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Renminbi Internationalisation: China's Central Bank Digital Currency

By Elgin Chan

SYNOPSIS

China's ambition to internationalise the renminbi (RMB), to reduce its reliance on the US dollar (USD), and to wean itself off the US-led international monetary system, can be bolstered by the deployment of its digital currency. While its Central Bank Digital Currency (CBDC) initiative is still in its early phases, China has emerged as a forerunner, giving it considerable influence over the standardisation of digital payment infrastructure. However, Beijing needs to tackle a number of challenges with appropriate confidence building and policy measures.

COMMENTARY

China's Central Bank Digital Currency Initiative

Beijing has been experimenting with its digital currency (e-CNY) since 2014, and the prototype was developed in 2016. Subsequently, in 2017, the People's Bank of China (PBoC) announced its e-CNY research and innovation programme, in which a large number of domestic commercial banks, and technology and telecommunication companies participated.

In 2019, China reached a milestone when it became the first major country to conduct a [wide-scale CBDC pilot programme](#) across multiple regions, including the region of Beijing-Tianjin-Hebei, and the Pearl River Delta. The pilot programme was progressively expanded to include [23 cities](#) across China.

Since its pilot in 2019, China's CBDC initiative has seen tremendous success. According to the PBoC, by the end of 2021: (i) the e-CNY had been used in more than 1.2 million instances including for utility payments, government services, retail services, and even [salary payments](#); (ii) the number of unique users of e-CNY app

had increased to [261 million](#); (iii) the e-CNY was accepted by over 8 million businesses; and (iv) the e-CNY was used in transactions totalling [RMB87.6 billion \(US\\$13.8 billion\)](#).

Another pivotal moment was reached during the Beijing 2022 Winter Olympics, when foreign visitors were allowed to use the e-CNY in transactions via cellphones and wearable payment devices. This pilot was relatively successful, which saw daily transactions of more than [RMB2 million \(US\\$315,000\)](#) daily.

More recently, the PBoC joined the [Multiple CBDC \(m-CBDC\) Bridge](#), a cross-border payment project being run in collaboration with the Bank for International Settlements (BIS) Innovation Hub, the Reserve Bank of Australia, the Monetary Authority of Singapore, and the South African Reserve Bank. The goal of this project is to provide an environment in which central banks can investigate the potential of [Distributed Ledger Technology](#) (DLT) to reduce some pain points in present cross-border financial transfers.

The PBoC's CBDC initiatives are the most sophisticated amongst those of all the central banks involved in the project. In fact, from 15 August to 23 September last year, China's e-CNY stood out in the world's largest cross-border CBDC experiment to date, processing more than [160 cross-border payments](#) and foreign exchange transactions totaling more than RMB150 million.

Despite its initial success, China's cross-border CBDC initiatives require more work to achieve its ultimate aim of RMB internationalisation. Indeed, according to the PBoC, the outstanding level of e-CNY at the end of 2022 stood at just [RMB13.61 billion \(US\\$2 billion\)](#), or just 0.13 per cent of outstanding money supply.

RMB Internationalisation Through China's Central Bank Digital Currency

To wean itself off the US-led international monetary system, and to internationalise its currency, China will need to not only reduce its reliance on the USD, but also to veer away from the US-led Society for Worldwide Interbank Financial Telecommunication (SWIFT) system. The ideal way to achieve both requirements would be to provide greenfield payment infrastructures like CBDC, which enables the transfer of funds between a payer and a payee, while simultaneously working out agreements and processes for trading its e-CNY internationally.

Considering that CBDCs are a novel technology with no worldwide standards, China's PBoC has been collaborating with regulators from various countries and global financial organisations to develop standards for them. Indeed, over the coming years, China's government-backed national programme Blockchain Service Network (BSN) has actively collaborated with a number of international banks and organisations, and technology corporations to develop a framework to [standardise](#) the cross-border circulation of stable coins and CBDCs. Such partnerships have equipped Beijing with greater control over the rules and regulations for cross-border CBDC transactions.

Furthermore, the advantages of CBDCs, such as lower-cost, and real-time cross-border transfers, can make BSN's network a compelling payment alternative to the existing payment networks. For example, depending on the e-CNY's acceptance

networks, its holders may be able to transmit money internationally by circumventing traditional payment networks, such as SWIFT, making cross-border transactions quicker and more cost-effective.

Moreover, China has a natural advantage in its population size and economic prowess, which allows it to build a scalable model for its e-CNY. Indeed, Beijing has enlisted two prominent partners, China Mobile and UnionPay, for its BSN. China Mobile has over [975 million](#) global customers, while UnionPay is the world's largest card company, with over [8.4 billion](#) cards issued, and is accepted in 179 countries, making the e-CNY more accessible to those customers.

To further expand the global reach of its e-CNY, Beijing has further engaged [Alipay, and WeChat Pay](#), which already have well-established digital payment networks internationally. With [1.3 billion and 900 million users](#), respectively, Alipay and WeChat Pay are the world's top two mobile payment systems, which will undoubtedly strengthen Beijing's ambition to promote the utility of the e-CNY.

In comparison to China, other major central banks' CBDC initiatives are at a very nascent stage. Indeed, all G7 economies are still in the early stages of CBDC development, with the US' White House encouraging the Federal Reserve to continue its ongoing [CBDC research and experimentation](#) only last September.

Challenges to China's Central Bank Digital Currency Initiatives

Although China is one of the CBDC forerunners in terms of development, usability, and standard setting, it faces several challenges that may hinder the e-CNY's success.

First, China's capacity to successfully promote the use of its e-CNY will be dependent on its ability to remove capital controls while maintaining international confidence in its institutions. Despite Beijing's best efforts to liberalise its financial markets to become the [world's second largest grouping of equity and bond markets](#), it remains more restrictive than those of Western nations.

Additionally, China lacks expertise in dealing with financial crises. When one occurs, it may lead to a severe loss of confidence in its markets. Furthermore, apart from China's draconian zero-Covid policies (now lifted), the recent crackdowns on its big technology companies and property developers have brought serious concerns to investors' confidence. Therefore, Beijing must establish broader market-oriented policies to support the steady rise of cross-border capital flows.

Second, China must seek ways to motivate other countries to utilise the e-CNY for international commerce and investment. Unless presented with a superior payment system alternative, countries and private organisations will continue to use the *status quo* payment system, i.e., SWIFT. To boost the use of e-CNY, Beijing must continue to collaborate with other countries in the area of CBDC and undertake measures that make cross-border e-CNY transactions more cost-efficient and straightforward.

Finally, the global CBDC infrastructure is still in its infancy, with around [90 per cent](#) of the world's central banks exploring CBDC programmes in some form. China, as one

of the initiative's pioneers, must take the lead in the development of digital currency infrastructure while simultaneously encouraging the use of e-CNY abroad.

Indeed, Beijing can take the lead in assisting its counterparts develop their CBDCs and setting standards for the global digital payment system through the BSN. Collaborations with foreign central banks via the m-CBDC Bridge, as well as involvement with Alipay, and WeChat Pay, will afford Beijing an advantage over other countries.

Consequently, in order for the RMB to gain greater international prominence, Beijing must: (i) wean itself of its dependence on the USD by promoting the use of its own currency for cross-border commerce and investments; (ii) develop parallel international payment systems in the form of Cross-border Interbank Payment System (CIPS) and BSN as an alternative to SWIFT; and (iii) collaborate with its counterparts to establish an all-encompassing digital payment infrastructure, which allows Beijing greater influence in its standard-setting.

Elgin Chan is a PhD student at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University (NTU), Singapore. Chan's research interests include international political economy, international finance institutions, and global financial architecture.

S. Rajaratnam School of International Studies, NTU Singapore
Block S4, Level B3, 50 Nanyang Avenue, Singapore 639798
T: +65 6790 6982 | E: rsispublications@ntu.edu.sg | W: www.rsis.edu.sg