

**Bitcoin and Bankruptcy: Implications for Canadian Insolvency Law**

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## I. Introduction

In 2009, a modest investment of US\$1.00 could have purchased 1,309.03 bitcoins.<sup>1</sup> In 2017, that same investment would have been worth over US\$25 million.<sup>2</sup> How is it that a technological fiction with no inherent value can be worth so much? That mystery has sent shockwaves throughout the global economy, especially over the past year.

Cryptocurrencies have gained considerable momentum in Canada and may ultimately mature into a mainstream asset class.<sup>3</sup> Accordingly, policymakers ought to consider the implications of Bitcoin and other cryptocurrencies on the Canadian insolvency regime. There is no Canadian jurisprudence or guiding principles dealing directly with cryptocurrencies. However, this paper examines recent American case law, and highlights some of the key issues relevant to insolvency law in Canada.

This paper is structured as follows: Part II provides an overview of Bitcoin; Part III deals with the legal characterization of Bitcoin; Part IV examines two leading cases from the United States of America (the “U.S.”); Part V discusses the key issues that Bitcoin raises for Canadian insolvency law; Part VI considers policy recommendations; and Part VII concludes.

## II. What is Bitcoin?

Bitcoin is largely a creature of the “cypherpunk” movement, which merged libertarianism with cryptography.<sup>4</sup> The cypherpunk movement consisted of people who believed that with strong online privacy and cryptography, they could redesign the architecture of the way in which people and businesses interact. The cypherpunks sought to create a world in which people could more effectively protect their interests while minimizing government interference. A major obstacle to this paradigm shift was the government monopoly on money. Thus, the cypherpunks’ aim was to create new forms of decentralized digital value that functioned like cash in the sense of being anonymous and easily exchangeable.<sup>5</sup> Bitcoin provided the solution.

Bitcoin was created in 2008 by an unidentified person operating under the pseudonym Satoshi Nakamoto. In his or her seminal white paper, Satoshi described Bitcoin as a cryptographic system for electronic cash in which transactions are verified on the basis of group consensus rather than

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<sup>1</sup> With capitalization, “Bitcoin” is used when describing the overall concept of Bitcoin or its network. Without capitalization, “bitcoin” and “bitcoins” refer to bitcoins as a unit of account.

<sup>2</sup> 1,309.03 multiplied by the US\$ value per bitcoin on December 17, 2017 (US\$19,783.21) = US\$25.9 million.

<sup>3</sup> Bitcoin miners have flocked to Alberta and Quebec to leverage inexpensive power. Businesses are increasingly accepting bitcoin as a medium of exchange. Toronto and Vancouver each host large Bitcoin exchanges. The first Canadian Bitcoin vault will soon be opened by a small digital bank in London, Ontario.

<sup>4</sup> See Arvind Narayanan et al, *Bitcoin and Cryptocurrency Technologies – A Comprehensive Introduction*, (Princeton: Princeton University Press, 2016) at 175.

<sup>5</sup> *Ibid.*

through financial institutions serving as trusted third parties.<sup>6</sup> Cryptographic proof would allow two willing parties to safely and pseudonymously transact with one another directly. This would, at least in theory, eliminate the need for financial and governmental intermediaries, and the associated transaction costs.

Bitcoins originate through a process called mining. Mining involves employing supercomputers with specialized software to solve complex mathematical puzzles in order to validate and record a new transaction to the blockchain.<sup>7</sup> The blockchain is the decentralized public ledger that keeps track of every Bitcoin transaction that has ever taken place. Once properly validated, Bitcoin transactions are immutable, which could significantly impact the legal remedies available in insolvency proceedings.<sup>8</sup> Bitcoins can be exchanged for government issued currencies, used to purchase goods and services, or transferred from one user to another.<sup>9</sup>

Bitcoin is complex in that it represents a multifaceted cross-disciplinary system that is continuously evolving. It lies at the crossroads between cryptography, game theory, computer networking, data transmission, and monetary policy.<sup>10</sup> Much of the mystery surrounding cryptocurrencies and the blockchain stems from the fact that they are not merely technologies. Rather, cryptocurrencies and the blockchain technology that supports them represent a fundamental cultural shift that will challenge many of the assumptions underlying the global economic order.<sup>11</sup>

### III. Legal Characterization of Bitcoin

In order to determine the implications of Bitcoin on Canadian insolvency law, it is helpful to first examine the legal characterization of Bitcoin. A logical starting point is to determine whether bitcoins constitute property. Property is a defined term in the *Bankruptcy and Insolvency Act* (the “BIA”).<sup>12</sup> The definition is expansive and has been broadly interpreted by the Supreme Court of Canada.<sup>13</sup> As such, in any insolvency proceeding involving bitcoins, there should be little debate

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<sup>6</sup> Satoshi Nakamoto, “Bitcoin: A Peer-to-Peer Electronic Cash System” (2008) <<https://bitcoin.org/bitcoin.pdf>>.

<sup>7</sup> The blockchain is a decentralized public ledger that keeps track of all the Bitcoin transactions.

<sup>8</sup> Kelvin FK Low & Ernie GS Teo, “Bitcoins and Other Cryptocurrencies as Property?” (2017) 9:2 Law, Innovation and Technology 235 at 237.

<sup>9</sup> Chelsea Deppert, “Bitcoin and Bankruptcy: Putting the Bits Together” (2015) 32:1 Emory Bankr Dev J 123 at 127 [Deppert, “Bitcoin and Bankruptcy”].

<sup>10</sup> Ferdinando Ametrano, *Sixth Lesson for the Bitcoin and Blockchain Technology Course* (Politecnico Milano, 2016).

<sup>11</sup> Don Tapscott & Alex Tapscott, *Blockchain Revolution* (Toronto: Penguin Canada, 2016) at 25.

<sup>12</sup> *Bankruptcy and Insolvency Act*, RSC 1985, c B-3, s 2 [BIA]. “Property” includes, money, goods, things in action, land and every description of property whether real or personal, legal or equitable, and whether situated in Canada or elsewhere. Including obligations, easements and every description of estate, interest and profit present or future, vested or contingent, in, arising out of, or incident to property.

<sup>13</sup> *Saulnier v Royal Bank of Canada*, 2008 SCC 58.

as to whether bitcoins constitute property of the bankruptcy estate, or the debtor-in-possession restructuring under the *Companies' Creditors Arrangement Act* (the “CCAA”).<sup>14</sup>

The Ontario *Personal Property Security Act* (the “PPSA”)<sup>15</sup> is silent with regard to cryptocurrencies, as is the corresponding legislation in every other province and territory.<sup>16</sup> While proponents of Bitcoin would seek to characterize bitcoins as money, that characterization fails on the basis that bitcoins are not an officially recognized currency by any government.<sup>17</sup> Bitcoins also fail to qualify as goods, chattel paper, documents of title, instruments, and investment property. Accordingly, bitcoins would almost certainly be captured by the catch-all “intangibles” category under the PPSA.<sup>18</sup> This is consistent with the prevailing U.S. commentary that bitcoins are “intangibles” for the purposes of the *Uniform Commercial Code* (the “UCC”).<sup>19</sup>

It is worth noting that the characterization of bitcoins as intangible personal property may carry with it some consequences. Unlike with other forms of personal property, transferees of intangibles take the intangibles subject to pre-existing security interests, notwithstanding that the transfer takes place in the ordinary course of business.<sup>20</sup> This has led some commentators to posit that intangibles are the “least negotiable” of all forms of personal property, which may have a chilling effect on the utility of bitcoin as a medium of exchange.<sup>21</sup>

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<sup>14</sup> *Companies' Creditors Arrangement Act*, RSC 1985, c C-36 [CCAA].

<sup>15</sup> *Personal Property Security Act*, RSO 1990, c P-10.

<sup>16</sup> For simplicity, the Ontario PPSA will be used as a proxy for other provincial and territorial personal property security legislation. Any differences can be safely ignored for the limited purposes of this discussion.

<sup>17</sup> Interestingly, however, if any country adopted Bitcoin as its official currency, its treatment under Canadian personal property legislation would drastically shift. If the recent move by Venezuela is any indication, this may not be too far fetched. See Kirk Semple & Nathaniel Popper, “Venezuela Launches Virtual Currency, Hoping to Resuscitate Economy”, *The New York Times* (20 February 2018), online: <<https://www.nytimes.com/2018/02/20/world/americas/venezuela-petro-currency.html>>.

<sup>18</sup> Timothy Jones & Dillon Collett, “Cryptocurrency Assets Under Insolvency and Personal Property Security Law” (15 February 2018), Aird & Berlis, online: <<http://www.airdberlis.com/insights/publications/publication/cryptocurrency-assets-under-insolvency-and-personal-property-security-law>> [Jones & Collett, “Cryptocurrency Assets”].

<sup>19</sup> *Uniform Commercial Code* (2012). See Jeanne L Schroeder, “Bitcoin and the Uniform Commercial Code” (2015) Benjamin N. Cardozo School of Law Faculty Research Paper No 458 at 5 [Schroeder].

<sup>20</sup> For example, suppose A grants B a security interest in all of A’s present and after acquired personal property. If A purchases equipment in the ordinary course from C using bitcoins, these bitcoins remain subject to B’s security interest. Thus, if A subsequently defaults, B could seize these bitcoins from C as collateral.

<sup>21</sup> Schroeder, *supra* note 9; Jones & Collett, “Cryptocurrency Assets”, *supra* note 18.

#### IV. American Jurisprudence and Commentary

As mentioned, there are no Canadian insolvency cases dealing with Bitcoin.<sup>22</sup> There is also limited commentary<sup>23</sup> and administrative guidance.<sup>24</sup> Thus, in order to better understand the issues surrounding Bitcoin and bankruptcy, it is helpful to examine recent U.S. case law and commentary.

It appears settled that bitcoins qualify as property in insolvency proceedings. However, a major issue in the U.S. is whether bitcoins should be classified as currency or commodities.<sup>25</sup> This classification has far reaching implications under the *United States Bankruptcy Code* (the “US Code”).<sup>26</sup> This is because the US Code affords greater protections to assets classified as currencies compared to those classified as commodities.<sup>27</sup> If bitcoins are currency, then bitcoin contracts may be classified as “swaps.” Swaps are automatically afforded statutory “safe harbour” treatment<sup>28</sup> and receive special exemptions from both the automatic stay of proceedings and the reviewable transaction provisions of the US Code.<sup>29</sup> Accordingly, a debtor’s counterparty to a swap contract may terminate and net out the parties’ obligations, including enforcement of collateral, notwithstanding the automatic stay of proceedings.<sup>30</sup> This includes the ability to terminate the swap by reason only of the debtor’s insolvency under an *ipso facto* clause.<sup>31</sup> Conversely, if bitcoins are commodities, bitcoin contracts would be extended far fewer protections under the US Code, unless they fall within the narrow definition of a “forward contract.”<sup>32</sup>

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<sup>22</sup> There has been one recognition proceeding of a Japanese bankruptcy in *Mt Gox Co., Re*, 2014 ONSC 5811. For an excellent summary on the *Mt Gox* issues see Jones & Collett, “Cryptocurrency Assets”, *supra* note 18.

<sup>23</sup> Jones & Collett, “Cryptocurrency Assets”, *supra* note 18; Petter Hurich, “The Virtual is Real: An Argument for Characterizing Bitcoins as Private Property” (2016) 31:3 BFLR 573; Andrea Borroni, “Bitcoins: Regulatory Patterns” (2016) 32:1 BFLR 47.

<sup>24</sup> Bank of Canada, “Decentralized E-Money (Bitcoin)” (April 2014), online: Bank of Canada <<http://www.bankofcanada.ca/wp-content/uploads/2014/04/Decentralize-E-Money.pdf>>; Canada Revenue Agency Fact Sheets, “What You Should Know About Digital Currency” (December 3, 2014), online: Government of Canada <<https://www.canada.ca/en/revenue-agency/news/newsroom/fact-sheets/fact-sheets-2013/what-you-should-know-about-digital-currency.html>>.

<sup>25</sup> See Deppert, “Bitcoin and Bankruptcy”, *supra* note 8; Casey Doherty, “Bitcoin and Bankruptcy: Understanding the Newest Potential Commodity” (2014) 33:7 Am Bankr Inst J.

<sup>26</sup> *United States Bankruptcy Code*, 11 USC (2005) [US Code]. Deppert, “Bitcoin and Bankruptcy”, *supra* note 8 at 124; Casey Doherty, “Bitcoin and Bankruptcy: Understanding the Newest Potential Commodity” (2014) 33:7 Am Bankr Inst J at 1.

<sup>27</sup> Deppert, “Bitcoin and Bankruptcy”, *supra* note 8 at 124.

<sup>28</sup> Rupert H Chartrand, Edward A Sellers & Martin McGregor, “Selected Aspects of the Treatment of Derivatives in Canadian Insolvency Proceedings: Time for a Re-Set?” in Janis P Sarra ed, *Annual Review of Insolvency Law 2011* (Toronto: Carswell, 2011) [Chartrand, Sellers & McGregor].

<sup>29</sup> See *US Code*, *supra* note 26, ss 362(b)(17), 546(g) and 548.

<sup>30</sup> Charles W Mooney Jr., “The Bankruptcy Code’s Safe Harbors for Settlement Payments and Securities Contracts: When is Safe Too Safe?” (2014) 49:243 Tex Intl LJ 243 at 250.

<sup>31</sup> *Ibid.* Ordinarily, such clauses would be rendered ineffective by Section 365(e)(1) of the US Code.

<sup>32</sup> Deppert, “Bitcoin and Bankruptcy”, *supra* note 8 at 131.

*CLI Holdings*<sup>33</sup> and *HashFast Technologies*<sup>34</sup> are two of the leading American bankruptcy cases involving Bitcoin. While each case touched on the classification issue, neither provided a definitive decision on whether bitcoins are currency or commodities for the purposes of interpreting the US Code. Thus, it remains uncertain how cryptocurrencies will be treated in future U.S. insolvency proceedings.

In *CLI Holdings*, the debtor was a bitcoin miner who borrowed US\$75,000 from a bitcoin financier to purchase mining equipment. In return, the debtor was to repay the loan with the first 7,984 bitcoins that were mined.<sup>35</sup> Much to the debtor's dismay, the market value of those 7,984 bitcoins subsequently skyrocketed to over US\$8 million, far eclipsing the amount of the original loan. Clearly, this turned out to be an excellent investment for the financier, albeit frustrating for the debtor. The debtor discontinued payments and strategically filed for bankruptcy under Chapter 11 of the US Code. It sought to use Chapter 11 to disclaim the onerous contract,<sup>36</sup> thereby freeing itself to sell its bitcoins on the open market. The court rejected this position, holding that the debtor could not disclaim a contract where the creditor was merely to receive production.<sup>37</sup> In upholding the contract, the court seemed to treat bitcoins as any other commodity. However, the classification of bitcoin was not directly at issue.

In *HashFast Technologies*, prior to filing for bankruptcy, HashFast suspiciously transferred 3,000 bitcoins to a related party, Dr. Lowe. At the time of the transfer, those bitcoins were worth US\$363,861.43. At the commencement of proceedings, the value of the same bitcoins appreciated to approximately US\$1.3 million. The trustee sought to avoid this transaction on the basis of fraud. In its motion for partial summary judgment, the trustee argued that because bitcoins are commodities, the bankruptcy estate should be entitled to the return of the bitcoins, or the equivalent current market value of US\$1.3 million. In so doing, the trustee relied on subsection 550 of the US Code, which allows the bankruptcy estate to benefit from any appreciation.<sup>38</sup> Conversely, Dr. Lowe argued that because bitcoins are currency, the estate was merely entitled to the return of US\$363,861.43, the value of the bitcoins on the date of the initial transfer.

The court ruled partially in favour of the trustee, and commented that bitcoins are clearly not U.S. dollars.<sup>39</sup> However, it elected to reserve its judgment on whether bitcoins are currency or

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<sup>33</sup> *In re CLI Holdings*, Case No 13-19746 (WD Wash, 2013) [*CLI Holdings*].

<sup>34</sup> *In re HashFast Technologies LLC*, Case No 14-30725DM (Bankr ND Cal, 2016) [*HashFast Technologies*].

<sup>35</sup> This type of agreement is called an overriding royalty interest, and is commonly used in the extractive resource industries.

<sup>36</sup> This presumably centred around the payback terms. Given that the present value of 7,984 bitcoins was significantly greater than US\$75,000 (the original amount loaned to the debtor), the debtor would be significantly better off if it were able to disclaim the contract or restructure its terms in order to only pay back the US\$75,000 loan plus interest.

<sup>37</sup> *CLI Holdings*, *supra* note 33 at para 43.

<sup>38</sup> *US Code*, *supra* note 26 ss 550; *In re Brun*, 360 BR 669, 675 (Bankr CD Cal, 2007); *In re Am Way Serv Corp*, 229 BR 496, 531 (Bankr SD Fla, 1999).

<sup>39</sup> *HashFast Technologies*, *supra* note 34 at 1.

commodities for the purposes of the US Code until the trustee prevailed in the underlying avoidance action. Since the matter was ultimately settled, the court never had an opportunity to issue a ruling in that regard.<sup>40</sup>

While both cases sidestepped the overarching issue of whether bitcoins are currency or commodities for the purposes of interpreting the US Code, the judgments seem to suggest that bitcoins will be treated more like a commodity than a currency. However, this is inconsistent with the approach taken in recent securities<sup>41</sup> and criminal<sup>42</sup> law cases, where certain U.S. courts held that bitcoins are currency. Thus, it remains unclear how the classification issue will be decided. What is clear, however, is that technological innovation has once again outpaced the law. Without congressional guidance on the treatment of cryptocurrencies, conflicting classifications are an inexorable byproduct in the race to assume regulatory jurisdiction. Consequently, the regulatory response to Bitcoin in the U.S. is both fragmented and incomplete.<sup>43</sup> The UCC and the US Code ought to be amended to provide some guidance.

## V. Canadian Insolvency Issues

The following will discuss three primary issues that Bitcoin raises in the context of the Canadian insolvency system.

### (i) Eligible Financial Contracts

A compelling issue that derives itself from the American currency vs commodity debate, is whether Canadian bitcoin contracts would qualify as eligible financial contracts (“EFCs”). EFCs are granted similar safe harbour protection as “swaps” under the US Code. As such, they are afforded certain exemptions from the stay of proceedings and the reviewable transactions provisions.<sup>44</sup> Similar to the U.S. exemptions, this means that a non-defaulting counterparty to an EFC may terminate and net out the parties’ obligations, including enforcement of financial collateral, notwithstanding the stay of proceedings.

EFCs are given an expansive definition under the *Eligible Financial Contract Regulations* (the “**EFC Regulations**”),<sup>45</sup> and have been criticized for being overinclusive.<sup>46</sup> The risk is that if the definition of EFCs is too broadly construed, the exemption from the stay of proceedings could

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<sup>40</sup> *Ibid.* See also Alan Rosenberg, “The Cryptocurrency Craze: How to Treat Bitcoins in Fraudulent-Transfer Litigation” (February 2018) Am Bankr Inst J at 5.

<sup>41</sup> *SEC v Shavers*, Case No 13-00416 (ED Tex, 2013).

<sup>42</sup> *US v Ulbricht*, 858 F 3d 71 (2<sup>nd</sup> Cir, 2017).

<sup>43</sup> Schroeder, *supra* note 9 at 18.

<sup>44</sup> *BIA*, *supra* note 12, ss 65.1, 65.11, 66.34, 84.1, 84.2, 95; *CCAA*, *supra* note 14 ss 11.3, 32, 34.

<sup>45</sup> *Eligible Financial Contract Regulations*, SOR/2007-257.

<sup>46</sup> Chartrand, Sellers & McGregor, *supra* note 28.

inappropriately impair the ability of insolvent debtors to restructure.<sup>47</sup> A plain reading of the regulations suggests that bitcoin contracts may qualify as EFCs, particularly if bitcoins are classified as a type of currency.<sup>48</sup> This could serve to unduly protect non-defaulting counterparties to the detriment of the broader community of creditors. Since the purpose of EFCs is to shield the Canadian and global financial markets from systemic risk,<sup>49</sup> it is questionable whether bitcoin contracts should be granted safe harbour protection. As it stands, default on such contracts would not trigger systemic risk.

## (ii) Traceability & Realizing Cryptocurrencies

Canadian insolvency legislation enables the trustee<sup>50</sup> and the monitor<sup>51</sup> to challenge preferential payments, or dispositions of property for conspicuously less consideration than fair market value. However, difficulties arise when the debtor in question deals in cryptocurrencies. Due to the decentralized and pseudonymous nature of the blockchain – the ledger that supports the Bitcoin network – it is nearly impossible to unwind preferences or fraudulent conveyances. Amending the blockchain would require vast amounts of computational power, which would likely come at an extortionate cost.<sup>52</sup>

## (iii) Valuation

As seen in the *Mt Gox* insolvency proceedings,<sup>53</sup> the valuation of bitcoins in the insolvency context is a thorny issue. The facts of this case are as follows. In 2014, Mt Gox filed for bankruptcy in Japan. At that time, it was the largest Bitcoin exchange in the world. After the commencement of proceedings, the bitcoin holders sought a return of the bitcoins that Mt Gox held on their behalf. However, the Tokyo Court held that under Japanese law, the bitcoin holders did not own the bitcoins while they were deposited on the exchange. Rather, the bitcoin holders merely held a contractual right to the value of the bitcoins, which crystallized pre-filing at US\$438 per token.

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<sup>47</sup> Andrew J.F. Kent *et al.*, “Eligible Financial Contracts vs Insolvency: Round II” in Janis P Sarra ed, *Annual Review of Insolvency Law 2008* (Toronto: Carswell, 2008).

<sup>48</sup> As in the case of the U.S., it seems more difficult to classify commodities contracts as EFCs. See *Androskoggin Energy LLC, Re*, 2005 CarswellOnt 589 (ONCA). Canadian commodities contracts will generally only qualify where the underlying transaction is of a type that is the subject of recurrent dealings in over-the-counter commodities markets. However, caution must be exercised in comparing the American and Canadian safe harbour legislation since there are material differences. For example, the safe harbour afforded to forward contracts under the U.S. legislation is only available if they are transacted with a “forward contract merchant” (US Code ss 101(26)). There is no similar requirement under Canadian legislation.

<sup>49</sup> Insolvency Institute of Canada, “Report of the Task Force on Derivatives” (2013) at 2, online: <[https://www.insolvency.ca/en/iicresources/resources/IIC\\_Derivatives\\_Task\\_Force\\_Report\\_November\\_2013.pdf](https://www.insolvency.ca/en/iicresources/resources/IIC_Derivatives_Task_Force_Report_November_2013.pdf)>.

<sup>50</sup> *BIA*, *supra* note 12, ss 95-96.

<sup>51</sup> *CCAA*, *supra* note 14 ss 23(1)(d.1), 36.1; see especially *Ernst & Young Inc v Essar Global Fund Limited*, 2017 ONCA 1014 at paras 109-116 for an excellent summary of the expanded role of the monitor.

<sup>52</sup> Charlotte Moller & Claude Brown, “Insolvency of Virtual Currencies – A New Reality?” (2017) Reed Smith LLP, online: <[http://www.insol.org/emailer/June\\_2017\\_downloads/Doc1.pdf](http://www.insol.org/emailer/June_2017_downloads/Doc1.pdf)>.

<sup>53</sup> See Jones & Collett, “Cryptocurrency Assets”, *supra* note 18.

The price subsequently skyrocketed by a factor of nearly twenty times. Because the bitcoins were only valued at the pre-filing amount, it resulted in a surplus to the bankruptcy estate. This led to a multi-billion dollar windfall to the shareholders of Mt Gox. Thus, the bitcoin holders were unable to realize what should have been billions of dollars in capital gains on their bitcoins.

Clearly, the key determination is when the value of a cryptocurrency crystallizes for the purposes of an insolvency proceeding. Given the extreme volatility in the price of bitcoins, there will necessarily be winners and losers. Therefore, a major issue for Canadian policymakers is how to efficiently allocate these gains and losses, while also maintaining a careful balance between debtor rehabilitation, fairness, and maximizing returns to creditors. It is only a matter of time before Canadian courts will be forced to grapple with these issues.

## **VI. Policy Recommendations**

In the coming years, Canadian policymakers ought to consider establishing a comprehensive legal framework that applies to cryptocurrencies such as Bitcoin. Paramount to this framework will be the issue of classification. Clarity in this regard will be crucial in defining the parameters of any forthcoming legislation.

Gaining such clarity will necessarily involve determining what exactly a bitcoin is. Bitcoins certainly share many characteristics with both currency and commodities. On one hand, like a commodity, bitcoins are finite in nature,<sup>54</sup> and can be purchased, sold, and traded for goods and services. Yet, they are intangible and have no inherent value. On the other hand, like a currency, bitcoins are a store of value, a unit of account, and a medium of exchange. However, they are not a universally accepted legal tender. With this in mind, perhaps the best answer is that bitcoins are neither a currency nor a commodity. Attempting to use these existing categories to classify bitcoins is akin to being “handed a square peg and asked to choose between two round holes.”<sup>55</sup> As such, we may be better served by affording cryptocurrencies a class of their own. Cryptocurrencies are a new, decentralized means of payment. Accordingly, the legislation capturing bitcoin transactions should be specifically tailored to deal with the unique nature of cryptocurrencies and blockchain technology.

Most importantly, this means amending the PPSA to address, at minimum, the following five elements: (i) the addition of “cryptocurrency” as a new form of personal property; (ii) providing a

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<sup>54</sup> Bitcoins are created at a decreasing and predictable rate. The number of new bitcoins created each year is automatically halved over time until bitcoin issuance halts completely with a total of exactly 21 million bitcoins in existence. See < <https://bitcoin.org/en/faq#how-are-bitcoins-created>>.

<sup>55</sup> *Cotter v Lyft Inc.*, 60 F Supp 3d 1067, 1081 (ND Cal, 2016) at 19. While this quote from Judge Chhabria was in the context of a labour law proceeding, it provides a useful analogy for the bitcoin classification issue discussed in this paper.

comprehensive definition of what constitutes a cryptocurrency; (iii) providing negotiability rules for cryptocurrencies that augment their utility as a medium of exchange; (iv) providing rules for what constitutes ownership or control; and (v) priority rules with respect to security interests in cryptocurrencies.

Additionally, both the BIA and the CCAA should be modified to account for the issues discussed in Part V. Parliament should amend the EFC Regulations to provide guidance as to circumstances under which bitcoin contracts qualify as EFCs, if any. With respect to the valuation issue, bitcoins should be treated the same as commodities and foreign currency. In other words, the estate should benefit from any relative appreciation. Of course, it cuts both ways. The estate must also shoulder any resulting depreciation. This is the intuitive approach given the status quo. The fact that bitcoins are a form of cryptocurrency does not, in this instance, demand a different result.

## **VII. Conclusion**

The U.S. authorities demonstrate that the regulation of Bitcoin is fragmented and incomplete. This has resulted in inconsistency in the law and a race to assume regulatory jurisdiction. Thanks to the recent American examples, Canadian policymakers now have the luxury of precedent. As such, a wait-and-see approach may not be necessary. Parliament and the Provincial Legislatures should take a proactive approach by amending the legislation that captures bitcoin transactions. The legislation should be specifically tailored to deal with the unique nature of cryptocurrencies and blockchain technology. Comprehensive details on the breadth and substance of any amendments are well beyond the scope of this paper. However, some degree of clarity and predictability would be welcome in order to protect the reasonable expectations of Canadians dealing with bitcoins.