government to Control Currency*, FOX NEWS (Mar. 10, 2023), <https://www.foxnews.com/video/6322327799112> [<https://perma.cc/H3M4-XU64>].

⁶¹ JUSTIN HASKINS, THE HEARTLAND INST., 6 FACTS EVERY LAWMAKER NEEDS TO KNOW ABOUT THE 2022 UCC AMENDMENTS AND CENTRAL BANK DIGITAL CURRENCIES 1 (2023), <https://heartland.org/wp-content/uploads/2023/03/UCC-Talking-Points-Mar-2023.pdf> [<https://perma.cc/G5H3-RRR6>].

⁶² *Id.*

⁶³ Press Release, Governor Ron DeSantis Signs First-in-the-Nation Legislation to Protect Against Gov’t Surveillance of Pers. Fins., Off. of Governor Ron DeSantis (May 12, 2023), <https://www.flgov.com/2023/05/12/governor-ron-desantis-signs-first-in-the-nation-legislation-to-protect-against-government-surveillance-of-personal-finances/> [<https://perma.cc/7QMU-KTFF>].

objections lodged by Governor Noem, the alleged solutions recommended by the Heartland Institute, and the legislation enacted in Florida is twofold: these approaches (1) rest on misunderstandings of foundational aspects of commercial law, and (2) actually manage to disadvantage cryptocurrency in commerce without taking any real steps to achieve the stated goals of protecting financial privacy or hindering the adoption of CBDCs.

First, the changes to the definition of money in the 2022 UCC Amendments were not drafted to “pave the way” for the creation of a U.S.-issued CBDC. Rather, as with all of the amendments, the changes to the definition of money solve problems that real creditors lending against cryptocurrency as collateral face in their businesses. Namely, as the 2022 UCC Amendments were being drafted and debated, El Salvador adopted bitcoin as legal tender. Arguably, El Salvador’s move made bitcoin “money” under the existing UCC.⁶⁴ Of course, this presents a problem because no creditor can now perfect a security interest in bitcoin, which is intangible. Recall that “money” must be perfected by possession⁶⁵ and possession is a concept for tangible things you can hold in your hands.⁶⁶ The existence of intangible bitcoin as “money” does not fit within that model of perfection by physical possession.

Further, although the critiques claimed that the 2022 UCC Amendments create rules for an asset that does not exist, some countries had already developed CBDCs like the Sand Dollar.⁶⁷ The Sand Dollar, as e-currency authorized by the Bahamian government, clearly falls under the UCC’s existing definition of “money,” leaving lenders unable to perfect security interests in Sand Dollars or other existing CBDCs via possession, because possession, as a physical concept, simply does not work.⁶⁸ As explained in greater detail below,⁶⁹ the extent to which existing UCC rules work for CBDCs depends upon the technical architecture adopted by the issuing government. For example, the Bahamian Sand Dollar must be obtained by users through one or more authorized financial institutions.⁷⁰ To the extent

⁶⁴ McCall, *supra* note 25, at 319–20.

⁶⁵ U.C.C. § 9-312(b)(3).

⁶⁶ Schroeder, *supra* note 24, at 19.

⁶⁷ Solly Boussidan, *The Sand Dollar: Digital Currency of the Bahamas*, GLOB. FIN. MAG. (Oct. 7, 2021), <https://gfmag.com/supplement/sand-dollar-bahamas-digital-currency/> [<https://perma.cc/JS9U-U5US>].

⁶⁸ Notably, when money is deposited in a bank account, it shifts from the classification of money to the classification of deposit account, and perfection can be obtained by control (defined differently than for CERs).

⁶⁹ See *infra* footnotes 76–80 and accompanying text.

⁷⁰ SAND DOLLAR, <https://www.sanddollar.bs/individual> [<https://perma.cc/SDB7-8TXK>]. See Nigeria’s eNaira Design Paper, ENAIRA <https://www.enaira.gov.ng/about/design> [<https://perma.cc/F7F5-CPL8>], for another example.

that those authorized financial institutions simply credit a user's purchase of Sand Dollars to a deposit account, and then the user offers those Sand Dollars as collateral in a secured transaction, the UCC would classify the collateral as a deposit account,⁷¹ and the normal rules for perfecting in deposit accounts would apply.⁷² However, other governments may choose a more decentralized technical architecture for their CBDC issuance. For example, the Eastern Caribbean Central Bank (ECCB) issued the CBDC known as DCash.⁷³ DCash can be held in both custodial and noncustodial wallets.⁷⁴ When held in noncustodial wallets (and therefore not credited to a deposit account), lenders trying to take DCash as collateral would face similar difficulties as lenders taking bitcoin as collateral under the existing UCC rules.⁷⁵ As a result, the 2022 UCC Amendments provide for the perfection of electronic money with technical architectures like DCash by control, similar to a CER.⁷⁶

Ultimately, far from "banning" or "prohibiting" the use of cryptocurrencies such as bitcoin, the 2022 UCC Amendments enable more efficient use of such cryptocurrencies in certain commercial transactions by creating the CER definition and building related rules that respect the decentralized nature of cryptocurrencies. As a form of legal tender, many

⁷¹ U.C.C. § 9-102(a)(54A) (excluding deposit accounts from money, and therefore from perfection by possession), U.C.C. § 9-102(a)(31A) (incorporating by reference the definition of money, for electronic money, including the exclusion of deposit accounts). Working together, these definitions mean that once money and electronic money are credited to a deposit account, they are subject to the rules for deposit accounts and not money or electronic money.

⁷² *Id.* § 9-104 (explaining requirements for control of a deposit account as when "(1) the secured party is the bank with which the deposit account is maintained; (2) the debtor, secured party, and bank have agreed in an authenticated record that the bank will comply with instructions originated by the secured party directing disposition of the funds in the deposit account without further consent by the debtor; or (3) the secured party becomes the bank's customer with respect to the deposit account."); § 9-314(a) (providing for perfection of security interests in deposit accounts by control). To be clear, the 2022 UCC Amendments do not change the rules on deposit accounts so it is currently the case under existing law that secured parties can take CBDCs credited to a deposit account as collateral and have clear rules to follow for perfection of their security interest.

⁷³ Rick Steves, *Eastern Caribbean's Digital Currency DCash Goes Live*, FIN. FEEDS (Apr. 5, 2021, 12:38 PM), <https://financefeeds.com/eastern-caribbeans-digital-currency-dcash-goes-live/> [<https://perma.cc/438Z-JG8F>]; Vipin Bharathan, *DXCD, The Eastern Caribbean Central Bank Digital Money Is Being Readied for Production*, FORBES (Jan. 30, 2021, 4:38 PM), <https://www.forbes.com/sites/vipinbharathan/2021/01/30/dxcd-the-eastern-caribbean-central-bank-money-is-being-readied-for-production/?sh=7186bcd178d2> [<https://perma.cc/VRK8-59G5>].

⁷⁴ Bharathan, *supra* note 73.

⁷⁵ See *supra* notes 32–**Error! Bookmark not defined.** and accompanying text.

⁷⁶ U.C.C. § 9-107. To the extent that other governments issue CBDCs, a noncustodial, decentralized technical architecture would better protect privacy. In this way, the new rules for electronic money do not pick a winner in the fight over CBDCs and certainly do not encourage increased government surveillance or restrictions on financial autonomy.

expect CBDCs to integrate with the existing banking system,⁷⁷ and the existing UCC rules already account for how to perfect in collateral like a deposit account (namely by control, defined in a different way).⁷⁸ Notably, even El Salvador's adoption of bitcoin integrates with the existing banking system similarly to CBDCs.⁷⁹ El Salvador implemented its adoption of bitcoin as legal tender through the Chivo Wallet, a custodial wallet that does not give users control over their private keys.⁸⁰

The 2022 UCC Amendments could have taken their cue from the El Salvador implementation and required that perfection of bitcoin and other cryptocurrency take place via a custodial wallet provider or deposit account. The 2022 UCC Amendments opted for a different approach.⁸¹ Namely, to honor the decentralized nature of cryptocurrencies and blockchain protocols, the 2022 UCC Amendments created the CER classification to differentiate it from electronic money and CBDCs.⁸² It was this concept of electronic money that drew the exceptional ire of Governor Noem, Governor DeSantis, and others.

⁷⁷ Ruadhan O, *How Could Retail and Wholesale CBDCs Impact Businesses in 2023?*, FORBES (Mar. 8, 2023, 8:15 AM), <https://www.forbes.com/sites/forbesbusinesscouncil/2023/03/08/how-could-retail-and-wholesale-cbdc-impact-businesses-in-2023/?sh=5a30d837646a> [<https://perma.cc/C4KN-RAKN>].

⁷⁸ U.C.C. § 9-314 (providing for perfection of security interests in deposit accounts by control); U.C.C. § 9-104(a) (explaining requirements for control of a deposit account as when “(1) the secured party is the bank with which the deposit account is maintained; (2) the debtor, secured party, and bank have agreed in an authenticated record that the bank will comply with instructions originated by the secured party directing disposition of the funds in the deposit account without further consent by the debtor; or (3) the secured party becomes the bank’s customer with respect to the deposit account.”).

⁷⁹ Fernando E. Alvarez, David Argente & Diana Van Patten, *Are Cryptocurrencies Currencies? Bitcoin as Legal Tender in El Salvador* 5 (Nat’l Bureau of Econ. Rsch., Working Paper No. 29968, 2023), https://www.nber.org/system/files/working_papers/w29968/w29968.pdf [<https://perma.cc/9URZ-WGT3>].

⁸⁰ *Id.*

⁸¹ Indeed, the 2022 UCC Amendments took a cue from industry in this regard. The cryptocurrency industry had already indicated their preference that bitcoin not be forced into custodial wallets or deposit accounts in order to obtain the benefits of certain commercial law rules. *See, e.g.*, Letter from the Legislature of the State of Wyoming’s Blockchain Task Force to the Anita Ramasastry, President, Unif. L. Comm’n (Feb. 27, 2019), <https://www.wyoleg.gov/InterimCommittee/2018/S3-Letter%20to%20Uniform%20Law%20Commission.pdf> [<https://perma.cc/UV6A-P795>]. *See generally* Andrea Tinianow, *A Split Emerges in Blockchain Law: Wyoming’s Approach Versus the Supplemental Act*, FORBES (Mar. 7, 2019, 12:41 PM), <https://www.forbes.com/sites/andreatinianow/2019/03/07/a-split-emerges-in-blockchain-law-wyomings-approach-versus-the-supplemental-act/?sh=57adc9ff719a> [<https://perma.cc/M6GV-GCEY>].

⁸² Carla L. Reyes & Andrea Tosato, *Crypto’s Future Is at Stake in a Dispute Over Commercial Law’s Definition of Money*, BARRON’S (Apr. 7, 2023, 4:00 AM) (explaining that one of the primary reasons for creating the CER asset classification was a recognition that “although it is possible to hold Bitcoin and other cryptocurrencies in centralized accounts, users of these digital assets highly value their decentralized nature and often prefer self-custody over reliance on banks and other financial intermediaries”).

The critics of the 2022 UCC Amendments claimed that the definition of electronic money bans the use of cryptocurrency and encourages the establishment of a U.S.-issued CBDC. Such claims misunderstand the role of asset categorization in the UCC and simply reflect an incorrect reading of the plain words of the law. Creating the electronic money classification does not preference CBDCs, but instead deals with unique issues.⁸³ Namely, if electronic money is credited to a deposit account (which, in UCC-speak, means a bank account,⁸⁴ and could include an account at a central bank), then the normal deposit account perfection rules⁸⁵ will apply.⁸⁶ If the electronic money collateral is not credited to a deposit account, then a security interest in electronic money could be perfected by control.⁸⁷ As a practical matter, because of the nature of CBDCs, and the expectation that they will integrate with the existing banking system, the default method of perfection in electronic money in practice will likely be by perfection of deposit accounts, which, to be clear, is the same perfection method available under existing law.

It should come as no surprise, then, as to why treating bitcoin like electronic money and folding it into the definition of “money” would be suboptimal. Namely, such treatment would likely encourage recentralization of bitcoin holdings through deposit accounts or intermediated securities accounts. Such recentralization would be a step in an incredibly wrong direction. Rather, enabling maximum party autonomy by allowing individualized control over a CER to act as a method of perfection for bitcoin

⁸³ *Id.* (“In reality, the UCC amendments hardly resemble their opponents’ portrayal. The core element of the definition of ‘money’ remains unchanged, encompassing ‘a medium of exchange currently authorized or adopted by a domestic or foreign government’ in both paper and electronic forms. The amendments merely aim to clarify the limited scope of certain UCC sections as they apply to CBDCs already issued by some countries and those that other foreign nations might introduce in the future.”).

⁸⁴ U.C.C. § 9-102(a)(29).

⁸⁵ *Id.* §§ 9-104, 9-314(a).

⁸⁶ *Id.* § 9-102(a)(54A) (excluding deposit accounts from money, and therefore from perfection by possession); *Id.* § 9-102(a)(31A) (incorporating by reference the definition of money, for electronic money, including the exclusion of deposit accounts). Working together, these definitions mean that once money and electronic money are credited to a deposit account, they are subject to the rules for deposit accounts and not money or electronic money.

⁸⁷ *Id.* § 9-107. The Eastern Caribbean Central Bank’s DCash represents an existing example, as users can hold DCash in noncustodial wallets and are not required to use deposit accounts. Rick Steves, *Eastern Caribbean’s Digital Currency DCash Goes Live*, FIN. FEEDS (Apr. 5, 2021, 12:38 PM), <https://financefeeds.com/eastern-caribbeans-digital-currency-dcash-goes-live/> [<https://perma.cc/4EHR-HAFG>]. The ill-fated attempt by the Marshall Islands to create the CBDC Sovereign also would have fallen into this category of CBDCs. Notably, a technical architecture that does not rely on banks or centralized wallet providers, but rather on decentralized infrastructure would result in a CBDC with less of the (very real and important) privacy concerns that the critics of the 2022 UCC Amendments worry about. If anything, then, the definition of electronic money and the new method of perfection by control attendant to it benefits decentralization and privacy, not government surveillance.

and other cryptocurrencies represents a more beneficial approach, as signaled by the fact that crypto-native secured lenders employed this approach before the 2022 UCC Amendments project began. The separation between electronic money and CERs, far from somehow favoring CBDCs, respects existing commercial practice and the decentralized nature of bitcoin and other cryptocurrency.

In the end, despite claims that the 2022 UCC Amendments disadvantage decentralized cryptocurrencies or somehow “ban” their use, the amendments actually put cryptocurrencies on an even commercial law playing field with other, more traditional assets. This would be quite advantageous for cryptocurrency users and creditors lending against cryptocurrency as collateral. Arguably, a state’s failure to adopt the amendments disadvantages cryptocurrency businesses in that state by leaving their transactions subject to the problematic existing rules.

Finally, to the extent that state legislatures are genuinely concerned about privacy and surveillance issues related to CBDCs, attempts to “ban” CBDCs “within” the UCC by excluding them from the definition of money are worse than disadvantageous; they are disingenuous.⁸⁸ The UCC is a private law statute; it is not regulatory in nature.⁸⁹ The UCC does not ban assets or prohibit anyone from transacting in any kind of asset.⁹⁰ Rather, recall that the purpose of UCC definitions is to help creditors classify the asset involved in the transaction so as to identify the appropriate rules for use in structuring predictable and stable transactions. All exclusion of an asset from a particular definition achieves is to move that asset to a different definition. For example, in Florida, where CBDCs are excluded from the definition of money, transactions in Florida using CBDCs may continue to be undertaken. If the CBDC is a Bahamian Sand Dollar held in a deposit account, the parties simply look to the rules in the Florida UCC related to deposit accounts to structure their transaction. If the CBDC used in the transaction is a Bahamian Sand Dollar not held in a deposit account or ECCB DCash held in a decentralized wallet, those CBDCs would be general intangibles in Florida, and the parties would use the rules related to general intangibles to structure their transaction.

⁸⁸ Jesse Hamilton, *Florida’s DeSantis Waging Toothless Campaign Against Digital Dollars*, *Lawyers Say*, COINDESK (May 19, 2023, 10:24 AM), <https://www.coindesk.com/policy/2023/05/17/floridas-desantis-waging-toothless-campaign-against-digital-dollars-lawyers-say/> [https://perma.cc/2JZR-UHRX].

⁸⁹ *Id.*

⁹⁰ *Id.* (“The UCC gives both sides of transactions basic legal protections, Tosato explained, but it doesn’t tell them what they can or can’t exchange. That’s the job of regulations or criminal codes.” (quoting Andrea Tosato)).

The UCC simply is not the place to encourage, discourage, or prohibit the use of a certain medium of exchange—that is not within its remit. The 2022 UCC Amendments do not encourage the implementation of a U.S.-issued CBDC, and changes to the UCC cannot effectively “ban” or “prohibit” private parties from transacting in CBDCs if they choose to do so. The Florida law incorrectly promoted as protecting Floridians from CBDCs and championing their right to financial privacy does nothing of the sort. Instead, the entire controversy rests on an unfamiliarity with commercial law. If lawmakers across the nation fall victim to the same misunderstandings as South Dakota and Florida, the cryptocurrency industry will suffer ill-fitting commercial law rules for no reason, since the opposition to the amendments failed to enact any real deterrent effect on CBDCs.⁹¹

CONCLUSION

The worries raised about the UCC including CBDCs in the definition of “money” while excluding bitcoin⁹² center on a concern that other laws might copy the definition for other purposes.⁹³ In this regard, the private law nature of the UCC plays an important role.⁹⁴ The UCC is not regulatory in nature, and the definition of “money” in the UCC has no direct impact on the definition of “money” for other legal purposes such as in taxes, anti-money laundering, money transmitter regulations, security regulations, commodities regulations, or even which mediums of exchange serve as U.S. legal tender.⁹⁵ The definition of “money” in the UCC serves a narrow commercial law purpose: to provide predictability and stability in commercial transactions relating to a specific type of medium of exchange. The unique and decentralized nature of bitcoin and other cryptocurrency requires a different approach to enabling stable and predictable commercial transactions involving those assets.

The 2022 UCC Amendments seek to preserve the decentralized nature of bitcoin and other cryptocurrencies, enable secured lenders to enjoy the legal benefits of their existing commercial practices, and protect the negotiability of bitcoin by allowing onward transferees to take bitcoin and

⁹¹ A more thoughtful deterrent to CBDCs at the state level (which might actually have some teeth and staying power) might revolve around targeted financial privacy legislation. Particularly in Florida, which enshrines a right to privacy in the state constitution.

⁹² Horowitz, *supra* note 7.

⁹³ *Id.* (e.g., using the definition to “ban” bitcoin).

⁹⁴ Kara Bruce, Christopher K. Odinet & Andrea Tosato, *The Private Law of Stablecoins*, 54 ARIZ. STATE L.J. 1073, 1149 (2023) (identifying the bodies of private law as including property law, contract law, and corporate law).

⁹⁵ The statute that achieves that feat, making the dollar legal tender in the United States, is the Coinage Act of 1965, Pub. L. No. 89-81, 79 Stat. 254.

cryptocurrencies free of existing encumbrances. Without an understanding of the role that the definition of “money” plays in the UCC, however, bitcoin’s proponents may miss the opportunity to support a law that respects some of bitcoin’s core values. Although unfamiliarity with blockchain-related terminology often motivates suboptimal legislation and regulatory schemes for cryptocurrency,⁹⁶ smart contracts,⁹⁷ and other emerging technology,⁹⁸ this battle over the 2022 UCC Amendments stems from the opposite: unfamiliarity with commercial law among proponents of emerging technology. Emerging technology’s language wars, it seems, run both ways.

⁹⁶ See Reyes, *supra* note 10, at 1193.

⁹⁷ See Carla L. Reyes, *Emerging Technology’s Language Wars: Smart Contracts*, 2022 WIS. L. REV. FORWARD 85 (2022).

⁹⁸ See Carla L. Reyes, *Emerging Technology’s Language Wars: AI and Criminal Justice*, 5 J.L. & INNOVATION 1 (2022).