

2024

Article 12 and the Negotiability of Cryptocurrencies

Jonathan A. Marcantel

Follow this and additional works at: <https://scholarship.law.campbell.edu/clr>

Recommended Citation

Jonathan A. Marcantel, *Article 12 and the Negotiability of Cryptocurrencies*, 46 CAMPBELL L. REV. 157 (2024).

This Article is brought to you for free and open access by Scholarly Repository @ Campbell University School of Law. It has been accepted for inclusion in Campbell Law Review by an authorized editor of Scholarly Repository @ Campbell University School of Law.

Article 12 and the Negotiability of Cryptocurrencies

JONATHAN A. MARCANTEL*

ABSTRACT

In July 2022, the Uniform Law Commission published its proposed changes to the Uniform Commercial Code. Central to those changes was the creation of Article 12: a new article intended to govern cryptocurrencies, among other things. The changes, if adopted by states, will steer cryptocurrencies towards the type of negotiability common for instruments under Article 3—a result likely to encourage the use of cryptocurrencies as security devices and concomitantly improve their marketability. This article argues that is a positive movement, and states should adopt the Revisions.

ABSTRACT	157
INTRODUCTION	158
I. THE CURRENT TREATMENT OF CRYPTOCURRENCIES	158
<i>A. Cryptocurrencies Under Current Article 9 as Traditional Security Devices</i>	<i>159</i>
<i>B. Current Events and Further Chaos in the Code</i>	<i>162</i>
II. THE 2022 REVISIONS’S TREATMENT OF CONTROLLABLE ELECTRONIC RECORDS.....	164
<i>A. The Creation of a New Collateral Description.....</i>	<i>165</i>
<i>B. The Perfection and Priority Rules for Controllable Electronic Records.....</i>	<i>166</i>
1. <i>Non-Temporal Priority for Qualified Purchasers.....</i>	<i>168</i>
2. <i>The Shelter Principle.....</i>	<i>171</i>
III. ENCOURAGING THE USE AND MARKETABILITY OF CRYPTOCURRENCIES	173
<i>A. The Revisions Create Certainty</i>	<i>173</i>
1. <i>Certainty Through the Definition of “Money”</i>	<i>174</i>

*Professor of Law, Charleston School of Law.

2. <i>Certainty Through the Creation of a New Collateral Type</i>	175
B. <i>The Revisions Alleviate Non-Inherent Risk</i>	177
CONCLUSION	178

INTRODUCTION

In July 2022, the Uniform Law Commission released its 2022 proposed changes to the Uniform Commercial Code (“the Code”). While the changes are manifold, the centerpiece of those proposed changes was the newly-created Article 12. By its terms, Article 12 governs controllable electronic records. But in layman’s speak, Article 12 governs, among other things, cryptocurrencies. Perhaps the most striking change to the Code’s treatment of cryptocurrencies under 2022 proposed changes (“the Revisions”) is the movement towards a negotiability of cryptocurrencies that is on par with instruments under Article 3. This Article argues that this movement is likely to both encourage the use of cryptocurrencies and improve their marketability. In that vein, this Article proceeds in four parts. Part I discusses the current treatment of cryptocurrencies in jurisdictions that have not adopted the 2022 Revisions. Part II discusses the newly created collateral—controllable electronic records—and its perfection and priority protocols. Part II additionally examines the negotiability of cryptocurrencies under the Revisions and likens the negotiability granted under Articles 9 and 12 to that of instruments under Article 3. Part III argues that negotiability is likely to encourage the use of cryptocurrencies and improve their marketability. Finally, this Article concludes that the proposed Revisions are a positive movement in the law, and that states should adopt them.

I. THE CURRENT TREATMENT OF CRYPTOCURRENCIES

Until recently, the Code’s treatment of cryptocurrencies was relegated to their use as Article 9 security interests. But recent events led to both the inclusion of cryptocurrencies under the definitional structure of Article 1, as well as to concomitant alterations in the manner that cryptocurrencies are characterized under Article 9. These two changes have led to negative movements in the treatment of cryptocurrencies and in their overall use, both as security devices and in the general sense.

A. Cryptocurrencies Under Current Article 9 as Traditional Security Devices

The Code was never designed to directly address the existence of cryptocurrencies. Thus, none of currently adopted pre-Revisions articles provide direct coverage for assets with the particular characteristics of cryptocurrencies. Rather, at least in the traditional sense, the Code’s current coverage of cryptocurrencies is relegated to residual treatment under Article 9 as traditional security devices.

A cursory review of the scope provisions for any individual article of the Code yields negative coverage for personal property with the peculiar characteristics of cryptocurrencies. For example, cryptocurrencies cannot be “goods” under Article 2 because cryptocurrencies are intangibles and thus not “moveable.”¹ Similarly, cryptocurrencies are not “instruments” under Article 3 because they are neither “drafts” nor “notes.”² The list could continue, but the result is that the only traditional coverage of cryptocurrencies was within the residual aspects of Article 9 and, even then, only as traditional security devices.

The general purpose of Article 9 is to create collateral descriptions for various types of personal property to ultimately provide perfection protocols and priority rules for each type of collateral.³ But the drafters envisioned situations where a debtor might encumber personal property that was not otherwise defined within the collateral definitions of section 9-102. Thus, the drafters created a catch-all category of personal property—“general intangibles.”⁴

1. See U.C.C. § 2-105(1) (AM. L. INST. & UNIF. L. COMM’N 2002) (“‘Goods’ means all things (including specially manufactured goods) which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities (Article 8) and things in action.”).

2. Article 3 applies to negotiable instruments. *Id.* § 3-102(a) (“This Article applies to negotiable instruments.”). A negotiable instrument is “an unconditional promise or order to pay a fixed amount of money . . .” *Id.* § 3-104(a) (2002). Thus, Article 3 only governs notes (“promises”) and drafts (“orders”). See *id.* § 3-103(a)(9) (“‘Promise’ means a written undertaking to pay money signed by the person undertaking to pay.”); *id.* § 3-103(a)(6) (“‘Order’ means a written instruction to pay money signed by the person giving the instruction.”).

3. See generally JAMES J. WHITE & ROBERT S. SUMMERS, UNIFORM COMMERCIAL CODE § 30:2 (6th ed. 2021) (discussing the importance of properly defining collateral and how attachment and perfection are necessary for a creditor’s priority).

4. See U.C.C. § 9-102(a)(42) (AM. L. INST. & UNIF. L. COMM’N 2010) (“‘General intangible’ means any personal property, including things in action, other than accounts, chattel paper, commercial tort claims, deposit accounts, documents, goods, instruments, investment property, letter-of-credit rights, letters of credit, money, and oil, gas, or other minerals before extraction.”). See also Kevin V. Tu, *Crypto-Collateral*, 21 SMU SCI. &

The easiest way to understand the operation of general intangibles is to recognize it as a residual definition of personal property.⁵ That is, in the event personal property is otherwise subject to Article 9 but is not already defined within section 9-102, then the personal property is automatically characterized as a general intangible.⁶ For example, rights associated with trademarks and patents are characterized as general intangibles because they do not otherwise fall within a collateral description articulated in section 9-102.⁷ Like intellectual property rights, cryptocurrencies are not otherwise defined within the collateral definitions of section 9-102.⁸ As a result, cryptocurrencies fall within the residual category of general intangibles.⁹ Although some types of Article 9 collateral are subject to multiple perfection protocols, general intangibles as original collateral can only be perfected by filing a financing statement pursuant to section 9-310.¹⁰ As a result, the current treatment of cryptocurrencies as traditional security devices subjects them to temporal priority rules.¹¹ Under Article 9's temporal priority rules, priority is given to the first to file or perfect.¹² But because filing is the only method of perfecting a security interest in general

TECH. L. REV. 205, 219 (2020) (“Under Article 9 of the U.C.C., general intangibles exist as a broad catch-all collateral type. If the collateral is personal property, and it does not fall into one of the other collateral types defined by Article 9, then it is a general intangible.”).

5. Gary D. Spivey, Annotation, *Definition and Treatment of “General Intangibles” Under Revised Article 9 of Uniform Commercial Code*, 33 A.L.R. 7th Art. 4, §§ 1–2 (2017).

6. *Id.*

7. *See id.* §§ 13–14.

8. *E.g.*, Tu, *supra* note 4, at 219.

9. *Id.* *See generally* Jeanne L. Schroeder, *Bitcoin and the Uniform Commercial Code*, 24 U. MIA. BUS. L. REV. 1, 3–46 (2016) (arguing cryptocurrencies are not within the collateral types described in Article 9 and are thus properly classified as general intangibles).

10. U.C.C. § 9-310(a) (AM. L. INST. & UNIF. L. COMM’N 2010) (“Except as otherwise provided in subsection (b) and Section 9-312(b), a financing statement must be filed to perfect all security interests”); *see also, e.g.*, *In re Newman*, 993 F.2d 90, 92–93 (5th Cir. 1993) (holding annuities are general intangibles that can only be perfected by filing a financing statement); *Holiday Intervals, Inc. v. Brown*, 931 F.2d 500, 502 (8th Cir. 1991) (explaining that land-sale installment contracts are general intangibles, and thus, a secured party must file a financing statement to perfect a security interest in them as original collateral).

11. U.C.C. § 9-322(a).

12. *Id.* (“Except as otherwise provided in this section, priority among conflicting securing interests and agricultural liens in the same collateral is determined according to the following rules: (1) Conflicting perfected security interests and agricultural liens rank according to priority in time of filing or perfection. Priority dates from the earlier of the time a filing covering the collateral is first made or the security interest or agricultural lien is perfected, if there is no period thereafter when there is neither filing nor perfection.”).

intangibles, priority is given to the first to file.¹³ And, importantly, there is no “take free” rule that would upset this priority protocol.¹⁴ As a result, if cryptocurrencies that are subject to security interests are sold, the security interest will continue to attach to both the cryptocurrency as well as identifiable proceeds.¹⁵

The problem with the characterization of cryptocurrencies as general intangibles, even before recent events created chaos,¹⁶ lies within the subsequent sale of a general intangible following the attachment of a security interest. Unless some Article 9 take-free provision applies, the sale of any collateral will constitute a disposition that generates proceeds.¹⁷ Thereafter, the security interest will both continue to attach to the underlying security interest (the cryptocurrency) as well as to any identifiable proceeds of the disposition.¹⁸ That continued attachment of a security interest following a sale creates havoc for cryptocurrency investors, even before the chaos created by recent events.

Because cryptocurrencies are general intangibles, once a cryptocurrency is subject to a security interest, it will always remain subject

13. *See id.* §§ 9-310(a)–(b), 9-322(a).

14. There is a take-free rule for licensees of general intangibles, but a purchaser of cryptocurrencies is not a licensee. *See id.* § 9-321(b) (“A licensee in ordinary course of business takes its rights under a nonexclusive license free of a security interest in the general intangible created by the licensor, even if the security interest is perfected and the licensee knows of its existence.”).

15. *See id.* § 9-315(a)(1)–(2) (“Except as otherwise provided in this article and in Section 2-403(2): (1) a security interest or agricultural lien continues in collateral notwithstanding sale, lease, license, exchange, or other disposition thereof unless the secured party authorized the disposition free of the security interest or agricultural lien; and (2) a security interest attaches to any identifiable proceeds of collateral.”); *id.* § 9-102(64) (definition of proceeds).

16. *See infra* Part I.B.

17. U.C.C. § 9-315(a). There are a number of take-free provisions in Article 9 that functionally unseat this provision. *See, e.g., id.* § 9-317(b) (“Except as otherwise provided in subsection (e), a buyer, other than a secured party, of tangible chattel paper, tangible documents, goods, instruments, or a security certificate takes free of a security interest or agricultural lien if the buyer gives value and receives delivery of the collateral without knowledge of the security interest or agricultural lien and before it is perfected.”); *id.* § 9-320(a) (“Except as otherwise provided in subsection (e), a buyer in the ordinary course of business . . . takes free of a security interest created by the buyer’s seller, even if the security interest is perfected and the buyer knows of its existence.”); *id.* § 9-332(a) (“A transferee of money takes the money free of a security interest unless the transferee acts in collusion with the debtor in violating the rights of the secured party.”).

18. *Id.* § 9-315(a)(2) (“[A] security interest attaches to any identifiable proceeds of collateral.”).

to that security interest unless the security interest is released.¹⁹ That basic rule limits the negotiability of cryptocurrencies because purchasers of cryptocurrencies could never be sure that a cryptocurrency was not subject to an unperfected security interest. As a result, the Code's current treatment of cryptocurrencies functions to limit their growth as both security devices and personal property.

B. Current Events and Further Chaos in the Code

While perhaps imperfect, the traditional treatment of cryptocurrencies characterized them as general intangibles.²⁰ But current events began to alter that traditional treatment, creating further chaos in the treatment of cryptocurrencies under the Code. In particular, foreign governments began adopting Bitcoin as legal tender, moving Bitcoin's collateral characterization from general intangible to money and wreaking havoc in Article 9's perfection rules.

In 2021, El Salvador adopted Bitcoin as an official currency.²¹ Thereafter, in 2022, the Central African Republic adopted Bitcoin as legal tender.²² Other foreign governments are considering doing the

19. *Id.* § 9-315(a); see also 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, 322–23 (2022) (“The one advantage of Bitcoin becoming money is that a transferee of Bitcoin would take free of any security interest in the Bitcoin (unless acting in collusion to defraud the secured party). When Bitcoin was a general intangible, security interests continued notwithstanding sale of the Bitcoin (unless the secured party consented to the transfer free of its interest). Investment advisor Michael Gordon noted that when Bitcoin was a general intangible, ‘it [was] unclear how a transferee would confirm that all liens that previously attached to the relevant Bitcoins [had] been released.’” (internal footnotes omitted) (quoting Michael R. Gordon et al., *Bitcoin to Blockchain: How Laws and Regulations are Conforming to and Impacting the Use of Virtual Currency*, N.Y.C. BAR CTR. FOR CONTINUING LEGAL EDUC., Apr. 28, 2016, at V.B.3.e.iv, 2016 WL 3019299)).

20. See Tu, *supra* note 4, at 219 n.90, for references discussing the imperfect nature of the traditional characterization of cryptocurrencies.

21. Oscar Lopez & Ephrat Livni, *In Global First, El Salvador Adopts Bitcoin as Currency*, N.Y. TIMES (Oct. 7, 2021), <https://www.nytimes.com/2021/09/07/world/americas/el-salvador-bitcoin.html> [<https://perma.cc/4KJL-SANJ>].

22. Ryan Browne, *Central African Republic Becomes Second Country to Adopt Bitcoin as Legal Tender*, CNBC (Apr. 29, 2022, 3:43 AM), <https://www.cnbc.com/2022/04/28/central-african-republic-adopts-bitcoin-as-legal-tender.html#:~:text=The%20Central%20African%20Republic%20has,a%20statement%20from%20the%20presidency> [<https://perma.cc/VBT2-A7UT>]. The legislation was subsequently repealed. See Jonathan Buck, *The Fall of Bitcoin in the Central African Republic: Why This Legal Tender Experiment Failed*, BITCOIN MAG. (Apr. 30, 2023), <https://bitcoinmagazine.com/culture/why-bitcoin-failed-in-car> [<https://perma.cc/SE3A-TX48>].

same.²³ Irrespective of the wisdom of those decisions,²⁴ they have created chaotic waves within the structure of the entire Uniform Commercial Code. More specifically, they have created chaotic waves in Article 1’s definitional structure as it applies to Article 9.

Article 9 does not define the word “money.”²⁵ As a result, the definition of “money” in Article 1 controls that word’s meaning in Article 9.²⁶ Under Article 1, money is defined as “a medium of exchange authorized or adopted by a domestic or foreign government.”²⁷ Stated differently, money is any medium of exchange authorized or adopted by a sovereign. Once El Salvador adopted Bitcoin as a form of currency, Bitcoin technically became money within that word’s definition in Article 1.²⁸ As a result, Bitcoin’s characterization changed from a general intangible to money under Article 9.²⁹ On its face, that recharacterization is perhaps dull. But in the context of Article 9’s perfection rules, it wreaks havoc.

23. See Noah Berman, *What Does the Cryptocurrency Decline Mean for Bitcoin Countries?*, COUNCIL ON FOREIGN RELS. (Dec. 21, 2022, 9:13 AM), <https://www.cfr.org/in-brief/what-does-cryptocurrency-decline-mean-bitcoin-countries> [<https://perma.cc/LMB3-AVTT>] (stating the prime minister of St. Kitts & Nevis was considering adopting Bitcoin as legal tender).

24. Commentators have expressed concern over the wisdom of countries adopting cryptocurrencies as official currency. *Cf.*, Steve H. Hanke & Manuel Hinds, *El Salvador’s Big Bitcoin Mistake*, WALL ST. J. (June 22, 2021, 5:58 PM), <https://www.wsj.com/articles/el-salvadors-big-bitcoin-mistake-11624399097> [<https://perma.cc/SW9L-4ZF5>] (discussing El Salvador’s adoption of cryptocurrency as an official currency); MacKenzie Sigalos, *El Salvador’s \$425 Million Bitcoin Experiment Isn’t Saving the Country’s Finances*, CNBC (June 25, 2022, 9:00 AM), <https://www.cnbc.com/2022/06/25/el-salvador-bitcoin-experiment-not-saving-countrys-finances.html> [<https://perma.cc/645V-5BSU>] (“Bitcoin doesn’t solve any of El Salvador’s important economic problems.”).

25. Brian M. McCall, *Money, Money, Everywhere but Not a Drop to Secure: A Proposal for Amending the Perfection Rules for Security Interests in Money and Deposit Accounts*, 74 Tenn. L. Rev. 669, 677 (2007). The 2022 amendments alter this, such that Article 9 has its own definition of money, albeit one that is still reliant upon Article 1’s definition. Under the 2022 amendments, “[m]oney’ has the meaning in Section 1-201(b)(24), but does not include (i) a deposit account or (ii) money in an electronic form that cannot be subjected to control under Section 9-105A.” REVISED U.C.C. § 9-102(a)(54A) (AM. L. INST. & UNIF. L. COMM’N 2022).

26. McCall, *supra* note 25, at 677; *see* U.C.C. § 1-102 (AM. L. INST. & UNIF. L. COMM’N 2010) (“This article applies to a transaction to the extent that it is governed by another article of [the Uniform Commercial Code].”).

27. U.C.C. § 1-201(b)(24) (AM. L. INST. & UNIF. L. COMM’N 2001).

28. McCall, *supra* note 19, at 320 (“Now that El Salvador has adopted Bitcoin as money, for all purposes in the UCC, money includes Bitcoin.”).

29. *Id.* at 321–22.

As stated earlier, Article 9 creates a system of defining collateral and provides rules for the attachment, perfection, and priority of that collateral.³⁰ In that system, money has a unique place. A secured party can only perfect a security interest in money by possession.³¹ Although possession is not defined within Article 9 in the general sense, the uniform understanding of possession refers to physical possession.³² That interpretation is partly due to the fact that under Article 9, only tangible personal property is subject to attachment and perfection by possession.³³

Once Bitcoin's collateral characterization converted from a general intangible to money, it became "impossible to perfect a security interest in [it]."³⁴ Of course, Bitcoin cannot be physically possessed, as it is intangible, leading to the unintended consequence that a secured party cannot perfect a security interest in Bitcoin.³⁵ Taken together, the characterization of cryptocurrencies, under either the traditional characterization or under the more recent characterization applying to Bitcoin, limits its negotiability and its usefulness, either as personal property or as traditional security devices.

II. THE 2022 REVISIONS'S TREATMENT OF CONTROLLABLE ELECTRONIC RECORDS

Traditionally, cryptocurrencies were characterized as general intangibles, but the Uniform Law Commission started a movement to create a separate system for cryptocurrencies. At least in part, the movement was catalyzed by the potential for—and sometimes the actuality of—disruptions

30. See WHITE & SUMMERS, *supra* note 3, § 30:2.

31. U.C.C. § 9-312(b)(3) (AM. L. INST. & UNIF. L. COMM'N 2010); *see id.* § 9-313(a); *see also* McCall, *supra* note 19, at 321–22 ("Prior to El Salvador's legislative action, Bitcoin was a 'general intangible' under the UCC. A secured creditor can perfect a security interest in a general intangible by filing a UCC-1 financing statement that identifies the Bitcoin as such or simply as a 'general intangible.' A security interest in 'money,' however, can be perfected only by possession."); Tu, *supra* note 4, at 220 ("In fact, the only way to perfect a security interest in money is via possession by the secured party.").

32. See WHITE & SUMMERS, *supra* note 3, at § 31:19 ("One who reflects on the nature of the kinds of collateral covered by Article 9 will appreciate that the pledge (in which the creditor possesses the collateral) is well suited to certain kinds of collateral but wholly unsuited to others. Since the creditor's possession . . . puts third parties on notice, the collateral must be the type that one can see, touch, and move. The collateral must have a physical embodiment that is recognizable as the exclusive representation of the right.").

33. See U.C.C. § 9-313(a) ("Except as otherwise provided in subsection (b), a secured party may perfect a security interest in tangible negotiable documents, goods, instruments, money, or tangible chattel paper by taking possession of the collateral.").

34. McCall, *supra* note 19, at 322.

35. *See id.*

of the existing system by foreign sovereigns. Thus, and at least in part to ameliorate those disruptions, the Uniform Law Commission released Article 12 which included the creation of a new type of collateral: “controllable electronic records.”³⁶ This new system, as it pertains to cryptocurrencies, has three primary facets. First, the newly created controllable electronic records effectively removed the uncertainty surrounding the characterization of cryptocurrencies.³⁷ Second, the Revisions created a new perfection protocol for controllable electronic records.³⁸ Third, the Revisions created new priority rules for controllable electronic records that are subject to “take free” protocols.³⁹

A. The Creation of a New Collateral Description

Although the Uniform Law Commission had already begun its work in drafting Article 12, current events became the catalyst for some of the revisions.⁴⁰ Under Article 12, the Uniform Law Commission created a new type of collateral: controllable electronic records.

Under the Revisions, a controllable electronic record is defined as “a record stored in an electronic medium that can be subjected to control under Section 12-105.”⁴¹ Section 12-105 then provides the definition of “control” for controllable electronic records.⁴² Pursuant to section 12-105(a), a secured party has control over a controllable electronic record if four

36. See REVISED U.C.C. § 12-102(a)(1) (AM. L. INST. & UNIF. L. COMM’N 2022). The Uniform Law Commission began its work on the Revisions in 2019. See PREFATORY NOTE TO UNIFORM COMMERCIAL CODE AMENDMENTS (2022), note 1 (AM. L. INST. & UNIF. L. COMM’N 2022). Nevertheless, the comments to the Amendments make clear that the Amendments were intended, at least in part, to solve the problems associated with sovereign adoption of cryptocurrencies as official currencies. See REVISED U.C.C. § 9-102 cmt. 12A. More specifically, the Amendments create a type of collateral entitled “electronic money” intended to supplant the potential of cryptocurrencies becoming “money” under Article 1. See *id.* The amended perfection and priority protocols for electronic money then follow the perfection and priority protocols for controllable electronic records. See *id.* (“A security interest in electronic money as original collateral can be perfected only by control. . . . The requirements for obtaining control of electronic money are essentially the same as those for obtaining control of a controllable electronic record under Article 12.” (citations omitted)).

37. See PREFATORY NOTE TO UNIFORM COMMERCIAL CODE AMENDMENTS (2022), note 2.a. (2022).

38. See *id.* at note 2.b.

39. See *id.*

40. See McCall *supra* note 19, at 314.

41. REVISED U.C.C. § 12-102(a)(1). The word “record” is an existing defined term under Article 9. Pursuant to Article 1, “record” means information that is “retrievable in perceivable form.” U.C.C. § 1-201(b)(31) (AM. L. INST. & UNIF. L. COMM’N 2010).

42. REVISED U.C.C. § 12-105; see also *id.* § 12-102(a)(1).

conditions are met.⁴³ First, the electronic record or system must give a person the “power to avail itself of substantially all the benefit from the electronic record.”⁴⁴ Second, the electronic record or system must give the person “exclusive power . . . to prevent others from availing themselves of substantially all the benefit from the electronic record[.]”⁴⁵ Third, the electronic record or system must give the person “exclusive power to transfer control”⁴⁶ Fourth, the person in control must be able to identify the electronic record “any way, including by name, identifying number, cryptographic key, office, or account number”⁴⁷

This article could spend pages unpacking the nuances created by the rules regarding control, but for purposes of this article, it is sufficient to say that control pursuant to section 12-105(a) is consistent with basic notions of property ownership. More specifically, if control is to exist, a person must have the power to use, exclude, and transfer.⁴⁸ Depending on the facets of the transaction, most cryptocurrencies would meet these requirements.⁴⁹ As a result, most cryptocurrencies are now characterized as controllable electronic records.

B. The Perfection and Priority Rules for Controllable Electronic Records

Because cryptocurrencies are now characterized as controllable electronic records, they are no longer solely subject to the perfection and priority rules of general intangibles.⁵⁰ Instead, Revised Article 9 permits cryptocurrencies to be perfected by filing—the same method available for

43. *Id.* § 12-105(a).

44. *Id.* § 12-105(a)(1)(A).

45. *Id.* § 12-105(a)(1)(B)(i).

46. *Id.* § 12-105(a)(1)(B)(ii).

47. *Id.* § 12-105(a)(2).

48. *See, e.g.,* Natalie M. Banta, *Property Interests in Digital Assets: The Rise of Digital Feudalism*, 38 CARDOZO L. REV. 1099, 1103 (2017) (describing the incidents of ownership as the rights to “exclude, possess, use, and transfer”).

49. *See, e.g.,* PREFATORY NOTE TO ARTICLE 12, note 1 (AM. L. INST. & UNIF. L. COMM’N 2022) (“Article 12 creates a legal regime that is meant to apply more broadly than to electronic (intangible) assets that are created using existing technologies such as distributed ledger technology (DLT), including blockchain technology, which records transactions in bitcoin and other digital assets”); *id.* at note 3 (using Bitcoin as an example of the “take free” rules of Article 12).

50. Under the Revisions, controllable electronic records remain a subset of general intangibles. *See* REVISED U.C.C. § 9-102(a)(42) (“‘General intangible’ means any personal property, including things in action, other than accounts, chattel paper, commercial tort claims, deposit accounts, documents, goods, instruments, investment property, letter-of-credit rights, letters of credit, money, and oil, gas, or other minerals before extraction. The term includes controllable electronic records, payment intangibles, and software.”).

general intangibles—as well as by acquiring control.⁵¹ Furthermore, Article 12 creates a system of priority for cryptocurrencies that provides the facets of negotiability.⁵² More specifically, Article 12 grants qualified purchasers non-temporal priority over pre-existing security interests and relieves qualified purchasers from exposure to most defenses that could be brought by other previous purchasers.⁵³

Revised Article 9 provides the perfection protocols for controllable electronic records. Pursuant to Revised Article 9, a secured party can perfect a security interest in controllable electronic records by either filing with the Secretary of State’s Office pursuant to section 9-312(a)⁵⁴ or by obtaining control pursuant to § 9-314(a).⁵⁵ Nevertheless, the perfection protocols are not functional equals in terms of their priority.

As explained earlier, before the Revisions, cryptocurrencies were solely characterized as general intangibles.⁵⁶ Similarly, the singular perfection protocol for cryptocurrencies was filing with the Secretary of State’s Office.⁵⁷ The Revisions continue this perfection protocol as an option for controllable electronic records but also permit a controllable electronic record to be perfected by control.⁵⁸ Thus, a secured party has a choice whether to perfect by filing or by acquiring control. Still, the choice is not between two functional equals due to the priority provisions of both Revised Article 9 and Article 12.

When multiple perfection methods exist for any type of collateral, Article 9 provides rules for determining which method is superior in a priority battle.⁵⁹ In terms of controllable electronic records, Revised Article

51. *Id.* § 9-314(a).

52. *See id.* § 12-104(e).

53. *See id.*

54. *Id.* § 9-312(a) (“A security interest in . . . controllable electronic records . . . may be perfected by filing.”).

55. *Id.* § 9-314(a) (“A security interest in . . . controllable electronic records . . . may be perfected by control of the collateral under . . . 9-107A.”).

56. *See supra* Part I.A.

57. *See supra* Part I.A.

58. *Compare* REVISED U.C.C. § 9-312(a) (“A security interest in . . . controllable electronic records . . . may be perfected by filing.”), *with id.* § 9-314(a) (“A security interest in . . . controllable electronic records . . . may be perfected by control of the collateral under . . . 9-107A.”), *and id.* § 9-107A(a) (“A secured party has control of a controllable electronic record as provided in Section 12-105.”).

59. *See, e.g.*, U.C.C. § 9-330(a) (AM. L. INST. & UNIF. L. COMM’N 2010) (“A purchaser of chattel paper has priority over a security interest in the chattel paper which is claimed merely as proceeds of inventory subject to a security interest if: (1) in good faith and in the ordinary course of the purchaser’s business, the purchaser gives new value and takes

9 and Article 12 provide purchasers in control of controllable electronic records with two distinct advantages over purchasers who file with the Secretary of State's Office.⁶⁰ First, qualified purchasers are granted non-temporal priority.⁶¹ Second, Article 12 grants shelter to qualified purchasers.⁶² Taken together, those two facets of Article 12 create a system of negotiability.⁶³

1. Non-Temporal Priority for Qualified Purchasers

The first advantage provided to qualified purchasers in control of controllable electronic records is non-temporal priority. Thus, qualified purchasers will take priority over secured parties who have perfected by filing a financing statement with the Secretary of State's Office. The net effect of this provision is to create a system of negotiability for controllable electronic records that is similar to negotiable instruments.

As stated earlier, secured parties wishing to perfect a security interest in controllable electronic records have two options: they can either perfect by filing a financing statement, or they can take control of the controllable

possession of the chattel paper or obtains control of the chattel paper under Section 9-105[.]”).

60. Although not an advantage over filing, Revised Article 9 permits buyers of controllable electronic records to “take free” of competing security interest in certain circumstances. REVISED U.C.C. § 9-317(h) (“A buyer of a controllable electronic record takes free of a security interest if, without knowledge of the security interest and before it is perfected, the buyer gives value and obtains control of the controllable electronic record.”). This provision is consistent with the 2003 revisions that provide similar take free provisions for buyer of goods, among others. *See* U.C.C. § 9-317(b) (AM. L. INST. & UNIF. L. COMM’N 2003) (“[A] buyer, other than a secured party, of tangible chattel paper, documents, goods, instruments, or a security certificate takes free of a security interest or agricultural lien if the buyer gives value and receives delivery of the collateral without knowledge of the security interest or agricultural lien and before it is perfected.”).

61. *Compare* REVISED U.C.C. § 9-331(a) (“This article does not limit the rights of . . . a qualifying purchaser of a . . . controllable electronic record These holders or purchasers take priority over an earlier security interest, even if perfected, to the extent provided in Article[] . . . 12.”), *with id.* § 12-104(e) (“A qualifying purchaser acquires its rights in the controllable electronic record free of a claim of a property right in the controllable electronic record.”).

62. *Id.* § 12-104(d) (“A purchaser of a controllable electronic record acquires all rights in the controllable electronic record that the transferor had or had power to transfer, except that a purchaser of a limited interest in a controllable electronic record acquires rights only to the extent of the interest purchased.”).

63. *Id.* § 12-104 cmt. 10 (“Two defining characteristics of an Article 3 negotiable instrument are that a holder in due course (i) takes free of claims of a property or possessory right to the instrument . . . and (ii) takes free of most defenses and claims in recoupment. . . . Article 12 and the revisions to Article 9 provide a method for reaching a similar result”).

electronic record.⁶⁴ Still, taking control of a controllable electronic record is advantageous because it permits a qualified purchaser to take free of preceding security interests, even if those interests are perfected.⁶⁵

Even prior to the 2022 Revisions, Article 9 had created a series of “take free” provisions for certain classes of transferees and purchasers. For example, a transferee of money will ordinarily take free of any preceding security interests in the money.⁶⁶ Furthermore, a transferee of funds from a deposit account will take free of any preceding security interests.⁶⁷ As a final example, certain types of buyers of goods and chattel paper, among other types of collateral, will take free of preceding security interests.⁶⁸ The effect of these provisions is that, assuming a transferee or purchaser can qualify for protection, the transferee or purchaser will take the former collateral without any lingering property claims against the former collateral.⁶⁹

Article 12 creates a similar system for qualified purchasers of controllable electronic records. Pursuant to the 2022 Revisions, a qualified purchaser of a controllable electronic record takes “free of [any] claim of a property right in the controllable electronic record.”⁷⁰ This remains true even if the preceding secured party filed a financing statement describing the controllable electronic record.⁷¹ The advantage here is obvious:

64. *Supra* Part II.B.

65. REVISED U.C.C. § 12-104(e) (“A qualifying purchaser acquires its rights in the controllable electronic record free of a claim of a property right in the controllable electronic record.”).

66. U.C.C. § 9-332(a) (AM. L. INST. & UNIF. L. COMM’N 2010) (“A transferee of money takes the money free of a security interest unless the transferee acts in collusion with the debtor in violating the rights of the secured party.”).

67. *Id.* § 9-332(b) (“A transferee of funds from a deposit account takes the funds free of a security interest in the deposit account unless the transferee acts in collusion with the debtor in violating the rights of the secured party.”).

68. *Id.* § 9-317(b) (“[A] buyer, other than a secured party, of tangible chattel paper, tangible documents, goods, instruments, or a security certificate takes free of a security interest or agricultural lien if the buyer gives value and receives delivery of the collateral without knowledge of the security interest or agricultural lien and before it is perfected.”).

69. It should be noted that while a transferee or purchaser will take the former collateral free of security interests, a security interest will ordinarily attach to any proceeds from the transfer or purchase. *See id.* § 9-315(a)(2) (“[A] security interest attaches to any identifiable proceeds of collateral.”).

70. REVISED U.C.C. § 12-104(e).

71. *Compare id.* § 12-102(a)(2) (“‘Qualifying purchaser’ means a purchaser of a controllable electronic record or an interest in a controllable electronic record that obtains control of the controllable electronic record for value, in good faith, and without notice of a claim of a property right in the controllable electronic record.”), *with id.* § 12-104(h) (2022)

qualified purchasers in control of controllable electronic records will always win priority battles over secured parties who have perfected by filing. The functional result of this provision is to create a system of negotiability akin to negotiable instruments under Article 3.

Although Article 3 does not speak in terms of “take free” provisions, Article 3 has an analytically similar provision in the doctrine of holder in due course status.⁷² Under Article 3, holders in due course are the darlings of the Code, as they are immune from claims and defenses to an instrument and thus functionally take the instrument “free” of those claims.⁷³ For example, assume a maker issues an instrument to a payee as a promise to repay a debt.⁷⁴ The payee thereafter indorses the instrument and sells it to a third-party purchaser. Assuming the third-party purchaser can achieve the status of a holder in due course, the third-party purchaser would take the instrument free of any claims or defenses that are not “real defenses.”⁷⁵ Accordingly, the third-party purchaser can enforce the instrument, even if the maker has defenses—other than real defenses—against enforcement stemming from the underlying transaction.⁷⁶ This ultimately creates a system of negotiability under Article 3 because subsequent purchasers of a negotiable instrument can purchase the instrument without concern over whether payment of the instrument is subject to some voidable defense.⁷⁷

As stated earlier, the 2022 Revisions create a similar result for controllable electronic records. For example, assume the owner of cryptocurrency (“the Debtor”) uses the cryptocurrency as collateral for a loan. Furthermore, assume the secured party perfects that security interest by filing a financing statement with the Secretary of State’s Office.

(“Filing of a financing statement under Article 9 is not notice of a claim of a property right in a controllable electronic record.”).

72. Under Article 3, a holder in due course is the holder of an instrument that was taken for value, in good faith, and without notice of defenses to the instrument. U.C.C. § 3-302(a)(2) (AM. L. INST. & UNIF. L. COMM’N 2002).

73. *See id.* § 3-305(a) (providing the short list of defenses to which a holder in due course is still exposed).

74. A maker is defined as “a person who signs or is identified in a note as a person undertaking to pay.” *Id.* § 3-103(a)(5). Issue means “the first delivery of an instrument by the maker or drawer, whether to a holder or nonholder, for the purpose of giving rights on the instrument to any person.” *Id.* § 3-105(a).

75. *See id.* § 3-305(a); *id.* § 3-305 cmt. 1.

76. *See id.* § 3-305(a)–(b).

77. This result would remain the same under Article 9 for the sale of a negotiable instrument. *See* U.C.C. § 9-331(a) (AM. L. INST. & UNIF. L. COMM’N 2010) (“This article does not limit the rights of a holder in due course of a negotiable instrument These holders or purchasers take priority over an earlier security interest, even if perfected, to the extent provided in Article[] 3”).

Thereafter, assume the Debtor sells the cryptocurrency to a third-party. If the third-party is a qualified purchaser, the third-party would take the cryptocurrency free of the secured party's security interest.⁷⁸ This enhances negotiability because purchasers of cryptocurrencies can now rest easy knowing that their cryptocurrency will not be subject to some unknown—and perhaps even unperfected—security interest.⁷⁹

2. *The Shelter Principle*

In addition to granting non-temporal priority for qualified purchasers of controllable electronic records, the 2022 Revisions also grant qualified purchasers the right to take shelter in the rights of their transferor.⁸⁰ Functionally, this means that any transferee of a controllable electronic record will become a qualified purchaser if its transferor was a qualified purchaser.⁸¹ This grants an advantage to secured parties in control of controllable electronic records because it increases the marketability of a controllable electronic record.

The shelter principle has long been a facet of negotiability for instruments under Article 3. Pursuant to the shelter principle, a transferee acquires all the rights of a transferor.⁸² For example, assume the purchaser of a negotiable instrument achieves holder in due course status. Thereafter, the purchaser sells the negotiable instrument to a transferee who personally could not achieve holder in due course status. The absence of holder in due course status would be irrelevant because the transferee is entitled to take shelter in the rights of her transferor, as long as the transferee did not engage

78. REVISED U.C.C. § 12-104(e) (AM. L. INST. & UNIF. L. COMM'N 2022) (“A qualifying purchaser acquires its rights in the controllable electronic record free of a claim of a property right in the controllable electronic record.”).

79. It should be noted, if the secured party wishes to avoid this result, the secured party need only perfect by control and then exclude the debtor's access. Thus, although the example seems to discourage traditional security interests in controllable electronic records, secured parties have an option available to them to avoid this result.

80. REVISED U.C.C. § 12-104(d) (“A purchaser of a controllable electronic record acquires all rights in the controllable electronic record that the transferor had or had power to transfer, except that a purchaser of a limited interest in a controllable electronic record acquires rights only to the extent of the interest purchased.”).

81. *See Id.* § 12-104 cmt. 4.

82. U.C.C. § 3-203(b) (AM. L. INST. & UNIF. L. COMM'N 2002) (“Transfer of an instrument, whether or not the transfer is a negotiation, vests in the transferee any right of the transferor to enforce the instrument, including any right as a holder in due course, but the transferee cannot acquire rights of a holder in due course by a transfer, directly or indirectly, from a holder in due course if the transferee engaged in fraud or illegality affecting the instrument.”).

in fraud or illegality affecting the instrument.⁸³ Thus, the transferee has the rights of a holder in due course.⁸⁴ Under Article 3, that entitles the transferee to take the instrument free from most defenses and claims in recoupment.⁸⁵

The 2022 Revisions create a similar shelter principle for transferees of controllable electronic records. Pursuant to the 2022 Revisions, transferees of controllable electronic records are entitled to take shelter in the rights of their transferors.⁸⁶ To illustrate, assume a debtor owns a controllable electronic record and subsequently grants a security interest to a secured party (“the Secured Party”) in the controllable electronic record. Thereafter, the Secured Party perfects that security interest by filing a financing statement with the Secretary of State’s Office. Later, the debtor sells the same controllable electronic record to another party (“the Transferor”) who then takes control of the controllable electronic record. As stated in the previous section, the Transferor will take priority over the Secured Party, so long as the Transferor was a qualified purchaser.⁸⁷ Now assume following that transaction, the Transferor sells the controllable electronic record to a transferee (“the Transferee”). But the Transferee, in the Transferee’s personal capacity, could not achieve the status of a qualified purchaser because the Transferee had notice of the Secured Party’s property interest before the transfer. The Transferee can nevertheless take shelter in the status of the Transferor, and thus, the Transferee has the rights of a qualified purchaser.⁸⁸ Effectively, the Transferee takes free of the Secured Party’s preceding interests, just as the Transferor took free from the Secured Party’s preceding interests. This enhances the marketability of controllable electronic records for qualified purchasers with control because a transferee can rest easy in the transfer knowing the transferee will take free even if the transferee is aware of the preceding property interest at the time of the transfer.

83. *Id.*

84. *Id.*

85. *See id.* § 3-305(a) (providing the short list of defenses to which a holder in due course is still exposed).

86. REVISED U.C.C. § 12-104(d) (“A purchaser of a controllable electronic record acquires all rights in the controllable electronic record that the transferor had or had power to transfer, except that a purchaser of a limited interest in a controllable electronic record acquires rights only to the extent of the interest purchased.”).

87. *Id.* § 12-104(e) (“A qualifying purchaser acquires its rights in the controllable electronic record free of a claim of a property right in the controllable electronic record.”).

88. U.C.C. § 3-203(b) (“Transfer of an instrument, whether or not the transfer is a negotiation, vests in the transferee any right of the transferor to enforce the instrument, including any rights as a holder in due course . . .”).

III. ENCOURAGING THE USE AND MARKETABILITY OF CRYPTOCURRENCIES

The 2022 Revisions encourage the use and marketability of cryptocurrencies for two reasons. First, and in the general sense, the Revisions create certainty. Second, the 2022 Revisions, through their promotion of negotiability, alleviate the non-inherent risk of cryptocurrency transactions.

A. The Revisions Create Certainty

One of the least attractive aspects of cryptocurrency transactions is the absence of certainty surrounding their legal landscape. And that absence of certainty is pervasive—existing irrespective of the underlying nature of the transaction. The 2022 Revisions encourage the use and marketability of cryptocurrencies by creating certainty that permits potential purchasers to predict outcomes.

As Part I articulates, the current treatment of cryptocurrencies under the Code is an odd fit. That odd fit has in turn given rise to substantial uncertainty in the treatment of cryptocurrencies, particularly under Article 9. For instance, although the common perspective is that cryptocurrencies are properly characterized as general intangibles under Article 9, that has not always proven the case.⁸⁹ As explained earlier, Bitcoin may now be characterized as money—a characterization that would subject Bitcoin to a markedly different set of perfection and priority rules from that of general intangibles.⁹⁰ Similarly, arguments exist for characterizing at least some cryptocurrencies as securities, due to either the nature of the cryptocurrencies or the manner of their offerings.⁹¹ Those cryptocurrencies could potentially be characterized as investment properties, subjecting them to markedly different perfection and priority rules for either general intangibles or money.⁹²

89. See, e.g., Tu, *supra* note 4, at 219–24 (explaining why cryptocurrency falls under “general intangibles”).

90. See McCall, *supra* note 19, at 319–20.

91. See, e.g., Tu, *supra* note 4, at 222–23 (giving examples of cryptocurrency transactions that may meet the definition of a security).

92. Investment property is defined as “a security, whether certificated or uncertificated, security entitlement, securities account, commodity contract, or commodity account.” U.C.C. § 9-102(a)(49) (AM. L. INST. & UNIF. L. COMM’N 2010). Unlike general intangibles, a security interest in investment property may be perfected by control. *Id.* § 9-314(a). And a secured party in control has priority over a secured party who is not in control. *Id.* § 9-328(1).

The 2022 Revisions end that controversy in two distinct ways, creating certainty in the treatment of cryptocurrencies under the Code. First, under Article 1, the Revisions alter the definition of “money,” temporally excluding existing cryptocurrencies from the definition.⁹³ Second, the Revisions create the new collateral classification of “controllable electronic records” and make that classification a subset of general intangibles, thus preventing the possibility that a cryptocurrency qualifying as a controllable electronic record will be characterized as some other form of collateral.⁹⁴ Taken together, the certainty created through the Revisions encourages the use and marketability of cryptocurrencies because they enable potential secured parties to predict the outcomes of a transaction.

1. Certainty Through the Definition of “Money”

Perhaps one of the more important changes within the Revisions is the separation of “money” from “electronic money.” Under the Revisions, the drafters both altered the definition of “money” in Article 1 and created a new type of collateral—“electronic money”—under Article 9.⁹⁵ Taken together, the two alterations prevent any current cryptocurrency from qualifying as money. And should future cryptocurrencies meet the definition of “electronic money,” they would be subject to the control provisions of Article 12.

Under the Revised Article 1, the definition of “money” now excludes existing cryptocurrencies on a temporal basis.⁹⁶ More specifically, the definition provides that “[t]he 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

93. See REVISED U.C.C. § 1-201(b)(24) (AM. L. INST. & UNIF. L. COMM’N 2022) (“‘Money’ means a medium of exchange that is currently authorized or adopted by a domestic or foreign government. . . . 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.”).

94. See *id.* § 9-102(a)(42) (“‘General intangible’ means any personal property, including things in action, other than accounts, chattel paper, commercial tort claims, deposit accounts, documents, goods, instruments, investment property, letter-of-credit rights, letters of credit, money, and oil, gas, or other minerals before extraction. The term includes controllable electronic records, payment intangibles, and software.”).

95. See *id.* § 1-201(b)(24); *id.* § 1-201 cmt. 24 (“The 2022 revised definition of money in Section 1-201(b)(24) is broader and includes both ‘tangible money’ and ‘electronic money.’”); *id.* § 9-102(a)(31A) (“‘Electronic money’ means money in an electronic form.”).

96. *Id.* § 1-201(b)(24).

exchange was authorized or adopted by the government.”⁹⁷ Thus, under the new definition of “money,” no existing cryptocurrency would qualify because all of their systems for recording and transferring existed and operated before they were authorized or adopted by a sovereign government.⁹⁸

In addition to altering the definition of “money” in Article 1 to functionally exclude all existing cryptocurrencies, the drafters also planned for the potential future of a governmental body developing its own cryptocurrency and then authorizing or adopting it before the system of recording and transferring exists. Accordingly, the drafters created a new collateral type in Article 9 termed “electronic money.”⁹⁹ Under Revised Article 9, “[e]lectronic money” means money in an electronic form.¹⁰⁰ Thus, assuming a governmental body did develop its own cryptocurrency, the cryptocurrency would not be “money”; it would be “electronic money.”¹⁰¹ And importantly, because cryptocurrency is electronic money, it is subject to the perfection protocol of control rather than possession.¹⁰²

These two definitional changes create certainty for secured parties because they eliminate the possibility that cryptocurrencies are “money” and therefore eliminate the possibility that perfecting a security interest in them is functionally impossible.¹⁰³

2. Certainty Through the Creation of a New Collateral Type

Although altering the definition of “money” was an important and necessary alteration, by far the most important alteration in the Revisions is

97. *Id.*

98. *See id.* § 9-102 cmt. 12A (“It follows that cryptocurrencies, such as bitcoin, that are not ‘money’ as defined in Section 1-201 because they were in existence and used before adoption by a government, also are not Article 9 money.”).

99. *Id.* § 9-102(a)(31A).

100. *Id.*

101. *Id.* § 9-102 cmt. 12A (“Some countries may authorize or adopt intangible tokens as a medium of exchange that would be ‘money’ as defined in both Article 1 and Article 9. . . . Such intangible tokens would be ‘electronic money,’ as defined in Section 9-102(a)(31A). A security interest in electronic money as original collateral can be perfected only by control.”).

102. *See id.* Nevertheless, it should be noted that if money in an electronic form cannot be subjected to control, then the collateral would be characterized as a general intangible and subject to the perfection and priority rules thereunder. *See id.* (“Another purpose of the Article 9 definition of ‘money’ is to exclude from that definition money (as defined in Section 1-201(b)(24)) in an electronic form that cannot be subjected to control under Section 9-105A. Such property would be a general intangible, governed by the perfection and priority rules for that type of collateral.”).

103. *See supra* Part I.B.

the creation of a new collateral type—controllable electronic records—and the creation of rules associated with them. By creating this new collateral type, the drafters created certainty in the rules surrounding perfection and priority of cryptocurrencies.

Prior to the Revisions, cryptocurrencies could have been subject to a variety of perfection and priority rules. As stated earlier, Bitcoin could have been characterized as money, subjecting it to a singular method of perfection—possession—and priority rules associated therewith.¹⁰⁴ At the same time, depending on the nature of the cryptocurrency or the manner of its offering, a cryptocurrency could be characterized as a security, subjecting it to a completely different set of perfection and priority rules.¹⁰⁵ Finally, and true a majority of the time, cryptocurrencies could be characterized as general intangibles, subjecting them to a set of perfection and priority rules markedly distinct from those applicable to either money or investment property.¹⁰⁶ The inconsistency in both the characterization of cryptocurrencies as well as the perfection and priority rules for cryptocurrencies limits their utility because, from a business perspective, it complicates informed planning for predictive outcomes. The Revisions resolve this uncertainty in both the characterization of cryptocurrencies as well as their perfection and priority rules by creating a new collateral type—controllable electronic records—and then concomitantly creating specific rules associated with their perfection and priority.

Pursuant to the Revisions, cryptocurrencies are now characterized as controllable electronic records—a subset of general intangibles.¹⁰⁷ Additionally, and as stated earlier, the Revisions also create specific rules associated with both the perfection and priority of controllable electronic records.¹⁰⁸ Those changes create certainty for potential secured parties because secured parties no longer need to attempt to predict whether they are eligible for perfection by possession, control, or filing. Rather, pursuant to the Revisions, a secured party can perfect a security interest in cryptocurrencies by either control or filing.¹⁰⁹ And, perfection by control wins in a priority battle.¹¹⁰

104. *See supra* Part I.B.

105. *See supra* note 92 and accompanying text.

106. Tu, *supra* note 4, at 222–23.

107. For information regarding the characterization of most cryptocurrencies as controllable electronic records, see *supra* note 49. For information regarding controllable electronic records operating as a subset of general intangibles, see REVISED U.C.C. § 9-102(a)(42).

108. *See supra* Part II.B.

109. *See supra* Part II.B.

110. *See supra* Part II.B.

B. The Revisions Alleviate Non-Inherent Risk

Cryptocurrencies carry risk in a variety of forms. Until the adoption of Article 12 and the concomitant changes to Articles 1 and 9, that list of risks included the possibility that any transfer of a cryptocurrency could carry with it the luggage of a security interest. But through the Revisions’s promotion of negotiability, the Revisions have alleviated that non-inherent risk. That change ultimately encourages the use and marketability of cryptocurrencies because it increases the perception of value in the asset.

It is unequivocal that cryptocurrencies as either investments or security devices carry an inherent set of risks.¹¹¹ For instance, there is an inherent risk that the perceived value of any cryptocurrency could diminish, leaving a purchaser with reduced value in the asset.¹¹² That particular risk is exacerbated by the fact that many cryptocurrencies do not have underlying assets to support their value.¹¹³ Instead, their value lies purely in the perception of those willing to enter the market. Among the risks traditionally allocated to cryptocurrencies was the possibility that any purchase of cryptocurrency could be subject to a variety of security interests.

As discussed above, upon the disposition of any collateral, security interests attached to that collateral will ordinarily continue.¹¹⁴ Thus, if a particular cryptocurrency were subject to a security interest—even a secret security interest—that security interest would continue to attach to the cryptocurrency, irrespective of the number of times it is transferred, so long as the cryptocurrency remains identifiable. Although tracing can be challenging with cryptocurrencies, the danger of unknown security interests limits the perceived value of cryptocurrencies because it increases the risk associated with them as assets, without providing any potential benefit.

111. See, e.g., Jake Frankenfield, *Cryptocurrency Explained with Pros and Cons for Investment*, INVESTOPEDIA (Nov. 3, 2023), <https://www.investopedia.com/terms/c/cryptocurrency.asp> [<https://perma.cc/VGP6-3J9C>]; Tobias Adrian, *Cryptocurrencies and Decentralized Finance*, INT’L MONETARY FUND (June 24, 2022) <https://www.imf.org/en/News/Articles/2022/06/24/sp083022-cryptocurrencies-and-decentralized-finance> [<https://perma.cc/249W-5DV5>].

112. Frankenfield, *supra* note 111; Adrian, *supra* note 111.

113. See, e.g., Eswar Prasad, *The Brutal Truth About Bitcoin*, BROOKINGS (July 20, 2021), <https://www.brookings.edu/articles/the-brutal-truth-about-bitcoin/> [<https://perma.cc/B7QE-76T8>] (noting bitcoin “has no intrinsic value and is not backed by anything”).

114. U.C.C. § 9-315(a) (AM. L. INST. & UNIF. L. COMM’N 2010) (“Except as otherwise provided in this article and in Section 2-403(2): (1) a security interest or agricultural lien continues in collateral notwithstanding sale, lease, license, exchange, or other disposition thereof unless the secured party authorized the disposition free of the security interest or agricultural lien . . .”).

The Revisions alleviate this non-inherent risk by promoting negotiability. As stated above, the Revisions adopted a “take free” rule for cryptocurrencies such that a qualified purchaser will functionally strip any existing security interest upon the purchase.¹¹⁵ For potential investors or transferees, that means that an entire class of risk has been eliminated. And, by eliminating risk, the perceived value of cryptocurrency is enhanced. Once framed in that way, that change encourages the use and marketability of cryptocurrencies for obvious reasons.

CONCLUSION

The possibility that cryptocurrencies could be a flash in the pan is over. It seems clear at this point that cryptocurrencies will remain an asset class in some form for the foreseeable future. Thus, the only real, remaining inquiry is how to manage them. The Revisions take an important first step that is ultimately positive for both the law and the marketability of cryptocurrencies.

Undeniably, there was once the perception that cryptocurrencies as investments would remain at best on the fringe. Leading investors were prolific in their criticisms and warnings.¹¹⁶ Nevertheless, those days appear past us. Cryptocurrencies are now authorized mediums of exchange in at least one country.¹¹⁷ Furthermore, cryptocurrencies and blockchains are now being used for land purchases.¹¹⁸ There is no shortage of examples. Given that truth—and the continued growth of cryptocurrencies—the

115. See *supra* Part II.B.

116. E.g., Berkeley Lovelace, Jr., *Buffet on Cryptocurrencies: ‘I Can Say Almost with Certainty that They Will Come to a Bad Ending,’* CNBC (Jan. 10, 2018, 2:35 PM), <https://www.cnbc.com/2018/01/10/buffett-says-cryptocurrencies-will-almost-certainly-end-badly.html> [<https://perma.cc/M3DZ-7R7V>]; Fred Imbert, *JPMorgan CEO Jamie Dimon Says Bitcoin is a ‘Fraud’ That Will Eventually Blow Up,* CNBC (Sept. 12, 2017, 4:39 PM), <https://www.cnbc.com/2017/09/12/jpmorgan-ceo-jamie-dimon-raises-flag-on-trading-revenue-sees-20-percent-fall-for-the-third-quarter.html> [<https://perma.cc/Z9HM-JMUT>].

117. See, e.g., Oscar Lopez & Ephrat Livni, *In Global First, El Salvador Adopts Bitcoin as Currency,* N.Y. TIMES (Oct. 7, 2021), <https://www.nytimes.com/2021/09/07/world/americas/el-salvador-bitcoin.html> [<https://perma.cc/4KJL-SANJ>], <https://www.nytimes.com/2021/09/07/world/americas/el-salvador-bitcoin.html> [<https://perma.cc/4KJL-SANJ>] (discussing El Salvador’s adoption of Bitcoin as legal tender).

118. E.g., Mike Fitts, *Columbia Home First in SC Sold Via Online Cryptocurrency, All-Digital Deal,* POST & COURIER (Nov. 7, 2022), https://www.postandcourier.com/columbia/business/columbia-home-first-in-sc-sold-via-online-cryptocurrency-all-digital-deal/article_94243a22-517d-11ed-bbee-d76c2eaf5ca9.html [<https://perma.cc/8EUY-K5TQ>] (reviewing an investor’s purchase of a South Carolina home using Bitcoin).

2024] ARTICLE 12 – NEGOTIABILITY OF CRYPTOCURRENCIES 179

question is no longer whether cryptocurrencies will exist but instead how to manage them given that they do and will continue to exist. The Revisions are an important step in the management of cryptocurrencies under the Code because they create a degree of predictability in the application of the law that was previously lacking. Predictability in the application of law is an obvious benefit, and thus, state legislatures should adopt the Revisions.