



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: E
ECONOMICS

Volume 25 Issue 1 Version 1.0 Year 2025

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-460X & Print ISSN: 0975-587X

The Digital Renminbi and its Impacts on the Structural Power of the Dollar

By Alba Boaventura & Isabela Nogueira

Federal University of Rio de Janeiro

Abstract- This paper analyzes how the digital renminbi (e-CNY) may impact the structural power of the U.S. dollar and discusses its primary limitations. We adopt the framework of the dollar's structural power within US hegemony, highlighting the political consequences of its central role. Next, we examine China's digitalization from two perspectives: monetary and operational, and within the context of the Digital Silk Road, whose four pillars – infrastructure, technology, e-commerce, and governance – support the e-CNY's dissemination. This paper argues that the e-CNY's launch might provide a new impetus for the renminbi's internationalization, particularly in regional payments and e-commerce. However, this does not challenge the dollar's structural dominance in the short term, as the limits to the expansion of the e-CNY in the international monetary hierarchy remain quite significant.

Keywords: central bank digital currency, chinese digital currency, e-CNY, digital renminbi, digital yuan, china, structural power of the dollar, international monetary hierarchy, digital silk road.

GJHSS-E Classification: JEL: E42



THE DIGITAL RENMINBI AND ITS IMPACTS ON THE STRUCTURAL POWER OF THE DOLLAR

Strictly as per the compliance and regulations of:



The Digital Renminbi and its Impacts on the Structural Power of the Dollar

Alba Boaventura ^α & Isabela Nogueira ^σ

Abstract- This paper analyzes how the digital renminbi (e-CNY) may impact the structural power of the U.S. dollar and discusses its primary limitations. We adopt the framework of the dollar's structural power within US hegemony, highlighting the political consequences of its central role. Next, we examine China's digitalization from two perspectives: monetary and operational, and within the context of the Digital Silk Road, whose four pillars – infrastructure, technology, e-commerce, and governance – support the e-CNY's dissemination. This paper argues that the e-CNY's launch might provide a new impetus for the renminbi's internationalization, particularly in regional payments and e-commerce. However, this does not challenge the dollar's structural dominance in the short term, as the limits to the expansion of the e-CNY in the international monetary hierarchy remain quite significant.

Keywords: central bank digital currency, chinese digital currency, e-CNY, digital renminbi, digital yuan, china, structural power of the dollar, international monetary hierarchy, digital silk road.

INTRODUCTION

The introduction of Central Bank Digital Currencies (CBDCs) has sparked significant international debate due to their potential to be a turning point in monetary transactions. CBDCs may not only accelerate international settlements but also provide alternatives to the U.S.-led global payment system (Raghuveera, 2020). This could impact security and defense by creating blind spots for the U.S. in tracking international financial flows, potentially undermining its economic coercion and provoking broader geopolitical consequences (Economic Diplomacy Initiative, 2020; Raghuveera, 2020). Following Russia's removal from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) after its February 2022 invasion of Ukraine, the urgency to explore alternatives to dollar reliance has grown.

The e-CNY – the Chinese digital renminbi – is at the forefront of the CBDC race to strategically leverage

digitalization and strengthen China's autonomy in its technological competition with the U.S. As of June 2023, China boasts the world's most advanced digital ecosystem, with around 943 million people using mobile payment platforms daily (Daxue Consulting, 2024). The Chinese expansive investment project, the Belt and Road Initiative (BRI), also encompasses a digital extension known as the Digital Silk Road (DSR). In summary, it aims "to create 'a global information highway with China at its core' [...] through technology 'bundles' comprised of smart cities, smart ports, e-commerce and digital currency, communications networks, and satellite networks" (Hemmings, 2020, p. 7).

Yet, any monetary actions face significant obstacles because of the structural power of the U.S. dollar. Unlike relational power, i.e., coercing or influencing B's behavior regardless of B's preferences, structural power emphasizes how social processes shape outcomes. It "confers the power to decide how things shall be done, the power to shape frameworks within which states relate to each other, relate to people, or relate to corporate enterprises" (Strange, 1995, p. 50). In the monetary realm, this power enables the hegemon to control global credit supply and currency convertibility, as well as to impose financial sanctions that restrict access to the SWIFT system (Guzzini, 2000; Strange, 1989; 1994; Cohen, 2015; Torres, 2019).

Based on this debate, the objective of this paper is to analyze how the e-CNY may challenge the structural power of the U.S. dollar in the international system and to assess its main limitations. This discussion is essential for two reasons. First, China's leading role in the CBDC race raises concerns in American literature about the e-CNY's potential to weaken the "dollar bomb," the ability to constrain access to the reserve currency global market (Torres, 2019). Second, despite extensive research on 5G and the BRI, few studies focus on the DSR and its role in China's strategy to lead the Fourth Industrial Revolution.

This paper is structured into three sections, in addition to this introduction. The first section outlines the theoretical framework of structural power and its impacts on the International Monetary Hierarchy (IMH), along with the current status of the Chinese renminbi (RMB). The second section examines the two digital strategies pursued by China – the e-CNY and the

Author α: Master's degree from the International Political Economy Graduate Program and researcher at the Laboratory of Studies in the Political Economy of China, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil. Financial support from the Coordination for the Improvement of Higher Education Personnel.
e-mail: boaventuraalba@gmail.com

Author σ: Professor at the Institute of Economics and at the International Political Economy Graduate Program and coordinator of the Laboratory of Studies in the Political Economy of China, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil. e-mail: isabela.nogueira@ie.ufjf.br

DSR –, detailing their characteristics and potential points of convergence. Finally, the third section reflects on the implications of a successful e-CNY from a critical perspective. The article concludes with a summary of key findings.

I. STRUCTURAL POWER OF THE DOLLAR AND THE INTERNATIONAL MONETARY HIERARCHY

In the 1970s, a hypothesis emerged suggesting that the relative decline of U.S. power was behind global economic instabilities, including currency and interest rate volatility, stagflation, and rising commodity prices. Proponents of “declinist” theories linked this decline to a dispersal of political power and the lack of economic cooperation, especially after the breakdown of the gold-dollar standard in 1971 and the U.S. defeat in Vietnam in 1975 (Strange, 1987). However, Strange (1994) challenged the narrative of lost hegemony, arguing that it stemmed from a narrow view of power that focuses on exploiting advantages within the structure, known as relational power or the first face of power. Instead, she proposed a second face that is more diffuse and centered on social necessity, which shapes the system’s foundations and redefines the rules to extract benefits (Cohen, 2015; 2016).

Structural power refers to a nation’s ability to establish and influence four interconnected structures: security, production, finance, and knowledge. In particular, the financial sphere relates to control over credit and currency convertibility (Strange, 1994; Torres, 2018). This dominance over essential inputs – such as weapons, capital, credit, and technology – determines a country’s position in the global hierarchy (Guzzini, 2000). Therefore, those who possess structural power can decide who has access to these resources and under what conditions (Strange, 1989). While indirect and less visible, this power enables A to expand or limit, either implicitly or explicitly, the range of choices available to B, thereby facilitating or constraining decisions and influencing behavior (Strange, 1994). According to Guzzini, this manipulation can occur in two ways: deliberately (indirect institutional power) or unintentionally (unintentional power) (Helleiner, 2005).

Strange (1989) contends that this theory demonstrates how the U.S. was not in decline but rather leveraging its hegemonic power unilaterally to prioritize its own interests. The resurgence of U.S. power after the Interest Rate Shock of 1979 occurred through “strong dollar diplomacy” and external pressures for both financial and trade liberalization during the 1980s and 1990s (Tavares; Melin, 1997). This process secured the dollar’s centrality as the global reference currency, allowing the U.S. to: 1) appropriate wealth through seigniorage; 2) project its macroeconomic preferences;

3) define international financial regulations as the lender of last resort; 4) influence economic geography; and 5) gain symbolic power from global interest in its stability (Helleiner, 2005). Thus, the dollar’s status became self-reinforcing, as the large size of the U.S. market boosted demand, which in turn increased its attractiveness and liquidity (Eichengreen, 2011).

This framework significantly affects the IMH. As Kirshner (1995) notes, currency acts as a coercive tool in three ways: 1) monetary manipulation to destabilize rival currencies; 2) dependence exploitation via threats or selective coordination of resources; and 3) systemic disruption to exploit advantages. Owing to its central position in the IMH, the U.S. exerts its influence through economic sanctions and exclusions from the SWIFT system, as evidenced by the cases of Iran (Torres, 2019) and Russia since 2022 amid the Ukraine War. While a few other central currencies represent global wealth to a lesser extent, peripheral currencies are often viewed as mere financial assets (Carneiro & De Conti, 2022). Despite the inertia within the IMH, De Conti et al. (2013) suggest that long-term changes are possible as a consequence of geopolitical shifts or if the currency issuer holds political power, a willingness to internationalize, and a larger integrated economy.

Given these criteria, China’s monetary initiatives offer considerable potential. Since the 2008 Global Financial Crisis, the country has intensified efforts to internationalize the RMB, launching key projects like the Cross-Border Interbank Payment System (CIPS). Established in 2015, CIPS had expanded to include 153 direct participants and over 1.413 indirect participants worldwide by October 2024 (CIPS, 2024). Yet, China’s capital control policies continue to restrict the RMB’s external use, with the currency ranking fourth in global payments (SWIFT, 2024) and seventh in reserves (IMF, 2024) as of September 2024. The Chinese government’s strategy to integrate the e-CNY with the DSR is expected to strengthen its competitiveness and provide China with greater economic autonomy, as discussed in the following sections.

II. CONSTRUCTION AND PROLIFERATION OF CHINESE DIGITAL CURRENCY AND INFRASTRUCTURE

a) *Chinese Digital Currency: e-Cny or Digital Renminbi*
A CBDC is a digital form of fiat currency issued by a central bank and denominated in the national unit of account. It functions as both a medium of exchange for payments and a store of value to preserve purchasing power. Unlike credit cards and bank transfers, CBDCs are legal tender and carry no solvency risk since they are direct liabilities of the central bank. They also differ from cryptocurrencies and stablecoins as they are issued, regulated, and priced by the

monetary authority rather than the market, which reduces volatility (Bank of England, 2020). The global discussion around CBDCs gained momentum in 2018 when Facebook announced plans for a private currency, raising concerns about its economic impact due to the company's massive user base. Based on data up to March 2024 from the *CBDC Tracker*, 134 nations or monetary unions are exploring designs for implementing CBDCs in their jurisdictions, representing 98% of global gross domestic product (Atlantic Council, 2024).

In China, the CBDC debate began in 2014 when the government set up a task force to explore digital currency issuance and technology. By 2016, the Digital Currency Research Institute was established and the first prototype was developed, supported by partnerships among state banks, national firms, and private companies in the communications sector. The current pilot encompasses 26 cities and 17 provinces, including tests in Shenzhen, Suzhou, Xiong'an, Chengdu, Shanghai, Hainan, Changsha, Xi'an, Qingdao, Dalian, the Yangtze River Delta, the Pearl River Delta, and the Beijing-Tianjin-Hebei corridor (People's Bank of China, 2021; Bansal & Singh, 2021; Fullerton & Morgan, 2022; Gou, 2024).

In 2021, China joined Hong Kong, Thailand, and the United Arab Emirates for the Multiple CBDC Bridge (mBridge), a project exploring Distributed Ledger Technology (DLT) for cross-border applications. A digital wallet app was launched in pilot areas during the Winter Olympics in February 2022. Its overseas version also supports more than 210 countries and regions, as well as Visa and Mastercard cards. Hong Kong is the first international test, and 17 local banks registered 14.375 million e-CNY wallets through the Foreign Payment System by April 2024 (Fullerton & Morgan, 2022; Murray, 2022; Gou, 2024).

The People's Bank of China (PBoC) has emphasized that the initiative primarily focuses on reclaiming control of data and money from the private sector domestically (People's Bank of China, 2021). By the second quarter of 2020, Alipay (55.6%) from Ant Group and WeChat (38.8%) from Tencent dominated 94% of the Chinese mobile payments market (Fullerton & Morgan, 2022). With such a large market share, any disruption to one system could overwhelm the other. Massive withdrawals of bank deposits could also reduce liquidity and tighten credit. Nevertheless, the primary concern lies in the amount of data these companies possess, which enhances the products appeal and stifles competition. Therefore, the Chinese government argues that the e-CNY will strengthen financial stability, lower transaction costs, and simplify international payments, among other benefits (Bansal & Singh, 2021; Murray, 2020).

The e-CNY operates on two levels. First, the PBoC issues e-CNY and distributes it to state banks,

commercial banks, and mobile app conglomerates. Second, these authorized entities distribute it to businesses and individuals. The PBoC centrally manages the system, overseeing transactions, balance management, and a real-time ledger. Three data centers authenticate users and record e-CNY issuance, transfers, and withdrawals, as well as conduct big data analysis for risk management. The e-CNY aims to provide a safer, faster, and cheaper alternative to the current system, offering controllable anonymity based on transaction value (small amounts remain anonymous, while larger amounts are traceable). However, critics argue that this anonymity may ultimately depend on the Chinese government's interests, which could use e-CNY as a tool to monitor political opponents more easily (Fullerton & Morgan, 2022; Kumar & Rosenbach, 2020; Murray, 2020).

Elston (2023) points out that by January 2022, 261 million people had created e-CNY wallets, representing a relatively low 28.89% adoption rate compared to China's 903.6 million mobile payment users. Moreover, many of these wallets may be inactive, as several users signed up merely to benefit from the 340 million RMB (US\$ 50.47 million) distributed in 2022 through discounts, promotions, and red envelopes¹ by the PBoC to promote the initiative. In December 2022, a former PBoC Research director acknowledged that "the results are not ideal... Usage has been low, highly inactive" (Elston, 2023, online). Although it has low domestic adoption rates, the e-CNY remains the largest CBDC pilot globally (Kumar, 2023). By June 2023, the e-CNY had 120 million wallets, 16.5 billion RMB in circulation (0.16% of the total M0 money supply), and 950 million transactions, amounting to 1.8 trillion RMB (US\$ 249.9 billion) in cumulative annual volume (Wee, 2023).

China has also been making significant multilateral efforts to promote the adoption of the e-CNY, as interoperability is essential to the success of the alternative financial system (Greene, 2021). In 2021, the PBoC helped establish the Finance Gateway Information Services Co. – a joint venture between SWIFT and CIPS –, a move seen by many experts as a strategic step towards broader e-CNY use (Greenwald, 2021; Bansal & Singh, 2021). Additionally, the mBridge project has shown promising results: by 2022, it had completed 164 transactions over six weeks using CBDCs and settled \$22 million with the involvement of 20 commercial banks (BIS Innovation Hub, 2022). Estimates suggest that mBridge could cut cross-border invoicing costs by up to 50% and reduce payment times from days to seconds,

¹ Red envelopes (红包) contain banknotes and are traditional gifts given on holidays and special occasions to family and friends for good luck.

with no dependency on time zones (Greene, 2021). As highlighted by Murray (2022, online),

the mBridge's benefits may sound like minor incremental changes. They are not. The current system of international exchange is outdated. It requires numerous manual touches and is vulnerable to fraud and even large-scale theft. Think of China's approach as the high finance and international commerce version of Venmo. In comparison, the reigning U.S.-led system is akin to mailing a check. If the mBridge is scaled as planned, it would dramatically facilitate and accelerate the cross-border movement of money.

In 2020, the Chinese government launched the Blockchain Service Network (BSN), a platform aimed at standardizing global blockchain protocols to reduce costs and improve accessibility. The BSN operates both within China and abroad. Domestically, it is supported by China Mobile, China Telecom, and Baidu AI Cloud. Internationally, it collaborates with Google Cloud and Amazon Web Services to harmonize financial services. Notwithstanding these advances, the e-CNY does not currently use blockchain technology because of its centralized structure, identification requirements, and transaction volume. Yet, Yaya Fanusie, a former CIA analyst and researcher at the Center for a New American Security, predicts that these projects will eventually converge. Once the BSN is fully operational, he argues it will play a key role in advancing China's broader goal of creating a Universal Digital Payments Network (Raud, 2021; Raud & MacKinnon, 2022).

China's leadership in CBDCs is also partly attributed to the U.S.'s lack of decisive action. Despite anticipation regarding the Federal Reserve's (FED) stance, the January 2022 report *Money and Payments: The U.S. Dollar in the Age of Digital Transformation* is still considering whether the U.S. should join the CBDC race and invites public feedback on the issue. While the U.S. possesses the technology to create a digital dollar, there is no consensus on how it would function or its relevance to the structural power of the dollar. In February 2021, the chairman of the FED stated, "We don't need to be first. We need to get it right" (Li, 2021, online), suggesting that the gains from China's pioneering efforts may not be substantial. This has sparked debate in the U.S., with some analysts warning that China needs neither to internationalize the RMB nor to liberalize its current account to export its CBDC technology and regulate emerging financial technologies globally (Hoffman, 2021).

In fact, there is also a critical strategic dimension: providing a competitive alternative to U.S. channels for processing cross-border payments. To downplay the global implications of the e-CNY, Chinese authorities have employed rhetorical strategies. In April 2021, Li Bo, then Deputy Governor of the PBoC, stated that e-CNY enables the market to determine which currencies are used in cross-border trade and

investment, rather than to replace the dollar as the world's predominant currency (Greene, 2021). In light of these "market selection" declarations, Cheng and Gao (2022, p. 220, our translation) indicate that the advent of CBDCs may transform the competition within the IMH for China:

The technological progress represented by CBDCs will become a major force in breaking the inertia of international reserve currencies. CBDCs have unparalleled advantages over traditional fiat currencies in areas such as cross-border payments and payment versus payment (PvP) transactions, and are expected to be a game-changer in reshaping the landscape. Since 1920, the US dollar's status as a reserve currency in the international system has continuously strengthened, creating a strong inertia in its use. Within this existing competitive system, it has indeed been difficult for the RMB to achieve significant breakthroughs. However, in the new global reshuffling of digital currencies, all nations' digital currencies will effectively return to the same starting line, and the digital RMB is expected to stand out thanks to its first-mover technological edge and its competitiveness in the digital economy².

To put it bluntly, the dissemination of the e-CNY endeavors to elevate its position within the IMH, mitigate the side effects of the structural power of the dollar discussed earlier, and bolster China's financial autonomy. In other words, investing in the digital version intends to increase both the attractiveness and competitiveness of the RMB relative to other central currencies, promote its international spread, and consequently minimize the impact of the "dollar bomb." This is not solely a monetary strategy but part of a broader effort to expand China's digital infrastructure and technological capabilities, as addressed in the following subsection.

b) *Digital Silk Road*

The first mention of the DSR appeared in 2015 in a precursor white paper titled *Vision and Actions on Jointly Building the Silk Road Economic Belt and the 21st-Century Maritime Silk Road*. Initially referred to as the "Information Silk Road," its goal was to enhance international connectivity by constructing digital infrastructure, primarily through expanding cross-border optical cables and satellite-based communication (NDRC, 2015). Approximately 137 countries have undertaken or planned projects (Nouwens, 2021),

² Original: 以央行数字货币为代表的科技进步将成为国际储备货币快速挣脱惯性的力量。央行数字货币在跨境支付和券款对付领域具有传统法币无法比拟的优势，料将成为重要破局者。1920年以来，美元在国际储备货币体系中的地位不断巩固，形成了强大的货币使用惯性，人民币在旧有的竞争体系中确实难以取得突破性进展。然而，在新一轮的数字货币全球大洗牌中，所有国家的数字货币都将重回同一起跑线，而数字人民币则有望凭借先发技术优势与数字经济竞争力脱颖而出。

resulting in global investments of around \$79 billion (Triolo et al., 2020). In short, the DSR aims to help Chinese state-owned companies and private firms penetrate BRI member countries to obtain benefits in the race for both emerging markets (Triolo et al., 2020) and international standards.

From Cheney's (2019) perspective, the DSR encompasses four interrelated areas, which we propose to support the dissemination of the e-CNY: infrastructure, technological development, e-commerce, and cyberspace governance. The first area involves substantial investments in digital infrastructure, such as 5G networks to increase internet speeds, submarine and terrestrial fiber optic cables, and data centers (Cheney, 2019; Mochinaga, 2021). The second area covers domestic investments in artificial intelligence (AI) for data filtering and cybersecurity, satellite navigation systems via BeiDou, and quantum computing, a promising technology for intelligence and encryption (Cheney, 2019).

These elements contribute to the e-CNY by enhancing the sophistication of China's digital ecosystem in terms of infrastructure and security. By promoting a network for data transmission linked to the e-CNY, China would not only increase its ability to monitor information but also improve its defense against external interference. As Fanusie (2021, p. 2) states, "China's digital currency is as much about data as it is about money." Furthermore, the Chinese government announced nearly \$1.4 trillion in investments between 2020 and 2025 to expand data centers and digital infrastructure, particularly in 5G and AI (USCC, 2021). Hence, the synergy between the e-CNY and the DSR builds a robust digital infrastructure and develops mechanisms to leverage it, thereby expanding Chinese influence and power (Hemmings, 2020).

The third area relates to e-commerce, specifically digital free trade zones and mobile payment networks. On one hand, these zones reduce international shipping costs in East Asia, with Malaysia's partnership with Alibaba as a notable example. Established in July 2017, this zone was "serving as an international logistics hub, providing auxiliary services such as training and finance, and providing online service platforms, including electronic customs clearing and commercial inspections." (Naughton, 2020, p. 35). As outlined by Naughton (2020), such partnerships create a digital common market with unified standards, likely strengthening China's position due to the volume of participants and transactions. If China tests its CBDC in these zones and improves trade efficiency, the e-CNY's appeal, credibility, and market acceptance could potentially rise, despite privacy concerns.

On the other hand, Beijing's subsidies and incentives to promote its mobile payment companies (Alipay and WeChat) through the DSR could further

benefit the e-CNY. While Alipay envisions expanding into Europe, Australia, and Asia through Chinese tourists traveling abroad, WeChat aspires to surpass local rivals and capture markets in Russia, India, and emerging economies in Southeast Asia (Triolo, 2020). The internationalization of these platforms might create a network of acceptance and infrastructure that Beijing could later utilize to promote the e-CNY, regardless of its status as a new payment method (Bansal & Singh, 2021). In other words, the forays of Chinese mobile payment players into the DSR may lay the groundwork for the PBoC's future dominance with the e-CNY.

Finally, the fourth emphasizes the establishment of international norms for cyberspace. China advocates for *cyber sovereignty*, i.e., the right of nations to determine their own development, regulations, and policies in the digital domain. This view contrasts with Western liberal rhetoric since it sets precedents for government intervention (Cheney, 2019). Nevertheless, China's leadership in the global CBDC debate may enable it to promote international regulatory frameworks and standards that align with its interests. Taking into account the possible repercussions for the dollar's centrality, this prospect has raised concerns among U.S. policymakers. Some analysts argue that the country is "missing in action" and must ensure its historical guiding role in coordinating standards for financial technology innovations (Raghuveera, 2020, online).

III. CONSEQUENCES OF CHINESE DIGITALIZATION

Kumar and Rosenbach (2020) describe three key benefits that China could gain from the e-CNY, especially in light of our hypothesis regarding its connection to the DSR. First, it would allow China to circumvent U.S. sanctions by utilizing an alternative settlement system via CIPS. Second, it could enhance China's influence by attracting foreign users to its technology, offering exclusive interoperability, and fostering dependency on its network. Third, China's access to vast amounts of data could provide it with an informational advantage, which critics argue might be used for political forecasting or to manipulate public opinion and electoral processes (Cheney, 2019; Hemmings, 2020; Mochinaga, 2021). Through the e-CNY and DSR, China is consequently perceived as exporting a system of digital surveillance characterized by real-time monitoring and censorship (Hemmings, 2020).

First and foremost, these speculations are largely exaggerated. Surveillance and the strategic use of data in the fourth industrial revolution are not exclusive to China, even though its *modus operandi* may have distinct characteristics. In the context of surveillance capitalism, Western countries also deploy

advanced infrastructures for social control, relying on companies to monitor behavior on social media, in financial transactions, and through mobile devices (Zuboff, 2019). The main difference in China is that much of this surveillance is openly conducted by the state, with the public well aware of the monitoring – and often supportive owing to the perceived security benefits. In fact, U.S. critiques of Chinese surveillance display a degree of cynicism, as they tend to overlook scandals such as the Snowden leaks, which exposed espionage and sabotage by the U.S. government for political and economic advantages.

In addition, our analysis indicates that the launch of the e-CNY does not alter the nature of the RMB per se in a way that justifies surpassing the dollar in the short term. Instead, it is likely to lead to a brief repositioning of the RMB within the IMH. Some argue that the e-CNY has no impact on dollar supremacy due to China's capital controls (USCC, 2021; Fullerton & Morgan, 2022), while others propose that its programmable nature could introduce new forms of liberalization, such as in Hong Kong's CNH market (Ekberg & Ho, 2021). However, the e-CNY merely digitizes the RMB and faces the same challenges (Aysan & Kayani, 2022; Paulson, 2020) in competing with the structural power of the dollar. Although CBDCs may transform cross-border payments by reducing intermediaries and liquidity issues (Bansal & Singh, 2021), there is no evidence suggesting a shift in global financial dominance toward the e-CNY.

According to a BIS report (2021), more fundamental factors for monetary internationalization – geopolitics, institutional credibility, financial openness, and the rule of law – are slow to undergo significant transformations.

Thus, the advent of CBDCs may accelerate changes to the configuration of reserve currencies, but may not change it dramatically over a short period. Regional patterns, where trade connections are tighter, and political pressures stronger, may instead evolve more rapidly. These tendencies already exist today, but a new CBDC issued in the region and with more attractive features compared with present versions of the national currency, could tip the balance towards the establishment of a new regional reserve currency (BIS, 2021, p. 18).

In line with this, we also believe that the connection between the e-CNY and DSR contributes to facilitating regional trade payments and accelerating Chinese e-commerce. Eichengreen et al. (2022) reveal that China was the largest supplier of imports for 70% of Asian countries and the main destination for 50% of them by 2022. In spite of the percentage of trade invoiced in RMB remaining stable since 2017, its absolute value has risen, particularly with Asian countries such as Cambodia, South Korea, Taiwan, and India. If integrated into regional trade programs, the e-

CNY could streamline RMB settlements and mitigate both transaction costs and the currency risks associated with using the dollar as an intermediary (Knoerich, 2021).

Hence, the spread of the e-CNY through the DSR is likely to significantly promote the RMB's internationalization, enhancing its status within the IMH and granting China greater independence. Trade invoicing has been the main driver of RMB internationalization, helping central banks accumulate reserves for last-resort liquidity (Gopinath & Stein, 2018; Eichengreen et al., 2022). This trajectory closely mirrors the approach taken by the U.S. in the 20th century to internationalize the dollar. Initially, the U.S. leveraged the dollar's use in foreign trade, followed by its adoption in private financial transactions, and ultimately for central bank reserves (Eichengreen, 2010). In light of Gopinath and Stein (2018), this widespread use of a currency creates a self-reinforcing cycle, which "begins with wanting to hold the currency in which one is paid, thus requiring safe assets in that currency, decreasing interest on these assets, incentivizing issuance, and thus pricing in that currency to hedge." (BIS, 2021, p. 17).

In the context of the BRI and DSR, the adoption of the e-CNY could further accelerate the recent surge in cross-border e-commerce. Qi (2023) observes that 30 BRI e-commerce partner countries accounted for 31.5% of China's cross-border e-commerce volume in 2022. By the end of that year, China's pilot digital trade zones had expanded to 165 zones across 31 provinces, representing 90% of the country's RMB 2.11 billion (US\$305.67 billion) e-commerce revenue (State Council, 2023). To promote the spread of the e-CNY within the BRI, China could offer commercial incentives, lower interest rates, and reduced transaction costs in regions where it has significant geopolitical influence, notably in the Asia-Pacific (Bansal & Singh, 2021).

IV. CONCLUDING REMARKS

The structural power of the dollar is essential for exercising American influence through economic sanctions. However, its overuse can lead to distortions and encourage nations to seek alternatives to this dominance. Since 2008, China has accelerated its efforts to internationalize the RMB and has recently turned to digitalization to attain more flexibility vis-à-vis the dollar's power. Although Chinese authorities claim that the e-CNY aims to restore state control over payments and ensure monetary stability, it also promises greater efficiency in cross-border payments at a lower cost. Given the CBDC's potential to revolutionize international settlements, some experts have raised concerns about whether e-CNY could threaten the supremacy of the U.S. dollar.

The e-CNY project should be seen as part of China's broader digital strategy within the DSR rather than in isolation. The four pillars of the DSR – infrastructure, technology, e-commerce, and governance – facilitate e-CNY adoption by strengthening China's digital ecosystem. Moreover, multilateral initiatives such as the Finance Gateway Information Services Co., mBridge, and the BSN improve interoperability and technical support for e-CNY. As a result, Kumar and Rosenbach (2020) identify three key advantages China derives from the e-CNY: 1) the ability to create a dependency network through CIPS, akin to the U.S.'s role with SWIFT; 2) the potential to expand political and economic influence, particularly in cyberspace; and 3) access to vast amounts of data for potential geopolitical purposes.

Yet the initiative faces significant structural challenges. Domestically, strict Chinese capital controls continue inhibiting the RMB's global reach. On the one hand, this policy has been critical in channeling the so-called "financialization with Chinese characteristics" toward an investment-driven growth model and preserving the country's autonomy (Nogueira, Guimarães, & Braga, 2019). On the other hand, it is counterproductive to the international use of the RMB since it restricts liquidity and limits the development of its financial system. Externally, the structural power of the dollar and its self-reinforcing position remain obstacles, albeit the relative delay of the U.S. in the CBDC race. While losses of relative power on a competitive frontier may occur, they do not necessarily imply a decline in the structural power of the dollar over the economy.

Thus, the self-reinforcing cycle of the dominant currency, the resistance to changes in the IMH, and the limit of its external use still constrain the RMB's internationalization, either in the physical or digital version. As long as e-CNY builds trust and credibility in the international community, its association along the BRI and DSR corridor may boost the RMB's internationalization in the short term through regional gains, particularly in e-commerce. This approach aligns with China's internationalization strategy of following the historical lessons of the dollar but will face strong external resistance. From the perspective of the U.S. establishment, any rival innovations that could potentially impact the dollar's preeminence must be neutralized.

REFERENCES RÉFÉRENCES REFERENCIAS

- Aysan, A. F., & Kayani, F. N. (2022). China's transition to a digital currency: Does it threaten dollarization? *Asia and the Global Economy*, 2 (1), 1-6. <https://bit.ly/3Lerf60>
- Bank for International Settlements (BIS). (2021). *Central bank digital currencies for cross-border payments: Report to the G20*. Basileia: BIS. <https://bit.ly/3C9RZCo>
- Bank for International Settlements. (2022). *Project mBridge: Connecting economies through CBDC*. <https://bit.ly/3U2zg3T>
- Bank of England. (2020). *Central bank digital currency: Opportunities, challenges and design*. Discussion Paper. <https://bit.ly/367Nqef>
- Bansal, R., & Singh, S. (2021). China's digital yuan: An alternative to the dollar-dominated financial system. *Carnegie Endowment for International Peace*. <https://bit.ly/3pA6BUD>
- Carneiro, R., & De Conti, B. (2022). Exorbitant privilege and compulsory duty: The two faces of the financialised IMS. *Cambridge Journal of Economics*, 46 (4), 735-752. <https://bit.ly/3RU9I5d>
- Central Bank Digital Currency (CBDC) Tracker. (2022). *Atlantic Council*. <https://bit.ly/3JV2PQA>
- Cheney, C. (2019). China's digital silk road: Strategic technological competition and exporting political illiberalism. *Pacific Forum, Working Paper (Issues & Insights)*, 19 (8), 1-23. <https://bit.ly/37d7WdL>
- Cheng, S., & Gao, X. (2022). *Shùzì jīngjì yǔ shùzì huòbì: Rénmínbì de xīn juésè*. Beijing: China Renmin University Press.
- China International Payment Service Corp. (2024). *CIPS*. <https://bit.ly/3ZZhOAW>
- Cohen, B. J. (2015). *Currency power: Understanding monetary rivalry*. Princeton: Princeton University Press.
- Cohen, B. J. (2016). Money, power, authority. In R. Germain (Ed.), *Susan Strange and the future of global political economy: Power, control and transformation* (pp. 167-187). London: Routledge.
- Daxue Consulting. (2024). *Payment methods in China: How China became a mobile-first nation*. <https://bit.ly/3Nhfj5p>
- De Conti, B., & Prates, D., & Plihon, D. (2013). O sistema monetário internacional e seu caráter hierarquizado. In M. Cintra & A. Martins (Eds.), *As transformações no sistema monetário internacional* (Cap. 1, pp. 23-84). Brasília: IPEA.
- Economic Diplomacy Initiative. (2020). *Digital currency wars: A national security crisis simulation*. Belfer Center for Science and International Affairs, Harvard Kennedy School. <https://bit.ly/35KbOC3>
- Eichengreen, B. (2010). The renminbi as an international currency. *Policy Paper*. <https://bit.ly/3ChDI6l>
- Eichengreen, B. (2011). *Privilégio exorbitante: A ascensão e queda do dólar e o futuro do sistema monetário internacional*. Rio de Janeiro: Elsevier.

18. Eichengreen, B., Macaire, C., Mehl, A., Monnet, E., & Naef, A. (2022). Is capital account convertibility required for the renminbi to acquire reserve currency status? *Centre for Economic Policy Research Press Discussion Paper Series, 17498*. <https://bit.ly/3eAYwME>
19. Ekberg, J., & Ho, M. (2021). A new dawn for digital currency: Why China's eCNY will change the way money flows forever. *Oliver Wyman*. <https://owy.mn/3MjaUNN>
20. Elston, T.-B. (2023). China is doubling down on its digital currency. *Foreign Policy Research Institute*. <https://bit.ly/4eSQQ2c>
21. Fanusie, Y. (2021). Testimony before the US-China economic and security review commission. *U.S.-China Economic and Security Review Commission*. <https://bit.ly/3uDXbll>
22. Federal Reserve System. (2022). *Money and payments: The U.S. dollar in the age of digital transformation*. <https://bit.ly/3vIXeFS>
23. Fullerton, E., & Morgan, P. (2022). The People's Republic of China's digital yuan: Its environment, design, and implications. *Asian Development Bank Institute Discussion Paper Series, 1306*, 1-30. <https://bit.ly/3tor3bS>
24. Gopinath, G., & Stein, J. (2018). Banking, trade, and the making of a dominant currency. *National Bureau of Economic Research, Working Paper, 24485*, 1-67. <https://bit.ly/3pzc2Ta>
25. Gou, M. Y. (2024, May 31). Shùzì rénminbì shìdiǎn zài jīnyībù. *Xinhua Wang*. <https://bit.ly/4gUNUE1>
26. Greene, R. (2021). Beijing's global ambitions for central bank digital currencies are growing clearer. *Carnegie Endowment for International Peace*. <https://bit.ly/3vCUVER>
27. Greenwald, M. (2021, April 13). What happens to the dollar if the Chinese digital yuan goes global? *Belfer Center for Science and International Affairs, Harvard Kennedy School*. <https://bit.ly/35upBgn>
28. Guzzini, S. (2000). Strange's oscillating realism: Opposing the ideal – and the apparent. In T. C. Lawton, J. N. Rosenau, & A. C. Verdun (Eds.), *Strange power: Shaping the parameters of international relations and international political economy* (Cap. 12, pp. 215-228). Aldershot: Ashgate.
29. Helleiner, E. (2005). Structural power in international monetary relations. *European University Institute - EUI Working Papers, Robert Schuman Centre*, 1-15. <https://bit.ly/34Y3xdQ>
30. Hemmings, J. (2020). Reconstructing order: The geopolitical risks in China's digital silk road. *Asia Policy, 15* (1), 5-21.
31. Hoffman, S. (2021, April 15). Testimony before the US-China Economic and Security Review Commission (USCC): Hearing on an assessment of the CCP's economic ambitions, plans, and metrics of success. *USCC*. <https://bit.ly/40fi679>
32. International Monetary Fund (IMF). (2024). *Currency composition of official foreign exchange reserves (COFER)*. <https://bit.ly/3XsoUci>
33. Kirshner, J. (1995). *Currency and coercion: The political economy of international monetary power*. Princeton: Princeton University Press.
34. Knoerich, J. (2021). China's new digital currency: Implications for renminbi internationalization and the US dollar. In N. Bilotta & F. Botti (Eds.), *The (near) future of central bank digital currencies: Risks and opportunities for the global economy and society* (Cap. 7, pp. 145-166). Bern: Peter Lang. <https://bit.ly/3BCuqlA>
35. Kumar, A., & Rosenbach, E. (2021, May 20). Could China's digital currency unseat the dollar? American economic and geopolitical power is at stake. *Foreign Affairs*. <https://fam.ag/3pHH5wl>
36. Li, D. (2021, October 20). China's digital yuan is aimed at home, not Washington. *Foreign Policy*. <https://bit.ly/3BD3Sm4>
37. MacKinnon, E. (2022, March 8). Is SWIFT's joint venture with the People's Bank of China related to the digital yuan? *DigiChina, Stanford University*. <https://stanford.io/36pcjla>
38. Mochinaga, D. (2021, June 10). The digital silk road and China's technology influence in Southeast Asia. *Council on Foreign Relations*. <https://on.cfr.org/3pKhEdL>
39. Murray, R. (2020, September). *Understanding China's digital yuan*. Foreign Policy Research Institute, Asia Program. <https://bit.ly/3qUiV2W>
40. Murray, R. (2022, February 11). *The U.S. is facing a Sputnik moment in the international economy*. Foreign Policy Research Institute. <https://bit.ly/3MpUkMm>
41. National Development and Reform Commission. (2015, March 28). *Vision and actions on jointly building Silk Road Economic Belt and 21st-Century Maritime Silk Road*. Ministry of Foreign Affairs and Ministry of Commerce (PRC). <https://bit.ly/3hJStUI>
42. Naughton, B. (2020). Chinese industrial policy and the digital Silk Road: The case of Alibaba in Malaysia. *Asia Policy, 15* (1), 23-39. <https://bit.ly/3RCCMOo>
43. Nogueira, I., Guimarães, J., & Braga, J. P. (2019). Inequalities and capital accumulation in China. *Brazilian Journal of Political Economy, 39* (3), 449-469.
44. Nouwens, M. (2021, February). China's digital Silk Road: Integration into national IT infrastructure and wider implications for western defense industries. *International Institute for Strategic Studies (IISS), Research Papers*. <https://bit.ly/37240MB>

45. Paulson, H. (2020, May 19). The future of the dollar: U.S. financial power depends on Washington, not Beijing. *Foreign Affairs*. <https://fam.ag/3QXxNrt>
46. People's Bank of China. (2021). *Progress of research & development of e-CNY in China*. Working Group on E-CNY Research and Development. <https://bit.ly/2YkyvVX>
47. Qi, X. (2023, November 28). "Silk Road" e-commerce flourishing. *Global Times*. <https://bit.ly/4dJZPBD>
48. Raghuvvera, N. (2020). Design choices of central bank digital currencies will transform digital payments and geopolitics. *Atlantic Council*. <https://bit.ly/3zRxBai>
49. Raud, M. (2021, July 2). Knowledge base: Blockchain-based service network (BSN, 区块链服务网络). *DigiChina, Stanford University*. <https://stanford.io/378wHaR>
50. Raud, M., & MacKinnon, E. (2022, March 8). China's digital currency and blockchain network: Disparate projects or two sides of the same coin? *DigiChina, Stanford University*. <https://stanford.io/3igoELa>
51. Society for Worldwide Interbank Financial Telecommunication (SWIFT). (2024, September). *RMB tracker: Monthly reporting and statistics on Renminbi (RMB) progress towards becoming an international currency*. <https://bit.ly/3N890Bg>
52. State Council. (2023). *China's cross-border e-commerce pilot zones cover 31 provincial-level regions*. <https://bit.ly/480cYp6>
53. Strange, S. (1987). The persistent myth of lost hegemony. *International Organization*, 41 (4), 551–574. <https://bit.ly/3lrJ0pU>
54. Strange, S. (1989). Toward a theory of transnational empire. In J. N. Rosenau & E.-O. Czempiel (Eds.), *Global changes and theoretical challenges* (pp. 161–176). Lexington Books.
55. Strange, S. (1994). *States and markets*. Bloomsbury Academic.
56. Tavares, M., & Melin, L. (1997). Pós-escrito 1997: A reafirmação da hegemonia norte-americana. In M. Tavares & J. L. Fiori (Eds.), *Poder e dinheiro: Uma economia política da globalização* (pp. 55–86). Vozes.
57. Torres, E. (2018). Guerra, moeda e finanças. In J. Fiori (Ed.), *Sobre a guerra* (pp. 312–350). Vozes.
58. Torres, E. (2019). A bomba dólar: Paz, moeda e coerção. *Texto para Discussão, n. 006*. Instituto de Economia da UFRJ. <https://bit.ly/3iC1wrb>
59. Triolo, P., Allison, K., Brown, C., & Broderick, K. (2020). *The Digital Silk Road: Expanding China's digital footprint*. Eurasia Group. <https://bit.ly/3Clo7Rv>
60. U.S.-China Economic and Security Review Commission (USCC). (2021, November). The Chinese Communist Party's economic and technological ambitions: Synthetic bio, new mobility, cloud computing, and digital currency. *Report to Congress, chapter 2, section 2*. <https://bit.ly/3KU Pc0Y>
61. Wee, R. (2023, July 19). China's digital yuan transactions seeing strong momentum. *Reuters*. <https://bit.ly/3NjPnq2>
62. Zuboff, S. (2019). *The age of surveillance capitalism*. Public Affairs.

