

April 2022

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Brandon Mickelsen

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### Recommended Citation

Brandon Mickelsen, *China's Moonshot: How the Introduction of the Digital Renminbi Furtheres China's Societal Grip and Threatens the Future of Digital Currencies*, 15 U. ST. THOMAS J.L. & PUB. POL'Y 813 (2022). Available at: <https://ir.stthomas.edu/ustjlpp/vol15/iss2/33>

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## COMMENT

# CHINA'S MOONSHOT: HOW THE INTRODUCTION OF THE DIGITAL RENMINBI FURTHERS CHINA'S SOCIETAL GRIP AND THREATENS THE FUTURE OF DIGITAL CURRENCIES

BRANDON MICKELSEN\*

### I. INTRODUCTION

China's introduction of the digital renminbi puts the country on the fast track to become the first G-20 nation to adopt a full-fledged digital currency. The use of the digital renminbi provides both domestic and international benefits to the growing power. Domestically, the digital renminbi enables China to track economic trends in real-time, curtail illegal payments, and provide relief to its vast unbanked population. Internationally, China's digital renminbi enables near-instantaneous settlement among trade-partners, reduces transaction costs, and most importantly, provides its users the ability to circumvent internationally imposed sanctions.

Nonetheless, the digital renminbi's benefits mask its place in China's surveillance state. The currency's direct ties to China's central government enables tracking of all payments down to an individual user, fitting directly into a regime that increasingly uses reeducation camps, facial recognition, and other means of widespread monitoring to control the movement and thoughts of its citizens. The digital renminbi's ability to suppress civil rights should strike fear if the currency proliferates worldwide. Though its benefits are numerous, the currency's place in China's surveillance state should give pause to worldwide adoption of the digital renminbi or its framework.

This paper does not recommend specific responses to the introduction of the digital renminbi. Instead, it seeks to lend insight on the benefits and drawbacks of China's approach. In particular, the paper will discuss how a digital renminbi helps fulfill China's domestic ambitions, and highlights the digital renminbi's role in international trade, including its

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\*Brandon Mickelsen is a 2022 J.D. candidate at the University of St. Thomas School of Law. A special thanks to Robert Delahunty for his continued support throughout the writing process.

presence in China's Belt and Road Initiative. Finally, the paper will analyze the human rights implications of introducing a digital currency into China's surveillance state. One thing is certain, the digital renminbi's introduction marks the beginning of a sea of digital currency initiatives. It remains to be seen whether countries adopt China's approach or chart their own path. Regardless, the world's response will have massive implications on trade and human rights.

## II. CHINA'S DIGITAL CURRENCY

In 2014, China announced an ambitious, and potentially world-altering, goal: releasing a digital version of its currency.<sup>1</sup> The soon-to-be-called digital renminbi gained priority among China's top policymakers when it was officially written into China's 13th Five Year Plan in 2016, placing the currency at the forefront of China's social and economic initiatives.<sup>2</sup> After five years of research and development, China used 2020 to parade its progress, launching the digital renminbi's initial pilot program. While small, the pilot showcased the effectiveness and efficiency of the digital currency's infrastructure.

The digital renminbi provides vast benefits to an increasingly digital Chinese society. A digital currency enhances the People's Bank of China's (PBOC) monetary and fiscal abilities, enabling the country to distribute stimulus funds to even the most remote of locations, stymie sudden inflation or deflation, and stop fraud, embezzlement, or terroristic activities in their tracks. Further, a digital renminbi introduced on an international stage can buoy China's vast international infrastructure projects. However, the digital currency also holds a dark place in China's surveillance state. It sacrifices civil rights to fill yet another piece in China's surveillance puzzle—allowing the country to monitor and control the daily activities of all its citizens.

China will aim to flaunt the benefits of its digital currency. As the first major power to implement a digital currency, the digital renminbi's potential success will give China the power to dictate the creation of an international framework for developing digital currencies. International organizations, however, must proceed with caution. The positive attributes of the digital renminbi, namely the ability to ease transactions, reduce

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<sup>1</sup> Yuan Yang & Hudson Lockett, *What is China's Digital Currency Plan?*, FIN. TIMES (Nov. 25, 2019), <https://www.ft.com/content/e3f9c3c2-0aaf-11ea-bb52-34c8d9dc6d84>.

<sup>2</sup> David Pan, *Zhou Xiaochuan: The Father of the Digital Yuan*, COINDESK (Dec. 9, 2020), <https://www.coindesk.com/zhou-xiaochuan-most-influential-2020>.

transactional costs, and reach the unbanked, should be studied and implemented by other countries. However, countries must also address the human rights implications of a digital currency. Any worldwide standard must protect individuals' privacy rights. China's approach sets aside privacy, but democratic governments must ensure it becomes a priority for its own digital currency implementation. The digital renminbi provides a worthwhile template for a digital currency implementation, but countries must proceed with caution if using the approach for their own digital currency adoption framework.

#### A. How China's Digital Renminbi Works

Before diving into the benefits of China's digital renminbi, this paper will provide a general description of how the currency works, both from a technological and an economic perspective. The digital renminbi is hyper-centralized, controlled solely by the PBOC.<sup>3</sup> The digital renminbi's structure is two-tiered. The first tier consists of the PBOC issuing funds to state-owned banks and payment firms such as Alipay and WeChat. From there, banks and firms distribute the funds to individual accounts on mobile apps.<sup>4</sup> All exchanges utilizing the digital renminbi are recorded on a ledger directly controlled by the PBOC, providing the bank oversight over any transaction.<sup>5</sup>

China's implementation of two digital renminbi pilots provides a glimpse of how the currency will function in Chinese society. The initial digital renminbi pilot included four large cities: Shenzhen, Suzhou, Chengdu, and Xiong'an.<sup>6</sup> In lieu of the payroll deposits, workers received funds through a state-developed app on their cell phone. From there, designated merchants accepted digital renminbi payment via the state-developed app.<sup>7</sup>

A second pilot program concluded in December 2020. The PBOC held a lottery for citizens in Suzhou, randomly choosing 100,000 citizens to

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<sup>3</sup> Aditi Kumar & Eric Rosenbach, *Could China's Digital Currency Unseat the Dollar?*, FOREIGN AFF. (May 20, 2020), <https://www.foreignaffairs.com/articles/china/2020-05-20/could-chinas-digital-currency-unseat-dollar>.

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

<sup>5</sup> *Id.*

<sup>6</sup> Jonathan Cheng, *China Rolls Out Pilot Test of Digital Currency*, WALL ST. J. (Apr. 20, 2020), <https://www.wsj.com/articles/china-rolls-out-pilot-test-of-digital-currency-11587385339>.

<sup>7</sup> *Id.*

receive two hundred renminbi for online or offline purchases.<sup>8</sup> The second pilot involved a more extensive inclusion of merchants, including delivery services, and tested a broader range of uses throughout the city.<sup>9</sup> A timeline for a full-phased rollout has yet to be announced;<sup>10</sup> but the pilot programs, though small in scale, proved to be largely successful and show the massive potential that a digital renminbi holds domestically and abroad.

The pilot programs provide a glimpse of the currency's usage in everyday life. For in-store purchases, users of the digital renminbi generate a QR code which the receiving merchant then scans.<sup>11</sup> A user does not need to be online for these transactions to occur—a tap together of two offline-capable devices is sufficient to complete a transaction.<sup>12</sup>

The initial use of the digital renminbi has no measurable impact on currency circulation and domestic economic policies. Because the digital renminbi merely replaces the physical version, renminbi circulation will not directly increase or decrease.<sup>13</sup> In the long term, however, its impact could be tremendous. Having oversight over spending—in real-time—allows the PBOC to track trends and react as necessary, giving China the ability to enact a near-instantaneous monetary policy. If spending dips, the PBOC could implement negative interest rates that drive spending increases across the board. Further, the PBOC would have direct control over financing endeavors, requiring the review of interest rates, loan terms, and other essential details before any loans can be distributed.<sup>14</sup>

The introduction of a digital renminbi provides comprehensive domestic benefits. From a complete transition to digital payments, to enhanced visibility over domestic spending, the digital renminbi will create a new set of monetary options for the PBOC. These options are not readily

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<sup>8</sup> Jonathan Cheng, *China Envisions Its Digital-Currency Future, With Lotteries and a Year's Worth of Laundry*, WALL ST. J. (Dec. 27, 2020), <https://www.wsj.com/articles/china-envisions-its-digital-currency-future-with-lotteries-and-a-years-worth-of-laundry-11609066819>.

<sup>9</sup> *Id.*

<sup>10</sup> There is speculation that a broad rollout could be timed with the 2022 Winter Olympics taking place in Beijing. This could allow the Chinese government to show its digital currency to a global audience and highlight the country's economic and technological prowess.

<sup>11</sup> Cheng, *supra* note 6.

<sup>12</sup> *Id.*

<sup>13</sup> *How China Is Closing in on Its Own Digital Currency*, BLOOMBERG (Sep. 8, 2020), <https://www.bloomberg.com/news/articles/2020-09-08/how-china-is-closing-in-on-its-own-digital-currency-quicktake>.

<sup>14</sup> *Id.*

available in a purely cash-driven state. Introducing the digital renminbi to international trade provides additional benefits, including increased usage of China's Cross-border Interbank Payments System (CIPS).

### B. Transacting Over CIPS

Today's global financial framework evolved from the 1944 Bretton Woods Conference. The three-week conference, held among forty-four nations, established the U.S. dominated global financial system—a system that holds strong to this day.<sup>15</sup> Despite the Bretton Woods system effectively ending in 1976 when the U.S. dollar separated from the gold standard, the system's structure remains in place. The U.S. dollar remains the most coveted reserve currency, making up nearly 60 percent of all foreign central bank reserves.<sup>16</sup> The dollar's prevalence ensures that most international transactions are cleared in U.S. dollars and through U.S. banks.

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) facilitates most dollar transactions upon a vast, far-reaching financial messaging system. SWIFT aims to ease the complexities of global banking by providing its nearly 11,000 members unique IDs, a borderless messaging system, and a common transaction language.<sup>17</sup> Its transaction volume is massive, conducting over 30 million per day, with 40 percent of transactions using the U.S. dollar.<sup>18</sup>

The complexities and sheer volume of transactions, however, make the SWIFT network both slow and costly. The system runs multiple criminal checks to mitigate illegal transactions across the network, creating

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<sup>15</sup> Greg Rosalky, *75 Years Ago the U.S. Dollar Became The World's Currency. Will That Last?*, NPR (Jul. 30, 2019), <https://www.npr.org/sections/money/2019/07/30/746337868/75-years-ago-the-u-s-dollar-became-the-worlds-currency-will-that-last>.

<sup>16</sup> Robert Hackett, *China's Drive for Digital Currency Dominance*, FORTUNE 75, 79 (Aug./Sep. 2020).

<sup>17</sup> *The Financial World's Nervous System is Being Rewired*, ECONOMIST (May 9, 2020), <https://www.economist.com/special-report/2020/05/07/the-financial-worlds-nervous-system-is-being-rewired>.

<sup>18</sup> Mary Hui, *The World's Money Transfer System is China's Achilles Heel in Its Sanctions Battle Against the U.S.*, QUARTZ (Aug. 18, 2020), <https://qz.com/1893235/swift-transfer-system-leaves-china-vulnerable-to-us-sanctions>; Kazuhiro Kida et al., *Rise of the Yuan: China-based Payment Settlements Jump 80%*, NIKKEI ASIA (May 20, 2019), <https://asia.nikkei.com/Business/Markets/Rise-of-the-yuan-China-based-payment-settlements-jump-80>.

redundancies that add cost and time.<sup>19</sup> Even more worrisome, the system is vulnerable to hacking. In 2016, North Korean hackers stole \$101 million by manipulating SWIFT's transfer instructions.<sup>20</sup> And since 2015, a North Korean connected hacker group has attempted to steal more than \$2 billion across the global economic network.<sup>21</sup> While SWIFT remains the predominant transaction network, its vulnerabilities and costs leave openings for other promising alternatives.

SWIFT's deficiencies are not solely attributable to system issues. Growing outside influence over the messaging system drives concerns over the independence of the private network. Specifically, calls to lessen western countries' influence over SWIFT have increased as sanction pressure begins to mount.

The prevalence of the U.S. dollar is one of the driving factors of sanctions. The U.S. wields its legal interest in dollar transactions to impose sanctions upon individuals, corporations, and countries.<sup>22</sup> In the past, the U.S. effectively utilized country-wide sanctions and subsequent SWIFT-imposed disconnections. For example, the U.S. and European Union implemented sanctions to inflict punishment against Iran for running a nuclear weapons program,<sup>23</sup> crippling the Iranian economy.<sup>24</sup> More recently, the Trump administration used sanctions to prevent Chinese companies from purchasing U.S. semiconductor technology.<sup>25</sup>

A dollar-centric global economy, primarily transacted with the assistance of SWIFT, gives the U.S. vast opportunities to utilize economic

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<sup>19</sup> Despite being headquartered in Belgium, the U.S. holds vast powers over SWIFT, largely because of the overwhelming number of transactions involving the U.S. dollar.

<sup>20</sup> *How to Launder Ill-gotten Gains*, ECONOMIST (Sep. 10, 2020), <https://www.economist.com/finance-and-economics/2020/09/10/how-to-laundry-ill-gotten-gains>.

<sup>21</sup> *Id.*

<sup>22</sup> *America's Aggressive Use of Sanctions Endangers the Dollar's Reign*, ECONOMIST (Jan. 18, 2020), <https://www.economist.com/briefing/2020/01/18/americas-aggressive-use-of-sanctions-endangers-the-dollars-reign>. (As of 2018, America has over 30 active financial and trade sanction programs)

<sup>23</sup> Brian O'Toole, *Don't Believe the SWIFT China Sanctions Hype*, ATLANTIC COUNCIL (Sep. 15, 2020), <https://www.atlanticcouncil.org/blogs/new-atlanticist/dont-believe-the-swift-china-sanctions-hype>.

<sup>24</sup> *Six Charts that Show How Hard U.S. Sanctions Have Hit Iran*, BBC (Dec. 9, 2019), <https://www.bbc.com/news/world-middle-east-48119109>.

<sup>25</sup> Joe McDonald, *Huawei: Smartphone Chips Running Out Under U.S. Sanctions*, AP NEWS (Aug. 8, 2020), <https://apnews.com/270e93e985733a4d086c06a01375cea0>.

sanctions to dictate foreign policy. Though SWIFT is independent, the U.S. has threatened to sanction the organization if it does not disconnect a country from the global messaging network.<sup>26</sup> As pressures mount, and the independence of SWIFT comes into question, countries fearful of disconnections from global commerce continue to search for alternatives.

China, recognizing the flaws of SWIFT and the growing western influence over the network, introduced CIPS to facilitate the clearing of the renminbi in international transactions. Compared to SWIFT, CIPS transaction volume is minuscule.<sup>27</sup> CIPS member size is also considerably smaller, consisting of 1,023 participants across ninety-six countries.<sup>28</sup>

Despite its smaller size, CIPS provides China a considerable advantage for clearing renminbi-based transactions. Transactions related to China's vast international development venture, the Belt and Road Initiative (BRI), increasingly use China's renminbi versus the U.S. dollar or other currencies. CIPS provides an English-language-based system that provides real-time settlement versus the slower, more cumbersome, SWIFT system.<sup>29</sup> And more importantly for certain countries, CIPS provides an alternative settlement system that can help avoid U.S. or internationally imposed sanctions.

If bank-specific, or more broadly, country-specific, disconnections are made by the SWIFT network, it can have dramatic ramifications on domestic markets. China's current usage of CIPS focuses on providing facilitating settlement and clearing cross-border transactions using the renminbi rather than providing an alternative messaging service to SWIFT.<sup>30</sup> CIPS initial implementation uses SWIFT as the primary messaging system.<sup>31</sup>

But China could sever CIPS usage of SWIFT and instead implement its own alternative messaging system.<sup>32</sup> And if China finds the need to

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<sup>26</sup> *What SWIFT is and Why It Matters in the U.S.-Iran Spat*, AL JAZEERA (Nov. 5, 2018), <https://www.aljazeera.com/economy/2018/11/5/what-swift-is-and-why-it-matters-in-the-us-iran-spat>.

<sup>27</sup> CIPS transacts the equivalent of \$19.4 billion per day, compared to \$5-6 trillion transacted over SWIFT. Hung Tran, *Can China's Digital Yuan Really Challenge the Dollar?*, ATLANTIC COUNCIL (Nov. 30, 2020), <https://www.atlanticcouncil.org/blogs/new-atlanticist/can-chinas-digital-yuan-really-challenge-the-dollar/>.

<sup>28</sup> Meanwhile, SWIFT has over 11,000 members. *Id.*

<sup>29</sup> Kida et al., *supra* note 18.

<sup>30</sup> ESWAR PRASAD, *GAINING CURRENCY: THE RISE OF THE RENMINBI* 114 (2016).

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*



provide a legitimate alternative to western financial clearinghouses and messaging systems, it potentially would. Providing transactions over CIPS allows China to continue to trade with countries facing broad sanctions from multiple international bodies. Russia, Turkey, and various African countries affected by western-imposed sanctions transitioned over to CIPS, providing them an alternative in case sanctions impact their ability to transact with other clearing systems.<sup>33</sup>

Once expanded beyond its initial domestic use, China's digital renminbi could transact primarily, if not entirely, over CIPS. The speed and efficiency of CIPS, coupled with the near-instantaneous transaction ability of the digital renminbi, will provide a significant trade advantage over dollar-based SWIFT transactions. Clearing of international trade, usually taking days, could be completed in almost real-time. Further, trade disruptions caused by internationally imposed sanctions could be avoided, providing China and BRI countries the economic stability that often eludes them today.

### C. China's Rationales for Digital Currency Implementation

Despite the digital renminbi's placement in China's Five-Year Plan, the country's initial introduction of the currency provided limited details on how it benefits China's ever-growing society. Recognizing the lack of detail, and preparing for the currency's wider rollout, the Chinese government increased its efforts to show the value of the digital renminbi, highlighting five main points in explaining the rationale for its quick implementation:

1. Enabling the People's Bank of China to have greater control over the financial sector and monetary system;
2. Reducing the threat posed by other cryptocurrencies, including Bitcoin and Libra;
3. Providing additional support to the existing, and widely used, mobile payment infrastructure;
4. Promoting financial inclusion by making payments accessible to citizens without bank accounts; and
5. Protecting against money laundering, fraud, and terrorism financing.<sup>34</sup>

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<sup>33</sup> Kida et al., *supra* note 18.

<sup>34</sup> Hu Yue et al., *In Depth: China's Digital Currency Ambitions Lead the World*, NIKKEI ASIA (Dec. 3, 2020), <https://asia.nikkei.com/Spotlight/Caixin/In-depth-China-s-digital-currency-ambitions-lead-the-world>.

Each of these rationales will be discussed in detail below, providing a background and wide lens view of the current issues, followed by how the digital renminbi addresses the perceived issues.

### 1. China's First Rationale: Enabling Greater Financial and Monetary Control

As China navigates through the COVID-19 pandemic, President Xi Jinping intends to undertake a substantial shift in the country's economic policy. Under previous presidents, China made moves toward a more open capital market, encouraging foreign investment, and loosening various economic controls as the years progressed. Recent actions, however, show a countrywide redirect to ensure that foreign investment and domestic companies' actions do not conflict with party goals. Background to China's open market shift and evidence of this trend ending is discussed below. Following that discussion, the digital renminbi's place in ensuring adherence to party ideas and the new vision of China's economy will be analyzed.

In practice, most advanced economies have open markets. An open, free-market economy, that allows an unrestricted flow of capital both in and out of the country, provides many benefits. These benefits include the entrance of foreign investors into the market, bringing with them increased trading volumes and overall performance improvements based on a demand for more governance and transparency.<sup>35</sup> China, in contrast, practices a controlled open-market approach, allowing foreign investment while still maintaining a guiding hand over the marketplace. Two primary factors drive China's market control: the increased oversight of foreign investors, and a wariness to lower the massive savings rate throughout the country.

Increasing foreign investors in a market, while beneficial, brings enhanced enforcement of operating policies and transparency.<sup>36</sup> Though investors favor transparency, increased oversight exposes corporations that may be using less-than-ethical tactics to drive success. A growing domestic market and an influx of foreign investors looking to take advantage of cheap, excess labor drove China's booming growth. However, the influx of investment also brought strict requirements of technology transfer, some of which China has been accused of stealing versus legally acquiring.<sup>37</sup> An open

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<sup>35</sup> PRASAD, *supra* note 30, at 45.

<sup>36</sup> *Id.*

<sup>37</sup> Keith Bradsher, *How China Obtains American Trade Secrets*, N.Y. TIMES (Jan. 15, 2020), <https://www.nytimes.com/2020/01/15/business/china-technology-transfer.html>.

market brings strict requirements of transparency, which could have massive implications to the economy depending on the legitimacy of China's corporations' tactics.

China is also wary of a massive outflow of capital.<sup>38</sup> Historically, China's savings rates are significantly higher than other countries: 46 percent of GDP compared to a worldwide average of 20 percent.<sup>39</sup> Multiple factors drive household savings in China, including the country's one-child policy, its implementation of economic reform in the 1990s that reduced both job security and state benefits, and the country's growing income inequality.<sup>40</sup>

The PBOC favors a savings-oriented society. Savings drive large amounts of money towards state-owned banks, giving them access to cheap lending funds. China recognizes the benefits of cheap funds and, as a result, places many restrictions on the ability of households to invest outside the country.<sup>41</sup> While outward foreign direct investment by corporations increased over the last decade, individual households do not have this opportunity to diversify their savings.

Despite China's concerns over foreign investors and capital outflow, the PBOC made efforts to open its markets significantly. In 2007, the PBOC invited foreign banks to take equity stakes in state-owned banks with the hopes of driving corporate governance reforms throughout the industry.<sup>42</sup> China gradually opened both inflows and outflows in other markets, as well. Since 2008, China drastically reduced its quotas on foreign investment in the Chinese stock market along with the country's government and corporate bond market, bringing more foreign countries and corporations into the marketplace.<sup>43</sup>

These openings showcased China altering its approach to its controlled open market. China's selective approach intended to increase international exposure and demand for the renminbi while also preventing some of the adverse effects China associates with a completely open marketplace.<sup>44</sup> This idea of "managed market convertibility," leading to a more open China, seemed to be the direction the People's Republic of China

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<sup>38</sup> PRASAD, *supra* note 30, at 45.

<sup>39</sup> Longmei Zhang et al., *China's High Savings: Drivers, Prospects, and Policies* 5 (IMF, Working Paper No. 18/277, 2018).

<sup>40</sup> *Id.* at 10-11.

<sup>41</sup> PRASAD, *supra* note 30, at 44.

<sup>42</sup> *Id.* at 46.

<sup>43</sup> *Id.* at 50-51.

<sup>44</sup> *Id.* at 69.

(PRC) would take moving forward. Recently, however, President Xi Jinping indicated a different path for the country.

Despite China's forty years of enormous economic growth—a trend arguably attributable to the country's efforts to open its markets—President Xi Jinping intends to reorient the market to the party's needs. In a redirect from the previous free-market direction, President Xi continues to enact extensive control over domestic companies, guiding them to “the modern enterprise system with Chinese characteristics.”<sup>45</sup> The size and scope of this control could be enormous. No company, no matter how successful, will be out of reach. Even Chinese global success stories, such as Ant Group Co., Ltd. are not immune to the President's control.<sup>46</sup>

China's new approach of a “dual circulation” strategy emphasizes a redirect towards domestic sustainability and stability.<sup>47</sup> “Internal circulation” aligns directly with China's 2025 plan to focus on growing domestic strengths.<sup>48</sup> In five years, China plans to be technologically self-reliant, shedding its exposure to U.S. sanctions and gaining back the upper hand over its internal affairs.<sup>49</sup> President Xi does not hide his desire to showcase the ever-increasing state hand in affairs. From financial aid for high-tech industries, to a shift of bank loans to state-owned enterprises, the state's influence in China's market continues to grow.<sup>50</sup>

However, “internal circulation” does not mean a shift to closing off China's external markets. The country will continue to lure in foreign companies to strengthen its supply chain and deter other countries from

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<sup>45</sup> Michael Schuman, *The Undoing of China's Economic Miracle*, ATLANTIC (Jan. 11, 2021), <https://www.theatlantic.com/international/archive/2021/01/xi-jinping-china-economy-jack-ma/617552>.

<sup>46</sup> Jing Yang, *Jack Ma's Ant Plans Major Revamp in Response to Chinese Pressure*, WALL ST. J. (Jan. 27, 2021), <https://www.wsj.com/articles/jack-mas-ant-plans-major-revamp-in-response-to-chinese-pressure-11611749842>.

<sup>47</sup> Schuman, *supra* note 45.

<sup>48</sup> Kevin Yao, *What We Know About China's 'Dual Circulation' Economic Strategy*, REUTERS (Sep. 15, 2020), <https://www.reuters.com/article/china-economy-transformation-explainer/what-we-know-about-chinas-dual-circulation-economic-strategy-idUSKBN2600B5>.

<sup>49</sup> Lingling Wei, *China Stresses Reliance on Its Own Technologies in Five-Year Plan*, WALL ST. J. (Oct. 29, 2020) <https://www.wsj.com/articles/china-leadership-says-economy-will-reachmid-level-within-15-years-11603969958>.

<sup>50</sup> Schuman, *supra* note 45; *See also*, Liza Lin, *China Targets Alibaba, Other Homegrown Tech Giants with Antimonopoly Rules*, WALL ST. J. (Nov. 10, 2020), <https://www.wsj.com/articles/chinas-regulators-prepare-to-roll-out-new-antimonopoly-rules-11605013205> (China has increased its anti-monopoly efforts to curb private enterprise power in the Chinese marketplace).

shifting away from China.<sup>51</sup> But strengthening China's domestic abilities will soften, if not eliminate, the effect of sanctions or other laws seeking to limit China's broad reach. The development of a digital renminbi will only help this state-wide change.

The digital renminbi's programmability and oversight capabilities provide China with massive control over its domestic markets and corporations. As China seeks to reorient market and corporate actions to ensure they align with party desires, a digital renminbi provides yet another lever the state can pull to ensure compliance. First, the digital renminbi's ledger technology provides traceability of corporate spending and foreign investment. If state-owned (or even private) enterprises are distributing funds or resources to initiatives that do not align with party needs, China can impose fines, penalties, or take control of these enterprises.

President Xi aims to track all these activities through a newly developed "Corporate Social Credit" system.<sup>52</sup> As advertised, the system would detect corporations evading taxes or violating other corporate laws. But the system's usage could become even broader in practice, providing the government another tool "to intrude on private managers."<sup>53</sup> This new system furthers President Xi's self-sufficiency goals, and the digital renminbi plays a vital role in achieving the lofty endeavor.

The digital currency's programmability provides the PBOC extensive oversight capabilities. Programmability allows banks to provide conditions on loans. Instead of distributing funds and losing the ability to trace spending, banks could impose a system of checks, ensuring that money can only be used for one particular purpose or project. The same goes for foreign investment. China can gain an even greater grasp of international investment by using the digital renminbi to allow investments in particular corporations or markets, albeit with specific programmable terms.

As China imposes stricter monopoly controls and encourages domestic spending, a programmable currency increases the efficiency and effectiveness of these efforts.<sup>54</sup> Control is key in President Xi's state-centric approach, and the digital renminbi provides a level of control that is unparalleled in modern economies.

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<sup>51</sup> Kevin Yao, *supra* note 48.

<sup>52</sup> Schuman, *supra* note 45.

<sup>53</sup> *Id.*

<sup>54</sup> Wei, *supra* note 49.

## 2. China's Second Rationale: Reducing the Threat of Bitcoin and Libra

Bitcoin and the Facebook-backed Libra (now known as Diem) put central banks across the globe on notice. While cryptocurrencies' current threats seem limited, the alternatives they provide to typical fiat currencies present massive implications to how people trade, transact, and save in the not-so-distant future. Bitcoin and Libra offer different cryptocurrency approaches. Each of these approaches will be discussed in detail below, followed by how China accelerated its digital renminbi project to address lingering cryptocurrency fears and how introducing the digital renminbi limits the appeal of cryptocurrencies in China's domestic market.

Ever since the release of Bitcoin's source code in 2008, it continues to draw admirers and critics, while stoking fear in central governments. Bitcoin's origins are shrouded in mystery: the identity of its creator, Satoshi Nakamoto, remains unknown.<sup>55</sup> But, despite its mysterious beginnings, Bitcoin's value continues to skyrocket. In the past year, the value of a single bitcoin rose nearly 300 percent to over \$35,000.<sup>56</sup> Australian economist, Nicholas Gruen, laid out the striking potential of Bitcoin, noting the cryptocurrency could be a "microeconomic miracle worker and it could be a macroeconomic wrecking ball."<sup>57</sup>

Bitcoin emerged from a hacker counterculture driven by distrust in the governments, banks, and institutions that control the global money supply. The timing of Bitcoin's release to the public in 2008, a year that saw one of the biggest financial crashes in modern history, is no coincidence. The value in a fiat currency, a currency backed by an underlying commodity, is derived from trust in its issuing body. Both history and modern times provide examples of this trust eroding and the value of a currency disappearing as a

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<sup>55</sup> Sophie Bearman, *Bitcoin's Creator May be Worth \$6 Billion — but People Still Don't Know Who It Is*, CNBC (Oct. 27, 2017), <https://www.cnbc.com/2017/10/27/bitcoins-origin-story-remains-shrouded-in-mystery-heres-why-it-matters.html>.

<sup>56</sup> Vivekanand Jayakumar, *Opinion, What is Behind the Recent Surge in the Price of Bitcoin?*, HILL (Jan. 6, 2021) <https://thehill.com/opinion/finance/532811-what-is-behind-the-recent-surge-in-the-price-of-bitcoin>.

<sup>57</sup> Torsten Hoffman & Michael Watchulonis, *Bitcoin: The End of Money as We Know It*, YouTube (Jun. 12, 2020), <https://www.youtube.com/watch?v=yz8ymvqUMrU>.

result. Whether it be the fall of Rome,<sup>58</sup> or the 2008 financial crisis,<sup>59</sup> the erosion of the public's trust in central governments or banking systems often leads to financial hardship and ruin. The creator(s) of Bitcoin recognized the growing distrust in fiat currencies and responded accordingly. They eliminated the need for trust in any individual or company and placed it elsewhere—in mathematical formulas and computer software.<sup>60</sup>

Bitcoin conducts its transactions using a decentralized ledger which holds a record of every Bitcoin and entry.<sup>61</sup> A massive network of computers, or nodes, maintain the ledger.<sup>62</sup> Each node, the server that verifies and maintains the transactions across the ledger, acts as a verifier, deciphering a complex formula that creates a consensus among the millions of other nodes that a Bitcoin transaction is legitimate.<sup>63</sup> The amount of Bitcoin is finite, with the total amount—21 million—expected to be released by 2140.<sup>64</sup> The finite amount of currency and the consensus approach used to verify transactions aim to create trust in the Bitcoin network versus trust in any individual or corporation.

Bitcoin advocates tout the cryptocurrency's ability to offer faster, cheaper, and more secure transactions by cutting out intermediaries.<sup>65</sup> Further, Bitcoin's ledger is completely transparent, offering a log of every transaction and owner of Bitcoin throughout its entire history.<sup>66</sup> While there is value in offering Bitcoin in already well-developed western societies, Bitcoin's potential also stems from its ability to serve the unbanked populations in third-world countries.<sup>67</sup>

The sole requirement of transacting with Bitcoin is a device with internet access.<sup>68</sup> Citizens in third-world countries who lack access to a traditional bank or cannot afford the exorbitant fees charged to transact

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<sup>58</sup> Nathan Lewis, *The Decline of Rome*, NEW WORLD ECON. (Nov. 11, 2018), <https://newworldeconomics.com/the-decline-of-rome>.

<sup>59</sup> John Cassidy, *The Real Cost of the 2008 Financial Crisis*, NEW YORKER (Sep. 10, 2018), <https://www.newyorker.com/magazine/2018/09/17/the-real-cost-of-the-2008-financial-crisis>.

<sup>60</sup> ANDREAS M. ANTONOPOULOS, *THE INTERNET OF MONEY 2* (2016).

<sup>61</sup> *Id.*

<sup>62</sup> See ANDREAS M. ANTONOPOULOS, *THE INTERNET OF MONEY VOLUME TWO* 12-13 (2017).

<sup>63</sup> *Id.*

<sup>64</sup> Hoffman & Watchulonis, *supra* note 57.

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

internationally can use Bitcoin's virtually-free network to trade both locally and internationally.<sup>69</sup> While still in its infancy, Bitcoin provides a legitimate alternative to fiat currencies, creating fear in central banks worldwide, including the PBOC.

The emergence of Libra struck a similar fear in central banks. Libra provides an alternative digital currency that is corporation-backed, mainly by Facebook. Its status as a "stablecoin" puts Libra more in line with traditional fiat currencies. A stablecoin derives its name from its ability to maintain a relatively stable value.<sup>70</sup> In Libra's case, its stability is derived from its basket of currencies, including the U.S. dollar, the Euro, and the Japanese Yen.<sup>71</sup> In addition to its stability, Libra's value-proposition is similar to Bitcoin's: the ability to extend financial services to the 1.7 billion unbanked across the world and provide a cheaper and faster means of transacting money across the globe.<sup>72</sup>

Unlike Bitcoin, Libra limits its number of nodes. Only members of the Libra Association (such as Facebook and Uber) are allowed the access needed to keep track of the data on the transaction ledger.<sup>73</sup> Fewer nodes makes scalability easier and transaction processing quicker.<sup>74</sup>

Almost immediately, Libra faced waves of criticism from governments. According to France's economic minister, Bruno Le Maire, Libra is "a threat to national sovereignty."<sup>75</sup> Federal Reserve Chairman, Jerome Powell, echoed similar sentiments acknowledging "serious concerns regarding privacy, money laundering, consumer protection, and financial stability."<sup>76</sup> Concerns did not stop there. Legitimate fears arose regarding a privately led corporation, especially one directly connected to Facebook, driving the compilation of the currency basket.<sup>77</sup>

Libra yielded to this criticism. Instead of being pegged against a basket of currencies, the initial launch of Libra will be tied to one currency:

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<sup>69</sup> ANTONOPOULOS, *supra* note 60, at 42-43.

<sup>70</sup> Robert Hackett, *Facebook and Libra: Hanging in the Balance*, FORTUNE 58, 59 (Jan. 2020).

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> Gian Volpicelli, *What is Libra? Facebook's Cryptocurrency, Explained*, WIRED (Aug. 14, 2019), <https://www.wired.co.uk/article/facebook-libra-cryptocurrency-explained>.

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

<sup>75</sup> Hackett, *supra* note 70.

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*



the U.S. dollar.<sup>78</sup> The ambitious goals of Libra are now severely constrained as they react to pressure from regulators domestically and abroad. However, the fear of Libra and Bitcoin led to accelerated initiatives to establish central bank digital currencies, including the digital renminbi.

Well before China wrote the digital renminbi into its five-year plan, the country recognized the threat that cryptocurrencies such as Bitcoin posed to the state's sovereignty. In 2013, after seeing a surge in Bitcoin value, China blocked all financial institutions from processing Bitcoin-related transactions.<sup>79</sup>

Bitcoin and other decentralized currencies threaten central banks' abilities to implement monetary policies. A shift in use from central bank currencies to alternative currencies significantly limits the effectiveness of inflationary or deflationary efforts. Additionally, a central aim of China's surveillance state is to eliminate terroristic threats, both domestically and internationally.<sup>80</sup> A decentralized currency transacts completely anonymously, limiting China's ability to track and eliminate potential terrorist threats.

The benefits touted by China's digital renminbi mirror those of Bitcoin and Libra. The digital renminbi offers near-instantaneous transactions and the ability to reach rural citizens throughout the country.<sup>81</sup> Finally, the transactions are either low-cost or completely free, providing significant economic incentives for vendors. By directly embracing the attributes of a decentralized cryptocurrency, China limits the appeal of adopting alternative cryptocurrencies. Further, China's ability to track transactions eases the central government's fear of cryptocurrencies facilitating terroristic activities.

### 3. China's Third Rationale: Providing Support for the Existing, and Widely Used, Mobile Payment Infrastructure

The digital renminbi's introduction gives China state-wide control over the future of cashless transactions. Mobile apps developed by China-based companies, such as WeChat and AliPay, have a stranglehold over

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<sup>78</sup> Hannah Murphy, *Facebook's Libra Currency to Launch Next Year in Limited Format*, FIN. TIMES (Nov. 26, 2020), <https://www.ft.com/content/cfe4ca11-139a-4d4e-8a65-b3be3a0166be>.

<sup>79</sup> Pan, *supra* note 2.

<sup>80</sup> See Cheng, *supra* note 6.

<sup>81</sup> *Id.*

China's mobile payment marketplace. But with the emergence of the digital renminbi, the PBOC opens the market to state-owned banks, creating competition and reducing the threats posed by the current private duopoly. The emergence of mobile payment options and the digital renminbi's future role in this space will be discussed below.

As China's day-to-day activities move from cash to digital payments, WeChat Pay and AliPay reap the benefits. The two payment platforms host over two billion users, and over 90 percent of the population in the largest cities use digital technology as their primary payment platform.<sup>82</sup> China's society was well-positioned to see this tremendous shift to digital payments. The resistance to the introduction of card payments, and the cumbersome nature of cash transactions, gave digital payment technology an opening to assert its advantages.

Despite being the largest card network in the world, China faces nationwide resistance to card-based terminals. Two factors drive this resistance: transaction fees and implementation costs. Card-based terminals require merchants to pay processing fees up to 100 basis points on each transaction.<sup>83</sup> Merchants are resistant to incur costs associated with adopting the payment terminals, nor are they willing to pass along the costs to their customers.<sup>84</sup> The pushback means a slow adoption of terminals across the country.

Additionally, cash transactions continue to be cumbersome in daily commerce. The largest denomination of the yuan in circulation is the equivalent of fifteen U.S. dollars.<sup>85</sup> This low value makes large cash transactions difficult to process. As a result, merchants use cash counting machines to speed transaction processing and protect against the usage of counterfeit notes.<sup>86</sup>

The struggles of card and cash transactions left the market open to alternative options and digital payments took advantage. By creating digital wallets that directly store the value of a currency and giving each user (both individuals and merchants) an account, digital payment technology

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<sup>82</sup> Aaron Klein, *China's Digital Payments Revolution*, BROOKINGS INST. 3 (Apr. 2020), [https://www.brookings.edu/wp-content/uploads/2020/04/FP\\_20200427\\_china\\_digital\\_payments\\_klein.pdf](https://www.brookings.edu/wp-content/uploads/2020/04/FP_20200427_china_digital_payments_klein.pdf).

<sup>83</sup> *Id.* at 2.

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

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

effectively eliminated intermediaries.<sup>87</sup> Without intermediaries, transactions become instantaneous, and merchants benefit from drastic cost reductions.<sup>88</sup>

Both WeChat and AliPay continue to evolve their digital wallet offerings, including creating partnerships with financial institutions that enable funds held in digital wallets to accrue interest, much like funds would in a traditional banking account.<sup>89</sup> The greater transparency allows digital payment companies to issue small business loans based on a deep understanding of a company's cash flows.<sup>90</sup>

Digital payment benefits are nearly endless, and China refuses to let private players be the sole beneficiaries. The introduction of the digital renminbi brings a broader set of competitors into the marketplace, reducing the systemic risk posed by the current duopoly. Two opportunities present themselves to China: it could take the approach of being a direct competitor to WeChat and AliPay and provide incentives to encourage digital renminbi use; alternatively, the country could use the digital renminbi defensively, ensuring a failure of one of the private players has a limited impact on the broader economy.

WeChat and AliPay's duopoly over the digital payment market creates a state-wide risk of default. Whether it be the loss of consumer funds, the inability to complete transactions, a loss of service, or worse yet, an all-out default, a private-only approach poses grave risks to China's domestic economy. The introduction of a state-run infrastructure provides a backbone to the digital marketplace—significantly reducing the risk of a technological failure or default by one of the current marketplace leaders.

A major question for the digital renminbi is how its introduction will affect the dominance of WeChat and AliPay. The digital renminbi must provide incentives to shift consumer usage and merchant preference. One advantage the central bank currency has is its ability to offer truly free transactions. While WeChat and AliPay are considerably cheaper than card-based transactions, there are still small fees associated with the transactions.<sup>91</sup>

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<sup>87</sup> Aaron Klein, *China's Digital Payments Revolution*, BROOKINGS INST. 5 (Apr. 2020), [https://www.brookings.edu/wp-content/uploads/2020/04/FP\\_20200427\\_china\\_digital\\_payments\\_klein.pdf](https://www.brookings.edu/wp-content/uploads/2020/04/FP_20200427_china_digital_payments_klein.pdf).

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

<sup>89</sup> *Id.* at 9.

<sup>90</sup> *Id.*

<sup>91</sup> *Will China's Digital Currency Compete with Alipay, WeChat Pay?*, LEDGER INSIGHTS (Apr. 27, 2020), <https://www.ledgerinsights.com/china-digital-currency-cbdc-dcep-alipay-wechat-pay>.

The PBOC's ability to offer no-fee transactions may incentivize merchants to offer discounts for its usage, having the long-term effect of shifting usage to the central bank currency.<sup>92</sup>

Alternatively, China could introduce subsidies to encourage further adoption. In its first pilot test, China distributed half of the participants' paychecks in travel subsidies.<sup>93</sup> Providing limited usage subsidies as part of broader digital renminbi rollout encourages the adoption of the new platform and a more forceful shift from the private payment providers.

Regardless of how the PBOC chooses to introduce the digital renminbi, a government-backed payment infrastructure provides the marketplace stability that private players do not. Both WeChat Pay and AliPay are supported by large worldwide corporations that are exposed to many different business activities, and therefore many different risks. The ability to complete transactions in some of China's biggest cities is gravely threatened by a business interruption. The PBOC recognizes this risk. And the introduction of a government-backed alternative enables the PBOC to ensure disruptions in the private players infrastructure do not have country-wide economic ramifications. Even if the digital renminbi is used solely as a defensive play, it still greatly benefits the country.

#### 4. China's Fourth Rationale: Promoting Financial Inclusion

A hallmark endeavor that accompanied President Xi's rise to power was an increased emphasis on alleviating poverty throughout the country. In 2015, the President announced a goal to eradicate extreme poverty. And in early December 2020, China declared it reached its goal—a proclamation that has come with its share of skeptics.<sup>94</sup> Even with the achievement, anti-poverty initiatives remain one of the government's core priorities. The digital renminbi's place in China's anti-poverty efforts will be discussed below.

When President Xi announced his anti-poverty campaign in 2015, the country classified 832 counties (30 percent of the country's total) as

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<sup>92</sup> *Id.*

<sup>93</sup> *In May China's Digital Currency to be Used for Transport Payments in Suzhou*, LEDGER INSIGHTS (Apr. 17, 2020), <https://www.ledgerinsights.com/china-digital-currency-transport-payments-in-suzhou>.

<sup>94</sup> *Extreme Poverty is History in China, Officials Say*, ECONOMIST (Jan. 2, 2021), <https://www.economist.com/china/2021/01/02/extreme-poverty-is-history-in-china-officials-say>.

poverty-stricken.<sup>95</sup> Nearly all those counties are rural.<sup>96</sup> The nature of living in rural China stands in stark contrast to the fast-paced, high-functioning city centers: the internet is scarce, access to banks is minimal, and living conditions are often inadequate.

To drive its anti-poverty initiative, China adopted two poverty-reducing measures. First, the country introduced industries, such as growing and processing mushrooms, to pool labor and stoke job growth.<sup>97</sup> Second, China took a more drastic approach, moving inhabitants to better-connected areas throughout the country. The driving factor behind the mass-movement is the exorbitant costs of providing necessary services to the remote locales.<sup>98</sup> Even with these anti-poverty efforts, China continues to provide significant amounts of aid to the impoverished.<sup>99</sup>

Additionally, China focused government efforts toward increasing financial inclusion throughout the country. In 2015, China launched the Plan for Advancing Inclusive Finance Development, a five-year endeavor to develop a system dedicated to creating a “moderately prosperous society.”<sup>100</sup> A key goal of the initiative is to increase financial inclusions coverage by making banking institutions and services available in all townships across the country.<sup>101</sup>

China’s initiatives yielded impressive results. China developed a vast agent infrastructure, improved financial services offerings, and increased the rate of account ownership, putting the country on par with many other G-20 countries.<sup>102</sup> Where there are inclusion gaps, financial technology, such as the digital payment offerings of WeChat and AliPay, help fill the void. Yet, despite these improvements, China’s offerings still fail to reach many of the rural unbanked populations across the country.

Banking access continues to apply downward pressure to financial inclusion growth. Forty-five percent of households in China note that they

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<sup>95</sup> *Id.*

<sup>96</sup> *Id.*

<sup>97</sup> *Id.*

<sup>98</sup> *Id.*

<sup>99</sup> *Id.* Funding marked for poverty measures rose from 500 yuan in 2015, to nearly 26,000 yuan in 2020.

<sup>100</sup> World Bank Group [WBG], *Toward Universal Financial Inclusion in China: Models, Challenges, and Global Lessons*, at 57 (Feb. 2018), <https://openknowledge.worldbank.org/bitstream/handle/10986/29336/FinancialInclusionChinaP158554.pdf>.

<sup>101</sup> *Id.* at 26.

<sup>102</sup> *Id.* at 1.

chose financial services based on the convenience of locations.<sup>103</sup> When accessibility is lacking, financial usage is low.<sup>104</sup> However, low financial usage frequently leads to a limited number of financial services offerings.<sup>105</sup>

The answer to accessibility seems simple: provide more banking institutions. But rural and impoverished areas generate low profits for banks compared to the high costs of developing rural operations. As a result, the areas needing financial services the most are often underserved by banking institutions.<sup>106</sup> Traditional finance options fail to address the inclusion issue.

The emergence of an offline digital payment technology may finally solve the accessibility problem. The digital renminbi's most transformative impact may be its ability to increase financial inclusion and reduce poverty within the country. Reducing transactions costs and the ability to transact without internet access can increase banking access across the country. Once access is increased, service offerings such as interest-bearing digital currency, micro-loans, and access to credit facilities, will be available, even without online access.<sup>107</sup>

Widespread cell phone usage makes the digital renminbi a viable alternative to traditional paper currency, but the ability to transact offline is the true game-changer. Nearly 97 percent of China's population either has access or knows someone with access to a cell phone.<sup>108</sup> However, the extent of internet access is drastically lower.<sup>109</sup> But the digital renminbi's ability to work offline should ease any concerns over internet availability. Offline usage minimizes the impacts of internet accessibility and speeds up the digital renminbi's adoption.<sup>110</sup>

The digital renminbi will be the country's most effective tool for reducing poverty and increasing financial inclusion. Between the speed of

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<sup>103</sup> *Id.* at 5.

<sup>104</sup> *Id.* at 6.

<sup>105</sup> World Bank Group [WBG] & People's Bank of China, *Toward Universal Financial Inclusion in China: Models, Challenges, and Global Lessons*, 6 (2018), <https://openknowledge.worldbank.org/bitstream/handle/10986/29336/FinancialInclusionChinaP158554.pdf>.

<sup>106</sup> *Id.*

<sup>107</sup> Charles Chang, *The Paperless Potential of China's Digital Currency*, PROF. WEALTH MGMT. (June 24, 2020), <https://www.pwmnet.com/Financial-Centres/Asia/China/The-paperless-potential-of-China-s-digital-currency>.

<sup>108</sup> *Toward Universal Financial Inclusion in China*, *supra* note 105, at 14.

<sup>109</sup> *Id.* Only 52 percent of the China's adult population can access the internet.

<sup>110</sup> See Jane Li, *China's Digital Yuan is Beginning Its Assault on the World's Biggest Mobile Wallets*, QUARTZ (Dec. 7, 2020), <https://qz.com/1942470/chinas-digital-yuan-begins-assault-on-alipay-and-wechat-pay/>.

disbursing funds, and the ability to transact offline, historically underfunded populations are easily within reach. The opportunity is tremendous for China domestically, and it also provides a selling point for the adoption of the digital currency in foreign markets.

#### 5. China's Fifth Rationale: Protecting Against Money Laundering, Fraud, and Terrorism Financing

Another fundamental goal for China's regime is to maintain both economic and political stability. In recent years, China imposed nationwide crackdowns on corruption, money laundering, fraud, and terrorism activities, in the hopes of maintaining social order amidst broader regime changes. As China faces threats both internally and externally, the digital renminbi provides the country another tool to protect social order.

Reducing illicit capital flows both in and out of the country is essential to ensure economic stability in mainland China. While China's economy has grown to be more open in the past two decades, there are still controls in place to monitor foreign investment, domestic outflows, and other economic transactions.<sup>111</sup> In 2015, China's net errors and omissions (NEO) was nearly negative \$200 billion,<sup>112</sup> reflecting massive amounts of money leaving the country through unofficial channels and navigating around China's market controls.<sup>113</sup>

China acknowledges the shortcomings in its anti-money laundering efforts. In May 2020, the Standing Committee of the National People's Congress, one of the central legislative bodies in the PRC, placed the amendment of the thirteen-year-old anti-laundering law on the upcoming legislative agenda.<sup>114</sup> The deficiencies of the current anti-money laundering law are obvious: punishment is lenient and narrow compared to the damage the money laundering can inflict.<sup>115</sup>

China's current anti-money laundering law targets primarily financial institutions, which historically, were the primary source of money

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<sup>111</sup> PRASAD, *supra* note 30, at 181.

<sup>112</sup> *Id.* at 182.

<sup>113</sup> *Id.*

<sup>114</sup> Peng Qinqin & Denise Jia, *How China Plans to Catch Up to Money Launderers*, NIKKEI ASIA (Sep. 1, 2020), <https://asia.nikkei.com/Spotlight/Caixin/How-China-plans-to-catch-up-to-money-launderers>.

<sup>115</sup> *Id.*

laundering in the country.<sup>116</sup> Recently, however, the scale and scope of laundering have broadened. Today, money laundering efforts flow through real estate, precious metals, and a wide range of other non-financial industries.<sup>117</sup> In the proposed amendment, China hopes to adopt a risk-based assessment requiring institutions to allocate resources to develop prevention and control measures. Its goal: broader efforts to identify and eliminate money laundering activities.<sup>118</sup>

Like money laundering, fraud runs rampant throughout the Chinese economy. And oftentimes, local governments are to blame for the run-up of fraudulent loans and other illicit activities. The central government prevents provincial governments in China from issuing their own debt.<sup>119</sup> To navigate around these restrictions, local officials will set up shell companies to borrow from banks and finance projects for the province.<sup>120</sup> As bribery drives lending actions, banks get burdened by large single-borrower loans that lead to little or no return in value.<sup>121</sup>

Fraud does not stop with the local government. In 2015, the Bank of Liuzhou discovered \$4.9 billion of fraudulent loans.<sup>122</sup> Similarly, other large Chinese banks discovered fraudulent loans of \$147 million and \$578 million.<sup>123</sup> The importance of these banks to the Chinese economy grants them a near too-big-to-fail status. The Chinese government often prevents the dire implications of writing down bad loans by providing stimulus or alternative means of limiting bank defaults.<sup>124</sup>

The digital renminbi could assist in developing more effective anti-money laundering and fraud controls. First, the ledger allows both financial and non-financial institutions to identify customers before transactions are approved. If a customer flags as a potential risk, the institution could require further investigation or deny the transaction altogether. The onus would be

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<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> PRASAD, *supra* note 30, at 190.

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

<sup>121</sup> Don Weiland, *Chinese Bank Hit by \$4.9bn Loan Fraud*, FIN. TIMES (Feb. 17, 2016), <https://www.ft.com/content/31fd750e-d06d-11e5-831d-09f7778e7377>.

<sup>122</sup> *Id.* To secure the massive loan, the businessperson forged collateral and the success of business operations.

<sup>123</sup> *Id.*

<sup>124</sup> Anjani Trivedi, *China's Bank Bailouts Are Even Scarier Than They Look*, BLOOMBERG QUINT (Apr. 26, 2020), <https://www.bloombergquint.com/opinion/china-s-scary-bank-bailouts-rely-on-state-owned-shareholders>.



on the institution to conduct these risk-based assessments on the front-end. But if an institution fails to do so, Chinese regulatory administrations could impose penalties using transactional data from the digital renminbi ledger.

Additionally, the digital renminbi would enable regulatory agencies to do broad checks across the country for illicit activities. Tracing the movement of money through multiple intermediaries would be considerably easier. Identifying and punishing repeat-offenders, whether it be for laundering money, disbursing fraudulent loans, or failure to abide by the requisite checks, would be simple and effective.

### III. INTERNATIONAL IMPLICATIONS

China's digital renminbi provides significant domestic benefits, but it also has the potential to legitimize the renminbi in the global marketplace. If China chooses to couple the digital currency with its Belt Road Initiative (BRI), it could provide a legitimate alternative to traditionally dominant western currencies.<sup>125</sup>

#### A. The Belt and Road Initiative

Two factors drove China's global emergence over the past two decades: cheap labor and a booming domestic market. This growth drove international investors, both corporations and countries, to flock to the mainland. But China's clout, as an investing player of its own, grew with the introduction of the BRI.

President Xi unveiled China's ambitious BRI in 2013, setting the course for a large-scale strategy of global Chinese influence.<sup>126</sup> China's BRI aspires to create a modern silk road, replicating the trade route that connected countries throughout Asia, the Middle East, Africa, and Europe in the fifteenth and sixteenth century.<sup>127</sup> The aim: to expand China's global economic integration and jumpstart the slowing growth of its domestic economy.<sup>128</sup> A broad initiative connecting these regions gives China greater and more secure access to energy and natural resources, and enables China to export its massive surplus of domestic goods and labor.<sup>129</sup>

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<sup>125</sup> Kumar & Rosenbach, *supra* note 3.

<sup>126</sup> Hong Yu, *Motivation behind China's 'One Belt, One Road' Initiatives and Establishment of the Asian Infrastructure Investment Bank*, 26 J. CONTEMP. CHINA 353, 355 (2017).

<sup>127</sup> *Id.*

<sup>128</sup> *Id.* at 357.

<sup>129</sup> *Id.* at 353.

Despite President Xi's goal of economic self-reliance, much of China's economic growth prospects are export-driven. Continuing to develop and grow markets to be consumers of Chinese goods boosts its economy in the short and long term. The BRI enables Chinese state-owned enterprises to drive infrastructure improvements across Asia and abroad, improving cross-border transports, increasing bilateral trade, and engraining the Chinese economy in neighboring countries.<sup>130</sup> The short-term gain is simple: increased work for state-owned enterprises. The long-term gain is more profound; it enables China to bring developing countries into the modern world. The BRI establishes goodwill and trade advantages for China that will drive economic growth for the next century.

China's ambitions do not stop with physical infrastructure development; it aims to become the global leader in manufacturing by 2025.<sup>131</sup> To do this, China is determined to be at the forefront of robotic and other informational technology.<sup>132</sup> The technology advancements are not merely for domestic gains. Combining China's current physical infrastructure projects in BRI countries with its future technological ambitions engrains Chinese technology in emerging economies worldwide. If the BRI's broad economic ambitions prove successful, foreign goods developed with Chinese manufacturing equipment and technology will flow across borders using Chinese-built infrastructure—cementing China's grasp of the global economy.

Maintaining economic growth domestically and abroad serves an essential purpose for China—preserving stability within the region and providing security for the one-party government.<sup>133</sup> Economic stability is nearly as important in China's neighboring countries as well. The Chinese government largely believes that poverty and underdeveloped economies lead to extremism against their one-party system.<sup>134</sup>

Fostering economic development in neighboring countries achieves two goals. First, China hopes economic development will reduce foreign poverty levels and consequently stymie China's "three evils."<sup>135</sup> Second,

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<sup>130</sup> *Id.* at 356.

<sup>131</sup> Elsa B. Kania, *Made in China 2025, Explained*, DIPLOMAT (Feb. 1, 2019), <https://thediplomat.com/2019/02/made-in-china-2025-explained/>.

<sup>132</sup> *Id.*

<sup>133</sup> Nadège Rolland, *China's "Belt and Road Initiative": Underwhelming or Game-Changer?*, 40 WASH. Q. 127, 131 (2017).

<sup>134</sup> *Id.* at 132.

<sup>135</sup> *Id.*

China seeks to bolster the strength of authoritarian governments ruling in neighboring countries.<sup>136</sup> China's economic ambitions aim to fulfill an underlying ideological goal: projecting domestic economic tranquility and portraying itself as a strong partner for authoritarian regimes.

The BRI presents another burgeoning opportunity for China: the development of the renminbi as a legitimate global currency. Direct investment by the central bank and Chinese firms into emerging economies present entryways to grow the renminbi on the world stage. In 2019, direct investment from Chinese firms in Belt and Road Initiatives was worth \$15 billion.<sup>137</sup> The renminbi made up a quarter of the transactions.<sup>138</sup> This direct connection to emerging economies could be the path China takes to broaden the renminbi's international exposure.

#### B. The Asian International Infrastructure Bank: China's Global Banking Emergence

China paints a bleak picture of traditional western funding mechanisms. It views institutions such as the IMF and World Bank as overly burdened by bureaucracy and time-consuming processes.<sup>139</sup> Even more egregious, according to China, is that the loans themselves come hindered with liberal democratic contingencies aimed at political reform.<sup>140</sup> China's creation of an alternative global bank, the Asian International Infrastructure Bank (AIIB), aims to counter traditional lending structures.<sup>141</sup> The AIIB offers infrastructure loans to emerging economies sans political influence. The creation of the AIIB moved China into an international lending position that typical western powers, especially the U.S., aimed to prevent.<sup>142</sup> China's

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<sup>136</sup> *Id.*

<sup>137</sup> *China Wants to Make the Yuan a Central-Bank Favourite*, *ECONOMIST* (May 7, 2020), <https://www.economist.com/special-report/2020/05/07/china-wants-to-make-the-yuan-a-central-bank-favourite>.

<sup>138</sup> *Id.*

<sup>139</sup> Rebecca LaForgia, *Listening to China's Multilateral Voice for the First Time: Analysing the Asian Infrastructure Investment Bank for Soft Power Opportunities and Risks in the Narrative of 'Lean, Clean and Green'*, 26 *J. CONTEMP. CHINA* 633, 642 (2017).

<sup>140</sup> *Id.*

<sup>141</sup> *Id.*

<sup>142</sup> Jonathan Cheng, *China-Backed Infrastructure Bank Seeks to Win Over Countries with Western-Style Approach*, *WALL ST. J.* (Jul. 30, 2020, 1:54 PM), <https://www.wsj.com/articles/china-backed-infrastructure-bank-seeks-to-win-over-countries-with-western-style-approach-11596131650>.

ability to convince nearly one hundred other countries to join shows the influence it holds.<sup>143</sup>

Coupling the AIIB with the BRI enables China to become the predominant lending arm for its vast infrastructure initiative. The AIIB can accelerate projects by providing capital and other financial services with minimal bureaucratic hurdles. While one hundred countries have a position in the bank, China holds nearly 26 percent of the voting shares, more than any other member.<sup>144</sup> This power gives China extensive control over the direction and decision-making of the bank.

The AIIB provides an opportunity for China to become a legitimate global lending power. The AIIB's initial approach focused on building a lending track record that solidifies its legitimacy.<sup>145</sup> However, as the U.S. backed off its international presence under the Trump Administration, an opening presented itself for a new "soft power" player globally. The AIIB will help achieve "diplomatic, economic and political objectives like providing multilateral aid, nurturing new markets, developing 'soft power' and steering Asian regional cooperation and integration."<sup>146</sup> The bank placed China on the world stage for lending—garnering a level of respect that has eluded the country throughout its history. China hopes international respect for the renminbi will follow.

### C. A Legitimate Renminbi on the Global Stage

China's inability to control domestic lending practices is the primary contributor to the renminbi's slow ascent to global legitimacy. Despite a push to increase governance and regulation, China continues to struggle reining in foreign investment undertaken by regional governments and state-owned enterprises.<sup>147</sup> The AIIB's adherence to typical international financial governing standards garnered respect across the international community, but other investing throughout China has failed to adhere to these same

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<sup>143</sup> *Id.*

<sup>144</sup> Yu, *supra* note 126, at 358.

<sup>145</sup> Anthony Rowley, *Will Asian Economic Integration Finally Take Root Under China's Infrastructure Bank AIIB?*, SOUTH CHINA MORNING POST (Aug. 9, 2020, 11:00 PM), <https://www.scmp.com/comment/opinion/article/3096541/will-asian-economic-integration-finally-take-root-under-chinas>.

<sup>146</sup> *Id.*

<sup>147</sup> Gabriel Wildau & Yizhen Jia, *Regional Lenders: China's Most Dangerous Banks*, FIN. TIMES (Jul. 30, 2018), <https://www.ft.com/content/24e2a368-7b4b-11e8-bc55-50daf11b720d>.

standards.<sup>148</sup> And until investments of the renminbi from abroad can be assured to be safe and risk adverse, China faces an uphill battle. The digital renminbi presents a ripe opportunity to counter this problem.

The value proposition of the digital renminbi on a global lending stage is summed up through three main points. First, the digital renminbi provides loan transparency for regional and state-owned enterprises loan statuses. Second, the digital renminbi provides benefits further down the loan money-stream, including additional oversight for investments. Finally, the digital renminbi offers a streamlined loan process, avoiding the traditional banking system that is both slow and costly.

China's inability to regulate the lending practices of regional government entities and state-owned enterprises hinders the renminbi's acceptance as a global reserve currency. The fear of mismanaged investments or corrupt loan processes exposes the renminbi to external risks of loan default and other impactful financial results.<sup>149</sup> The ledger that drives China's digital renminbi eliminates the transparency issues facing the physical renminbi, making the digital renminbi entirely traceable, and enabling the central government to have oversight of virtually every transaction.<sup>150</sup>

The digital renminbi gives China even more power to ensure state-owned enterprises fall in line—an increasingly important initiative for President Xi.<sup>151</sup> If state-owned enterprises are funneling money into unsuccessful projects, the central government could identify these transactions and stop them in their tracks—projecting the validity of its loan practices. This transparency provides further legitimization of the renminbi as a stable currency on the global stage.

The transparency capabilities of the digital renminbi do not stop with domestic lending institutions. Enabling BRI loans to be made with the digital renminbi gives lenders, including the PBOC, visibility to the usage of project funds. Specifically, lenders can ensure adherence to stipulated usages and enforce loan contingencies. The additional oversight gained minimizes the risk associated with projects, especially those in emerging economies with questionable lending track records who are struggling to repay their loans

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<sup>148</sup> See Cheng, *supra* note 142.

<sup>149</sup> *Id.*

<sup>150</sup> Hackett, *supra* note 15, at 77.

<sup>151</sup> Chris Buckley & Keith Bradsher, *China's Communists to Private Business: You Heed Us, We'll Help You*, N.Y. TIMES (Sep. 25, 2020), <https://www.nytimes.com/2020/09/17/business/china-communist-private-business.html>.

amidst the COVID-19 pandemic.<sup>152</sup> Gaining additional control in investments enables lenders to reduce exposure to failed projects and remove themselves from troublesome ventures before recognizing a complete loss.

The digital renminbi presents benefits to those receiving loans as well. Projects funded with a digital renminbi receive the added benefit of a streamlined currency with minimal transaction costs.<sup>153</sup> A loan issued from the lender is received instantaneously, enabling projects to move forward expeditiously. The reduced transaction costs associated with a loan disbursement would either ensure full utilization of the loan amount from the lender or reduce the interest rate that may be inflated to account for systemic transaction costs. The digital renminbi presents substantial cost savings because of its streamlined processing.

#### D. The Digital Renminbi's Place in the BRI

Coupling the digital renminbi with China's BRI serves two purposes. First, it encourages loans and transactions to be conducted via the digital renminbi, thereby introducing more of the currency into the global marketplace. Second, it increases digital renminbi adoption by encouraging other non-Asian countries to adopt the currency when investing in the BRI's emerging economies.

Insisting upon the usage of the renminbi for BRI transactions creates an outflow of the digital currency, enabling foreign governments and companies to increase their renminbi utilization in other transactions. A focused initiative in an Asian trading bloc allows China to circulate its renminbi across various countries in southeast and central Asia.<sup>154</sup> The currency could be used for trade with China and other countries as well. China's continued investment in infrastructure and other export and import exchanges throughout the region supports the cross-border currency flow.<sup>155</sup>

Additionally, the transparency abilities of the digital renminbi give loan providers a sense of security. Greater transparency ensures that the

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<sup>152</sup> See e.g., Weizhen Tan, *China Under Pressure to Write Off Loans as Countries Struggle to Repay Debt During Coronavirus Crisis*, CNBC (May 11, 2020, 7:10 AM), <https://www.cnbc.com/2020/05/11/belt-and-road-china-may-have-to-write-off-loans-as-countries-struggle-to-pay.html> ("Many countries under the (Belt and Road) initiative have borrowed heavily from China to invest in new projects, but the pandemic is disrupting economies and will complicate repayment plan.").

<sup>153</sup> Hackett, *supra* note 16, at 76.

<sup>154</sup> Rowley, *supra* note 145.

<sup>155</sup> See Yu, *supra* note 126.

money lent is being used appropriately and providers could stipulate further funding activities based on the use and subsequent returns on their investment. The transparency and lower transaction costs presented by the digital renminbi minimize the risk associated with projects. While projects in emerging economies will always pose risks, they also present immense growth value. A digital renminbi provides transparency into these investments, giving foreign investors peace of mind that they have ultimate oversight of their money, and enabling them to hedge against the downside of the loan, locking in the massive upside potential.

#### E. Convertibility with other Cryptocurrencies

One crucial decision for China to make regarding the digital renminbi is its ability to be converted to other alternative cryptocurrencies. This function is inherent in most cryptocurrencies. For example, using a common cryptocurrency exchange such as Coinbase, a single Bitcoin can be converted to its Ether equivalent in a rather pain-free transaction.

Whether the digital renminbi will be convertible remains to be seen. But China's fear of capital flight (money rapidly leaving the country) seems to indicate the answer will likely be no. Convertibility lends a relatively easy pathway to massive capital flight. The same capital flight that has plagued China over the past two decades.<sup>156</sup> Allowing the ability to convert digital renminbi to other central government currencies, or in a more extreme action, cryptocurrencies, would allow for streamlined capital movement outside of China. This hardly seems like an action the PRC would allow. But if they do, the negative implications of China's digital renminbi, discussed above and below, would be greatly diminished.

#### IV. THE DARK SIDE OF THE DIGITAL CURRENCY: THE DIGITAL RENMINBI'S ROLE IN CHINA'S SECURITY STATE.

In China, monitoring is the norm. From tracking citizens' movements to controlling internet usage, China has concocted a surveillance state prevalent throughout nearly every aspect of daily life. China's social credit system, a way of measuring an individual's adherence to party ideologies, is merely one aspect of the country's security state. This section begins with a discussion of China's "Three Evils," and showcases how the digital renminbi ties into China's social credit system. A discussion of the more extreme measures undertaken by the PRC follows. These inhumane

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<sup>156</sup> PRASAD, *supra* note 30, at 45.

measures highlight the country's quick devolvement from mere social tracking to radical initiatives aiming to curb supposed party dissidents, showcasing the biggest threat of a digital renminbi.

#### A. The “Three Evils” – Separatism, Terrorism, and Extremism

The digital renminbi's role in China's crackdown on the so-called “Three Evils”—separatism, terrorism, and extremism—presents one of the currency's most intriguing and most fear-inducing benefits. As President Xi came to power in 2013, he advocated an intense focus on forming true leaders in the PRC. Per President Xi, a true leader must show extreme loyalty to the “Communist Party, its leader, and its ideological roots, in good times and bad.”<sup>157</sup> These expectations are no different for the rest of the Chinese population.<sup>158</sup>

In 2017, China launched a technology-driven security system across the Xinjiang region. This system, premised upon 7,500 “convenience police stations,” utilizes multiple means of surveillance to patrol the region, including facial recognition, biometric data, GPS tracking, and spyware in phones.<sup>159</sup> Monitoring is critical, and the system identifies citizens that may incite acts of extremism, or “hatred, discrimination, or agitating violence through distorting religious doctrines or other means.”<sup>160</sup>

While China's current surveillance infrastructure is extensive, gaps exist. China has attempted to fill the surveillance voids by mobilizing the population to create the “people's war on terrorism.”<sup>161</sup> By driving a culture

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<sup>157</sup> Richard McGregor, *Xi Jinping's Quest to Dominate China*, 98 FOREIGN AFF. 18, 20 (Sep./Oct. 2019).

<sup>158</sup> *Id.* (“By the time he took office, Xi seemed possessed by a deep fear that the pillars of party rule—the military, the state-owned enterprises, the security apparatus, and the propaganda machine—were corrupt and crumbling. So he set out on a rescue mission. He would be the Reddest leader of his generation. And he expected all party members to follow in his footsteps, or else.”).

<sup>159</sup> Jérôme Doyon, ‘Counter-Extremism’ in Xinjiang: Understanding China's Community-Focused Counter-Terrorism Tactics, WAR ON THE ROCKS (Jan. 14, 2019), <https://warontherocks.com/2019/01/counter-extremism-in-xinjiang-understanding-chinas-community-focused-counter-terrorism-tactics/>.

<sup>160</sup> *Id.* (citing The People's Republic of China Anti-Terror Law of 2016).

<sup>161</sup> *Id.*



of extreme loyalty to the PRC, China created a fear-inducing environment where even neighbors report potential anti-party rhetoric or activities.<sup>162</sup>

The digital renminbi will play an integral part in China's domestic surveillance state and the country's broader efforts to track and eliminate foreign threats. While facial recognition, biometrics, GPS tracking, spyware, and the "people's war on terrorism" cast a wide net as part of China's surveillance state, holes remain. As evidenced by the previously discussed NEO data, China's current inability to track the illicit flow of money inside and outside the country is one of the key holes left to address.<sup>163</sup> The digital renminbi's ledger can help fill this gap.

The ledger technology that provides the backbone of the digital renminbi holds vast amounts of data that can assist in tracking transactions both inside and outside Chinese borders. Domestic and international organizations often gain funding through underground banks, money-laundering, or other methods that circumvent current monetary controls.<sup>164</sup> The ledger technology greatly reduces the effectiveness of the circumvention efforts.

China's digital ledger accesses every transaction conducted using the digital renminbi, tracking the amount, recipient, and sender.<sup>165</sup> This massive amount of data allows detailed analysis to identify and act on any potential threat. A digital ledger bolsters the already significant controls that the PRC has in place. While the digital renminbi may not eliminate terroristic threats, it provides a missing piece to China's surveillance puzzle.

### B. China's Social Credit System

To enforce adherence to party ideology, China created an elaborate, society-encompassing, social credit system that grades nearly every aspect of life. From reading texts, listening to phone calls, and tracking packages, the state is ever-present.<sup>166</sup> If a citizen follows what the country deems to be

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<sup>162</sup> See Dave Davies, *Facial Recognition and Beyond: Journalist Ventures Inside China's 'Surveillance State'*, NPR (Jan 5., 2021), <https://www.npr.org/2021/01/05/953515627/facial-recognition-and-beyond-journalist-ventures-inside-chinas-surveillance-sta>.

<sup>163</sup> See PRASAD, *supra* note 30, at 182.

<sup>164</sup> *Id.* at 195.

<sup>165</sup> See Hackett, *supra* note 16, at 78 (noting "transparency will be inherent in the all-seeing, back-end ledger.").

<sup>166</sup> Anna Mitchell & Larry Diamond, *China's Surveillance State Should Scare Everyone*, ATLANTIC (Feb. 2, 2018), <https://www.theatlantic.com/international/archive/2018/02/china-surveillance/552203/>.

“good behaviors,” their grade goes up. If they cross the street at the wrong time, express doubt about party efforts, or even buy too much alcohol, their grade goes down.<sup>167</sup> China’s surveillance state encroaches on the civil rights of China’s citizens and the digital renminbi could be yet another piece furthering this encroachment.

In 2014, China introduced its social credit system, linking “personal financial data to every part of an individual’s social life,” and creating a collective score that enables a citizen to be eligible or ineligible for social goods.<sup>168</sup> From bike-sharing to quick loans, a good score gives them access to a myriad of social goods. Meanwhile, a bad score blocks them off from these options, potentially leading to more significant ramifications.<sup>169</sup> Some Chinese citizens view the social credit system as a necessary means to the desired end, a sacrifice of individual autonomy to create a more harmonious society where an adherence to ethical values—as established by the state—can be measured, rewarded, and publicized accordingly.<sup>170</sup>

However, many of China’s citizens recognize the privacy infringement the social credit system perpetuates. In a society where facial recognition, amongst many other means of tracking, is expected in everyday life, the social credit system is yet another encroachment on a citizen’s ability to act without being monitored.<sup>171</sup> The public is wary of the social credit system because not only are a citizen’s actions considered, but the actions of individuals they associate with are factored in as well.<sup>172</sup> The “guilt-by-association” model is not new for China.<sup>173</sup> And its inclusion in the social credit system is deliberate. If the actions of family, friends, or other connections influence a social rating, a citizen is more likely to police their behavior to adhere to party norms.

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<sup>167</sup> *Id.*

<sup>168</sup> Claire Seungeun Lee, *Datafication, Dataveillance, and the Social Credit System as China's New Normal*, 43 ONLINE INFO. REV. 952, 960 (2019).

<sup>169</sup> Davies, *supra* note 165 (“If you're blacklisted because your social credit is down, then actually you already get sanctioned. For example, you're no longer allowed to take a plane. You're no longer able to buy plane tickets. You're no longer allowed to take a high-speed railway. You're no longer allowed, for example, in expensive hotels. Your children are no longer allowed to go to expensive good schools and things like this.”).

<sup>170</sup> *See id.*

<sup>171</sup> Lee, *supra* note 172, at 961-62.

<sup>172</sup> Davies, *supra* note 165.

<sup>173</sup> Lee, *supra* note 172, at 961-62.

Control is China's goal. The social credit system executes that goal to near perfection. However, when the social credit system is not enough to dissuade anti-party behavior, China turns to more sinister, inhumane means to achieve party alignment. Worldwide leaders cannot ignore this dark side of China's surveillance state when considering the emergence of the digital renminbi.

### C. From Social Credit to Genocide

*Genocide: a coordinated plan of different actions aiming at the destruction of essential foundations of the life of national groups, with the aim of annihilating the groups themselves.*<sup>174</sup>

In early 2021, following years of public outcry, the U.S. officially denounced China's repression of the Uighurs and other Muslim ethnic minorities.<sup>175</sup> Then-Secretary of State Mike Pompeo, chose his words carefully, placing emphasis on one word in particular: genocide.<sup>176</sup> Raphael Lemkin initially coined the term to describe the heinous acts of Nazi Germany towards the Jewish population in World War II.<sup>177</sup> There are two phases to *Genocide*: "one, destruction of the national pattern of the oppressed group; the other, the imposition of the national pattern on the oppressor."<sup>178</sup>

The genocide of the Uighur population in the Xianjing region harkens back to the genocide of the Jewish population by Nazi Germany, albeit with an added technological twist. China's surveillance state perpetuates fear within Xianjing. Its imposition of control over every aspect of life presents an extreme variation of China's social credit system, a system that grows even stronger with yet another addition to its surveillance arsenal—a digital renminbi.

When China's social credit system does not work, the PRC does not hesitate to enact more extreme measures to ensure adherence to party ideas. In a country where citizens are subservient to the state, China takes any action to ensure conformity. Even though China's actions in Xinjiang blatantly

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<sup>174</sup> RAPHAEL LEMKIN, *AXIS RULE IN OCCUPIED EUROPE: LAWS OF OCCUPATION, ANALYSIS OF GOVERNMENT, PROPOSALS FOR REDRESS (FOUNDATIONS OF THE LAWS OF WAR)* 79 (Lawbook Exchange, ed., 2d ed., 2008).

<sup>175</sup> Edward Wong & Chris Buckley, *U.S. Says China's Repression of Uighurs Is 'Genocide'*, N.Y. TIMES (Jan. 19, 2021), <https://www.nytimes.com/2021/01/19/us/politics/trump-china-xinjiang.html>.

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

<sup>177</sup> See Lemkin, *supra* note 178.

<sup>178</sup> *Id.*

violate various international treaties, and even its own constitution, the PRC shows no signs of curtailing its measures.<sup>179</sup>

China's Constitution protects religious practice in the country. Article 36 states: "no state organ, public organization, or individual may compel citizens to believe in, or not believe in, any religion."<sup>180</sup> But at the same time, the Constitution provides a broad exception, noting Article 36 only protects "normal" religious activities that do not "disrupt public order, impair the health of citizens, or interfere with the educational system of the state."<sup>181</sup> The "normal" activities clause gives China an avenue to persecute those with certain religious beliefs. China is also a signatory on multiple international treaties that explicitly ban religious persecution.<sup>182</sup> Yet, despite being a party to treaties that uphold religious freedom, China did not hesitate to develop reeducation camps aimed solely at eradicating religion from the Muslim Uighur population.

The tension with the Uighur population stems from Mao-era China, where the PRC led a mass migration of Han Chinese into the Xianjing region.<sup>183</sup> The Uighurs are a primarily Muslim population who inhabited the China's northwest region (including Xianjing) for centuries. The forced integration of the Han Chinese into the Uighur society led to riots and Uighur attacks on both citizens and police, actions attributed to part of a separatist movement in the region.<sup>184</sup>

Following multiple terrorist attacks across the Xinjiang province (Urumqi in 2009, Beijing in 2013, and Kunming and Urumqi in 2014), China enacted extreme security measures to secure the region.<sup>185</sup> The "Strike Hard Campaign against Violent Terrorism" created a quasi-police state in Xinjiang and ushered in China's ever-evolving surveillance society.<sup>186</sup> But separatist activity is not limited to the China mainland. In 2016, the Chinese blamed

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<sup>179</sup> Giavanna O'Connell, *How China is Violating Human Rights Treaties and its own Constitution in Xinjiang*, JUST SECURITY (Aug. 19, 2020), <https://www.justsecurity.org/72074/how-china-is-violating-human-rights-treaties-and-its-own-constitution-in-xinjiang/>.

<sup>180</sup> *Id.*

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

<sup>182</sup> Rights to religious, cultural, and social self-determination are protected as fundamental freedoms by several treaties China is party to, including Articles 1, 2, and 15 of the ICESCR; Articles 2 and 5 of the ICERD; and Articles 18-20 of the UDHR.

<sup>183</sup> *Id.*

<sup>184</sup> *Id.*

<sup>185</sup> Doyon, *supra* note 162.

<sup>186</sup> *Id.*

Uighur-led militants for a suicide bomber that attacked a Chinese Embassy in Kyrgyzstan.<sup>187</sup> Whether the Uighur militants truly committed the attack is unknown, but the international threat rattled China and exposed weaknesses in its terrorism efforts.

First put in place in 2014, the Xinjiang reeducation camps are explicitly aimed at Uighur's. By 2017, the Chinese government forced over one million Uighur's into the camps, regardless of their political beliefs or extremism potential.<sup>188</sup> There is one goal in China's reeducation camps: developing party loyalty. To emphasize the importance of this loyalty, "Forget not the Party's mercy, walk with the Party forever" is emblazoned on building walls throughout the camps.<sup>189</sup>

China aims to eliminate any sense of Uighur individuality and assimilate the Uighur population to Chinese ideals, seeking to "break their lineage, break their roots, break their connections, and break their origins."<sup>190</sup> In the words of Lemkin, China seeks to destroy the national identity of the Uighur population. China shows little restraint in achieving this aim. Forced sterilization, restrictions on traditional religious ceremonies, and placing approved Chinese supporters into homes, are frequently utilized in the Xinjiang province.<sup>191</sup>

Further, China developed an artificial intelligence algorithm that seeks to identify problematic Uighurs.<sup>192</sup> Xinjiang's surveillance state goes well beyond China's social credit system. Closed-circuit cameras with facial recognition, spyware installed on citizens phones, "Wi-Fi sniffers" that collect internet data, and tracking of package deliveries, are all part of

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<sup>187</sup> Michael Clarke, *China's Terrorist Problem Goes Global*, DIPLOMAT (Sep. 7, 2016), <https://thediplomat.com/2016/09/chinas-terrorist-problem-goes-global/>.

<sup>188</sup> Alice Su, *'Will They Let Us Live?' Inside Xinjiang, Survivors of China's Internment Camps Speak*, L.A. TIMES (Dec. 17, 2020), <https://www.latimes.com/world-nation/story/2020-12-17/china-xinjiang-uighurs-muslim-minority-camps>.

<sup>189</sup> *Id.*

<sup>190</sup> Ben Dooley, *Inside China's Internment Camps: Tear Gas, Tasers and Textbooks*, AGENCE FRANCE-PRESSE (Oct. 25, 2018), <https://www.afp.com/en/inside-chinas-internment-camps-tear-gas-tasers-and-textbooks>.

<sup>191</sup> O'Connell, *supra* note 183.

<sup>192</sup> Bethany Allen-Ebrahimian, *Exposed: China's Operating Manuals for Mass Internment and Arrest by Algorithm*, INT'L CONSORTIUM OF INVESTIGATIVE JOURNALISTS (Nov. 24, 2019), <https://www.icij.org/investigations/china-cables/exposed-chinas-operating-manuals-for-mass-internment-and-arrest-by-algorithm/>.

China's surveillance arsenal.<sup>193</sup> The data collected from each of these surveillance tools are fed through China's artificial intelligence algorithm to identify and detain "suspicious persons."<sup>194</sup> Two particular traits hold extreme weight as part of the suspicion algorithm: Muslim beliefs and Uighur nationality.<sup>195</sup> China's inhumane treatment of the Uighur is deplorable, and surveillance plays a key part, if not the most important role, in the treatment. The digital renminbi will add yet another layer to the algorithm and China's surveillance abilities.

The fear of internal and external dissidents led to China adopting these inhumane measures. And despite all the benefits of the digital renminbi, its implementation cannot be dissociated from China's desire to increase its ability to monitor every aspect of society. The ledger technology and its direct integration into China's central bank provides the country unparalleled access to everyday life. The potential usage of the digital renminbi abroad presents even further threats, as this same tracking could find itself prevalent outside mainland China.

China's failure to adhere to the religious freedom articles of international treaties is the biggest red flag for digital renminbi proliferation. Even if countries enact regulations limiting the human rights and autonomy encroaching aspects of the digital renminbi, would China follow those guidelines? China's track record of placing the party above all else—including its international obligations—seems to say no. A blatant disregard of China's international duties should provoke fear in the idea of a globally dominant digital renminbi.

## V. CONCLUSION

The technological framework of China's digital renminbi is a digital currency gamechanger. There are many aspects of the currency, and the framework backing it, that should be adopted by countries seeking to implement a digital currency of their own. These include instantaneous payment, the ability to transact offline, easier distribution of stimulus funds on an individual level, and reduced payment fees for even the smallest of transactions. However, efforts must be put in place to separate these benefits from the negative implications of China's approach.

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<sup>193</sup> *Id.*

<sup>194</sup> *Id.*

<sup>195</sup> *Id.*

First, China cannot have the ability to monitor ledger information of international transactions. While beneficial in an authoritarian society, this attribute implicates wide-ranging security concerns for all countries transacting using China's framework. Second, the digital currencies use in a surveillance-oriented state should also be limited. Though authoritarian governments view surveillance as a positive, if not a necessity, surveillance brings broad legal and human rights implications for democratic countries. Adopting a digital currency but not protecting inherent individual freedom could backfire significantly. If the public loses trust in a digital currency, there may be a seismic shift towards alternative options, such as Bitcoin or other non-central bank digital currencies.

Using a currency to track the movements and habits of everyday life cuts at the core of civil rights. According to China, however, the digital renminbi's use as more than a medium of exchange merely follows a path set forth by western economies.<sup>196</sup> China contends that whether it is imposing sanctions, or requiring the imposition of human rights standards, access to a western economy's currency does not just bring a new avenue of trade, but also brings requirements to upend societies pasts—whether right or wrong.<sup>197</sup> The digital renminbi, in China's view, is no different. In China, the party comes first; and a digital renminbi provides yet another tool to ensure that citizens' activities do not usurp party goals.

China's ideology should strike fear in countries that will be transacting with the digital renminbi. As with most technologies developed in the digital age, the massive benefits come with broad privacy implications. A digital currency, regardless of what country develops the framework, brings with it a heightened level of data capture that could give governments incredible amounts of user information. China exploits this information. Democratic countries should not. The legal and ethical implications are vast and should remain on the forefront of any digital framework to ensure that as currency enters the digital age, privacy, and civil rights do not fall by the wayside.

Strict enforcement and repercussions must be asserted on China as the digital renminbi gains a foothold abroad. The current global political climate, however, presents a headwind for consensus among countries. As nationalism grows across the U.S., Europe, and other continents, a view of "going it alone" continues to gain favor. But to truly protect individual rights

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<sup>196</sup> See LaForgia, *supra* note 139.

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

and prevent the encroachment of a digital renminbi (or a local variation) on everyday life, countries must band together and present a united front. As digital currencies become the norm, individual freedom and autonomy must become the top priority. If they are not, variations of China's surveillance state could proliferate across the globe.