

# Bringing Continuity to Cryptocurrency: Commercial Law as a Guide to the Asset Categorization of Bitcoin

*Evan Hewitt\**

## CONTENTS

INTRODUCTION .....	619
I. BITCOIN BASICS.....	622
<i>A. What Makes Bitcoin Unique?</i> .....	623
<i>B. Existing Examples of Regulatory Divergence</i> .....	624
II. BITCOIN AND COMMERCIAL LAW .....	627
<i>A. A Word on an Important Assumption</i> .....	628
<i>B. Bitcoin Under UCC Article 9</i> .....	629
<i>C. Bitcoin Under UCC Article 2</i> .....	632
<i>D. Bitcoin Under the Internal Revenue Code</i> .....	633
III. CATEGORIZING BITCOIN AS AN ASSET .....	636
<i>A. Summarizing What We Have Learned</i> .....	636
<i>B. The Final Hurdle</i> .....	637
<i>C. Recommending a New Asset Type: The Electronic Pseudo-</i> <i>Currency</i> .....	638
CONCLUSION.....	639

## INTRODUCTION

Bitcoin, the most widely known and utilized “cryptocurrency,” a type of encrypted electronic currency, began its life as a novelty.<sup>1</sup> This

---

\* J.D. Candidate, Seattle University School of Law, 2016; B.A., University of Washington, 2013. Thank you to my family; your ceaseless support has made the pursuit of my goals possible, and I would not have made it this far without you.

1. See Joe Light, *Should You Invest in Bitcoin?*, WALL ST. J. (Nov. 23, 2013, 6:40 PM), <http://online.wsj.com/articles/SB10001424052702304607104579212101356897382>.

new form of electronic, internet-based asset was purchased by consumers as something of a curiosity—not as a serious investment.<sup>2</sup> The coins themselves, valued at mere cents in the early days, were seen to be either a passing fad or something that would be forever confined to the far corners of the internet, cherished only by those who had an appreciation for the coins' technical inner workings.<sup>3</sup>

Today, however, things are different. Bitcoin is no longer a mere novelty but rather an asset that has found an increasing degree of acceptance in the market and the commercial sphere.<sup>4</sup> Many major retailers have begun accepting electronic currency as payment through their websites.<sup>5</sup> The most prominent example of this new acceptance is internet retail giant Overstock.com.<sup>6</sup> What once was a test policy limited to the United States is now accepted globally for any transaction conducted through the website.<sup>7</sup> Other major retailers, such as Amazon, Home Depot, and CVS have also begun to experiment with allowing transactions conducted through their websites to be paid in bitcoin.<sup>8</sup> Consumers can now even make transactions at “bitcoin ATMs,” which allow them to convert their code into cash just as simply as one might complete any other sort of banking transaction.<sup>9</sup> Even the valuation of bitcoin itself reflects this increased acceptance; what once was an asset that traded for mere pennies now trades for hundreds of dollars and was at one point trading for over \$1000 a coin.<sup>10</sup>

Because of bitcoin's recent expansion in popularity, it is possible that governments on both the state and federal level may attempt to regulate the cryptocurrency. Reasons behind crafting such a strategy might include the prevention of criminal transactions, consumer protection,

---

2. *See id.*

3. *See id.*

4. *See, e.g.,* Clare O'Connor, *How to Use Bitcoin to Shop at Amazon, Home Depot, CVS and More*, FORBES (Feb. 17, 2014, 11:47 AM), <http://www.forbes.com/sites/clareoconnor/2014/02/17/how-to-use-bitcoin-to-shop-at-amazon-home-depot-cvs-and-more/>.

5. Sydney Ember, *Overstock to Allow International Customers to Pay in Bitcoin*, N.Y. TIMES DEALBOOK (Aug. 19, 2014, 3:49 PM), <http://dealbook.nytimes.com/2014/08/19/overstock-to-allow-international-customers-to-pay-in-bitcoin/>.

6. *Id.*

7. *Id.*

8. O'Connor, *supra* note 4. It bears mentioning that the majority of these retailers do not accept the coins directly but rather utilize a third-party payment service, which converts the cryptocurrency into cash for the retailer. *See id.* More on this will be discussed below. *See infra* Part II.B.

9. Sydney Ember, *On To-Do List: Deposit Cash in Bitcoin A.T.M.*, N.Y. TIMES DEALBOOK (Aug. 25, 2014, 8:14 PM), <http://dealbook.nytimes.com/2014/08/25/on-to-do-list-deposit-cash-in-bitcoin-a-t-m/>.

10. *See* John Phillips, *Bitcoin Breaks \$1000 Barrier for the First Time*, CNBC (Nov. 27, 2013, 10:13 AM), <http://www.cnbc.com/id/101230884#>.

simplification of taxation issues, or other similar concerns. Indeed, several states and government agencies have already begun creating regulatory regimes for bitcoin to deal with some of these issues. Rather than debate the justifications behind regulation, this Note seeks to examine the most effective models for regulation, drawing from a variety of legal and practical sources.

Understanding that bitcoin could conceivably be (and already has been) the target of regulatory efforts, one of the primary questions to be addressed is how bitcoin should be characterized commercially. Bitcoin has numerous features that make it difficult to categorize under our existing schema of commercial assets.<sup>11</sup> As will ultimately be shown, if regulatory bodies attempt to classify bitcoin merely by analogizing its features to those of existing types of assets, different regulatory bodies could easily come to completely different conclusions as to what type of asset bitcoin is most like—whether that be property, currency, or even something else.<sup>12</sup> Thus, by comparing bitcoin to already existing asset categories, there will undoubtedly be regulatory inconsistencies that will arise as different jurisdictions and regulatory bodies look to different features of the asset in order to draw their comparison.<sup>13</sup>

However, rather than analogizing bitcoin to existing assets, regulatory bodies may find better guidance in commercial law. More specifically, commercial law can provide the framework for the legal community to determine how to categorize bitcoin for regulatory purposes in order to make it the most commercially viable. Because bitcoin has become more and more accepted in the commercial sphere,<sup>14</sup> it does not make much sense to characterize it in a way that might threaten its viability simply because it looks similar and is used similarly to another type of existing asset.

Thus, this Note will undertake to analyze bitcoin under the Uniform Commercial Code (UCC) and the Internal Revenue Code (IRC)—two important sources of commercial law—to see whether any existing asset categories adequately protect bitcoin's commercial viability. This Note will demonstrate that although commercial law dictates that bitcoin should—nay must—be regulated as a currency in order to sustain its existence, the very definition of currency seems to preclude that from happening. Therefore, this Note will recommend that we experiment with a new type of asset that receives currency-like treatment, specifically de-

---

11. *See infra* Part I.

12. *See infra* Part I.

13. Indeed, these inconsistencies have already begun to rear their heads. *See infra* Part I.

14. *See* Ember, *supra* note 5; Ember, *supra* note 9; O'Connor, *supra* note 4.

signed for cryptocurrencies, under which bitcoin can be categorized in order to preserve its commercial feasibility and to give legal regulatory clarity.

This argument will proceed as follows: Part I will introduce or refamiliarize the reader with how bitcoin itself works, from a technical standpoint, in order to demonstrate why it is so difficult to categorize as a commercial asset. This Part will then give a brief overview of existing regulatory efforts by various states and government agencies to demonstrate the “regulatory divergence” that can occur when different agencies look to different features of bitcoin to make their classification decisions.

Part II of the Note will be devoted to analyzing bitcoin under existing commercial law in order to determine how it might interact with various commercial provisions when categorized in different ways. For the sake of simplicity and widespread applicability, bitcoin will be analyzed under the UCC, rather than a particular state version of commercial law,<sup>15</sup> as well as under the IRC (for much the same reason). Analysis will be conducted under the two most relevant sections of the UCC, Article 9 and Article 2, as well as under code sections in the IRC relating to the taxation of capital gains and losses.

Additionally, this Part will contain a brief discussion of the assumption underlying this Note: that bitcoin should be categorized in a way that preserves its commercial viability. Although the examination of this assumption in full will be reserved for the benefit of a future author, space here will be devoted to arguing that the benefits of this sort of regulatory goal outweigh the potential drawbacks.

In Part III, this Note will argue that even though a currency categorization would be ideal for preserving bitcoin’s commercial viability and for providing regulatory continuity, it will be necessary to craft a new commercial asset especially for bitcoin that allows it to be regulated like a currency even though it is not legal tender. The author’s summarization of the Note’s key takeaways concludes.

## I. BITCOIN BASICS

Bitcoin, as a commercial asset, is unique, and it is ultimately this uniqueness that makes it amenable to several different classifications under our existing spectrum of commercial assets.<sup>16</sup> To ultimately under-

---

15. The goal of this Note is to give guidance categorizing bitcoin universally. Thus, the use of a model code is the logical source of underlying law, as this can be most easily analogized and adapted to actual enacted laws and statutes in various jurisdictions.

16. See Michael Nielsen, *How the Bitcoin Protocol Actually Works*, DATA-DRIVEN INTELLIGENCE (Dec. 6, 2013), <http://www.michaelnielsen.org/ddi/how-the-bitcoin-protocol->

stand the source of this uniqueness and why cryptocurrencies are difficult to categorize, one must first grasp, at least on a basic level, how bitcoin developed and how the asset works on a technical level. It will then also be important to review the existing attempts by various states and government agencies to regulate the currency as examples of how confusion as to bitcoin's underlying asset type has led to differing classifications and regulatory policies.

#### A. What Makes Bitcoin Unique?

Bitcoin was developed and launched in 2009 by a mysterious person (or possibly persons) using the pseudonym Satoshi Nakamoto.<sup>17</sup> Not much is known about Nakamoto, other than the fact that it was he (or she, or even possibly them) that developed the algorithmic code by which the bitcoin network operates.<sup>18</sup>

As for the workings of the cryptocurrency itself, an actual "bitcoin" is really only a string of computer-generated code.<sup>19</sup> This particular line of code can only be utilized by the coin's owner, who has a unique passcode that allows the user to either "spend" that coin with someone who will trade it in exchange for goods, or give the coin to another user in exchange for some other form of currency.<sup>20</sup> In this way, bitcoin operates on the market much like a currency would; the asset can be traded for goods from sellers who will accept it as payment or exchange it for other forms of currency. However, bitcoin differs from other sorts of currencies in that it lacks a central regulatory authority.<sup>21</sup> All bitcoin transactions are monitored and recorded into an ongoing log called the "block chain," which verifies that the coins being traded actually belong to that particular owner and can be traded in the way being proposed.<sup>22</sup>

This process of recording bitcoin transactions onto the block chain is known in the cryptocurrency community as "mining"; this is also the way that the currency itself is actually "created" or comes into being.<sup>23</sup> This process occurs as computer servers around the world run the bitcoin

---

actually-works/; *How Does Bitcoin Work?*, ECONOMIST (Apr. 11, 2013, 11:50 PM), <http://www.economist.com/bitcoinexplained>.

17. ECONOMIST, *supra* note 16.

18. It has been posited that Nakamoto may actually be a moniker adopted by a group that developed bitcoin, though this claim has never been substantiated. *See id.*

19. *See* Nielsen, *supra* note 16. This Note barely scratches the surface of how bitcoin really operates from a technical perspective. For readers who desire a much more in-depth and complex look at the cryptography of the bitcoin protocol, Mr. Nielsen's article cited here is an excellent read.

20. *See* ECONOMIST, *supra* note 16.

21. *Id.*

22. Nielsen, *supra* note 16.

23. *Id.*

algorithm and record transactions onto the block chain.<sup>24</sup> The algorithm itself is designed in such a way that it distributes a unique new bitcoin code to a random user running the program at predetermined points across the life of the algorithm.<sup>25</sup> The algorithm has been designed to generate fewer and fewer of these codes the longer it exists, such that there can only ever be a finite number of bitcoins released.<sup>26</sup> To capitalize on the workings of the algorithm, users running it have learned to band together and form cartels or pools to try and maximize their chances of receiving the periodic distribution of coins.<sup>27</sup> If one of the cartel's servers does receive the random distribution, then the profits are distributed pro rata across its membership base or in some other predetermined fashion.<sup>28</sup> In this way, the cryptocurrency looks more like property than currency, much in the way that the right to a mineral or precious metal would be treated more like property right than a right to currency.

In sum, bitcoin is—by its very nature—very difficult to categorize. Although it holds itself out as a currency and often functions like one in the market, some of its underlying features suggest that it might more accurately be treated as property.<sup>29</sup> Thus, it is easy to see why there has been such confusion in the legal community in trying to characterize bitcoin by comparing it to already existing asset categories, without some sort of additional underlying guidance. This confusion plays out when one looks at the already existing regulatory efforts of various states and governmental agencies.

### *B. Existing Examples of Regulatory Divergence*

Many states and government agencies have already undertaken to try and regulate bitcoin. The necessary first step to any regulation is determining what exactly the asset is that is being regulated. However, the existing efforts to classify bitcoin have led to a confusing regulatory divergence as to which asset category cryptocurrencies should belong.

There are a variety of federal government agencies that will need to develop a cryptocurrency regulation strategy as the asset continues to grow in its use. Any government agency that deals in commercial or financial transactions will need to develop clear and consistent policy so

---

24. *Id.*

25. *Id.*

26. ECONOMIST, *supra* note 16.

27. See Anthony Volastro, *CNBC Explains: How to Mine Bitcoins on Your Own*, CNBC (Jan. 23, 2014, 1:48 PM), <http://www.cnbc.com/id/101332124>.

28. *See id.*

29. *See* ECONOMIST, *supra* note 16.

that individuals and companies who interact with the agency will know what to expect. Several government agencies have already developed, to some extent, bitcoin regulation policies. The most notable example of these is the Internal Revenue Service (IRS).<sup>30</sup> IRS Notice 2014-21 lays out the treatment the IRS proposes to use for bitcoin for tax purposes for upcoming years.<sup>31</sup> Although the notice refers to bitcoin as currency and acknowledges that cryptocurrencies function in many ways like a currency would, the IRS has determined that bitcoin will be treated as property and will be taxed as such.<sup>32</sup> The notice goes on to dictate that a taxpayer's tax basis in cryptocurrency is the fair market value of that currency, measured in U.S. dollars, and further goes on to state that virtual currency miners realize gross income upon receipt of bitcoin payouts from operating the block chain.<sup>33</sup> Thus, as far as the IRS is concerned, bitcoin is most similar to property and should be regulated as such.<sup>34</sup>

However, possible forthcoming guidance by the IRS potentially alters this interpretation of bitcoin's underlying asset classification. Sources from the IRS have reported that the agency may begin to require consumers and businesses to report bitcoin transactions and holdings under the Report of Foreign Bank and Financial Accounts (FBAR).<sup>35</sup> The possibility springs from a decision of the U.S. District Court of the Northern District of California, which held that online accounts owned for the purpose of foreign online gambling were subject to the reporting requirements under FBAR.<sup>36</sup> From this, many in the cryptocurrency community have speculated that the IRS and the Department of Treasury's Financial Crimes Enforcement Network (FinCEN, as defined and discussed below) may apply this logic to bitcoin.<sup>37</sup> This would almost certainly cast bitcoin in a more currency-like light, even though the IRS has continually reiterated its stance that, for now, bitcoin is to be treated as property for tax-reporting purposes.<sup>38</sup>

The Department of the Treasury has also looked into categorizing and regulating bitcoin with regard to criminal matters. FinCEN has thus

---

30. See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938.

31. See *id.*

32. See *id.*

33. See *id.*

34. See *id.*

35. See Alison Bennett, *Bitcoin Accounts May Be Subject to FBAR, FATCA Reporting as IRS Focus Sharpens*, BLOOMBERG DAILY TAX REPORT (Nov. 13, 2014), <https://www.bloomberg.com/document/X6KLQED8000000?jsearch=bn%2520a0f8z1f7t8&js=0#jcite>.

36. See *United States v. Hom*, 45 F. Supp. 3d 1175, 1179 (N.D. Cal. 2014).

37. See Bennett, *supra* note 35.

38. See *id.*

far released regulatory guidance on bitcoin similar to the guidance provided by the IRS.<sup>39</sup> FinCEN is less clear as to the specific asset type to which it bases its classification of bitcoin, although it is arguable that this agency takes a slightly more currency-oriented approach.<sup>40</sup> In a recent regulatory document, the agency does state that bitcoin is not itself a currency as it lacks a central regulatory authority.<sup>41</sup> However, the regulation, applying its currency-regulation standards, then details what sort of brokers and dealers of the cryptocurrency must comply with certain other already existing FinCEN regulations.<sup>42</sup> Thus, although the agency does not purely regulate bitcoin as a currency, it does utilize much more of a currency-like approach than does the IRS, which is very clear about its property classification.

Beyond agencies of the federal government, there are other governing bodies that will inevitably need to craft some sort of cryptocurrency regulation strategy. Several states and state agencies have begun to grapple with this question, and as with the federal agencies, there is some degree of divergence of treatment, likely stemming from the lack of clarity as to what the underlying asset type is.

One of the more publicized state actions concerning bitcoin was the recent passage of AB 129 in California.<sup>43</sup> This legislation reversed California's previous stance on the use of bitcoin, namely that the use of any form of currency other than U.S. legal tender was illegal.<sup>44</sup> However, although this bill does allow for the use of bitcoin and other cryptocurrencies in California, it stops short of saying how these currencies might be regulated or should be classified.<sup>45</sup> In looking to the text of AB 129, it could be inferred that California will follow a more currency-like characterization if and when the state does give more specific guidance on the regulation of bitcoin.<sup>46</sup> Consumers and businesses in

---

39. See U.S. DEP'T OF TREASURY, FIN-2013-G001: APPLICATION OF FINCEN'S REGULATIONS TO PERSONS ADMINISTERING, EXCHANGING, OR USING VIRTUAL CURRENCIES (2013), available at [https://www.fincen.gov/statutes\\_regs/guidance/pdf/FIN-2013-G001.pdf](https://www.fincen.gov/statutes_regs/guidance/pdf/FIN-2013-G001.pdf).

40. This makes sense in the context of the agency and the department under which the agency falls. FinCEN is usually tasked with the enforcement of currency type matters, so it makes sense that this agency would take a more currency-like approach to bitcoin. See *id.*

41. *Id.*

42. The actual regulations themselves are not of great importance to this analysis, hence their omission. Rather, the idea here is merely to demonstrate that regulatory divergence exists when we attempt to classify bitcoin, for regulatory purposes, under different asset categories. See *id.*

43. See Assemb. B. 129, 2013–14 Reg. Sess. (Cal. 2014).

44. *Id.*

45. See *id.*

46. Some have interpreted the bill in a way that suggests that bitcoin has been granted the status of "legal money" in California. Pete Rizzo, *California Governor Grants Bitcoin 'Legal Mon-*

California ultimately will not know the true status of their cryptocurrency assets until the state provides clearer regulation.<sup>47</sup> However, for now, it seems like California is using currency as the most direct comparison to cryptocurrencies.<sup>48</sup>

Other states have also tried their hands at crafting bitcoin regulation. At the forefront of recent news, New York crafted one of the more complete sets of regulations regarding cryptocurrencies.<sup>49</sup> Although the New York rules do not explicitly state how bitcoin should be classified as an asset,<sup>50</sup> the structure of the rules suggests that the legislators used modern securities law as their muse.<sup>51</sup> The regulations in New York look very much in form like rules that might be crafted by the SEC governing stock ownership, as they set very specific rules as to who is allowed to own, sell, and buy bitcoin and what steps such individuals need to take in order to be compliant with the rules.<sup>52</sup> In this way, New York seems to have drawn comparisons between cryptocurrencies and securities in creating its regulations.<sup>53</sup> This is yet another example of the divergence in regulatory treatment when bitcoin is categorized by comparing it to an already existing asset type.

From the struggles of these state and federal agencies, we can see that, without guidance, it is difficult to determine under which asset category bitcoin should be regulated. For this necessary guidance, we look next to commercial law as the solution.

## II. BITCOIN AND COMMERCIAL LAW

The regulatory efforts of various state and federal government agencies when it comes to bitcoin are all over the proverbial map. This divergence in regulatory treatment is at least partially attributable to an underlying confusion about which asset category bitcoin fits into; as we have seen, the way bitcoin operates in commerce makes it amenable to classification by comparison to several existing asset categories. Thus, in order to eliminate differences in existing and forthcoming regulations,

---

*ey' Status*, COINDESK (June 29, 2014, 2:20 PM), <http://www.coindesk.com/california-governor-grants-bitcoin-legal-money-status/>.

47. *See id.*

48. *See id.*

49. *See* Virtual Currencies, N.Y. COMP. CODES R. & REGS. tit. 23, § 200 (2014).

50. Here again, the actual regulations themselves are not relevant to the point being made, hence their omission. Rather, the author hopes to demonstrate another example of a state looking to existing asset types upon which to “frame” their regulatory treatment of bitcoin. *See supra* note 42.

51. *See* Virtual Currencies, N.Y. COMP. CODES R. & REGS. tit. 23, § 200.

52. *See id.*

53. *See id.*

there needs to be agreement on what type of asset bitcoin is. There are a number of possible ways that such an effort might be undertaken. This Note will advocate for and undertake an approach in which bitcoin is analyzed through commercial law, in order to determine which, if any, existing asset classifications serve to enhance bitcoin's commercial viability and feasibility.

*A. A Word on an Important Assumption*

The strategy just described reflects an attitude and underlying assumption that will pervade the following analysis, making it important to address before going any further. This Note will seek to classify bitcoin in such a way that enhances its future as a commercial asset. It is debatable whether this is the correct course of action to take when deciding on which regulatory strategy the legal community should ultimately pursue. Obviously, it would be possible to craft the antithesis of the following approach, an asset classification of bitcoin designed to cause it to conflict with existing commercial laws in such a way as to destroy its future viability. This Note will not delve any further into this debate as to whether cryptocurrencies should be regulated "positively" or "negatively," preserving this issue for some future scholar seeking to analyze it in more depth. However, the author would like to provide a word on why this particular Note chooses the positive route.

As previously noted, bitcoin has already found a certain degree of success in the commercial sphere, and the acceptance of this asset is growing daily.<sup>54</sup> While bitcoin might never be the dominant form of payment between consumers and businesses, nor is it likely that every corporation or individual will accept it, that does not necessarily mean that we should regulate it in such a way that destroys it. Rather, this Note takes the stance that new forms of commerce should be encouraged as a method of promoting economic growth. It is certainly true that there will be challenges associated with a form of payment that comes attached to so many unknowns, yet these are challenges that can be dealt with through appropriate regulation. Thus, because of the growing acceptance of the asset and our ability to conquer potential challenges through regulation, this Note will advocate for and base its analysis toward the creation of a positive regulatory strategy. And though it remains to be seen whether this is the correct approach to take, the important takeaway is that this is the assumption that will underlie the following analysis.

---

54. See Ember, *supra* note 5; Ember, *supra* note 9; O'Connor, *supra* note 4.

*B. Bitcoin Under UCC Article 9*

This subpart examines Article 9 of the UCC to try and determine what type of asset bitcoin should be regulated as. Article 9, generally speaking, governs the attachment of security interests to personal property during certain commercial transactions.<sup>55</sup> The potential issue that arises under Article 9 involves the attachment of a security interest to bitcoin, depending on how it is classified as an asset.<sup>56</sup> Professors Bob Lawless of the University of Illinois College of Law and Lynn LoPucki of the UCLA School of Law were some of the first in the academic community to identify this issue and this subpart will be based largely off of their analysis.<sup>57</sup>

The best way to explain the potential issue that arises here (as well as issues discussed in following subparts) will be through the use of a recurrent example. For our purposes, say that there is a small mom-and-pop shop that sells various knickknacks to a largely local clientele.<sup>58</sup> Although most of their business is conducted in cash, the owners have heard about a new type of payment that is conducted through the internet: bitcoin. Because the store is trying to expand its online business, and because the owners have heard that many bitcoin holders have made large profits on their holdings, they decide to start allowing payment in bitcoin for transactions conducted through their website. Importantly, the store also has a line of credit with a local bank that allows them to borrow at predetermined rates in order to pay suppliers or expand their business.

The potential pitfall that the owners might run into with respect to Article 9 of the UCC involves the attachment of a security interest to the bitcoin that the owners will ultimately hold as an asset after receiving payments from customers.<sup>59</sup> Let us say, for sake of argument, that the terms of our store's loan from the bank provide that the bank receives a security interest in the store's inventory, goods, accounts, equipment, and intangibles in exchange for the loan.<sup>60</sup> This type of arrangement is fairly standard practice in the commercial lending industry and is known as a

---

55. See generally U.C.C. art. 9 (2015).

56. See Bob Lawless, *Is UCC Article 9 the Achilles Heel of Bitcoin?*, CREDIT SLIPS (Mar. 10, 2014, 8:17 PM), <http://www.creditslips.org/creditslips/2014/03/is-ucc-article-9-the-achilles-heel-of-bitcoin.html>.

57. See *id.*

58. This example is based on a real-life example of a bakery accepting payment in bitcoin, which is described by Professor Lawless in his article. *Id.*

59. *Id.*

60. In other words, the bank is secured by a lien covering all of the personal property of the store. *Id.*

“blanket lien.”<sup>61</sup> When a customer makes a purchase using the bitcoin payment option, the store receives those bitcoins as payment for goods and gains possession of them. Thus, if those bitcoins were considered by law to be the store’s property, then the bank’s blanket lien would apply to those assets.<sup>62</sup>

At first glance, this might not appear to be much of an issue. Although the bank has a security interest in the coins, it is not as though the owners cannot realize the value of these assets. Furthermore, had the owners received payment for the same transaction in cash and then had reinvested that money into inventory or store improvements, they would be in the same position with regard to the lien encumbering their personal property assets.

However, the problem under UCC Article 9 comes into play when the store wants to utilize the bitcoin that it has accrued to purchase something itself. For example, say one of the store’s suppliers also accepts payments in bitcoin and the owners would like to make their future purchases from that supplier using their accrued cryptocurrency. Under UCC § 9-315(a)(1), the security interest that the bank acquired in the property (here, the bitcoin being used to pay the supplier) “continues in collateral notwithstanding . . . disposition thereof unless the secured party authorized the disposition free of the security interest.”<sup>63</sup> Thus, the key realization of Professors Lawless and LoPucki is that, unless the bank authorizes the disposition of the asset free and clear of the security interest, the bank retains a lien on the bitcoin, even though it has been passed to the supplier as payment.<sup>64</sup>

Furthermore, the bank will continue to retain its security interest in the bitcoin through subsequent transfers.<sup>65</sup> Pursuant to UCC § 9-325, “a security interest created by a debtor is subordinate to a security interest in the same collateral created by another person if . . . the debtor acquired the collateral subject to the security interest created by the other person.”<sup>66</sup> In other words, even if the new owner attaches a security interest to the collateral, it is automatically subordinated to any previously existing liens on the property, even those on behalf of former owners.<sup>67</sup> Also, this interest is not stripped from the bitcoin by the “buyer in the ordinary

---

61. *Id.*

62. *Id.*

63. U.C.C. § 9-315(a)(1) (2015).

64. Lawless, *supra* note 56.

65. U.C.C. § 9-325(a)(1) (2015); Lawless, *supra* note 56.

66. U.C.C. § 9-325(a)(1) (2015).

67. *See id.*

course” protections of UCC § 9-320.<sup>68</sup> This provision in the code is designed to strip goods of security interests when they are involved in commercial transactions in order to prevent the problems that we will discuss in the following paragraph.<sup>69</sup> However, this section only applies to “goods,” defined in the UCC under § 9-102(44), which specifically excludes from the definition of goods “accounts . . . general intangibles . . . instruments, [and] investment property,” essentially all categories under which bitcoin might fall.<sup>70</sup> Thus, under the UCC, the security interest that the bank received under its blanket lien would remain with the bitcoin if bitcoins are treated as property.

Why is the attachment and retention of a security interest to bitcoin a problem? Professors Lawless and LoPucki analyze the problem as one where the bank can suddenly call in its interest in the secured assets if the original debtor is having financial issues.<sup>71</sup> For example, say the market slows and the store from our example hits financial difficulties, defaulting on its loan from the bank. The bank has the ability to retrieve its secured property in satisfaction of its debt, regardless of where the secured property has ultimately ended up. This would greatly hamper the feasibility of bitcoin as a commercial asset; fewer individuals and businesses would be willing to accept the coins as payment if there was the possibility that there had been a lien attached somewhere in the past life of the asset.<sup>72</sup> Thus, a property-like characterization of bitcoin under Article 9 seems to be problematic.<sup>73</sup>

However, under a currency-like characterization of the coins, none of these above problems are present.<sup>74</sup> Under UCC § 9-332, “[a] transferee of money takes the money free of a security interest.”<sup>75</sup> Thus, if bitcoins were considered money rather than property, even if a particular

---

68. U.C.C. § 9-320(a) (2015); Lawless, *supra* note 56.

69. *See* U.C.C. § 9-320(a) (2015).

70. U.C.C. § 9-102(44) (2015).

71. Lawless, *supra* note 56.

72. *See id.*

73. It is worth noting that, as has been said previously, many businesses that currently “accept” bitcoin do so through an intermediary that converts the coins into cash before they reach the business itself. This would seemingly solve the problem of the attachment of commercial liens. However, since the goal of this project is to craft a regulatory strategy that enhances bitcoin’s commercial viability, the system that we design must ultimately allow the asset itself to be traded directly, without having to be converted to cash. Furthermore, this approach would be more appealing to individuals and businesses that might be interested in holding the coins themselves for their investment value, only spending them once they have increased in value.

74. *See* Lawless, *supra* note 56.

75. U.C.C. § 9-332(a) (2015).

“wallet”<sup>76</sup> of cryptocurrency served as collateral to a loan somewhere commercially upstream from the current possessor, the security interest would not follow the transfer.<sup>77</sup> This means that the current owners would not need to worry about their bitcoin assets being taken as repayment for the default of some unrelated debtor.<sup>78</sup>

### C. Bitcoin Under UCC Article 2

Article 2 of the UCC should also be analyzed in order to further our efforts to classify cryptocurrencies as commercial assets. Article 2 primarily governs sales and contract-type issues in the commercial sphere, often with respect to dealings between merchants, and also for dealings between merchants and laypersons.<sup>79</sup> The potential issue that arises in this section of the UCC involves classifying the type of contract that is formed when bitcoin will be the method of payment utilized by one of the parties.<sup>80</sup> The type of contract may change depending on how bitcoin itself is ultimately classified as an asset.<sup>81</sup>

The UCC leaves available the possibility that contracting parties might desire to give or receive payment in some medium other than U.S. dollars. A salient example of this might be a business or an individual dealing in international commerce with a supplier that desires payment in his or her “home” currency. Returning to our example from the previous subpart, imagine our store deals with a candle company in the United States who has as one of its suppliers a candle-making company from Germany. The supplier, in exchange for the sale of its goods to our store, might demand that the contract be paid in euros so that it can easily turn around and pay its supplier from Germany. UCC § 3-107 dictates that “[u]nless the instrument otherwise provides, an instrument that states the amount payable in foreign money may be paid in the foreign money.”<sup>82</sup> Thus, transactions conducted in jurisdictions adopting the UCC may be conducted using mediums of payment other than dollars.<sup>83</sup>

Furthermore, although the most obvious example of an alternate payment device might be a foreign currency, alternate methods of pay-

---

76. Wallet is the term in the e-currency community describing the encrypted account in which a user holds bitcoin. ECONOMIST, *supra* note 16.

77. See Lawless, *supra* note 56.

78. See *id.*

79. See generally U.C.C. art. 2 (2015).

80. See Nikolei M. Kaplanov, *Nerdy Money: Bitcoin, the Private Digital Currency, and the Case Against Its Regulation*, 25 LOY. CONSUMER L. REV. 111, 139 (2012).

81. See *id.*

82. U.C.C. § 3-107 (2015).

83. See *id.*

ment are not limited to currencies.<sup>84</sup> If we consider bitcoin to be property, the contract would be a barter contract, as bitcoin would be considered a good for purposes of the UCC.<sup>85</sup> Under UCC § 2-304, the price of a contract “can be made payable in money or otherwise.”<sup>86</sup> Thus, a contract under Article 2 of the UCC would not fail for the simple reason of one side paying in bitcoin, if we were to categorize it as property; barter contracts are perfectly permissible under the code.

However, there is a potential issue within the statute of frauds when bitcoin is categorized as property. Under UCC § 2-201, when a contract is considered a barter contract, the code provides that where the price “consists of goods rather than money, the quantity of goods must be stated.”<sup>87</sup> In other words, a barter contract conforming with the statute of frauds must contain a price term for it to be acceptable under the UCC. This, of course, only applies when § 2-201 itself applies, which is certainly not applicable to all contracts. However, in situations where the payment of a contract for goods is in goods (i.e., a barter contract) and the contract must comply with the statute of frauds, the “price” of the contract must be included in the writing.

However, if bitcoin was considered to be currency, then this issue might be resolved. A contract where one side pays in recognized currency would be a standard contract for sale. Importantly, Comment 1 to UCC § 2-201 suggests that a contract using currency need not always contain a price term to comply with the statute of frauds.<sup>88</sup> Why is this important? If bitcoin is going to be viable as a commercial asset, then it will need to be able to be utilized in frequent commercial contracts. Often these contracts do not spell out exact price terms but rather will utilize something like a price list or the discretion of the seller to determine the ultimate price.<sup>89</sup> Thus, having to spell out the actual price of the contract any time that the statute of frauds must be complied with would greatly hamper bitcoin’s viability as a commercial asset.

#### *D. Bitcoin Under the Internal Revenue Code*

Finally, this Note will analyze bitcoin under tax law, specifically under the IRC. In addition to having to react positively with codified

---

84. See U.C.C. § 2-304(1) (2015).

85. See *Barter*, BLACK’S LAW DICTIONARY 179 (10th ed. 2014) (defining barter as “[t]he exchange of one commodity for another without the use of money”).

86. U.C.C. § 2-304 (2015).

87. U.C.C. § 2-201 cmt. 1 (2015).

88. See *id.*

89. See *id.*

commercial law, bitcoin will also need to be categorized in such a way that it reacts positively with the tax code if we are to achieve our goal of finding a classification that preserves bitcoin's commercial appeal.

The issue that most prominently arises with respect to tax law involves the potential need to compute capital gains for transactions conducted in bitcoin when it is treated as property.<sup>90</sup> Under § 1221 of the IRC, a capital asset is defined as "property held by the taxpayer," excluding such assets as property used in the taxpayer's trade or business, certain forms of intellectual property, and other listed categories.<sup>91</sup> Thus, unless a consumer-held bitcoin falls under one of the categories that § 1221 of the Code explicitly excludes, it would be considered a capital asset for purposes of tax law.<sup>92</sup> If this were the case, bitcoin would be subject to the Internal Revenue Code's rules regarding the calculation of gains and losses.<sup>93</sup>

Calculating capital gains and losses is a laborious process that becomes more and more complicated as the number of capital transactions a taxpayer engages in during the taxable year increases. The basic calculation is performed as follows: assets held for one year or less are considered to be short-term and assets held for longer than one year are considered to be long-term.<sup>94</sup> When the taxpayer sells capital assets or exchanges them for other goods, that individual is said to have had a "realization event."<sup>95</sup> The gain (or loss) realized from this transaction is calculated by taking the price for which the taxpayer disposed of the asset (the amount realized) and subtracting from it the "basis" of the asset, which is generally the price for which the taxpayer originally acquired the asset.<sup>96</sup> The difference between these two numbers is the taxpayer's gain (or loss) on that particular asset.<sup>97</sup> At the end of each taxable year, the taxpayer must net out short-term gains (or losses), which are the gains realized from the sale of short-term assets, against long-term gains, the gains realized from the sale of long-term assets, to determine overall capital gains or losses and the rate at which such gains will be taxed or losses will be deductible.<sup>98</sup>

---

90. See, e.g., Bennett, *supra* note 35.

91. I.R.C. § 1221(a) (2012).

92. And indeed, it is currently treated this way per the previously discussed IRS Notice on the asset classification of bitcoin. I.R.S. Notice 2014-21, 2014-16 I.R.B. 938.

93. See I.R.C. § 1221(a) (2012).

94. See *id.* § 1222.

95. See *id.* § 1001(b).

96. See *id.* § 1001(a).

97. See *id.*

98. See *id.* § 1222.

Thus, the issue here is one of labor intensiveness and inefficiency. For example, say one of the owners of our store walks down the street to the coffee shop on the corner in order to buy herself a drink. If she decides to pay for that drink using her own bitcoins, she will need to record the price that she pays for the drink (her realization on the asset) and she will need to calculate her gain based on the basis that she had in those coins, which she hopefully recorded when she acquired them.<sup>99</sup> She will also need to determine how long she held the particular coins that she used in the transaction in order to determine what category of gains they fall under.<sup>100</sup> This process would repeat *every time* our owner made a purchase using bitcoin; she would need to retain a requisite amount of information such that she could properly calculate her gains and losses at the end of the year. This additional labor intensiveness in the calculation of taxes would be a significant detriment to the commercial appeal of bitcoin. Additionally, the taxpayer would necessarily incur many more taxable transactions than they would have otherwise. Every time a consumer made a purchase using appreciated bitcoin, the consumer would be taxed on the appreciation.<sup>101</sup> This would generate much more tax liability than the drafters of the IRC likely intended with their inclusion of capital gains in the tax code.

However, capital treatment of bitcoin is not entirely bad. Along with these extra gains would necessarily come extra losses. Because of this, savvy taxpayers might be able to benefit from these rules by only spending bitcoin when its value has declined to an amount less than the taxpayer's basis. By doing this, the wily taxpayer would be able to rack up numerous small losses that could offset other gains at year's end.<sup>102</sup> Furthermore, it has been suggested that the structure of bitcoin itself could be used to simplify the above-described accounting dilemma. Since all bitcoin transactions are necessarily recorded on the block chain, it would be a fairly simple matter to design software that would record gains and losses in bitcoin simply by tracking a particular taxpayer's assets through the program.<sup>103</sup>

Regardless of whether an inclusion of bitcoin in capital gains can ultimately be construed as good or bad, a classification of bitcoin as currency would certainly simplify things greatly. By considering bitcoin to

---

99. *See id.* §§ 1001(a)–(b).

100. *See id.* § 1222.

101. *See id.* § 1221.

102. *See id.* § 1211.

103. Some companies, such as Libra Services Inc., have already explored and developed the type of software described. Bennett, *supra* note 35.

be currency, we would eliminate the entire problem of having to compute capital gains and losses, meaning that bitcoin could be exchanged in commerce just like cash.

### III. CATEGORIZING BITCOIN AS AN ASSET

One can see that commercial law does prove to be an effective guide in classifying bitcoin as an asset. Using Part II's reasoning, it is now possible to classify bitcoin in such a way that allows it to be useable as a viable commercial asset.

#### *A. Summarizing What We Have Learned*

In the previous Part, bitcoin was analyzed under two different sections of the UCC, as well as under relevant sections of the IRC. Each of these analyses concluded that classifying bitcoin as currency best preserves its commercial viability.

With respect to UCC Article 9, we saw that the potential issue with bitcoin's asset classification concerns the attachment of a security interest to the cryptocurrency when it is considered property.<sup>104</sup> If an enterprise were to hold bitcoin as an asset at the time it acquires a loan in exchange for a lien on all of the borrower's personal property, then the bitcoin assets would be encumbered by that lien.<sup>105</sup> Pursuant to the terms of UCC §§ 9-315 and 9-325, that security interest would continue to encumber the bitcoins even after the original borrower has transferred them to other parties as payment for goods or services.<sup>106</sup> This greatly reduces the commercial feasibility of bitcoin; it would be difficult to reliably engage in commerce using a medium of exchange that might be encumbered by a far removed lien that could potentially "pull the rug" out from under some unwitting recipient of the encumbered bitcoins.<sup>107</sup> People would simply be unwilling to do business in an asset that they might lose in an action that does not otherwise concern them.<sup>108</sup> However, if we classify bitcoin as currency, these issues do not arise.

Regarding UCC Article 2, we saw a potential issue arise with respect to the statute of frauds. Although UCC § 2-304 dictates that the price of a contract may be payable in goods,<sup>109</sup> the statute of frauds as codified in UCC § 2-201 dictates that the price of such a contract must be

---

104. Lawless, *supra* note 56.

105. *Id.*

106. See U.C.C. §§ 9-315, -325 (2015).

107. See Lawless, *supra* note 56.

108. See *id.*

109. U.C.C. § 2-304 (2015).

specified in the writing.<sup>110</sup> Thus, buyers and sellers looking to use or receive bitcoin must be able to incorporate the actual price of the contract into their agreement. This is burdensome in the commercial realm, as it is often the practice of repeat players to leave the price term in an agreement open, or to allow the price to be dictated by the market.<sup>111</sup> However, because there is nothing in UCC § 2-201 that mandates that cash buyers or sellers must include a price term, this problem would be eliminated by classifying bitcoin as currency.<sup>112</sup>

Finally, with regard to tax law, bitcoin potentially has problems when it comes to the need to compute capital gains and losses. If bitcoin were to be considered property under the IRC, then every transaction in which a consumer spent bitcoin would be a realization event, requiring the amount for which the consumer “spent” the coins (realization) to be calculated against the price for which the consumer received the coins (basis).<sup>113</sup> This process would be incredibly burdensome, and the accounting difficulties alone would almost certainly limit bitcoin’s appeal to businesses and consumers that engage in a large number of transactions. Again, the classification of bitcoin as currency eliminates this problem; no capital gains transactions would occur simply through the spending of the asset itself.<sup>114</sup>

In sum, preserving bitcoin’s viability as a commercial asset within the realities of commercial law is best done by classifying bitcoin not as “goods” but as currency.

### B. The Final Hurdle

There is one final, albeit critical, hurdle that bitcoin must clear in order to receive the necessary treatment as currency. Currency is defined as “an item . . . that circulates as a medium of exchange”<sup>115</sup>—a requirement that bitcoin certainly satisfies. However, the only currencies that the United States formally recognizes are those that are considered to be “legal tender,” which is defined as “[t]he money (bills and coins) approved in a country for the payment of debts, the purchase of goods, and other exchanges for value.”<sup>116</sup> That is currently not the case with bitcoin;

---

110. U.C.C. § 2-201 cmt. 1 (2015).

111. *See id.*

112. Indeed, Comment 1 seems to suggest the opposite, that courts are reticent to have a contract fail for lack of a specified price for the precise reasons listed above. Only in relation to paying in goods does the UCC demand a specific price. *See id.*

113. *See* I.R.C. § 1001(a)–(b) (2012); *see also id.* § 1221.

114. *See id.* § 1221

115. *Currency*, BLACK’S LAW DICTIONARY 435 (10th ed. 2014).

116. *Legal Tender*, BLACK’S LAW DICTIONARY 1035 (10th ed. 2014).

it is neither recognized as legal tender nor is its status as a viable medium of exchange validated by the power of any government.<sup>117</sup> Thus, the final hurdle that bitcoin must pass in order to be treated as a currency is to gain some sort of currency-like recognition without actually being legal tender. One potential solution to this would be the recognition of bitcoin as a legal tender by another country; such recognition would provide grounds for bitcoin to be considered legal tender in the United States as well. However, no other country has definitively recognized bitcoin as legal tender in their country.<sup>118</sup> Accordingly, we see that although the realities of commercial law dictate that bitcoin should—nay must—be regulated as a currency in order to sustain its viability in commerce, a lack of recognition as legal tender would seem to preclude that from happening.

*C. Recommending a New Asset Type: The Electronic Pseudo-Currency*

So, what is to be done? Is this exclusion from “currency” the death-blow to bitcoin? This Note has demonstrated that the most tenable asset classification for bitcoin would be as a currency. However, since the definition of currency seems to frustrate this classification, the simplest solution, and the solution for which this Note advocates, is not to treat bitcoin as currency directly, but as an entirely new asset type that is considered currency-like. Obviously, it is unlikely that the United States, or any other county, will ever consider bitcoin as a form of legal tender. However, a very simple step that the government of the United States or those of the various states could take would be to revise their commercial codes to allow bitcoin to receive currency-like treatment under law. This could be accomplished by creating a new asset type for “electronic pseudo-currencies”: assets that are classified and function as currencies but lack governmental backing.

This new asset classification could include additional restrictions that particular states or the federal government feel necessary to distinguish bitcoin from the U.S. dollar or recognized foreign currencies. For example, a state or the federal government could restrict or eliminate the power of individuals or corporate entities to pay taxes in cryptocurrency,

---

117. This is partially the reason that the IRS adheres to a property characterization. See I.R.S. Notice 2014-21, 2014-16 I.R.B. 938.

118. Germany has come the closest of any country to recognizing bitcoin as at least being money-like; it has taken a similar step to California in recognizing bitcoin as a “unit of account” similar to money. However, the German state certainly has not called the bitcoin itself legal tender, nor is it likely to do so. See Charles Arthur, *Bitcoin Now ‘Unit of Account’ in Germany*, GUARDIAN (Aug. 19, 2013, 6:01 PM), <http://www.theguardian.com/technology/2013/aug/19/bitcoin-unit-of-account-germany>.

or limit an individual's ability to pay for government-provided services using bitcoin. Additionally, the government (specifically the IRS or a state revenue agency) could choose to apply less laborious tax requirements to the new asset type, perhaps taxing the underlying bitcoin-based holdings themselves rather than requiring the computation of capital gains and losses. Furthermore, the new asset could contain a reporting requirement designed specifically for consumer protection. Payment for services using an electronic pseudo-currency could require the buyer to confirm the seller's willingness to accept a pseudo-currency payment in lieu of legal tender or property. Finally, requirements could be added to the asset in order to both distinguish it from other governmentally backed forms of legal tender and to provide additional security to those who do not want to deal in cryptocurrency.

This, of course, is only a suggestion as to how the government might be able to classify bitcoin in a way that gives it the necessary treatment of currency, although the author does believe this to be the simplest possible solution. As the Note has illustrated, there is a valid debate as to whether the positive regulation of bitcoin is even the best course of action to take. If the powers that be were to decide to regulate bitcoin in such a way as to make it impractical as a commercial asset, then this would obviously not be the route to pursue. But if the federal government and those of the fifty states decide to pursue a regulatory classification that promotes bitcoin's future growth, the creation of a new asset type that receives currency-like treatment seems the best possible approach.

#### CONCLUSION

In conclusion, this Note would have the reader remember the following points. First, the legal community must reach a consensus on bitcoin's underlying asset type in order to eliminate regulatory divergence. Because bitcoin is a unique asset that is amenable to multiple classifications, states and governmental agencies are likely to interpret it differently.

Second, commercial law can serve as an effective guide towards reaching consensus as to what bitcoin's underlying asset type ought to be. Ultimately, because bitcoin is a unit of commercial exchange, it is only sensible to utilize the law with which cryptocurrencies must ultimately interact in order to determine the best asset classification.

Third, and perhaps most importantly, the realities of commercial law dictate that if bitcoin is to be regulated in a way that allows its commercial viability, it must be treated as a currency rather than as property.

A classification as currency eliminates the most prevalent issues under commercial law that a property-like categorization might cause.

Finally, in order to effectively achieve a currency-like categorization for bitcoin, states and the federal government will need to create a new asset type for bitcoin. Although there may be many possible routes to this destination, this Note advocates for the creation of a pseudo-currency designation under which bitcoin can receive the asset treatment of currency for purposes of conformity with established commercial law.

Whether bitcoin will achieve long-term acceptance or viability remains to be seen. However, it cannot be denied that the asset has established a foothold in the commercial sector. Bitcoin is no longer a mere novelty and we can no longer treat it as one. Continuity in the underpinnings of our regulatory policy will be crucial; we cannot afford to continue the current regulatory divergence. This divergence can be eliminated by looking to commercial law, and if we decide to regulate in a way that preserves the future of bitcoin, then the realities of present-day commerce and commercial law dictate that a currency or pseudo-currency categorization best meets this goal.