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## The IMF Must Develop Best Practices Before Government-Backed Cryptocurrencies Destabilize the International Monetary System

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# THE IMF MUST DEVELOP BEST PRACTICES BEFORE GOVERNMENT-BACKED CRYPTOCURRENCIES DESTABILIZE THE INTERNATIONAL MONETARY SYSTEM

## INTRODUCTION

Imagine the following hypothetical—Russia, under economic sanctions from the West (i.e., the Western Bloc, including the United States, the United Kingdom, Australia, Canada, etc.) which bar consumers from conducting business with Russian corporations, introduces a government-backed cryptocurrency (“the e-Ruble”), accessible to all members of the European continent, both European Union (EU) members and non-members.<sup>1</sup> Russian corporations, hoping to re-enter the European markets, propose their customers use this Russian-backed cryptocurrency to circumvent the sanctions.

European citizens, seeing the benefits of the e-Ruble—particularly its cross-border reach and lower transaction fees—begin using this Russian-backed cryptocurrency, increasing demand for the e-Ruble and weakening the Euro.<sup>2</sup> Furthermore, China, in an economic alliance with Russia, permits Chinese corporations to conduct business using the e-Ruble.<sup>3</sup> European consumers and businesses, now allowed to use the e-Ruble in two of the largest export markets and six of the largest eleven world economies, further weaken by lowering its demand.<sup>4</sup>

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<sup>1</sup> This is not a far-off hypothetical; the potential for this scenario is very real. See Anthony Cuthbertson, *Iran Plans National Cryptocurrency to Evade U.S. Sanctions*, INDEPENDENT (Aug. 29, 2018), <https://www.independent.co.uk/life-style/gadgets-and-tech/news/iran-national-cryptocurrency-us-sanctionsbitcoin-trump-a8512596.html>; Max Seddon & Martin Arnold, *Putin Considers ‘Cryptorouble’ as Moscow Seeks to Evade Sanctions*, FIN. TIMES (Jan. 1, 2018), <https://www.ft.com/content/54d026d8-e4cc-11e7-97e2-916d4fbac0da?segmentId=6132a895-e068-7ddc-4ccc-a1abfa5c8378>.

<sup>2</sup> For the purposes of this hypothetical, Russian exports of natural gas, oil, minerals, and certain manufactured goods to Europe are significant. As such, European consumers and businesses are dependent on Russian imports as Russia is not under economic sanctions from the EU. See *Russia*, U.S. ENERGY ADMIN. (Mar. 12, 2014), <https://web.archive.org/web/20140324135804/http://www.eia.gov/countries/cab.cfm?fips=rs>; see also *EU Imports of Energy Products—Recent Developments*, EUROSTAT (May 2019), <https://ec.europa.eu/eurostat/statistics-explained/pdfscache/46126.pdf> (“Special focus is given to Russia as the main supplier of petroleum oils and natural gas to the EU.”).

<sup>3</sup> We assume China is working on its own cryptocurrency, but, for now, permits Chinese corporations to use the e-Ruble. See, e.g., Emily Feng, *Facebook’s Digital Money Plan Raises Stakes for China’s Cryptocurrency Ambitions*, NPR (July 31, 2019, 8:46AM), <https://www.npr.org/2019/07/31/742223881/facebook-digital-money-plan-raises-stakes-for-china-s-cryptocurrency-ambitions>.

<sup>4</sup> GROSS DOMESTIC PRODUCT 2018, <https://databank.worldbank.org/data/download/GDP.pdf> (last visited Jan. 7, 2019).

Seeking revenge on the EU, and the West more broadly, for previously imposed economic sanctions, Russia initiates a speculative attack on the Euro.<sup>5</sup> In an attempt to ensure EU citizens have a stable, sovereign currency not under Russia's control, the EU rushes to adopt its own "e-Euro," which has similar characteristics to the e-Ruble. Reminded of the Cold War, the EU also urges the United States to adopt its own government-backed cryptocurrency, sensing that this could be the next front of attack for Russia. These actions spur reactionary measures by both developed and developing countries,<sup>6</sup> and soon after, the world is fighting through currency manipulation. The front for the war is government-backed cryptocurrencies and there is no established framework for oversight, nor is there an international organization capable of containing the "fighting" or its national and international consequences. The near constant currency manipulation, amid global adoption of government-backed cryptocurrency, results in the collapse of the international monetary system, setting the globe back nearly eighty years.

While this scenario may seem far-fetched, the characteristics of cryptocurrency make it a distinct possibility.<sup>7</sup> Cryptocurrencies, and the technology underlying them, are promising technological advancements.<sup>8</sup> However, some of the characteristics that make the technology so promising are also the characteristics which could lead to a minor problem spiraling out of control. Government-backed cryptocurrency poses a threat to the stability of the international monetary system and, barring rapid and proactive measures, the international community risks sustaining significant injury to the infrastructure of the international economy.

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<sup>5</sup> See Ed Howden, Comment, *The Crypto-Currency Conundrum: Regulating an Uncertain Future*, 29 EMORY INT'L L. REV. 741, 773 (2015) ("A speculative attack is considered a massive devaluation of a country's currency brought on by the selling of the country's currency.").

<sup>6</sup> This is described as the "Herding Effect." See discussion *infra* Part II.B.

<sup>7</sup> See discussion *infra* Part III.B.

<sup>8</sup> See generally, Michael Crosby et al., *BlockChain Technology: Beyond Bitcoin*, 2016 APPLIED INNOVATION REV. (discussing cryptocurrencies).

Cryptocurrency<sup>9</sup> is the flavor of the month (or decade), and the darling of Silicon Valley, Wall Street, and Main Street.<sup>10</sup> But it is not all sunshine and rainbows; the volatility of Bitcoin, and other cryptos, has been covered ad-nauseum.<sup>11</sup> While “cryptocurrency” often evokes worries of “price volatility,” this is not the biggest threat posed by cryptocurrency.<sup>12</sup> Cryptocurrencies, specifically government-backed cryptocurrencies,<sup>13</sup> present a threat to the stability of the international monetary and financial systems.<sup>14</sup>

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<sup>9</sup> “Governments around the world are taking different approaches to cryptocurrency, applying different nomenclatures and definitions.” *Hearing on Examining Regulatory Frameworks for Digital Currencies and Blockchain Before the Committee on Banking, Housing, and Urban Affairs*, 116th Cong. 4 (July 30, 2019) (statement of Rebecca M. Nelson, Specialist in International Trade and Finance). Among the most commonly used terminology are “digital currency,” “virtual currency,” “virtual commodity,” “virtual asset,” “electronic currency,” and “payment token.” GLOB. LEGAL RES. CTR., REGULATION OF CRYPTOCURRENCY AROUND THE WORLD I (June 2018) [hereinafter GLOB. LEGAL RES. CTR., AROUND THE WORLD]. While there is other common vocabulary associated with cryptocurrencies, the idea here is to hopefully avoid confusing many different concepts with each other, an example of which would be “utility tokens.” *Id.* at 78.

<sup>10</sup> See generally, *Libra White Paper*, LIBRA (July 23, 2019), <https://libra.org/en-US/white-paper/> (discussing plans for cryptocurrency); Jay Clayton, *Statement on Cryptocurrencies and Initial Coin Offerings*, SEC. & EXCHANGE COMM. (Dec. 11, 2017), <https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11> (showing Wall Street and Main Street Interest); see also, e.g., Steve Fiorillo, *Bitcoin History: Timeline, Origins and Founder*, THE STREET (Aug. 17, 2018, 1:27 PM), <https://www.thestreet.com/investing/bitcoin/bitcoin-history-14686578>; Matthew Braga, *As Merchants Embrace Bitcoin, Digital Currency Still Struggles for Regulatory Approval Worldwide*, FIN. POST (Jan. 20, 2014), <http://business.financialpost.com/2014/01/20/bitcoin-currency-merchants-regulators-2014/?lisa=592b-fc15>.

<sup>11</sup> See, e.g., Scott A. Wiseman, Note, *Property or Currency? The Tax Dilemma Behind Bitcoin*, 2016 UTAH L. REV. 417, 424 (2016); Nicholas A. Plassaras, Comment, *Regulating Digital Currencies: Bringing Bitcoin within the Reach of the IMF*, 14 CHI. J. INT’L L. 377, 380–81 (2013); Reuben Grinberg, *Bitcoin: An Innovative Alternative Digital Currency*, 4 HASTINGS SCI. & TECH. L.J. 159, 164–65 (2012); Nikolei M. Kaplanov, *Nerdy Money: Bitcoin, the Private Digital Currency, and the Case Against Its Regulation*, 25 LOY. CONSUMER L. REV. 111, 127–28 (2012).

<sup>12</sup> JERRY BRITO & ANDREA CASTILLO, BITCOIN: A PRIMER FOR POLICYMAKERS, 17–18 (2013); see also Timothy B. Lee, *An Illustrated History of Bitcoin Crashes*, FORBES (Apr. 11, 2013, 12:45 AM), <http://www.forbes.com/sites/timothylee/2013/04/11/an-illustrated-history-of-bitcoin-crashes/>; Aleksander Berentsen & Fabian Schär, *A Short Introduction to the World of Cryptocurrencies*, 100 FED. RES. BANK ST. LOUIS REV. 1, 14 (2018).

<sup>13</sup> Over the last twenty-five years, many scholarly articles have discussed different forms of central bank e-money or Central Bank Digital Currency (CBDC), including various potential characteristics of such central bank currency. See, e.g., Charles M. Kahn et al., *Should the Central Bank Issue E-money?*, (Bank of Can., Staff Working Paper No. 2018-58, 2018). While articles discussing CBDC and central bank e-money will provide a basis for much of the analysis here, such general terms also include digital currency, released by central banks or governments in a variety of forms, many of which do not rely on cryptography. See *id.* at 3 (“Our definition of central bank e-money is an electronic liability of the central bank, which might be held as a token or in an account.”). This Comment will focus primarily on government-backed cryptocurrency, which would be initially released by central banks or governments, but would rely on cryptography, Distributed Ledger Technology, and blockchain. This focus more seamlessly permits extrapolation of lessons learned from regulation of private cryptocurrency. See generally *id.*

<sup>14</sup> EUROPEAN CENT. BANK, VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS 26 (Feb. 2015) [hereinafter ECB, VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS].

Governments have been slow,<sup>15</sup> ineffective,<sup>16</sup> and inconsistent in implementing regulatory responses to private cryptocurrencies.<sup>17</sup> As of May 2019, governments have managed to avoid such dangers, primarily because private cryptocurrencies<sup>18</sup> are not yet of significant enough heft to destabilize the entire international monetary system.<sup>19</sup> However, the European Central Bank (ECB) posits that, “[t]he build-up of financial stability risks from [Virtual Currency Schemes (VCS)] would be likely under the following conditions: (i) VCS become more widely used in regular payments; (ii) greater links to the real economy develop, including through the presence of financial institutions participating in VCS ... ”<sup>20</sup>

The biggest concern for government-backed cryptocurrencies is the potential instability within the international economy and monetary system.<sup>21</sup> Moving forward, more countries will dip their toes into the waters, choosing either to adopt their own, or another country’s government-backed cryptocurrency.<sup>22</sup> And while the international community has so far managed to avoid catastrophe, government-backed cryptocurrencies pose a greater threat to the stability of the international monetary system than do private cryptocurrencies.<sup>23</sup> Government-backed cryptocurrencies have the potential to become fully integrated within the

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<sup>15</sup> See Braga, *supra* note 10; Bob Adelman, *Government Is Taking Steps to Regulate Bitcoin*, NEW AM. (Nov. 19, 2013), <http://www.thenewamerican.com/economy/sectors/item/16985-government-is-taking-steps-to-regulate-bitcoin>; Kevin V. Tu & Michael W. Meredith, *Rethinking Virtual Currency Regulation in the Bitcoin Age*, 90 WASH. L. REV. 271, 296–306 (2015).

<sup>16</sup> See Anton Didenko & Ross P. Buckley, *The Evolution of Currency: Cash to Cryptos to Sovereign Digital Currency*, 42 FORDHAM INT’L L. J. (forthcoming Jan. 2019) (“In the case of Bitcoin and its spin-offs, regulation has proven distinctly problematic for technical reasons: without a central server or a single operator, it has been rather difficult to identify those to whom regulation should apply ... Instead, the most popular regulatory measure has taken the form of warnings concerning potential risks and—ironically—lack of proper regulation. As the new privately issued digital currencies have kept multiplying, it was perhaps only a matter of time before regulators would devise new strategies where regulation had thus far proven ineffective.”).

<sup>17</sup> See generally GLOB. LEGAL RES. CTR. AROUND THE WORLD, *supra* note 9 (surveying the approach to regulation of private cryptocurrencies of 130 jurisdictions, with a wide swath of approaches being undertaken).

<sup>18</sup> While not a widely used term, “private cryptocurrencies,” for purposes of this Comment, will refer to those cryptocurrencies such as Bitcoin, Ether, and Ripple, so as to distinguish such cryptocurrencies from what will be referred to as “government-backed cryptocurrencies.”

<sup>19</sup> See discussion *infra* Part IV.B.

<sup>20</sup> ECB, VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS, *supra* note 14, at 26.

<sup>21</sup> Veronika Rinecker, *Gov’t-Issued Digital Currencies Threaten Financial Stability, Says Swiss Central Banker*, COIN TELEGRAPH (Apr. 9, 2018), <https://cointelegraph.com/news/govt-issued-digital-currencies-threaten-financial-stability-says-swiss-central-banker>; see also BANK FOR INT’L SETTLEMENTS, ANNUAL ECONOMIC REPORT 100–01 (2018).

<sup>22</sup> Didenko & Buckley, *supra* note 16, at 52–53 (positing that while there may be hesitation on the part of most nations in leaping into the unknown with respect to government-backed cryptocurrency, should a major economy adopt such an official currency, other nations know they must respond in-kind).

<sup>23</sup> See discussion *infra* Part II.B.; see also discussion *infra* Part IV.B.

international monetary system.<sup>24</sup> This integration, combined with the lack of oversight or system of best practices, governments and international organizations ought to be acting with more urgency.<sup>25</sup> Governments should prioritize development of mechanisms to counter potential instability posed by widespread adoption of government-backed cryptocurrency. Stability risks to international systems are one of the most pressing issues facing governments and governance organizations around the world.<sup>26</sup>

How should the global community address this concern of potential instability posed by government-backed cryptocurrency? Is there one specific organization which ought to “take the wheel” in coordinating a best practices regime for government-backed cryptocurrency? Or is the current system, one in which each country sets their own oversight framework, the best way to deal with the potential instability posed by government-backed cryptocurrency to the international monetary system?

Development of a cohesive and consistent international standard for best practices will allow government-backed cryptocurrency to flourish, while limiting the potential dangers posed to the international monetary system. The organization best-equipped to handle international oversight of government-backed cryptocurrencies is the International Monetary Fund (IMF).<sup>27</sup> The IMF can provide protection to consumers, investors, and states by providing legitimacy to these government-backed cryptocurrencies and by helping the international community deal with the risks associated.<sup>28</sup>

This Comment justifies, in the context of private cryptocurrency regulatory schemes, IMF leadership in developing an international framework of “best practices” and proposes the IMF “pick up the pace” in creating such an oversight framework.

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<sup>24</sup> Tommaso Mancini-Griffoli, et al., *Casting Light on Central Bank Digital Currency*, 2018 IMF Staff Discussion Note 18/08, 27.

<sup>25</sup> See ECB, VIRTUAL CURRENCY SCHEMES—FURTHER ANALYSIS, *supra* note 14.

<sup>26</sup> As the ECB states, if virtual currency schemes become more widely adopted and are more directly connected to the financial system, threats to financial stability will need to be addressed. *Id.* at 26 (“[A]s and when these conditions are met to a larger extent, more direct regulatory responses might be required from a financial stability perspective.”).

<sup>27</sup> See Passaras, *supra* note 11, at 395–96 (discussing the primary purpose for the IMF and its role in the global system of international exchange); see generally *The IMF at a Glance*, INT’L MONETARY FUND (Aug. 22, 2012), <http://www.imf.org/external/np/exr/facts/glance.htm>. The IMF was created primarily to: (1) “overcome the collective action problem of allowing individual countries to enact self-interested economic policies without jeopardizing the global economy” and (2) “ensure the stability of the international monetary system.” Passaras, *supra* note 11, at 393.

<sup>28</sup> See Passaras, *supra* note 11, at 404.

Given that development of government-backed cryptocurrency is seemingly in the initial stages, there are few real-life examples from which to draw upon.<sup>29</sup> This Comment will look to the international regulatory treatment of private cryptocurrencies, primarily using Bitcoin as an example, and evaluate the approach that might best translate to oversight of government-backed cryptocurrencies. However, this Comment will not assess the effectiveness of current regulatory schemes in regulating private cryptocurrencies, nor proffer a suggestion for which regulatory scheme best fits private cryptocurrencies. In addition, this Comment will not address the potential implications of government-backed cryptocurrencies for the future of private cryptocurrencies.

This Comment will begin in Part I by looking at the recent, widespread interest in government-backed cryptocurrencies. Part I will also discuss the threat posed to the stability of the international monetary system and the existence of a framework (or lack thereof) for oversight of government-backed cryptocurrencies.

In Part II, this Comment will discuss private cryptocurrencies, focusing specifically on Bitcoin, its characteristics, and the various regulatory schemes currently in place around the world. Private cryptocurrencies do not fit neatly into any one classification of regulated good.<sup>30</sup> Examining the various approaches to regulation of private cryptocurrency will help to determine whether a parallel oversight framework can be applied to government-backed cryptocurrencies.

In Part III, this Comment will identify the differences between private cryptocurrencies and government cryptocurrencies, in an effort to identify which limitation, or limitations, ought to be of primary concern.

In Part IV, this Comment will look to the global response to private cryptos to provide some insight on how an oversight framework for government-backed cryptocurrency might be devised. This Comment will then parse through the globe's stumbling attempts to regulate private cryptocurrencies,<sup>31</sup> in hopes of finding a solution to deal with the potential instability posed by the proliferation of government-backed cryptocurrencies.

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<sup>29</sup> See *infra* Part V.

<sup>30</sup> See discussion *infra* Part III.C.

<sup>31</sup> See, e.g., Carol R. Goforth, *U.S. Law: Crypto is Money, Property, a Commodity, and a Security, All at the Same Time*, J. FIN. TRANSFORMATION (forthcoming Oct. 2018) (discussing the overlapping regulatory regimes and the unclear nature of what cryptocurrencies ought to be considered).

Finally, this Comment will propose that the IMF take on efforts of coordinating an international standard for best practices with greater urgency. By proposing that such coordination and oversight fall under the purview of the IMF, the international community can preemptively address one of the major dangers arising from widespread adoption of government-backed cryptocurrencies.

## I. INCREASED GOVERNMENT INTEREST

The dam is about to break in terms of widespread adoption of government-backed cryptocurrencies.<sup>32</sup> In August 2018, Venezuela launched the Petro, garnering media attention across the globe.<sup>33</sup> It seemed to be a clear attempt to capitalize on the “crypto-craze,” spurred by Bitcoin’s meteoric rise since early 2017.<sup>34</sup> However, many investment analysts have been quick to criticize the Petro as a clear scam.<sup>35</sup> On the other hand, Sweden, Japan, and Estonia have all contemplated the idea of releasing their own, more legitimate cryptocurrencies.<sup>36</sup>

When Bitcoin first emerged into the mainstream, only a few countries (e.g., Brazil,<sup>37</sup> Germany,<sup>38</sup> and Canada<sup>39</sup>) were receptive to the idea of decentralized

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<sup>32</sup> See Qin Chen, *Next Stop in the Cryptocurrency Craze: A Government-backed Coin*, CNBC (Nov. 30, 2017, 8:41 AM), <https://www.cnbc.com/2017/11/30/cryptocurrency-craze-springboards-government-backed-coin.html>; David Tweed, *Why Governments Might Join the Cryptocurrency Craze*, BLOOMBERG (Mar. 19, 2018), <https://www.bloomberg.com/news/articles/2018-02-12/why-governments-might-join-the-cryptocurrency-craze-quicktake>; see also Christine Lagarde, Managing Dir., Int’l Monetary Fund, *Winds of Change: The Case for New Digital Currency*, Address at the Singapore Fintech Festival 7 (Nov. 14, 2018).

<sup>33</sup> See, e.g., Kate Rooney, *Venezuela Is Pegging Its Economic Recovery to a Cryptocurrency That’s Widely Considered a Scam*, CNBC (Aug. 20, 2018, 11:34 AM), <https://www.cnbc.com/2018/08/20/venezuela-is-pegging-its-economic-recovery-to-a-cryptocurrency—thats-widely-considered-a-scam.html>.

<sup>34</sup> Chen, *supra* note 32; see also Hilary Hosia & Nick Perry, *This Is the First Country to Adopt a Cryptocurrency As Its Official Currency*, TIME (Mar. 5, 2018), <http://time.com/money/5186316/this-is-the-first-country-to-adopt-a-cryptocurrency-as-its-official-currency/> (“Bank of England Governor Mark Carney said this past week that a global speculative mania had encouraged a proliferation of the currencies . . . [t]he prices of many cryptocurrencies have exhibited the classic hallmarks of bubbles . . . reliant in part on finding the greater fool.”).

<sup>35</sup> See, e.g., Rooney, *supra* note 33; George Richards, *Why Governments Are Building Their Own Cryptocurrencies*, RACONTEUR (Mar. 27, 2018), <https://www.raconteur.net/finance/governments-building-cryptocurrencies>.

<sup>36</sup> Chen, *supra* note 32.

<sup>37</sup> Judith Lee et al., *Bitcoin Basics: A Primer on Virtual Currencies*, 16 BLI 21 (Jan. 2015).

<sup>38</sup> Emily Spaven, *Germany Officially Recognizes Bitcoin as “Private Coin,”* COINDESK (Aug. 19, 2013), <https://www.coindesk.com/germany-official-recognises-bitcoin-as-private-money/>.

<sup>39</sup> See Sarah Jane Hughes & Stephen T. Middlebrook, *Advancing a Framework for Regulating Cryptocurrency Payments Intermediaries*, 32 YALE J. ON REG. 495, 530–32 (2015) (citing Proceeds of Crime (Money Laundering) and Terrorist Financing Act, S.C. 2000, c 17, amended by S.C. 2014, c C-31 (Can.)).

cryptocurrencies. Many were outright hostile (e.g., China<sup>40</sup> and Thailand<sup>41</sup>), while others merely waited for further developments.<sup>42</sup> This attitude has shifted drastically in the past four to five years.<sup>43</sup> As of December 2018, a number of governments,<sup>44</sup> including Estonia,<sup>45</sup> Japan,<sup>46</sup> and the United States,<sup>47</sup> have expressed at least an interest in releasing their own, government-backed cryptocurrencies. Other governments have gone farther, with some undertaking research in anticipation of a release in the near future (e.g., Canada,<sup>48</sup> Sweden<sup>49</sup>), while others have already issued their own versions (e.g., Tunisia,<sup>50</sup> Senegal,<sup>51</sup> Dubai,<sup>52</sup> the Marshall Islands,<sup>53</sup> and Venezuela<sup>54</sup>).

Government interest in entering the cryptocurrency arena is motivated by a number of factors, but is driven primarily by expected benefits such as lower

<sup>40</sup> REUTERS, *China is Shutting Down All of Beijing's Bitcoin and Cryptocurrency Exchanges*, FORTUNE (Sept. 15, 2017, 8:21 AM), <http://fortune.com/2017/09/15/china-shutting-down-beijing-bitcoin-cryptocurrency-exchanges/>; see also Hughes & Middlebrook, *supra* note 39, at 512 (citing *Virtual Currencies: International Actions and Regulations*, PERKINS COIE, <http://www.perkinscoie.com/virtual-currencies-international-actions-and-regulations> (last updated June 2015)).

<sup>41</sup> *Virtual Currencies: International Actions and Regulations*, PERKINS COIE, <http://www.perkinscoie.com/virtual-currencies-international-actions-and-regulations> (last updated May 2019).

<sup>42</sup> See GLOB. LEGAL RESEARCH CTR., REGULATION OF BITCOIN IN SELECTED JURISDICTIONS 1 (Jan. 2014) [hereinafter GLOB. LEGAL RESEARCH CTR., SELECTED JURISDICTIONS] (“Of those countries surveyed, only a few, notably China and Brazil, have specific regulations applicable to bitcoin use ... [T]he debate over how to deal with this new virtual currency is still in its infancy.”).

<sup>43</sup> Compare *id.* (analyzing cryptocurrency regulation in forty select jurisdictions in 2014), with GLOB. LEGAL RES. CTR., AROUND THE WORLD., *supra* note 9 (analyzing government regulations of cryptocurrencies in 130 jurisdictions in 2018).

<sup>44</sup> See Mancini-Griffoli, et al., *supra* note 24, ¶ 54 (listing Australia, Brazil, China, Norway, Uruguay, Canada, Curacao, Ecuador, Israel, United Kingdom, and the Philippines, among others, as countries that have expressed interest in government-backed cryptocurrency).

<sup>45</sup> Chen, *supra* note 32.

<sup>46</sup> Arjun Kharpal, *Japanese Banks are Thinking of Making Their Own Cryptocurrency Called the J-Coin*, CNBC (Sept. 27, 2017, 9:04 AM), <https://www.cnbc.com/2017/09/27/japanese-banks-cryptocurrency-j-coin.html>.

<sup>47</sup> Jeff Cox, *Federal Reserve Starting to Think About Its Own Digital Currency, Dudley Says*, CNBC (Nov. 29, 2017, 8:52 AM), <https://www.cnbc.com/2017/11/29/federal-reserve-starting-to-think-about-its-own-digital-currency-dudley-says.html>.

<sup>48</sup> See generally, Walter Engert & Ben S. C. Fung, *Central Bank Digital Currency: Motivations and Implications* (Bank of Can. Staff Discussion Paper 2017-16, 2017).

<sup>49</sup> SVERIGES RIKSBANK, THE RIKSBANK'S E-KRONA PROJECT: REPORT 1 (Sept. 2017).

<sup>50</sup> Stephen O'Neal, *State-Issued Digital Currencies: The Countries Which Adopted, Rejected or Researched the Concept*, COIN TELEGRAPH (July 19, 2018), <https://cointelegraph.com/news/state-issued-digital-currencies-the-countries-which-adopted-rejected-or-researched-the-concept>.

<sup>51</sup> *Id.*

<sup>52</sup> Samburaj Das, *emCash is Dubai's First Official State Cryptocurrency*, CCN (Oct. 3, 2017, 1:57 PM), <https://www.ccn.com/emcash-dubais-first-official-state-cryptocurrency/>.

<sup>53</sup> Hosia & Perry, *supra* note 34.

<sup>54</sup> Rooney, *supra* note 33.

transaction costs,<sup>55</sup> the potential for further financial inclusion,<sup>56</sup> and the secure “public ledger.”<sup>57</sup> At the same time, governments have made it clear for years that a move towards digital is near, given the global environment and shifting attitude away from physical cash.<sup>58</sup> Finally, one of the likely<sup>59</sup> driving forces behind the interest in government-backed cryptocurrencies is the extensive news coverage of Bitcoin and other cryptocurrencies.<sup>60</sup>

A. *Greater Financial Inclusion Means More Extensive Integration of Government-backed Crypto Into the International Monetary System*

Governments considering adoption of government-backed cryptocurrency frequently cite the potential that such technology provides for greater financial inclusion.<sup>61</sup> Lower transaction costs are a significant contributing factor in government-backed cryptocurrencies’ potential for financial inclusion.<sup>62</sup> Another contributing factor is the implicit trust associated with a medium of exchange backed by the government/central bank.<sup>63</sup> Finally, elimination of the requirement for a trusted third-party intermediary not only contributes to lower

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<sup>55</sup> EUROPEAN CENT. BANK, VIRTUAL CURRENCY SCHEMES, 21 (Oct. 2012), [hereinafter ECB, VIRTUAL CURRENCY SCHEMES] (“[T]ransactions are carried out faster and more cheaply than with traditional means of payment. Transactions fees, if any, are very low and no bank account fee is charged.”).

<sup>56</sup> See discussion *infra* Part II.A.

<sup>57</sup> Jason Abbruzzese, *What Happens When Governments Get into Cryptocurrency*, MASHABLE (Jan. 8, 2018), <https://mashable.com/2018/01/08/cryptocurrency-bitcoin-governments/#YjtOaApmjaq4>.

<sup>58</sup> See IMF, *Republic of the Marshall Islands: 2018 Article IV Consultation*, IMF Country Rep. No. 18/270 (Sept. 2018) [hereinafter *Republic of the Marshall Islands*]; SVERIGES RIKSBANK, *supra* note 49; Lagarde, *supra* note 32 (“[M]oney itself is changing. We expect it to become more convenient and user-friendly, perhaps even less serious-looking. We expect it to be integrated with social media, readily available for online and person-to-person use, including micro-payments.”).

<sup>59</sup> It seems prescient to note that this is my own opinion. The applications of blockchain technology beyond Bitcoin are plentiful and diverse, as outlined in numerous articles. See, e.g., Crosby, *supra* note 8. However, cryptocurrencies have captured most of the attention of news outlets and the average consumer. Charles Bovaird, *Top 5 Factors Driving Bitcoin Higher This Year*, FORBES (Dec. 22, 2017, 4:37 PM), <https://www.forbes.com/sites/cbovaired/2017/12/22/top-5-factors-driving-bitcoin-higher-this-year/#2d3d685461a9>. Governments have latched onto this enthusiasm and put forth proposals centered primarily on cryptocurrencies, as opposed to proposals focused on the other aspects of the underlying technology. See, e.g., Token Taxonomy Act, H.R. 2144, 116th Cong. (2019).

<sup>60</sup> Bovaird, *supra* note 59.

<sup>61</sup> See Mancini-Griffoli et al., *supra* note 24, at Table 2 (indicating that many countries considering the implementation of CBDC reason that it will lead to greater financial inclusion); Lagarde, *supra* note 32 (“Let me start with financial inclusion, where digital currency offers great promise, through its ability to reach people and businesses in remote and marginalized regions.”).

<sup>62</sup> This includes distributed ledger technology (DLT) and blockchain technology. For further discussion of these technologies, see Crosby, *supra* note 8.

<sup>63</sup> See Plassaras, *supra* note 11, 383 n. 25 (2013) (citing ECB, VIRTUAL CURRENCY SCHEMES, *supra* note 55, at 9–10) (“Users are willing to accept it in exchange for goods and services simply because they trust this central authority.”).

transaction fees (meaning greater financial inclusion),<sup>64</sup> but also allows consumers to take one fewer step to enter the “mainstream” structured financial system.<sup>65</sup>

Potential risks to the international financial system must be addressed in a proactive manner, especially in light of the expectation that government-backed cryptocurrency will lead to greater financial inclusion.<sup>66</sup> Greater financial integration will allow such government-backed digital currency to account for substantially more of the value of the international monetary system.<sup>67</sup> As government-backed cryptocurrency comes to represent a greater portion of the international monetary system, potential instability will become more pressing and represent a bigger risk to the international monetary system.<sup>68</sup> The international community must deal with the risks associated with such integration before they present a major problem.

### *B. The Threat to Stability*

Due to the cross-border reach of cryptocurrencies, “the actions of one country that buys and sells cryptocurrency to control its availability could have a destabilizing effect on other economies that also widely use that cryptocurrency; in this way, one country’s approach to cryptocurrency could undermine price stability or exacerbate recessions or overheating in another country.”<sup>69</sup> Other risks to financial stability are posed by widely-adopted digital currency.<sup>70</sup> Per the IMF themselves, there are at least two scenarios which need to be considered as dangers to the stability of the financial system (1) “Risk of Disintermediation in Tranquil Times,” and (2) “Run Risks in Times of Systematic Financial Stress.”<sup>71</sup> Such effects are only increased when there is

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<sup>64</sup> Brito, *supra* note 12, at 10–13.

<sup>65</sup> See Joshua J. Doguet, *The Nature of the Form: Legal and Regulatory Issues Surrounding the Bitcoin Digital Currency System*, 73 LA. L. REV. 1119, 1122 (2013) (“While third parties, like central banks and financial intermediaries, often perform valuable services in regulating and transferring currency, their presence in the system increases the cost of using it . . . . In this context, cost is used in a broad sense not only to include the increased financial expense of the system, but also the inconvenience and uncertainty that it entails.”).

<sup>66</sup> See, e.g., Lagarde, *supra* note 32 (discussing that part of the case for central bank digital currency is the potential for greater financial inclusion of people and businesses in remote and marginalized regions); Mancini-Griffoli et al., *supra* note 24, at Table 2 (indicating that many countries considering the implementation of CBDC reason that it will lead to greater financial inclusion).

<sup>67</sup> See hypothetical *supra* Part I.

<sup>68</sup> See discussion *infra* Part IV.B.

<sup>69</sup> David W. Perkins, *Cryptocurrency: The Economics of Money and Selected Policy Issues*, Congressional Research Service 22 (Dec. 7, 2018), <https://fas.org/sgp/crs/misc/R45427.pdf>.

<sup>70</sup> See Mancini-Griffoli et al., *supra* note 24, ¶¶ 38–50 (discussing the potential effect CBDC could have on financial stability in a domestic context).

<sup>71</sup> *Id.*; see also Lagarde, *supra* note 32 (discussing the downsides of “Bank Digital Currencies,” including

further integration of government-backed cryptocurrencies into the monetary system.

Financial instability within the system could also begin with a speculative attack on the value of a currency.<sup>72</sup> Speculative attacks can be undertaken by international actors, for a number of purposes, but if successful, such attacks would cause substantial instability within the international monetary system.<sup>73</sup> One purpose of the IMF is to help counter such speculative attacks if needed, by fluctuating the money supply.<sup>74</sup>

Hidden in the background is one of the biggest threats to stability—the “Herding Effect.”<sup>75</sup> The premise of the “Herding Effect” is that if one government-backed cryptocurrency becomes the dominant form of electronic payment, other countries will want to “get in on the action.”<sup>76</sup> Governments that fail to develop the technology quickly will risk the loss of “monetary sovereignty,” something of vital importance to the legitimacy of government itself.<sup>77</sup>

### C. *The Lack of International Response*

The response of regulators, commentators, and investors to the proposition of government-backed cryptocurrency has been a mix of curiosity and

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the potential risks to financial stability presented by pressure on bank deposits and the possibility of bank runs).

<sup>72</sup> For an in-depth discussion of these potential speculative attacks in the context of Bitcoin, see Nicholas A. Plassaras, *supra* note 11, at 377. While Plassaras’ discussion is in the context of Bitcoin, “[a]ny other digital currency that enters widespread use would pose similar problems.” *Id.* at 380.

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> Didenko & Buckley, *supra* note 16, at 52–53

<sup>76</sup> “[O]ne of the biggest possible challenges stems from the herding effect that may result from the adoption of a disintermediated state-backed official currency by a major economy, like the US. The utility of an official medium of exchange digitally available to end-users without any intermediaries is hard to overestimate—such a currency could quickly become a dominant medium of exchange in international transactions, without meaningful ways for other states to regulate it, since the underlying technology easily penetrates national boundaries. One possible response for other states in this scenario could be the development of their own competing sovereign digital currencies and their promotion for internal use. This could explain, at least in part, why so many national regulators have expressed interest in devising a new sovereign currency ... many nations recognise that should a credible major country issue a sovereign digital currency, it may offer considerable advantages over regular currency in the first-mentioned nation’s jurisdiction, and so the nation could rapidly face the loss of both monetary sovereignty and of the data associated with the use of the sovereign digital currency which will be collected by the issuing sovereign abroad, not the nation within which it is being used. Only time will tell the answer, but for now one question remains: which country will be the first to throw down the gauntlet in the sovereign digital currency battle?” *Id.*

<sup>77</sup> *See id.*

skepticism.<sup>78</sup> Central banks engaged in research to determine the potential effects on that specific country and its population have been the primary participants in the discussion of government-backed cryptocurrency.<sup>79</sup> A few governments have taken the view that, while private cryptocurrencies may create issues, the market for such digital assets is “too small to [cause] sufficient concern [that] warrant[s] regulation and/or a ban at this juncture.”<sup>80</sup>

The first official analysis to emerge from an international organization was an annual IMF Article IV<sup>81</sup> consultation for the Marshall Islands, in September 2018.<sup>82</sup> The IMF report was relatively skeptical of the Marshall Island’s proposed cryptocurrency, the SOV.<sup>83</sup> The IMF expressed concerns about the interaction between cryptocurrencies and AML/CFT regulations,<sup>84</sup> concerns which would arise with any government-backed cryptocurrency should it look anything like Bitcoin.<sup>85</sup> However, such concerns were amplified given the circumstances and regulatory concerns already present in the Marshall Islands.<sup>86</sup>

Two months later, in November 2018, the IMF released a Staff Discussion Note entitled “Casting Light on Central Bank Digital Currency,” thereby bringing oversight of government-backed cryptocurrency into the international

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<sup>78</sup> See, e.g., Rooney, *supra* note 33; Chen, *supra* note 32.

<sup>79</sup> See, e.g., SVERIGES RIKSBANK, *supra* note 49.

<sup>80</sup> GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 2; see also Kahn et al., *supra* note 13, at 1, 4; discussion *infra* Part IV.B.

<sup>81</sup> An Article IV consultation stems from the requirement imposed on IMF member countries by Article IV of the IMF’s Articles of Agreement. Articles of Agreement of the International Monetary Fund art. 4, *adopted* July 22, 1945, 2 U.N.T.S. 134 [hereinafter IMF Articles of Agreement]; see also *Surveillance*, INT’L MONETARY FUND <https://www.imf.org/external/about/econsurv.htm> (last visited Jan. 30, 2019) (“Country surveillance is an ongoing process that culminates in regular (usually annual) comprehensive consultations with individual member countries, with discussions in between as needed. The consultations are known as ‘Article IV consultations’ because they are required by Article IV of the IMF’s Articles of Agreement. During an Article IV consultation, an IMF team of economists visits a country to assess economic and financial developments and discuss the country’s economic and financial policies with government and central bank officials. IMF staff missions also often meet with parliamentarians and representatives of business, labor unions, and civil society.”).

<sup>82</sup> *Republic of the Marshall Islands*, *supra* note 58.

<sup>83</sup> *Id.*

<sup>84</sup> *Id.*

<sup>85</sup> FIN. ACTION TASK FORCE, *Virtual Currencies—Key Definitions and Potential AML/CFT Risks*, 1, 9 (2014) [hereinafter FIN. ACTION TASK FORCE, *Virtual Currencies*]; see also PERKINS COIE, *supra* note 40 (containing a chart showing actions by many national governments); Hughes & Middlebrook, *supra* note 39, at 530–32.

<sup>86</sup> *Republic of the Marshall Islands*, *supra* note 58. The Marshall Islands is “a small and remote country ... with a dispersed population,” with an economy highly dependent on external aid. *Id.* ¶ 1. Furthermore, the Marshall Islands already has an issue complying with U.S. Know Your Customer and anti-money laundering requirements for accounts denominated in U.S. dollars. *Id.* ¶ 10. As discussed later in this Comment, government-backed cryptocurrency presents due diligence issues, even for countries currently implementing high levels of due diligence.

conversation.<sup>87</sup> The IMF analysis in this Staff Discussion Note was far more in-depth than in the Marshall Islands' Article IV Report. The analysis focused on possible Central Bank Digital Currency (CBDC) designs, as well as the potential advantages and disadvantages of government-backed cryptocurrency.<sup>88</sup> While extremely insightful when compared to alternative works available at the time, this Staff Discussion Note explicitly “abstract[ed] from cross-border considerations by assuming that [government-backed cryptocurrency] is for domestic use only.”<sup>89</sup> Limiting analysis within the domestic context is puzzling given the borderless characteristics of digital currencies, and is insufficient when measured against the dangers presented by cross-border transactions involving government-backed cryptocurrencies.

The international community has exhibited a surprising lack of urgency in determining the potential consequences and reverberations stemming from widespread adoption of government-backed cryptocurrency.<sup>90</sup> Exemplifying this insufficiently urgent attitude, the IMF Staff Discussion Note stated, “Overall, it is too early to draw firm conclusions on the net benefits of CBDC. Central banks should consider their specific country circumstances, paying careful attention to the risks and relative merits of alternative solutions. Further analysis of technological feasibility and operational costs is needed.”<sup>91</sup>

The IMF's attitude toward development of an international system of best practices, exemplified by the above quote, is not an isolated notion. In 2015, the European Central Bank advised that if virtual currencies became more connected to the real international economic system, the international community would need to more seriously undertake a comprehensive oversight framework.<sup>92</sup> The time for issuing warnings has passed given the increased interest by government in introducing their own cryptocurrencies.<sup>93</sup> The world must take decisive action

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<sup>87</sup> Mancini-Griffoli et al., *supra* note 24.

<sup>88</sup> *Id.*

<sup>89</sup> *Id.*

<sup>90</sup> Mancini-Griffoli et al., *supra* note 24, at 6. The IMF was the first major international organization to address this issue head-on. *Id.* The organization did not release a substantive paper until November 2018; this first major international analysis of central bank digital currency only evaluated such currencies with respect to their domestic application, as opposed to analyzing the international effects. *Id.*

<sup>91</sup> *Id.* at 5; *see also id.* at 31 (“Research on CBDC should proceed resolutely given that the questions to be explored are deep and difficult and have far-reaching implications.”).

<sup>92</sup> ECB, VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS, *supra* note 14, at 26 (“An increase in the usage of VCS is conceivable and thus surveillance of the take-up of VCS is important from a financial stability perspective. Transparency as regards the number, structure and scope of VCS appears key for monitoring such developments.”).

<sup>93</sup> Didenko & Buckley, *supra* note 16, at 3 (resulting from the potential danger for large-scale instability

to coordinate development of a coherent, international oversight framework or system of best practices to deal with the potential consequences of government-backed cryptocurrency. While it may not seem as though any one nation is close to introducing a legitimate government-backed cryptocurrency, the “Herding Effect,” lurks beneath the surface.<sup>94</sup> The “Herding Effect,” in conjunction with the above-referenced warning issued by the European Central Bank, should further spur governments to undertake specific actions which may preempt issues of financial instability posed by government-backed cryptocurrencies.

Given government-backed cryptocurrencies’ integration potential, and the subsequent issues that may arise, the international community must adopt some form of oversight or established best practices as soon as possible.<sup>95</sup> While a country-by-country approach may allow for more freedom of choice for each individual government and eventually result in a sufficient level of concern,<sup>96</sup> a single agency is much better equipped to tackle such pressing matters.<sup>97</sup> Furthermore, if a single agency is the force pushing countries to adopt a system of “best practices,” there will be the additional benefits conveyed by having a uniform approach to oversight across jurisdictions.<sup>98</sup> A single agency must take the lead in creating and enforcing an international scheme of oversight relating to government-backed cryptocurrencies—at least as a starting point.

Given the issues, discussed below in Part III.B, that private cryptocurrencies currently present to governments around the world, the lack of an urgent response to the dangers of government-backed cryptocurrencies should not come as a surprise.<sup>99</sup>

## II. THE INTERNATIONAL COMMUNITY MUST BE PRO-ACTIVE, DRAWING LESSONS FROM CURRENT EFFORTS TO REGULATE PRIVATE CRYPTOCURRENCY

National governments have failed to address regulatory concerns surrounding private cryptocurrencies.<sup>100</sup> Countries have opted to implement new regulatory schemes haphazardly, or to adapt existing regulatory schemes to

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within the international monetary system).

<sup>94</sup> *Id.* at 52–53.

<sup>95</sup> *See supra* Part II.B (discussing some of the ways in which the international monetary system might be destabilized).

<sup>96</sup> Sufficient with respect to the size of the threat posed by the government-backed cryptocurrency space without oversight.

<sup>97</sup> *See infra* Part V.B.

<sup>98</sup> *See infra* Part III.D.

<sup>99</sup> *See infra* Part II.C.

<sup>100</sup> *See Didenko & Buckley, supra* note 16, at 3.

private cryptocurrencies.<sup>101</sup> And yet, while private cryptocurrencies such as Bitcoin have been discussed ad-nauseam,<sup>102</sup> there is still no dominant approach to regulation.<sup>103</sup>

A number of factors contribute to this lack of regulatory clarity. Part of this is attributable to the evolving nature of the space.<sup>104</sup> Another part may be that existing laws often are not drafted with future technological advancements in mind.<sup>105</sup> Thus, attempts to regulate innovative products or technologies are often unclear.<sup>106</sup> Another significant factor contributing to the muddled regulatory environment for private cryptocurrencies is a result of the piece-meal approach taken by individual countries.<sup>107</sup> However, the unique characteristics of private cryptocurrencies are the biggest contributing factor to this slow regulatory development.<sup>108</sup> In an attempt to minimize the negative impact(s) which they perceive most harmful, states have taken a wide range of regulatory approaches.

#### A. *What are Private Cryptocurrencies, and Specifically, What is Bitcoin?*

Cryptocurrencies, both private and government-backed, represent a relatively new technology.<sup>109</sup> Cryptocurrencies are decentralized, peer-to-peer virtual currencies operating on a cryptographic network.<sup>110</sup> These coins are “digital representations of value and can be transferred, stored, and traded

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<sup>101</sup> See Tu & Meredith, *supra* note 15, at 296–306.

<sup>102</sup> See generally *supra* note 11.

<sup>103</sup> Compare Plassaras, *supra* note 11 (proposing regulation of Bitcoin under the IMF), with Howden, *supra* note 5, at 765 (rejecting regulation under the IMF and countering with WTO regulation) and Hughes & Middlebrook, *supra* note 39, at 530–32 (asserting that cryptocurrencies ought to be regulated as systems of payment).

<sup>104</sup> Tu & Meredith, *supra* note 15, at 296.

<sup>105</sup> *Id.* at 305.

<sup>106</sup> *Id.* at 304–05.

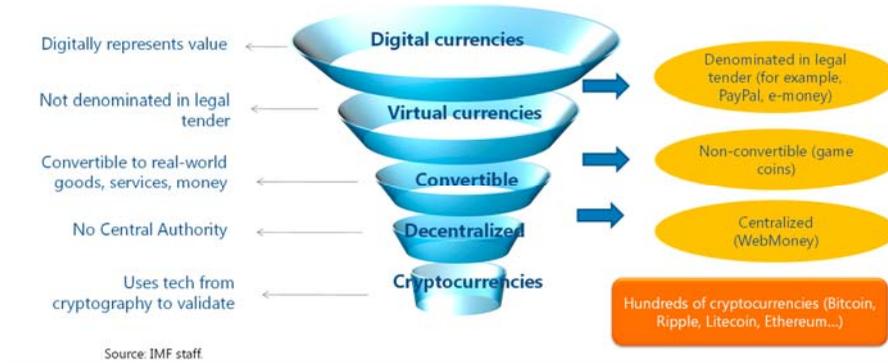
<sup>107</sup> This only makes sense; when a large number of intelligent people, from a variety of cultures and backgrounds, look at a problem, they will likely come up with various solutions to the problem. Lack of experience in the crypto space by regulators leads to experimentation in how the issues arising from cryptos are handled. Given the novelty of the technology, it will take time for the dominant regulatory scheme to emerge.

<sup>108</sup> See *infra* Part III.B.

<sup>109</sup> Kahn et al., *supra* note 13, at 2 (reasoning that while theorization of decentralized, private currency has been prevalent in Austrian School of Economics circles for many years, the technology blockchain and distributed ledger technology (DLT) and usage of such technology is a relatively recent development); See, e.g., Cole Peterson, *Lack of Widespread Crypto Knowledge Could be Stunting the Market's Growth*, NEWSBTC (Dec. 21, 2018), <https://www.newsbtc.com/2018/12/21/lack-of-widespread-crypto-knowledge-could-be-stunting-the-markets-growth/> (concluding that given the novelty of the technology itself, cryptocurrencies are a topic on which many people have only the most basic understanding). While this may prove to be sufficient for discussions at the workplace water-cooler, the substantive law of this Comment may prove more informative if the base technology of cryptocurrencies is explored at more than surface-level.

<sup>110</sup> Tal Yellin et al., *What is Bitcoin*, CNNMONEY, <http://money.cnn.com/infographic/technology/what-is-bitcoin/> (last visited Sept. 23, 2018).

electronically.”<sup>111</sup> Cryptocurrencies fall within the broader category of digital currencies,<sup>112</sup> as illustrated by Figure 1 below. There are currently hundreds of cryptocurrencies in circulation, each with distinct characteristics and applications.<sup>113</sup> The most popular and well-known of these cryptocurrencies is Bitcoin, while both Ethereum and XRP have seen relatively recent success.<sup>114</sup>



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As the most widespread and well-known cryptocurrency, a broad-strokes background of cryptocurrency necessarily begins with Bitcoin.<sup>116</sup> In 2009, Satoshi Nakamoto released a whitepaper in which he detailed how his cryptocurrency, Bitcoin, had solved, via a decentralized network, the double-spend problem previously encountered by virtual currencies.<sup>117</sup> The double-spend problem, was one of the main roadblocks to previous iterations of digital currency.<sup>118</sup> Before Bitcoin, online transactions always required trusted third-parties to facilitate, because:

[w]ithout such intermediaries, digital money could be spent twice. Imagine there are no intermediaries with ledgers, and digital cash is simply a computer file, just as digital documents are computer files.

<sup>111</sup> Lee et al., *supra* note 37.

<sup>112</sup> IMF, *Virtual Currencies and Beyond: Initial Considerations*, IMF Staff Discussion Note, SDN/16/03, ¶ 9 (Jan. 2016) [hereinafter *Virtual Currencies and Beyond*].

<sup>113</sup> Coinmarket provides a listing of the most recognized cryptocurrencies. See *All Cryptocurrencies*, COINMARKETCAP, <https://coinmarketcap.com/all/views/all/> (last visited July 16, 2019) [hereinafter COINMARKETCAP].

<sup>114</sup> See *id.* (listing of all cryptocurrencies sorted by market cap in USD from highest to lowest).

<sup>115</sup> *Virtual Currencies and Beyond*, *supra* note 112, ¶ 9.

<sup>116</sup> See COINMARKETCAP, *supra* note 113.

<sup>117</sup> Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System 1 (unpublished manuscript), available at <https://bitcoin.org/bitcoin.pdf> (last visited Sept. 23, 2018).

<sup>118</sup> See Nakamoto, *supra* note 117; see also Crosby, *supra* note 8, at 10; Benjamin Wallace, *The Rise and Fall of Bitcoin*, WIRED (Nov. 23, 2011, 2:52 PM), [http://www.wired.com/magazine/2011/11/mf\\_bitcoin/](http://www.wired.com/magazine/2011/11/mf_bitcoin/).

Alice could send \$100 to Bob by attaching a money file to a message. But just as with email, sending an attachment does not remove it from one's computer. Alice would retain a copy of the money file after she had sent it. She could then easily send the same \$100 to Charlie.<sup>119</sup>

The solution which Bitcoin implemented was to distribute,

the necessary ledger among all the users of the system via a peer-to-peer network. Every transaction that occurs in the bitcoin economy is registered in a public, distributed ledger, which is called the block chain. New transactions are checked against the block chain to ensure that the same bitcoins haven't been previously spent, thus eliminating the double-spending problem.<sup>120</sup>

This solution is one of the primary reasons that Bitcoin was considered a break-through for decentralized digital currency.<sup>121</sup> From 2009 to early 2012, Bitcoin remained relatively unknown, its use primarily confined amongst a small number of internet users.<sup>122</sup> However, between 2013 and 2014, Bitcoin (and other cryptocurrencies) came to the forefront via the Silk Road<sup>123</sup> investigation and the Mt. Gox scandal.<sup>124</sup> Since 2012, a number of agencies in countries such as the United States, Canada, and Great Britain, among others, have proposed a broad spectrum of regulatory schemes to help protect participants in the crypto-

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<sup>119</sup> Brito, *supra* note 12, at 3.

<sup>120</sup> *Id.* at 4.

<sup>121</sup> Crosby, *supra* note 8 at 16 (concluding that without the adoption of this feature, Bitcoin would have been destined to fall victim to many of the same issues presented by previous attempts to create decentralized, digital money—the potential fraud arising from counterfeiting, that without a trusted third-party could not be reined in, thus rendering the “money” unreliable and ultimately useless); *see also* Brito, *supra* note 12, at 3 (“Until Bitcoin’s invention in 2008 by the unidentified programmer known as Satoshi Nakamoto, online transactions always required a trusted third-party intermediary.”).

<sup>122</sup> Brito, *supra* note 12, at 3; Grinberg, *supra* note 11, at 172–74 (stating that other users included early adopters, gold bugs, and those individuals who “believe that central banking institutions that have the authority to print more money, like the Federal Reserve, corrupt the economy and therefore they do not trust government-backed fiat currencies (those unredeemable for commodities). Accordingly, these individuals prefer to hold their wealth and make exchanges in currencies backed by commodities—usually gold.”).

<sup>123</sup> Kaplanov, *supra* note 11, at 126 (“Silk Road, an online black-market website, also takes advantage of bitcoin’s anonymity to sell mail-order illegal drugs and weapons. They made bitcoins the only form of payment on the website since other forms of payment, like PayPal or credit cards, can be traced or blocked.”).

<sup>124</sup> Derek A. Dion, Note, *I’ll Gladly Trade You Two Bites on Tuesday for a Byte Today: Bitcoin, Regulating Fraud in the E-economy of Hacker-Cash*, 2013 U. ILL. J.L. TECH. & POL’Y 165, 185 (2013); Robert McMillan, *The Inside Story of Mt. Gox, Bitcoin’s \$460 Million Disaster*, WIRE (Mar. 3, 2014, 6:30 AM), <http://www.wired.com/2014/03/bitcoin-exchange/>; *see also* Anita Ramasastry, *Bitcoin: If You Can’t Ban It, Should You Regulate It? The Merits of Legalization*, JUSTIA VERDICT (Feb. 25, 2014), <https://verdict.justia.com/2014/02/25/bitcoin-cant-ban-regulate#sthash.4oUpDzhi.dpuf>.

asset space.<sup>125</sup> However, no single approach garnered particularly widespread consensus on the international stage.<sup>126</sup>

When Bitcoin began its slow rise in value starting in late 2013,<sup>127</sup> it became apparent that governments would begin to take greater interest in regulating these coins.<sup>128</sup> Some states took this a step further, raising the possibility of issuing, and regulating, their own cryptocurrencies, in an attempt to enter the digital currency space.<sup>129</sup> As Bitcoin began to skyrocket in late 2017,<sup>130</sup> so did government interest in the possibility of creating government-backed cryptocurrency.<sup>131</sup>

This Comment will use academic and central bank studies, as well as various other literature surrounding Bitcoin to identify potential challenges posed by government-backed cryptocurrency.<sup>132</sup> Lessons learned from attempts to regulate Bitcoin will subsequently be applied in order to propose viable solutions for dealing with the limitations of government-backed cryptocurrencies.

### *B. What are The Characteristics of Private Cryptocurrencies?*

Cryptocurrencies in general, and Bitcoin in particular, have gained popularity over the last 5 years.<sup>133</sup> The main advantages over traditional fiat currency<sup>134</sup> can be grouped into four categories: (1) the ability to operate without

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<sup>125</sup> See, e.g., I.R.S. Notice 2014-21, 2014-16 I.R.B. 938; Letter from Mary Jo White, to Senate Committee on Homeland Security and Government Affairs (Aug. 30, 2013), available at <http://online.wsj.com/public/resources/documents/VCurrenty111813.pdf>; US Dep't of the Treasury, Financial Crimes and Enforcement Network (FinCEN), "Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies" (Regulatory Guidance, FIN-2013-G001, US Dep't of the Treasury, Washington, DC, March 18, 2013), <https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf> [hereinafter FinCEN].

<sup>126</sup> PERKINS COIE, *supra* note 40; see generally GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 1.

<sup>127</sup> See Fiorillo, *supra* note 10.

<sup>128</sup> See e.g., FINCEN, *supra* note 125.

<sup>129</sup> See *supra* Part II.

<sup>130</sup> Fiorillo, *supra* note 10.

<sup>131</sup> See *supra* Part II.

<sup>132</sup> The discussion surrounding government-backed cryptocurrency is largely theoretical, consisting primarily of central bank studies and pilot programs. Mancini-Griffoli et al., *supra* note 24, at Intro. While government interest has increased greatly, the most widespread and most studied cryptocurrency is Bitcoin. See Michael Bordo & Andrew Levin, *Central Bank Digital Currency and the Future of Monetary Policy 1* (Hoover Institution Economics Working Paper No. 17104, Aug. 2017).

<sup>133</sup> GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 1.

<sup>134</sup> "Fiat money is any legal tender designated and issued by a central authority, such as the dollar or euro. It is similar to commodity-backed money in appearance, but radically different in concept, as it can no longer be redeemed for a commodity like gold. Users are willing to accept it in exchange for goods and services simply because they trust this central authority. Trust is therefore a crucial element of any fiat money system." Plassaras, *supra* note 11, at 383 n. 25 (citing ECB, VIRTUAL CURRENCY SCHEMES, *supra* note 55, at 9–10).

a trusted third-party;<sup>135</sup> (2) lower transaction costs;<sup>136</sup> (3) a secure “public ledger” (e.g., the blockchain technology underlying Bitcoin provides this security);<sup>137</sup> and (4) pseudo-anonymity.<sup>138</sup>

Some of these benefits are central to the idea of *decentralized*<sup>139</sup> cryptocurrencies,<sup>140</sup> and would likely be diminished or eliminated entirely in creating a government-backed cryptocurrency.<sup>141</sup> Other features—e.g., primarily the lower transaction costs and the secure “public ledger”—are benefits inherent to blockchain-based coins, meaning they would translate over to government-backed cryptocurrencies.<sup>142</sup>

While private cryptocurrencies offer important advantages, they also have significant drawbacks. Some of the major problems associated with private cryptocurrencies are: (1) a lack of price stability;<sup>143</sup> (2) a lack of inherent value;<sup>144</sup> (3) security concerns with respect to storage of cryptocurrencies;<sup>145</sup> (4)

<sup>135</sup> Lee et al., *supra* note 37, at

<sup>136</sup> Howden, *supra* note 5; *see also*, Mancini-Griffoli et al., *supra* note 24 (discussing the potential benefits of digital currency, of which greater financial integration and lower transaction costs are two mentioned).

<sup>137</sup> *See* Lee et al., *supra* note 37, at 2; *see also* Wiseman, *supra* note 11, at 8.

<sup>138</sup> Lee et al., *supra* note 37, at 2. Some publications mistakenly describe Bitcoin as an anonymous payment system. *See, e.g.*, Grinberg, *supra* note 11, at 204 (“Digital currencies are attractive vehicles for money laundering because they allow fast, anonymous, through-the-Internet transfers.”). Bitcoin is pseudo-anonymous because of the public and private key technology. For more information on Bitcoin’s usage of public and private keys, and the relationship of this technology with pseudo-anonymity of Bitcoin users, *see generally* Francois R. Velde, *Bitcoin: A Primer*, The Federal Reserve Bank of Chicago, Chicago Fed Letter No. 317, at 2–3 (Dec. 2013).

<sup>139</sup> For purposes of this Comment, all private cryptocurrencies will be presumed decentralized, while government-backed cryptocurrencies will be presumed to be centralized. While potentially interesting and relevant, expanding the scope of this Comment to include such information would muddle all discussion. For further discussion of the nuance surrounding centralized and decentralized digital currencies, *see generally* Mancini-Griffoli et al., *supra* note 24 at 7–9; Kahn et al., *supra* note 13.

<sup>140</sup> *See* BRITO & CASTILLO, *supra* note 12 at 15–16 (referencing security benefits [tangentially]).

<sup>141</sup> One of the “benefits,” anonymity (or at least pseudo-anonymity), would almost certainly disappear. Bitcoin Exchange Guide News Team, *Central Bank Digital Currency (CBDC): Bank-Built Cryptocurrency?*, BITCOIN EXCHANGE GUIDE (Aug. 31, 2018), <https://bitcoinexchangeguide.com/central-bank-digital-currency-cbdc/>; *see also*, JP Koning, *Fedcoin: A Central Bank-issued Cryptocurrency*, R3 (Nov. 2016), [https://www.r3.com/wp-content/uploads/2017/06/fedcoin\\_central-bank\\_R3.pdf](https://www.r3.com/wp-content/uploads/2017/06/fedcoin_central-bank_R3.pdf).

<sup>142</sup> Noelle Acheson, *Why Use Bitcoin?*, COINDESK, <http://www.coindesk.com/information/why-use-bitcoin/> (last updated Feb. 29, 2014).

<sup>143</sup> Brito, *supra* note 12; *see also*, Lee, *supra* note 12; Berentsen & Schär, *supra* note 12, at 14.

<sup>144</sup> Velde, *supra* note 138, at 2–3.

<sup>145</sup> Brito, *supra* note 12, at 19.

the effect of pseudo-anonymity on criminal activity;<sup>146</sup> and (5) the lack of developed consumer or merchant protections from fraudulent transactions.<sup>147</sup>

One of the most unique characteristics of private cryptocurrencies is the ability to transfer coins across borders. The Bank of International Settlements (BIS) aptly summarizes the concept:

**Cross Border Reach.** Digital currencies based on distributed ledgers are basically open networks with a global scope. These schemes do not distinguish between users based on location, and therefore allow value to be transferred between users across borders. Moreover, the speed of a transaction is not conditional on the location of the payer and payee. Further, in the context of restrictions that may be placed on cross-border transactions by national authorities, the decentralized nature of these digital currency schemes means that it is difficult to impose such restrictions on transactions.<sup>148</sup>

While this characteristic in and of itself is not a disadvantage, and some would argue it is an advantage, the “cross-border reach” of private cryptocurrencies can be a complicating factor in promulgating regulation.<sup>149</sup>

Given the lack of real-world experience with government-backed cryptocurrencies, one way to predict their potential risks, and provide solutions to such risks, is to analyze the current regulatory schemes for private cryptocurrencies.

### C. Current Cryptocurrency Regulatory Schemes

Private cryptocurrencies fall in what could best be described as a regulatory gray area.<sup>150</sup> The technology associated with private cryptocurrencies is unique

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<sup>146</sup> Brito, *supra* note 12, at 20–22; FIN. ACTION TASK FORCE, *Virtual Currencies*, *supra* note 85; *see also*, Ramasastry, *supra* note 124 (“Bitcoins, because they are not widely regulated or under government scrutiny, are used for illegal purposes.”).

<sup>147</sup> *See* Grinberg, *supra* note 11, at 168–70 (“Bitcoin has no built-in anti-fraud capabilities, whereas companies like PayPal have invested millions of dollars in protecting customers against fraud.”).

<sup>148</sup> BANK FOR INT’L SETTLEMENTS (BIS), COMMITTEE ON PAYMENTS AND MARKET INFRASTRUCTURES, DIGITAL CURRENCIES, 1, 10 (Nov. 2015).

<sup>149</sup> *See* ECB, VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS, *supra* note 14, at 26. (“As and when these conditions are met to a larger extent, more direct regulatory responses might be required from a financial stability perspective. Moreover, regulatory responses are likely to be more effective if they are internationally coordinated. A patchwork of inconsistent national-level regulatory responses to financial stability concerns may not address risks—as the activity of agents in this market may be international.”); *see also infra* Part IV.D (discussing NYDFS).

<sup>150</sup> Grinberg, *supra* note 11, at 182. *See*, for example, the tax law treatment of cryptocurrencies around the world. GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 2–3; *see generally* Goforth, *supra* note 31, at 2.

and could not have been, nor was it, anticipated by lawmakers.<sup>151</sup> Private cryptocurrencies exhibit traits of securities, systems of payment, commodities, and currencies,<sup>152</sup> as well as the catch-all phrase “digital assets.”<sup>153</sup> As a result, private cryptocurrencies, can be, and often are, placed into four different regulatory “buckets,” each of which is a different regulatory framework governing financial assets with different characteristics.<sup>154</sup>

Consequently, there are at least four unique regulatory schemes which parallel the different “classifications.”<sup>155</sup> These four regulatory schemes attempt to regulate private cryptocurrencies as: securities, a system of payment, commodities, and currency. A broad overview of these regulatory schemes, and the reasoning behind their application to Bitcoin/private cryptocurrencies, will provide important insight into a potentially workable framework for oversight of government-backed cryptocurrencies.<sup>156</sup>

The current system of regulation differs from jurisdiction to jurisdiction and is an incoherent mess.<sup>157</sup> The resulting “infrastructure” is destructive towards the currencies themselves, and dangerous for both individual users, as well as the societies in which such currency usage is prevalent.<sup>158</sup>

### *1. Cryptocurrencies as Securities*

The first regulatory scheme treats private cryptocurrencies as securities.<sup>159</sup> While many of the early adopters of Bitcoin invested because they believed in the idea and the tech, they also saw it as an investment opportunity.<sup>160</sup> Bitcoins,

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<sup>151</sup> Compare VoIP to cryptocurrencies. See Brito, *supra* note 12, at 23–24.

<sup>152</sup> Brito, *supra* note 12, at 22–23.

<sup>153</sup> Howden, *supra* note 5, at 767.

<sup>154</sup> See generally, Goforth, *supra* note 31.

<sup>155</sup> See generally, GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9.

<sup>156</sup> For a more in-depth discussion of certain regulatory schemes, on a country-by-country basis, see GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9.

<sup>157</sup> Laura Shin, *Crypto Industry Frustrated by Haphazard Regulation*, N.Y. TIMES DEALBOOK (June 27, 2018), <https://www.nytimes.com/2018/06/27/business/dealbook/crypto-industry-regulation.html>.

<sup>158</sup> *Id.*; see generally, GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9 (providing a survey of the regulatory responses of 130 countries and illustrating the lack of consistency in, not only regulatory schemes, but even terminology).

<sup>159</sup> This is the approach taken by the SEC, which treats Initial Coin Offerings (ICOs) as investment contracts under the *Howey* test. See *e.g.*, SEC v. Shavers, No. 4:13-CV-416, 2013 U.S. Dist. LEXIS 110018, at \*1 (E.D. Tex. Aug. 6, 2013).

<sup>160</sup> Kaplanov, *supra* note 11, at 14–15; see also, Grinberg, *supra* note 11, at 165; Joe Light, *Should You Invest in Bitcoin*, WALL ST. J. (Nov. 23, 2013, 10:40 PM), <https://www.wsj.com/articles/should-you-invest-in-bitcoin-1385161664>; Bill Bambrough, *Canadian Central Bank Bitcoin Survey Reveals Worrying Crypto Trends*, FORBES (July 12, 2018, 5:01 AM), <https://www.forbes.com/sites/billybambrough/2018/07/12/bitcoin-survey-reveals-worrying-crypto-trends/#361c67422cf2>.

as with most other private cryptocurrencies, are speculative investments and their usefulness does not extend beyond a small group of people looking to make passive gains via their investments.<sup>161</sup>

In *SEC v. W. J. Howey*, the U.S. Supreme Court found that an investment contract has four parts.<sup>162</sup> These four requirements are typically found in private cryptocurrencies and the early case law in the United States supported such a contention.<sup>163</sup> This approach was mirrored by a number of other governments.<sup>164</sup>

Under a regulatory system in which private cryptocurrencies are classified as securities, domestic authority would lie with the Securities and Exchange Commission (SEC),<sup>165</sup> or a similar regulatory agency, such as the Canadian Securities Agency (CSA).<sup>166</sup> This would provide a federal infrastructure for regulation of cryptocurrencies. However, this regulatory approach has been challenged by both academics<sup>167</sup> and the courts,<sup>168</sup> leading to speculation that certain cryptocurrencies, once usage is prevalent among a sufficiently large population, may no longer fall under the purview of securities regulators.<sup>169</sup>

Alternatively, cryptocurrencies could be regulated on a state-by-state basis under the “Blue Sky” laws, or a comparable scheme abroad.<sup>170</sup> The issue faced in a state-by-state regulatory regime is the cross-border reach of Bitcoin and other cryptocurrencies, which is only magnified at this level of intranational regulation.<sup>171</sup> Private cryptocurrencies are able to maneuver across boundaries

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<sup>161</sup> See generally Bambrough, *supra* note 156.

<sup>162</sup> *SEC v. W.J. Howey*, 328 U.S. 293, 298–99 (1946) (describing requirements for an investment contract). These four requirements are: (1) an investment of money; (2) a common enterprise; (3) an expectation of profits; and (4) profits derived from the efforts of others. *Id.*

<sup>163</sup> *Shavers*, 2013 U.S. Dist. LEXIS 110018, at \*4–\*6.

<sup>164</sup> See, e.g., CSA Staff Notice 46-307—Cryptocurrency Offerings, SN 46-307/2017 (Can.), available at [https://www.osc.gov.on.ca/en/SecuritiesLaw\\_csa\\_20170824\\_cryptocurrency-offerings.htm](https://www.osc.gov.on.ca/en/SecuritiesLaw_csa_20170824_cryptocurrency-offerings.htm); *Initial Coin Offers*, FMA, <https://www.fma.govt.nz/compliance/cryptocurrencies/> (last visited Sept. 12, 2019).

<sup>165</sup> See, e.g., Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, Exchange Act Release No. 81207 at 10–15 (July 25, 2017).

<sup>166</sup> See GLOB. LEGAL RES. CTR., *AROUND THE WORLD*, *supra* note 9, at 11.

<sup>167</sup> See Kerry Lynn Macintosh, *How to Encourage Global Electronic Commerce: The Case for Private Currencies On the Internet*, 11 HARV. J.L. & TECH. 733, 747 n.49 (1998); see also Grinberg, *supra* note 11, at 196–99.

<sup>168</sup> *SEC v. Blockvest, LLC*, No. 18CV2287-GPB(BLM), 2018 U.S. Dist. LEXIS 200773, at \*20 (S.D. Cal. Nov. 27, 2018).

<sup>169</sup> William Hinman, Dir., Div. of Corp. Fin., SEC, Remarks at the Yahoo Finance All Markets Summit: Crypto (June 14, 2018), available at <https://www.sec.gov/news/speech/speech-hinman-061418>.

<sup>170</sup> *Blue Sky Laws*, U.S. SECURITIES & EXCHANGE COMMISSION, <https://www.sec.gov/fast-answers/answers-blueskyhtm.html> (last visited Jan. 11, 2020).

<sup>171</sup> See *supra* Part III.B (discussing the cross-border reach of cryptocurrency).

unlike any other financial instrument anticipated by current regulations.<sup>172</sup> This method of regulating is likely to raise a number of questions and problems, which may confound users and regulators.<sup>173</sup> Furthermore, this state-by-state approach does not address the haphazard results which may occur from differing regulatory schemes.

The final, and most attractive, option under a securities regulatory scheme is regulation on an international scale. However, securities are not currently regulated on an international level and there is no entity with the clear capability or drive to undertake such a regulatory scheme.<sup>174</sup> The closest institution to one which regulates securities on an international basis is the Basel Committee on Banking Supervision.<sup>175</sup> The Basel Committee on Banking Supervision is “the primary global standard setter for the prudential regulation of banks ....”<sup>176</sup> However, the Basel Committee on Banking Supervision is not a binding legal authority and its decisions do not have legal force on their own, meaning the members of the Basel Committee on Banking Supervision are relied upon to enforce the decisions.<sup>177</sup> While the Basel Committee on Banking Supervision provides a forum for different governments to discuss and address “regulatory and supervisory gaps that pose risks to financial stability,” the lack of binding authority, presents issues in coordinating the creation of an oversight framework, as countries will presumably be more resistant to outside forces—which are essentially advisory boards—dictating their monetary policy.<sup>178</sup>

## 2. *Cryptocurrencies as a System of Payment*

There has been an interesting debate surrounding whether private cryptocurrencies fall under the category of “systems of payment.”<sup>179</sup> Given the nature of cryptocurrencies, some experts have put forth the idea that an obvious way to regulate private cryptocurrencies is to treat them as payment system.<sup>180</sup> Other scholars, however, have argued that Bitcoin is clearly not a system of

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<sup>172</sup> Brito, *supra* note 12, at 22–23.

<sup>173</sup> See Hughes & Middlebrook *supra*, note 39 at 540–41.

<sup>174</sup> Howden, *supra* note 5, at 765.

<sup>175</sup> *Id.* at 765–66; see also *Basel Committee on Banking Supervision—Overview*, BIS, <http://www.bis.org/bcbs/> (last visited Oct. 26, 2018) [hereinafter BIS, *Digital Currencies*].

<sup>176</sup> *Id.*

<sup>177</sup> *Id.* While the IMF is also not a “binding” authority, the historical importance of the IMF in maintaining the stability of the international monetary system for more than eighty years lends significant authority to its decisions. See *infra* note 237.

<sup>178</sup> *Basel Committee Charter*, BIS, <https://www.bis.org/bcbs/charter.htm> (last visited Jan. 11, 2020).

<sup>179</sup> ECB, *VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS*, *supra* note 14, at 17.

<sup>180</sup> Hughes & Middlebrook, *supra* note 39.

payment, given that a bitcoin user may make a person-to-person transaction or a person-to-business transaction without requiring an intermediary or third party to verify the validity of the transaction.<sup>181</sup>

Meanwhile, proponents argue that private cryptocurrencies are systems of payment which may operate free of a third-party. Further, such proponents stress, private cryptocurrencies function in a much more flexible manner than most other systems of payment.<sup>182</sup> However, payment systems are subject to a number of different regulations around the world, most prominent of which are anti-money laundering laws (AML) and combating the financing of terrorism (CFT).<sup>183</sup> Notwithstanding these concerns, some governments continue to classify cryptocurrencies as a means of payment.<sup>184</sup>

While an in-depth dive of such regulations is outside the scope of this Comment, there is some basic information required before evaluating regulation of cryptocurrencies under this regulatory scheme. AML/CFT regulations vary by country,<sup>185</sup> thus the Australian AML/CTF Act will serve as an example of such regulations. One of the main obligations placed upon reporting entities is Know Your Customer (KYC) requirements and verification of identity.<sup>186</sup> This obligation's purpose is to "ensure the reporting entity knows its customers and understands their customers' financial activities."<sup>187</sup> These obligations are universal with respect to many national AML/CFT statutes<sup>188</sup> and international standards.<sup>189</sup>

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<sup>181</sup> *Id.* at 518.

<sup>182</sup> *Id.* at 539–42.

<sup>183</sup> *Id.* at 517–22; *see also* FIN. ACTION TASK FORCE, INTERNATIONAL STANDARDS ON COMBATING MONEY LAUNDERING AND THE FINANCING OF TERRORISM AND PROLIFERATION [hereinafter FIN. ACTION TASK FORCE, INTERNATIONAL STANDARDS].

<sup>184</sup> *See, e.g.*, GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 3 (discussing the few jurisdictions that allow cryptocurrencies to function as a means of payment, even by government agencies).

<sup>185</sup> *See generally* Concepcion Verdugo Yepes, *Compliance with the AML/CFT International Standard: Lessons from a Cross-Country Analysis* (Int'l Monetary Fund, Working Paper WP/11/177, 2011).

<sup>186</sup> *See* Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (Cth) pt 2 div 4 s 29 (Austl.); *see also*, Part B of an AML/CTF Program (Customer Due Diligence Procedures), AUSTRAC, <http://www.austrac.gov.au/part-b-amlctf-program-customer-due-diligence-procedures> (last updated July 1, 2019).

<sup>187</sup> Part B of an AML/CTF Program (Customer Due Diligence Procedures), *supra* note 186. The Australian government requires that a reporting entity is "reasonably satisfied that: an individual customer is who they claim to be [and] a customer who is not an individual (such as a company, association, or trust) is a real entity and [they] know the details of its beneficial owners." *Id.*

<sup>188</sup> *See, e.g.*, Proceeds of Crime (Money Laundering) and Terrorist Financing Act, S.C. 2000, c. 17 amended by S.C. 2014, c C-31 (Can.).

<sup>189</sup> The FATF is an intergovernmental agency which promotes international standards on combating money-laundering and the financing of terrorism. *See* FIN. ACTION TASK FORCE, INTERNATIONAL STANDARDS, *supra* note 183.

Under the Bank Secrecy Act (BSA), the Department of the Treasury Financial Crimes Enforcement Network (FinCEN) is the entity responsible for regulating systems of payment with operations in the United States.<sup>190</sup> The BSA and its regulatory requirements were enacted by Congress primarily to “prevent illegal activity by requiring that regulated entities assist with the identification and investigation of suspicious transactions and customers.”<sup>191</sup> The regulatory requirements of the BSA impose four main requirements on financial institutions: “(1) report[ing] suspicious transactions to law enforcement, (2) maintain[ing] records of large and/or suspicious transactions, (3) submit[ing] to compliance reviews of their anti-money laundering efforts, and (4) develop[ing] methods of identifying potentially dangerous customers.”<sup>192</sup>

On the international level, the Financial Action Task Force (FATF) is the primary entity responsible for oversight of AML/CFT and KYC obligations.<sup>193</sup> The FATF, founded in 1989 to combat money laundering, is an intergovernmental organization which monitors progress in implementing the FATF Recommendations through mutual evaluations of member countries.<sup>194</sup>

There are two issues with regulating cryptocurrencies as a system of payment. The first issue is the KYC obligations outlined above, are antithetical to decentralized cryptocurrencies, particularly those which are “token-based.”<sup>195</sup> Many private cryptocurrencies such as Bitcoin are pseudo-anonymous, an appealing characteristic for many users.<sup>196</sup> Not only could users abandon usage of compliant cryptocurrencies, but implementation of such KYC obligations would also be extremely difficult with private cryptocurrencies, given their nature.<sup>197</sup>

The second issue with regulating cryptocurrencies as a system of payment is a question about who in the cryptocurrency network is required to meet such AML/CFT obligations.<sup>198</sup> Bitcoin, and many other popular cryptocurrencies, are

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<sup>190</sup> 31 U.S.C. § 310 (2012).

<sup>191</sup> Tu & Meredith, *supra* note 15, at 322.

<sup>192</sup> *Id.*

<sup>193</sup> FIN. ACTION TASK FORCE, INTERNATIONAL STANDARDS, *supra* note 183, at 6.

<sup>194</sup> FIN. ACTION TASK FORCE, FORCE MANDATE (2012–2020) (Apr. 20, 2012).

<sup>195</sup> Ariel Deschappell, *Why Know-You-Customer Rules Won't Work with Bitcoin*, COINDESK (Apr. 13, 2014), <https://www.coindesk.com/know-customer-rules-wont-work-bitcoin>; *see also* Kahn et al., *supra* note 13, at 3 (“Many of these new systems are ‘token-based’—that is, they rely on identification of the object being transferred as a means of payment rather than relying on identification of the individual whose account is being debited.”).

<sup>196</sup> Brito, *supra* note 12, at 20–22; Tu & Meredith, *supra* note 15, at 297.

<sup>197</sup> *Id.* at 328.

<sup>198</sup> Hughes & Middlebrook, *supra* note 39 at 531.

unique in their decentralized nature.<sup>199</sup> Arguably, the decentralized nature means that all members of the network are money services businesses (MSBs), and thus are all subject to these AML/CFT obligations.<sup>200</sup>

However, such obligations require significant investment on the part of the MSB and imposing such an obligation upon every member of the Bitcoin network would effectively kill the feasibility of cryptocurrencies.<sup>201</sup> FinCEN anticipated this problem in early 2013, releasing interpretive guidance “to clarify the applicability of the regulations . . . to persons creating, obtaining, distributing, exchanging, accepting, or transmitting virtual currencies.”<sup>202</sup> In this guidance memorandum, FinCEN stated that users “who obtain[] convertible virtual currency and use[] it to purchase real or virtual goods or services” are not MSBs.<sup>203</sup> As a result, such users are generally not subject to FinCEN requirements.<sup>204</sup> On the other hand, “Administrators” and “Exchangers” do qualify as MSBs and thus are subject to FinCEN regulations on AML and CFT.<sup>205</sup>

### 3. *Cryptocurrencies as Commodities*

Commodities are defined as a “basic good used in commerce that is interchangeable with other commodities of the same type.”<sup>206</sup> One important aspect of commodities is that there is little difference “between a commodity coming from one producer and the same commodity coming from another producer.”<sup>207</sup> Oftentimes, the word “commodity” brings to mind a raw material or agricultural product, which can be bought or sold at an exchange.<sup>208</sup> Goods

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<sup>199</sup> See discussion *supra* Part III.A.

<sup>200</sup> Hughes & Middlebrook, *supra* note 39 at 521–23 (citing FinCEN, *supra* note 125).

<sup>201</sup> *Id.* at 520, 558–59.

<sup>202</sup> FinCEN, *supra* note 125.

<sup>203</sup> *Id.* at 1–2. A user is a person that obtains virtual currency to purchase goods or services. *Id.*

<sup>204</sup> *Id.* at 2; see also Tu & Meredith, *supra* note 15, at 322.

<sup>205</sup> FinCEN, *supra* note 125; see also Hughes & Middlebrook, *supra* note 39, at 531 (AML regulations promulgated by FinCEN “prescribe general risk-based assessment requirements for specific industries that the federal Bank Secrecy Act (BSA) governs and impose certain additional responsibility for maintaining customer-identification programs and anti-money-laundering compliance programs for certain sub-industries otherwise identified as ‘financial institutions.’ FinCEN’s 2013 and 2014 Guidances brought operators of virtual-currency ‘wallets’ and ‘exchanges’ into the scope of the term ‘money services’ and, accordingly, into the term ‘financial institutions’ for BSA purposes.”).

<sup>206</sup> *Commodity*, INVESTOPEDIA, <http://www.investopedia.com/terms/c/commodity.asp> (last visited Jan. 13, 2019).

<sup>207</sup> *Id.* An example provided is that “[a] barrel of oil is basically the same product, regardless of the producer. By contrast, for electronics merchandise, the quality and features of a given product may be completely different depending on the producer.” *Id.*

<sup>208</sup> Joshua Kennan, *What Are Commodities and How Do You Trade Them?*, THE BALANCE (June 29,

such as gold and silver fall under the commodity regulations given that they are “raw materials.”<sup>209</sup> Bitcoin—as well as other cryptocurrencies—have often been compared to precious metals such as gold and silver, given the economic value of both.<sup>210</sup> In recent years, the commodity regulators have had their responsibilities broadened to include a wide range of derivatives, futures, and swap contracts which extend far beyond raw materials and/or agricultural products.<sup>211</sup> Thus, even if the comparison between cryptocurrencies and precious metals is unconvincing on its own, the expansion of commodity regulator power lends further credence to their regulation of cryptocurrencies.

Regulation of commodities in the United States, as defined within the Commodity Exchange Act (CEA), falls to the Commodity Futures Trading Commission (CFTC).<sup>212</sup> Recently, the CFTC expanded its regulatory umbrella to include cryptocurrencies.<sup>213</sup> Within the last few years, the CFTC has sought to define “virtual currencies,”<sup>214</sup> referred to in this Comment as private cryptocurrencies, as a form of commodity within the CEA.<sup>215</sup> Agencies in other

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2018), <https://www.thebalance.com/what-are-commodities-356089>.

<sup>209</sup> *Commodity*, INVESTOPEDIA, <http://www.investopedia.com/terms/c/commodity.asp> (last visited Sept. 27, 2019).

<sup>210</sup> See Alec Liu, *Why Bitcoins Are Just Like Gold*, VICE (Mar. 21, 2013), <http://motherboard.vice.com/blog/why-bitcoins-are-just-like-gold>; Howden, *supra* note 5, at 765.

<sup>211</sup> See, e.g., *Mission and Responsibilities*, U.S. COMMODITY FUTURES TRADING COMM’N, <https://www.cftc.gov/About/MissionResponsibilities/index.htm> (last visited Oct. 24, 2018).

<sup>212</sup> 7 U.S.C. § 2 (2018).

<sup>213</sup> See, e.g., Press Release, U.S. Commodity Futures Trading Comm’n, Federal Court in New York Enters Preliminary Injunction Order Against Patrick K. McDonnell and His Company CabbageTech, Corp. d/b/a Coin Drop Markets in Connection with Fraudulent Virtual Currency Scheme (Mar. 6, 2018) (on file at <https://www.cftc.gov/PressRoom/PressReleases/pr7702-18>).

<sup>214</sup> The CFTC defines “virtual currency” as a digital representation of value that functions as a medium of exchange, a unit of account, or a store of value, but it does not have legal tender status. U.S. COMMODITY FUTURES TRADING COMM’N, CUSTOMER ADVISORY: UNDERSTAND THE RISKS OF VIRTUAL CURRENCY TRADING (Dec. 2017), [https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/customeradvisory\\_urvct121517.pdf](https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/customeradvisory_urvct121517.pdf); see also *In re Coinflip, Inc.*, CFTC No. 15–29, 2015 WL 5535736 (Sept. 17, 2015); *CFTC v. McDonnell*, No. 18-CV-361, 2018 WL 1175156, at \*1 (E.D.N.Y. Mar. 6, 2018) (“A ‘commodity’ encompasses virtual currency both in economic function and in the language of the statute.”).

<sup>215</sup> *CFTC v. My Big Coin Pay, Inc.*, 334 F. Supp. 3d 492, 496–97 (D. Mass. 2018) (citations omitted) (“[CFTC] responds that ‘a ‘commodity’ for purposes of [the CEA definition] is broader than any particular type or brand of that commodity.’ Pointing to the existence of Bitcoin futures contracts, it argues that contracts for future delivery of virtual currencies are dealt in and that My Big Coin, as a virtual currency, is therefore a commodity.”).

countries, such as Canada<sup>216</sup> and China,<sup>217</sup> have undertaken similar steps. In further support of the view that cryptocurrencies may be considered commodities, the United States Internal Revenue Service (IRS) determined in 2014 that it would treat cryptocurrencies as commodities, and thus property, for purposes of taxation.<sup>218</sup> When Bitcoin—or another cryptocurrency—is exchanged for a good or a service—as opposed to fiat currency—the transaction may constitute a barter exchange, particularly if that jurisdiction classifies cryptocurrencies as commodities, assets, or property.<sup>219</sup>

On the international stage, such transactions would fall under the purview of two systems of regulation: the Uniform Commercial Code (UCC)<sup>220</sup> and the World Trade Organization (WTO).<sup>221</sup> The UCC functions as judicial reference helpful in settling disputes or litigation, but is not designed to proactively regulate cryptocurrencies without a centralized authority.<sup>222</sup> As this Comment seeks to stress the need for a pro-active approach to developing a set of best practices, the UCC lacks the necessary preventative aspects. This is where the WTO enters the picture.

The WTO is tasked with supervising the movement of goods and reducing obstacles to international trade.<sup>223</sup> In addition, the WTO is responsible for “administering and monitoring the application of the WTO’s agreed rules for trade in goods, trade in services, and trade-related intellectual property rights.”<sup>224</sup> The WTO could take the position of the Canadian government, classifying the exchange of cryptocurrencies as “barter exchanges.”<sup>225</sup> If so, the WTO would also be implying that cryptocurrencies are best classified as a

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<sup>216</sup> The Canada Revenue Service (CRA) “has characterized cryptocurrency as a commodity and not a government-issued currency. Accordingly, the use of cryptocurrency to pay for goods or services is ‘treated as a barter transaction.’” Mariam Al-Shikarchy et al., *Canadian Taxation of Cryptocurrency... So Far*, LEXOLOGY (Nov. 14, 2017), <https://www.lexology.com/library/detail.aspx?g=6283077e-9d32-4531-81a5-56355fa54f47>; *see also* GLOB. LEGAL RES. CTR., *AROUND THE WORLD*, *supra* note 9, at 10–11.

<sup>217</sup> GLOB. LEGAL RES. CTR., *SELECTED JURISDICTIONS*, *supra* note 42, at 6.

<sup>218</sup> I.R.S. Notice 2014-21, 2014-1 C.B. 938.

<sup>219</sup> *See* Al-Shikarchy, *supra* note 216 (“Accordingly, the use of cryptocurrency to pay for goods or services is ‘treated as a barter transaction.’”).

<sup>220</sup> *See* Hughes & Middlebrook, *supra* note 39, at 520–22 (discussing the applicability of U.C.C. Article 4A to regulation of cryptocurrencies).

<sup>221</sup> *See* WORLD TRADE ORG., *UNDERSTANDING WTO 9* (5th ed. 2011), [http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/understanding\\_e.pdf](http://www.wto.org/english/thewto_e/whatis_e/tif_e/understanding_e.pdf).

<sup>222</sup> *See* Howden, *supra* note 5, at 765.

<sup>223</sup> *UNDERSTANDING WTO*, *supra* note 222, at 9.

<sup>224</sup> WORLD TRADE ORG., *OVERVIEW*, [https://www.wto.org/english/thewto\\_e/whatis\\_e/wto\\_dg\\_stat\\_e.htm](https://www.wto.org/english/thewto_e/whatis_e/wto_dg_stat_e.htm); *see id.*

<sup>225</sup> *See* Al-Shikarchy, *supra* note 216; Howden, *supra* note 5, at 763.

good.<sup>226</sup> The WTO could thus regulate cryptocurrencies as the organization “designated with supervising and facilitating trade transactions ... across borders.”<sup>227</sup> However, one of the limitations of the WTO jurisdiction is that “the WTO serves as a forum where member governments can go to try to sort out any trade issues between one another.”<sup>228</sup> Thus, the WTO, as a forum for governments, would not necessarily be able to address concerns of private cryptocurrency as they relate to individual users.<sup>229</sup>

#### 4. *Cryptocurrencies as a Form of Currency*

Bitcoin and many other private cryptocurrencies share a number of characteristics with money or currency.<sup>230</sup> Before evaluating whether private cryptocurrencies are money or currency, it is important to understand the definitions of each, as the terms are often confused.<sup>231</sup> Money is a “mutually recognized representation of value.”<sup>232</sup> Money acts as “(1) a medium of exchange, (2) a unit of account, and (3) a store of value.”<sup>233</sup> Currency, has a similar definition, but importantly it is money “*accepted by a government*.”<sup>234</sup> Few countries have been willing to accept Bitcoin or other private cryptocurrencies as “currency.”<sup>235</sup> However, one national government has already made the move to classify cryptocurrencies as a form of private currency.<sup>236</sup> Just like fiat currencies, a major element of the popularity of Bitcoin and other cryptocurrencies is that it “is exactly like religion. It’s based entirely on faith.”<sup>237</sup>

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<sup>226</sup> Howden, *supra* note 5, at 763.

<sup>227</sup> *Id.* at 764.

<sup>228</sup> *Id.* at 781.

<sup>229</sup> *See generally id.*

<sup>230</sup> *See id.* at 762.

<sup>231</sup> Compare Perkins, *supra* note 69, at 2 (differentiating between currency and money) and Currency, INVESTOPEDIA, <http://www.investopedia.com/terms/c/currency.asp> (last visited Jan. 13, 2019), with Grinberg, *supra* note 11 (seemingly mixing definitions of money and currency). Further complicating these similar terms is the addition of the term “legal tender.” *See* discussion, *infra* Part V.A.

<sup>232</sup> Perkins, *supra* note 69, at 2.

<sup>233</sup> *Id.* Money is evaluated on its ability to meet each of those functions. *Id.* (“To function as a medium of exchange, the thing must be tradable and agreed to have value. To function as unit of account, the thing must act as a good measurement system. To function as a store of value, the thing must be able to purchase approximately the same value of goods and services at some future date as it can purchase now.”).

<sup>234</sup> Howden, *supra* note 5, at 762 (emphasis added).

<sup>235</sup> *See* GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9 at 1–4.

<sup>236</sup> Spaven, *supra* note 38; *see also*, O’Neal, *supra* note 50 (discussing Japan’s recognition of Bitcoin as currency or legal tender).

<sup>237</sup> Matthew Yeomans, *The Quest for a Global E-Currency*, CNN (Sept. 28, 1999, 10:28 AM), <http://www.cnn.com/TECH/computing/9909/28/global.e.currency.idg/index.html>

No U.S. government agency currently regulates Bitcoin or any other cryptocurrency, as a form of currency. However, an attempt to regulate Bitcoin as a form of currency can be identified in Germany.<sup>238</sup> Germany recognizes Bitcoin as a “private currency,” which only grants Bitcoin the status of a “financial instrument.”<sup>239</sup> Thus, while Germany technically recognizes Bitcoin as a form of currency, it does not recognize Bitcoin or any other private cryptocurrency as a form of legal tender.<sup>240</sup>

At the international level of currency “regulation,” the IMF is probably the most authoritative organization. The IMF was created following WWII to address problems created after the collapse of the gold standard.<sup>241</sup> The organization was given a mandate to regain control over the international monetary and financial systems, so as to provide stability and predictability for all international actors and states.<sup>242</sup>

While not officially a regulatory agency, the IMF is the closest thing to a regulatory agency of monetary policy on the international stage.<sup>243</sup> The IMF is a cooperative fund which works with all 189-member countries, assessing their economic and currency policies, while providing suggestions and undertaking studies, so as to accomplish its mission.<sup>244</sup> The primary goal of the IMF is to provide stability to the international monetary system.<sup>245</sup> More specifically, one of the primary responsibilities of the IMF is to coordinate and maintain order in the international foreign exchange market.<sup>246</sup>

The primary goal and responsibility of the IMF seems to parallel well with some of the issues presented by private cryptocurrency. There is just one

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<sup>238</sup> Spaven, *supra* note 38; *see also*, GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 40.

<sup>239</sup> GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 40.

<sup>240</sup> *Id.* at 40–41.

<sup>241</sup> Plassaras, *supra* note 11, at 395.

<sup>242</sup> *Id.*

<sup>243</sup> Following the collapse of the gold standard in 1945, the IMF was responsible for coordinating and ensuring implementation of the Bretton Woods system. *Id.* In 1978, following the “Nixon shock” of 1971, the IMF amended its Articles of Agreement, permitting individual states more freedom to determine their exchange rates. *Id.* The system set out by the IMF in 1978 continues to govern the international foreign exchange market today. Plassaras, *supra* note 11, at 395; *see also*, JONATHAN E. SANFORD, CONG. RESEARCH SERV., CURRENCY MANIPULATION: THE IMF AND WTO, 1 (Jan. 28, 2011) (“The IMF is the leading international organization in the area of monetary policy.”).

<sup>244</sup> *What We Do*, INT’L MONETARY FUND, <https://www.imf.org/external/about/whatwedo.htm> (last visited Jan. 13, 2019).

<sup>245</sup> *Id.*

<sup>246</sup> *See* IMF Articles of Agreement, *supra* note 81, art. 1 (“The purposes of the International Monetary Fund are: ... (iii) To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.”).

problem: the authority of the IMF is limited to countries which have signed onto the IMF Articles of Agreement. Private cryptocurrencies are, by their nature, separate from countries.<sup>247</sup> Thus, while some commentators have tried, it is a stretch to argue that the IMF could extend their authority to include oversight of private cryptocurrencies. Moreover, even if the argument could be made in theoretical terms, the feasibility of exercising such oversight is extremely low.

*D. While There Exists a Regulatory Gray Area for Private Cryptocurrencies, It Is Clear that a Single Organization Must Take Charge*

While it is not clear how private cryptocurrencies might be regulated on a global level, it seems most likely that a regulatory framework would parallel the treatment of securities on the international stage.<sup>248</sup> This regulatory scheme is essentially a collection of national systems, with no consistent regulatory requirements.<sup>249</sup> If this were to be the regulatory structure which develops, it could pose significant issues for effective regulation of cryptocurrencies, given their cross-border reach.<sup>250</sup> While not evaluating the overall effectiveness of this piece-meal approach to regulation, it is important to consider the potential limitations in considering how to best classify government-backed cryptocurrencies. In identifying the limitations of this country-by-country approach, it may be instructive to look to the smaller, but still parallel, example of New York State's BitLicense regulatory scheme.

In 2014, the most comprehensive private crypto regulations put forth by any state was the "BitLicense" regulatory scheme for cryptocurrency related businesses, proposed by the New York State Department of Financial Services (NYDFS).<sup>251</sup> The scheme itself provides for a money-transmitter regulatory framework applied to cryptocurrency-market participants.<sup>252</sup> While the NYDFS proposed regulatory scheme was monumental,<sup>253</sup> it also further highlighted

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<sup>247</sup> See *Virtual Currencies and Beyond*, *supra* note 112, ¶ 2 ("VCs [and thus, cryptocurrencies such as Bitcoin], in principle, question the paradigm of state-supported fiat currencies and the dominant role that central banks and conventional financial institutions have played in the operation of the financial system.") For further discussion of the IMF see *infra* Part V.

<sup>248</sup> See discussion *supra* Part III.C.1.

<sup>249</sup> See *id.*

<sup>250</sup> See COMMITTEE ON PAYMENTS AND MARKET INFRASTRUCTURES, *supra* note 148.

<sup>251</sup> Hughes, *supra* note 36, at 537.

<sup>252</sup> *Id.* at 536–46 (discussing the specifics of the BitLicense regulatory scheme).

<sup>253</sup> *Id.* at 537 ("Because it is the first comprehensive cryptocurrency-specific 'money services' licensing and regulatory framework for cryptocurrencies both in the United States and worldwide, the BitLicense is positioned to be the platform against which other cryptocurrency-specific 'money services' regulations are likely to be measured.").

issues with piecemeal regulation as opposed to a more cohesive regulatory scheme.<sup>254</sup>

Without the backing of a physical commodity, private cryptocurrencies are susceptible to rapid change in valuation, as their value is a reflection of what the market is willing to pay.<sup>255</sup> Government-backed cryptocurrencies have the advantage of government support, which seems likely help to control the price volatility.<sup>256</sup> While there are differences in how the two types of cryptocurrencies are regulated on an international scale, the interaction of private cryptocurrencies with currency-based regulations is instructive, allowing fact-supported predictions, as opposed to pure speculation.

### III. PRIVATE CRYPTOS VERSUS GOVERNMENT-BACKED CRYPTOS

There are some characteristics which are likely to remain the same when comparing government-backed cryptocurrency to private cryptocurrencies. Some of the most important characteristics, which are inherent to digital currencies, are processing speeds and cross-border reach of such coins.<sup>257</sup>

#### A. *How and Why Do They Differ?*

In switching the discussion from private cryptocurrencies to government-backed cryptocurrencies, one of the biggest doubts raised by the core adopters<sup>258</sup> of Bitcoin is the addition of a central authority.<sup>259</sup> Government-backed

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<sup>254</sup> The primary issue highlighted was that “there is no failsafe way to determine where an internet user is located geographically. There is no way to guarantee that one’s internet traffic will not touch a server in New York ... If there is no practical way for a virtual currency business to avoid engaging in activity that involves New York, there is no true limitation on New York’s jurisdictional reach.” Hughes, *supra* note 36, at 540–41; *see also* Shin, *supra* note 157.

<sup>255</sup> *See also* Mancini-Griffoli et al., *supra* note 24, ¶ 22; *Virtual Currencies and Beyond*, *supra* note 112, ¶ 13 (“The value of cryptocurrencies does not have any backing from any source. They derive value solely from the expectation that others would also value and use them.”).

<sup>256</sup> *See* Koning, *supra* note 141, at 2 (“The removal of all central points of control over a currency has the effect of sacrificing price stability, since the absence of an independent entity to ‘back’ the bitcoins in circulation means that their price cannot be managed during periods of fluctuating demand ... Fedcoin is one solution to the volatility problem. It reintroduces one central point of control to the monetary system by granting a central bank the ability to set the supply of tokens on a Fedcoin blockchain.”).

<sup>257</sup> COMMITTEE ON PAYMENTS AND MARKET INFRASTRUCTURES, *supra* note 148, at 4.

<sup>258</sup> Specifically, those individuals who do not believe that a central authority, such as the Federal Reserve, should be able to control monetary policy to the degree that they are currently afforded. *See* Grinberg *supra* note 11, at 172.

<sup>259</sup> *See Virtual Currencies and Beyond*, *supra* note 112, ¶ 2 (“VCs [and thus, cryptocurrencies such as Bitcoin], in principle, question the paradigm of state-supported fiat currencies and the dominant role that central banks and conventional financial institutions have played in the operation of the financial system.”).

cryptocurrencies will likely exist on a centralized network, as opposed to the decentralized, peer-to-peer network seen with private cryptocurrencies.<sup>260</sup>

As a result of the centralization of any proposed government-backed cryptocurrency, such cryptocurrency is unlikely to be pseudo-anonymous.<sup>261</sup> Even if the government were to propose a cryptocurrency with similar characteristics to Bitcoin, with public and private keys, the centralization of the underlying blockchain network would almost certainly allow the government to eliminate any façade of pseudo-anonymity.<sup>262</sup> At the same time, elimination of such pseudo-anonymity may help to mitigate the concerns surrounding use in connection with criminal activity.<sup>263</sup>

Another issue which would potentially be addressed via government backing of a cryptocurrency is providing stability to the value of the coin.<sup>264</sup> Private cryptocurrencies, such as Bitcoin, have been associated with price volatility, partially derived from their lack of inherent value.<sup>265</sup> In contrast, central bank actions may allow governments to address such volatility concerns in the context of government-backed cryptocurrencies.<sup>266</sup>

Some of the primary concerns surrounding the related issues of price instability and lack of inherent value would seem to be addressed merely by the backing of a stable government.<sup>267</sup> The truth is that concerns about price stability

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<sup>260</sup> *Bank-Built Cryptocurrency?*, *supra* note 141; *see also*, FIN. ACTION TASK FORCE, *Virtual Currencies*, *supra* note 85, at 5; Didenko & Buckley, *supra* note 16, at 51–52; (“[T]he recent revisions to the Fifth AML Directive, which provides for additional AML checks for virtual currencies, indicate that states are unlikely to permit anonymous circulation of new units of digital currency”); *but see* Koning, *supra* note 141, at 28 (“Fedecoin could provide cash-like levels of anonymity and censorship-resistance.”).

<sup>261</sup> *Bank-Built Cryptocurrency?*, *supra* note 141.

<sup>262</sup> Kahn et al., *supra* note 13, at 16–18.

<sup>263</sup> *Id.*; *see also*, Koning, *supra* note 141 (“Fedecoin could provide cash-like levels of anonymity and censorship-resistance, perhaps with a built-in mechanism that limits usage to small value payments so as to reduce participation by criminals and tax dodgers.”).

<sup>264</sup> *See* Koning, *supra* note 141 (“The removal of all central points of control over a currency has the effect of sacrificing price stability, since the absence of an independent entity to ‘back’ the bitcoins in circulation means that their price cannot be managed during periods of fluctuating demand. This price volatility in turn cripples any appeal bitcoins might have to a broader audience. Fedecoin is one solution to the volatility problem. It reintroduces one central point of control to the monetary system by granting a central bank the ability to set the supply of tokens on a Fedecoin blockchain.”).

<sup>265</sup> Plassaras, *supra* note 11, at 377; *see also* Mancini-Griffoli et al., *supra* note 24, ¶ 22.

<sup>266</sup> ECB, VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS, *supra* note 14, at 1; *accord.*, Doguet, *supra* note 65, at 1119.

<sup>267</sup> *Virtual Currencies and Beyond*, *supra* note 112, ¶ 13 (“Cryptocurrencies challenge the standard concept of fiat currencies. The value of existing fiat currencies is backed by the creditworthiness of the central bank and the government.”). However, while government guarantees may address some of the volatility issues with cryptocurrencies, such backing does not necessarily stabilize cryptocurrencies in the context of the larger monetary system. *See* Kahn et al., *supra* note 13, at 4 (“A central bank token would have to be designed

and stability of the international monetary system remain, even with the blessing of governments and their central banks.<sup>268</sup>

At least one high profile banker, Swiss National Bank governing board member Andréa Maechler, has posited that government-backed cryptocurrencies still present the potential to inject instability into the global monetary system.<sup>269</sup> Government-backed cryptocurrency has the potential to cause enormous issues for the international community, the most pressing of which is the threat to the stability of the international monetary system.

As mentioned above, one of the major issues with private cryptocurrencies is a lack of stability, given the absence of inherent value in the coins.<sup>270</sup> This lack of inherent value, mixed with speculation from investors and the relative uniqueness of the asset, have all contributed to price fluctuations which make private cryptocurrencies impractical for daily use by the average consumer.<sup>271</sup> Such impracticality would be unacceptable for government-backed cryptocurrency. As the IMF has discussed, central banks will prefer that government-backed cryptocurrencies support, or at least do not undermine, the public policy goals of financial integrity, financial stability, and monetary policy effectiveness.<sup>272</sup>

While the government's backing of a cryptocurrency may well stabilize the price of a cryptocurrency coin in the domestic scenario, the lack of any international oversight could cause instability to the international monetary system.<sup>273</sup> Barring the adoption of a global oversight framework to address such potential instability presented by government-backed crypto, the problems arising from private cryptocurrencies will seem trivial.<sup>274</sup>

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appropriately to allay the risk of becoming a source of financial instability.”).

<sup>268</sup> *See id.*

<sup>269</sup> Rinecker, *supra* note 21; *see also*, BIS, BIS ANNUAL ECONOMIC REPORT, CRYPTOCURRENCIES: LOOKING BEYOND THE HYPE (June 24, 2018).

<sup>270</sup> *See discussion supra* Part III.B.

<sup>271</sup> Koning, *supra* note 141, at 27–28 (“While Bitcoin shows some promise as a digital currency, its volatility makes it inaccessible to the majority of consumers.”).

<sup>272</sup> Mancini-Griffoli et al., *supra* note 24, ¶ 18.

<sup>273</sup> Eur. Banking Auth., EBA Opinion on ‘Virtual Currencies,’ (July 4, 2014), <https://www.eba.europa.eu/documents/10180/657547/EBA-Op-2014-08+Opinion+on+Virtual+Currencies.pdf>; *see also* Hughes & Middlebrook, *supra* note 39, at 514 (2015).

<sup>274</sup> *See discussion infra* Part V.B.

### B. *What are the Major Issues Arising From these Differences?*

State governments must recognize the potential issues arising from the widespread adoption of government-backed cryptocurrencies.<sup>275</sup> The biggest issues arising from differences between government-backed cryptocurrencies and private cryptocurrencies are related to: (1) potential instability posed by government-backed cryptocurrencies to the international monetary system,<sup>276</sup> and (2) uncertainty arising from the inconsistent treatment of such cryptocurrencies across differing jurisdictions.<sup>277</sup>

Some of these issues also arise with private cryptocurrencies, such as Bitcoin.<sup>278</sup> However, the key difference between private and government-backed cryptocurrency is the extent to which a government-backed cryptocurrency might potentially be integrated within the global economy.<sup>279</sup> A private cryptocurrency, at least in the current day and age, is likely too small to destabilize the entire international monetary system.<sup>280</sup> But with government-backed cryptocurrency, the effects of destabilizing events are magnified because of the order of financial inclusion possible with government-backed cryptocurrencies.

National governments have not been quick or effective in their attempts to regulate private cryptocurrency.<sup>281</sup> Furthermore, these governments have opted out of coordinating an effort to create a coherent framework for oversight or regulation of private cryptocurrency.

There are certainly national governments and central banks that do recognize the potential issues stemming from widespread proliferation of *private* cryptocurrencies.<sup>282</sup> As the Staff of the Global Legal Research Directorate noted in their comparative summary:

One of the most common actions identified across the surveyed jurisdictions is government-issued notices about the pitfalls of investing in the cryptocurrency markets. Such warnings, mostly issued by central

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<sup>275</sup> See CRYPTOASSETS TASKFORCE: FINAL REPORT, HM Treasury, Financial Conduct Authority, Bank of England (Oct. 2018); Deschapell, *supra* note 191.

<sup>276</sup> Plassaras, *supra* note 11, at 377; see also Mancini-Griffoli et al., *supra* note 24, ¶¶ 38–50 (discussing the extent to which government-backed digital currency could undermine financial stability).

<sup>277</sup> See generally GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9.

<sup>278</sup> Lee et al., *supra* note 37.

<sup>279</sup> Lagarde, *supra* note 32.

<sup>280</sup> See Andrea O’Sullivan, *How Do Cryptocurrencies Affect Monetary Policy?*, COIN CENTER (June 20, 2018), <https://coincenter.org/entry/how-do-cryptocurrencies-affect-monetary-policy>.

<sup>281</sup> See discussion *supra* Part III.C.

<sup>282</sup> GLOB. LEGAL RES. CTR., AROUND THE WORLD, *supra* note 9, at 1.

banks, are largely designed to educate the citizenry about the difference between actual currencies, which are issued and guaranteed by the state, and cryptocurrencies, which are not. Most government warnings note the added risk resulting from the high volatility associated with cryptocurrencies and the fact that many of the organizations that facilitate such transactions are unregulated. Most also note that citizens who invest in cryptocurrencies do so at their own personal risk and that no legal recourse is available to them in the event of loss.<sup>283</sup>

While there are a number of governments taking the above approach, there are other countries which believe that private cryptocurrencies are too small of a market and thus, “cannot jeopardize financial stability.”<sup>284</sup> This belief that private cryptocurrencies are too small of a market to cause major concern could potentially be correct—one writer, using Bitcoin to draw a “rough sketch of the current state of the market [of cryptocurrencies],” estimates Bitcoin’s \$100 billion market capitalization constitutes approximately 0.11% of the world’s broad money supply.<sup>285</sup> Government-backed cryptocurrency may well flip that conclusion on its head.<sup>286</sup> Private cryptocurrency is still confined to a relatively small number of users, with one estimate from 2015 expecting the Bitcoin user-base to consist of only 5 million active users worldwide.<sup>287</sup> While private cryptocurrencies are investable assets, they are still not widely accepted. A government-backed digital currency could (or would, depending on the level of adoption government-backed cryptocurrencies might enjoy) be nearly equivalent to electronic cash and would be a part of the average citizen’s daily life.<sup>288</sup>

Greater financial inclusion for members of society who historically have not had much access to the traditional financial system is an oft-cited reason for the

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<sup>283</sup> *Id.* The comparative summary goes on to discuss the potential use of private cryptocurrencies for criminal activity and fraud. *Id.*

<sup>284</sup> ECB, VIRTUAL CURRENCY SCHEMES, *supra* note 55, at 6.

<sup>285</sup> O’Sullivan, *supra* note 281.

<sup>286</sup> See Kahn et al., *supra* note 13, at 1, 4 (“A central bank move into digital tokens will have important effects on financial stability and competition. Today, private token-based forms of money, like cryptocurrencies, do not seem to be a major threat to financial stability because they are not widely used as means of payments or store of value. A central bank token would have to be designed appropriately to allay the risk of becoming a source of financial instability.”).

<sup>287</sup> See Everett Rosenfeld, *Bitcoin to Near 5M Active Users by 2019, Remain Niche: Study*, CNBC (Mar. 17, 2015, 6:20 PM), <https://www.nbc.com/2015/03/17/bitcoin-to-near-5m-active-users-by-2019-remain-niche-study.html> (citing MORGANE KIMMICH, THE FUTURE OF CRYPTOCURRENCY: BITCOIN & ALTCOIN IMPACT & OPPORTUNITIES 2015-2019 (2019)).

<sup>288</sup> Lagarde, *supra* note 32 (discussing that part of the case for Central Bank Digital Currency is the potential for greater financial inclusion of people and businesses in remote and marginalized regions); see also Mancini-Griffoli et al., *supra* note 24, ¶ 34; *Id.* at Table 2 (indicating that many countries considering the implementation of CBDC reason that it will lead to greater financial inclusion).

appeal of government-backed cryptocurrency.<sup>289</sup> The potential for greater financial inclusion deriving from the widespread adoption of government-backed cryptocurrency, illuminates one of the larger concerns surrounding government-backed cryptocurrency—that widespread adoption of these currencies may eventually create risks to financial stability.<sup>290</sup> While governments may recognize the opportunity for financial inclusion, international community action demonstrates a failure to recognize the dangerous consequences that accompany such integration.

#### IV. GOVERNMENT-BACKED CRYPTOCURRENCY IS EQUIVALENT TO LEGAL TENDER; IT IS URGENT THAT THE IMF COORDINATE THE DEVELOPMENT OF AN OVERSIGHT FRAMEWORK

Given the novelty of government-backed cryptocurrency, there is a dearth of regulation, as well as a lack of academic research on the topic of oversight. Thus, to make an educated guess as to how government-backed cryptocurrency might be classified, the review of current private cryptocurrency regulatory schemes provides a starting point for classification and regulation of government-backed cryptocurrency. Furthermore, the survey of these other regulatory schemes may provide a framework for potential future regulations governing other issues related to government-backed cryptocurrencies.

##### A. *Government-Backed Cryptocurrencies Are Currencies (Or Legal Tender)*

Currency is simply money that can be regularly used within an economy, frequently with the acceptance or backing of the government.<sup>291</sup> This parallels often-times with the definition of legal tender.<sup>292</sup> Legal tender is described as “a form of payment recognized by law that must be accepted by a creditor towards satisfaction of a debt or financial obligation.”<sup>293</sup> No creditor is obligated to

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<sup>289</sup> See Lagarde, *supra* note 32 (“[D]igital currency offers great promise, through its ability to reach people and businesses in remote and marginalized regions. We know that banks are not exactly rushing to serve poor and rural populations.”); Brito, *supra* note 12, at 14–15.

<sup>290</sup> See Mancini-Griffoli et al., *supra* note 24, ¶ 4 (discussing the risks which VCs and similar technologies, such as cryptocurrencies, pose).

<sup>291</sup> Howden, *supra* note 5, at 762 (citing Black’s Law Dictionary 440 (9th ed. 2009); *Currency*, *supra* note 232).

<sup>292</sup> *Id.*

<sup>293</sup> Tu & Meredith, *supra* note 15, at 276–78 (citing James B. Thayer, *Legal Tender*, 1 HARV. L. REV. 73, 84 (1887)); see also *Legal Tender*, INVESTOPEDIA, <https://www.investopedia.com/terms/l/legal-tender.asp> (last visited Sept. 19, 2019) (“Legal tender is any official medium of payment recognized by law that can be used to extinguish a public or private debt, or meet a financial obligation.”).

accept private cryptocurrencies; thus, denying such cryptocurrencies the status of legal tender.<sup>294</sup>

Many of the proposed frameworks that were discussed in this Comment for creation or regulation of government-backed cryptocurrencies contemplate that such government-backed cryptocurrency would satisfy the above requirements of legal tender.<sup>295</sup> These government-backed cryptocurrencies would be “a form of payment recognized by law” and would be widely accepted within the international economy.<sup>296</sup>

If government-backed cryptocurrency is given the status of legal tender, which seems likely given the information above, such designation would likely remove it from the purview of regulation over securities, commodities, and systems of payment.<sup>297</sup>

Furthermore, while outside the bounds of this Comment, it seems relevant to note the parallels between the current transition from paper fiat currency to government-backed digital currency, and the historical transition from the gold standard to the current system of national fiat monies and flexible exchange rates.<sup>298</sup>

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<sup>294</sup> *Id.* at 278.

<sup>295</sup> See, e.g., SVERIGES RIKSBANK, THE RIKSBANK’S E-KRONA PROJECT: ACTION PLAN FOR 2018 (Dec. 2017), [https://www.riksbank.se/globalassets/media/rapporter/e-krona/2017/handlingsplan\\_ekrona\\_171221\\_eng.pdf](https://www.riksbank.se/globalassets/media/rapporter/e-krona/2017/handlingsplan_ekrona_171221_eng.pdf); Mancini-Griffoli et al., *supra* note 24, the Riskbank’s e-krona project, the proposed “FedCoin,” and the IMF reporting “Casting Light on Digital Currency.” SVERIGES RIKSBANK, *supra* note 49, at 8; Koning, *supra* note 141; Mancini-Griffoli et al., *supra* note 24, 30.

<sup>296</sup> Tu & Meredith, *supra* note 15, at 276–78 (citing James B. Thayer, *Legal Tender*, 1 HARV. L. REV. 73, 84 (1887)).

<sup>297</sup> Grinberg, *supra* note 11, at 200 (citing Lewis D. Lowenfels & Alan R. Bromberg, *What is a Security Under the Federal Securities Laws?*, 56 ALB. L. REV. 473, 483 (1993) (“[I]t is generally acknowledged that currency is not a security.”); *Procter & Gamble Co. v. Bankers Trust Co.*, 925 F. Supp. 1270, 1280 n.4 (S.D. Ohio 1996) (“foreign currency ... is not a security as defined in the 1933 and 1934 Acts.”)). The 1934 Act excludes from the definition of security “currency or any note, draft, bill of exchange, or banker’s acceptance which has a maturity at the time of issuance of not exceeding nine months, exclusive of days of grace, or any renewal thereof the maturity of which is likewise limited.” Securities Exchange Act of 1934 § 3(a)(10)). With respect to regulation as a system of payment, it seems that if private cryptocurrencies are unlikely to be classified as systems of payment, it is even more unlikely that government-backed cryptos would be classified as such. *But see*, Hughes & Middlebrook, *supra* note 39, at 505 (2015) (suggesting that Bitcoin could be regulated as a system of payment entity).

<sup>298</sup> Historically, much of the globe had a system of commodity money. Didenko & Buckley, *supra* note 16. In this system, money could be exchanged at a bank for an equivalent amount of some commodity, usually gold, silver, or another previous metal. George Selgin, *Synthetic Commodity Money*, UNIV. OF GEORGIA, 1, 2 (Apr. 10, 2013). During the 20th century, the United States, and the rest of the world, transitioned from the gold standard (a commodity money) to the Bretton Woods system (also a commodity money system), and finally, in 1971, to the current, “post-Nixon Shock” era. Paul Krugman, *The Gold Bug Variations*, SLATE (Nov. 22, 1996). For further discussion, see Didenko & Buckley, *supra* note 16; Mancini-Griffoli et al., *supra* note 24, ¶ 4

While private cryptocurrencies currently exist in a gray zone of regulation,<sup>299</sup> government-backing of such coins will provide considerably more clarity as to the most appropriate regulatory classification.<sup>300</sup> However, even though government-backed cryptocurrencies may more easily be classified than are private cryptocurrencies, these government-backed coins will still retain some of the characteristics which originally placed cryptocurrencies in a regulatory gray area.<sup>301</sup>

### *B. Regulatory Efforts Moving Forward—Single Entity Oversight*

Cryptocurrencies, both government-backed and private, are unique in their ability to cross borders with ease.<sup>302</sup> While the current patchwork system of regulation might address some problems presented by government-backed cryptocurrency (such as those issues related to fraud and potential criminal activity) the cross-border reach inherent in cryptocurrency (and digital currency, more generally) will require international cooperation.<sup>303</sup> The characteristics of government-backed cryptocurrencies, at least as currently envisioned, are unique. However, at its core, government-backed cryptocurrency is analogous to paper, fiat currency. To address the possible instability presented by the widespread adoption of government-backed cryptocurrencies, the oversight scheme most likely to be successful is one that parallels the oversight framework currently in place governing fiat, paper currency.

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(“Several are actively investigating the possibility of a central bank digital currency (CBDC). This new central bank liability would be a widely accessible digital form of fiat money, intended as legal tender. One day, it could fully replace physical cash. CBDC seems to be a natural next step in the evolution of official coinage (from metal-based money, to metal-backed banknotes, to physical fiat money).”)

<sup>299</sup> See generally Goforth, *supra* note 31.

<sup>300</sup> See *Virtual Currencies and Beyond*, *supra* note 112, ¶ 19 (“The legal concept of currency is associated with the power of the sovereign to establish a legal framework providing for central issuance of banknotes and coins .... The legal concept of money is also based on the power of the state to regulate the monetary system.”).

<sup>301</sup> Brito, *supra* note 12, at 22. Given the shifting regulatory environment for cryptocurrencies and those who engage in crypto-related businesses, there is a great deal of confusion as to how these innovative products may be used in a legal manner. See generally Goforth, *supra* note 31.

<sup>302</sup> BIS, *Digital Currencies*, *supra* note 175.

<sup>303</sup> ECB, VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS, *supra* note 14, at 26 (“Moreover, regulatory responses are likely to be more effective if they are internationally coordinated. A patchwork of inconsistent national-level regulatory responses to financial stability concerns may not address risks—as the activity of agents in this market may be international.”).

C. *Why the IMF Can, and Should, Rapidly Expand Its Foray into the Government-Backed Cryptocurrency Space*

The IMF was established following World War II with the following express purposes:

- (i) To promote international monetary cooperation through a permanent institution which provides the machinery for consultation and collaboration on international monetary problems . . . .
- (iii) To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.
- (iv) To assist in the establishment of a multilateral system of payments in respect of current transactions between members and in the elimination of foreign exchange restrictions which hamper the growth of world trade . . . .
- (vi) In accordance with the above, to shorten the duration and lessen the degree of disequilibrium in the international balances of payments of members.<sup>304</sup>

The IMF was, and is, tasked with ensuring the stability of the international monetary system.<sup>305</sup> By signing the Articles of Agreement, states bind themselves to the IMF and as such, the IMF may impose obligations on signatories.<sup>306</sup> The IMF imposes obligations on member countries via numerous articles in the IMF founding document, including Article IV<sup>307</sup> and Article VIII.<sup>308</sup> The most important obligation relating to potential concerns about an intentional injection of instability is that IMF member-states must, “avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members.”<sup>309</sup>

Two other IMF member-states obligations which would help to maintain stability in the international monetary system are a “commitment to pursue policies that are conducive to orderly economic growth and reasonable price stability, . . . and to provide the IMF with data about its economy.”<sup>310</sup> To enforce these obligations and further its founding purpose, the IMF has a few mechanisms of power at its disposal. One of these powers, termed

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<sup>304</sup> IMF Articles of Agreement, *supra* note 81, art. 1.

<sup>305</sup> *Id.*

<sup>306</sup> Obligations and Benefits of IMF Membership, INT’L MONETARY FUND, [https://www.imf.org/external/np/exr/center/mm/eng/mm\\_bnfts.htm](https://www.imf.org/external/np/exr/center/mm/eng/mm_bnfts.htm); *see, e.g.*, Article IV consultations, further discussed *infra* n.78.

<sup>307</sup> *See generally* IMF Articles of Agreement, *supra* note 81, art. 4.

<sup>308</sup> *See generally id.* art. 8.

<sup>309</sup> *Id.* art. 4.

<sup>310</sup> *Surveillance*, INT’L MONETARY FUND, <https://www.imf.org/external/about/econsurv.htm> (last visited Jan. 30, 2019).

“surveillance,”<sup>311</sup> involves the IMF’s process of the regular monitoring of economies and associated provision of policy advice, which “is intended to identify weaknesses that are causing or could lead to financial or economic instability.”<sup>312</sup>

One of the most important Articles with respect to the IMF and its capacity to implement oversight of government-backed cryptocurrency is Article IV.<sup>313</sup> Article IV, Section 5(a), mentions “separate currencies” and seems to grant “a means by which the IMF can exercise indirect control over currencies not formally within its reach.”<sup>314</sup> Thus, even if a government does not consider its cryptocurrency to be an “official currency” of the country, the IMF may still exercise authority as it relates to oversight and/or best practices.

Private cryptocurrencies are currently regulated on a country-by-country basis.<sup>315</sup> However, this is not the ideal regulatory scheme for any form of cryptocurrency given the characteristics of the technology and the widespread risk posed by such characteristics.<sup>316</sup>

### *1. The IMF Should Lead the Push for an International Oversight Framework*

The IMF, in pushing for an oversight framework, should focus on providing legitimacy to government-backed cryptocurrencies. Providing legitimacy to valid government-backed cryptocurrencies will supply the necessary consumer confidence in such currency markets. Consistent consumer confidence in the

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<sup>311</sup> *Id.* There are three types of surveillance undertaken by the IMF—Country Surveillance, Regional Surveillance, and Global Surveillance. *Id.*

<sup>312</sup> *Id.* The IMF’s regular monitoring of economies and associated provision of policy advice is intended to identify weaknesses that are causing or could lead to financial or economic instability. *Id.*

<sup>313</sup> *See* Plassaras, *supra* note 11, at 404 (quoting IMF Articles of Agreement, *supra* note 81, art. 4) (“The precise meaning of these provisions—and the intent that motivates how they should operate—is unclear. Article IV, Section 5(a) mentions ‘separate currencies’ by referencing Article XXXI, Section 2, the provision under which signatories accede to the Article of Agreement . . . Presumably, this suggests that the reference to ‘separate currencies’ in Article IV is meant to hold principal nation-states responsible for the currencies of their subsidiaries . . . In essence, Article IV, Section 5’s reference to ‘separate currencies’ is best read as authorizing a means by which the IMF can exercise indirect control over currencies not formally within its reach.”).

<sup>314</sup> *Id.*

<sup>315</sup> *See* GLOB. LEGAL RES. CTR., *AROUND THE WORLD*, *supra* note 9.

<sup>316</sup> *See* Hughes & Middlebrook, *supra* note 39, at 556–58 (2015) (discussing the ease with which cryptocurrencies can flow across borders, with at least a measure of pseudo-anonymity and highlighting failings identified in New York state’s attempt to regulate private cryptocurrencies on its own). Furthermore, the authors highlight potential jurisdictional issues with regulating cryptocurrencies which regularly cross borders. *Id.* at 539–42; *see also* Shin, *supra* note 157; ECB, *VIRTUAL CURRENCY SCHEMES—A FURTHER ANALYSIS*, *supra* note 14, at 26.

reliability of government-backed cryptocurrencies will help to provide stability to the currency markets. Given that the primary purpose of the IMF is to ensure the stability of the international monetary system, it would certainly be appropriate for the IMF to assert their authority here. If the IMF fails to assert its leadership in this arena, it could lead to instability within the international monetary system, a less consequential parallel of which can be seen in the unstable private cryptocurrency market. Proliferation of government-backed cryptocurrencies could potentially de-stabilize the entire international monetary system, as outlined throughout this Comment.

For government-backed cryptocurrencies, the international oversight framework is most likely to emerge from consultations by and with the IMF. Government-backed cryptocurrencies share a number of characteristics with legal tender or currency as they currently exist.<sup>317</sup> The IMF, given its historical importance in transitioning the world from the gold standard to the current system of paper fiat currency, has plenty of experience re-working their mechanisms to adapt to changing times and changing technology. This demonstrated experience will be invaluable should we continue transitioning towards digital currency. Further, as referenced frequently, there is a need for international consensus on how to deal with these government-backed cryptocurrencies, as regulation on a country-by-country basis simply cannot get the job done.

## 2. *Limits of IMF Oversight*

If the IMF takes the lead in developing an international oversight framework for government-backed cryptocurrency, it would be a significant step in the right direction. By taking the lead, the IMF can signal the urgency required to proactively address the issues highlighted here. However, an oversight framework centered around the IMF will not address all of the issues with government-backed crypto. Just as with paper fiat currency, there are State obligations and international organizations dedicated entirely to ensuring that AML/CFT guidelines are followed. Furthermore, there are domestic agencies which deal with fraudulent actors. And most importantly, any oversight framework involving the IMF will continue to rely on the actions of individual central banks around the globe to develop well-reasoned monetary policy in a

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<sup>317</sup> While money, currency, and legal tender are often used in common parlance as equal substitutes, there are some key differences. The primary difference for a currency is the wide acceptance of a medium of exchange, particularly acceptance by government actors. Howden, *supra* note 5, at 762 (citing Black's Law Dictionary 440 (9th ed. 2009)); *Currency*, *supra* note 231.

manner which provides stability both domestically and (at least to a degree) internationally. Proposing that the IMF take the lead in developing an oversight framework for government-backed cryptos is merely the beginning of a long process, which will inevitably require many other actors in both the domestic and international spheres.

## CONCLUSION

Cryptocurrencies have become one of the most talked about news subjects over the last few years. Questions about their benefits to society as a whole, as well as the potential dangers they present to both individuals and institutions have topped the list of many regulatory agencies, both within the United States and across the globe. This emerging technology has led to questioning of current regulatory regimes and whether the technology is too sophisticated to fit within already-existing regulatory regimes. Furthermore, given the many characteristics inherent in cryptocurrencies, states have varied greatly in their approaches to regulation.

It may be awhile before the international community figures out how to regulate private cryptocurrencies, beyond the current piecemeal approach. However, along with the focus on private cryptocurrencies, there has been an increase in interest surrounding government-backed cryptocurrencies. These government-backed cryptocurrencies present many of the same questions that surround private cryptocurrencies, but at potentially greater economies of scale.

Classification of private cryptocurrencies is a conundrum and only time will tell what regulatory scheme is most effective. Government-backed cryptocurrency, however, is relatively easy to classify as legal tender or a form of currency. Given the potential dangers of government-backed cryptocurrency, this is fortunate. Lacking, however, is an organization willing to step up and take the reins and push for oversight of government-backed cryptocurrencies, before they destabilize the international monetary system. Governments could wait for further developments in the government-backed cryptocurrency space, but given experiences with private cryptocurrency regulation, it would be more effective to take a proactive approach. Considering this need for proactivity, and looking within the international community, the organization best equipped to handle this challenge is the IMF.

The IMF should work with individual countries and the international community as a whole to create an oversight framework (or at least a consensus system of best practices). This approach would include allowing the agency to

extend its monitoring and country surveillance programs over government-backed cryptocurrencies. The controls the IMF places on these currencies do not need to be strict. Many scholars have voiced concern that over-regulation (or under-regulation for that matter) could substantially limit the potential of cryptocurrencies and blockchain technology in general.<sup>318</sup>

If properly implemented (i.e., not over-bearing) and designed to enable the IMF to adjust rapidly to technological advancements, such an oversight framework ought to result in a much more globally appealing system of currency, even more so than paper (i.e., fiat) currency or private cryptocurrencies (which may still exist in a sort of regulatory gray area).

However, as exemplified in the opening hypothetical, if the international community fails to create a cohesive oversight framework for government-backed cryptocurrencies quickly, the consequences will be disastrous to the international monetary system.

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<sup>318</sup> See Perkins, *supra* note 69, at 21 (“Supporters of cryptocurrencies further argue that if the United States does not reduce the regulatory burdens involved in cryptocurrency exchanges, the country will be at a disadvantage relative to others in regard to the development of cryptocurrency systems and platforms.”); Kaplanov, *supra* note 11, at 173 (“Despite genuine concerns relating to bitcoins and criminal activity, this Comment argues against any prohibition by policymakers or judges that encounter bitcoins.”).

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