

**CHINA'S CENTRAL BANK DIGITAL
CURRENCY: IMPACT AND
POLICY IMPLICATIONS**

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Executive Summary

1. China is the first among major economies to experiment with a central bank digital currency (CBDC) or Digital Currency/Electronic Payment (DC/EP), with pilot tests in several Chinese cities but without formally announcing its launch.
2. Digital currency is basically an electronic form of *fiat* money. The use of a CBDC would raise fundamental issues that go beyond payment systems. Depending on the design elements or characteristics of the CBDC, many forms of the digital currency are possible, with different implications for payment systems, monetary policy transmission and financial stability.
3. CBDC could enrich the central bank's monetary policy toolkit, for instance, by allowing for a strengthening of pass-through of policy rate changes to other interest rates or addressing the zero lower bound on interest rates. Some studies have shown that monetary policy implications are likely more pronounced if the CBDC emerges as an attractive asset to hold, relative to bank deposits.
4. China's CBDCs could also have implications for financial stability. If the CBDC were to pay interest, there could be a shift in deposits towards the digital currency, facilitating a bank run particularly in times of financial stress.
5. Given China's rapid progress in digital innovative payments, the DC/EP could take off in a major way, displacing physical cash in the economy in the longer term. As of now, the digital yuan will circulate alongside the physical yuan and focus on facilitating payment, rather than replacing bank deposits or other financial products.
6. The People's Bank of China's ability to monitor DC/EP transactions could also help policymakers target fiscal policy more effectively to meet its policy goal. As the DC/EP would enable broader visibility of money flows in the economy, it could allow the government to target spending and put purchasing power in selected wallets with greater efficiency.

7. At the global level, the digitalisation of the yuan has the potential of accelerating the use of the Chinese currency in international payment transactions. This stems from China's desire to prevent its currency from being 'dollarised'. However, there are still constraints on RMB in international transactions, the most important of which is China's capital control and the limited currency conversion on the capital account.
8. Interest in central bank digital currencies has risen in recent years. However, the research debate on this is only in its infancy as the topic is still new and the construction of the CBDC has not crystalised in most economies yet. Any steps towards the possible launch of a CBDC should therefore be subject to careful consideration.

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Sarah CHAN*

A Primer on China's Digital Renminbi

- 1.1 China is leading the way among major economies in trialling a Central Bank Digital Currency (CBDC). In August 2020, the People's Bank of China (PBOC) became one of the first major central banks to conduct a trial run of its 'Digital Currency/Electronic Payment' (DC/EP) in four cities and pilot areas including Shenzhen, Suzhou, Xiong'an New Area and Chengdu, with plans to expand the tests to major metropolises. One major test is slated for the 2022 Beijing Winter Olympics. The PBOC and major state-owned commercial banks are leading the pilot project in cooperation with telecom companies in order to test various forms of use. The testing pace is likely to accelerate in 2021, with the experiments extended to the Greater Bay Area to include two offshore Renminbi (RMB) hubs — Hong Kong and Macau.
- 1.2 Unlike crypto-currencies like the Bitcoin which do not have legal standing as a currency, the digital RMB will be legal tender in the same way as physical cash; holders will be able to meet, for example, tax liabilities using the digital currency, which is an electronic form of *fiat* money. Yet, "digital currency" is not new as most central bank money is already "digital". All commercial bank deposits or reserves with the central bank represent digital claims (monetary value stored electronically). In China, digital money already exists in the form of bank reserves at the PBOC. It also exists in the form of household and corporate deposits at banks and is far larger than cash in circulation.¹

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¹ Paterson, Stewart. 2020. "The digital Yuan and China's potential financial revolution: A primer on Central Bank Digital Currencies (CBDCs)", Hinrich Foundation. Report available at <<https://www.hinrichfoundation.com/media/2kybhumh/hinrich-foundation-white-paper-digital-yuan-and-china-s-potential-financial-revolution-july-2020.pdf>> (accessed 4 April 2021).

- 1.3 Given the rapid pace of digital change and the speed of adoption of new payment methods by Chinese consumers, the e-CNY, as commonly referred to in China, has the potential of replacing cash entirely in the longer term. With new digital payment offerings by fintech startups or big tech companies, it should come as no surprise if the CBDC were to replace a huge portion of the physical cash economy. Digital wallets, in time, could also obviate some of the need for electronic payment systems such as Alipay.² CBDC could also favour financial inclusion, as cash may be difficult to obtain and in underpopulated and rural areas; financial inclusion may improve as the majority of the population shifts to digital forms of money.
- 1.4 Traditionally, money issued by the central bank has three major roles – medium of exchange, a stable unit of account and a safe store of value. The CBDC is the next milestone in the evolution of money. The characteristics built into the design of the CBDC will determine how different, or not, it will be from existing forms of money or near money. Differentiation between the CBDC and existing forms of money will depend on the design elements, which in turn will determine the CBDC’s efficacy as a payment system or store of value and creating a wide dispersion of potential outcomes. At the current stage, the digital yuan will circulate alongside the physical yuan and focus on facilitating payment for now, rather than replacing bank deposits or other financial products.
- 1.5 The PBOC has not released any white paper on DC/EP’s issuance plan or other technical details but some lectures, papers and other materials by some PBOC officials reveal various basic characteristics and a mechanism (Table 1). Initially, the DC/EP will operate on a “two-tier system”, with the PBOC distributing the currency to domestic commercial banks who will then pass it on to customers, namely, individuals and businesses. This approach, with the intermediaries providing services to the public, has the advantage of reducing the risk of financial disintermediation and crowding out effect on the deposits of commercial banks.

² With the launch of the DC/EP, the digital currency will be distributed to the e-wallets of users by the commercial banks, thus setting up payments channels that circumvent Alipay and WeChat Pay. The Chinese government hopes to use the digital currency as a means to reassert state control over its fintech industry and a vast e-payments market dominated by two huge private companies – Ant Group and Tencent.

TABLE 1 DC/EP BASIC CHARACTERISTICS AND MECHANISM

Legal tender	Recognised by law as a means to settle a debt or make payment
Digital format	Can be used through digital wallets
Retail-type	Can be used as an alternative to cash for small payments
Two-tiered operating system	Issued by PBOC and circulated through commercial banks and digital payments platforms run by China's Big Tech firms (e.g. Alipay) to individuals' digital wallets
Manageable anonymity	Confidentiality determined by system design, bank secrecy and data protection rules
Loosely tied to savings account	Payment possible without using savings account
No interest paid	Exact replica of physical cash but afford greater convenience to individuals and businesses in handling electronic cash transactions

Source: Takuma Yatsui, "Implications of China's Digital Yuan Initiative – Potential Impact and Future Focal Points", *Mitsui & Co. Global Strategic Studies Institute Monthly Report*, November 2020.

- 1.6 Further, users of the currency will hold a digital wallet on their phones or electronic devices to transact for goods and services using the electronic currency. From a technology standpoint, the DC/EP will be based on a centralised ledger operated by the PBOC, in contrast to crypto-currencies, which rely on a decentralised ledger. The records of each transaction will most likely be kept centrally by the PBOC.³

An Assessment of the Potential Implications for the Economy

- 2.1 The feasibility of central banks issuing their own *fiat* versions of digital currencies has been the focus of a growing debate in recent years. For China, the PBOC began its research on the digital RMB in 2014 and is experimenting with the DC/EP before its formal launch. For now, the priority of the DC/EP is to partially digitalise currency in circulation domestically and not to be traded on an exchange. The DC/EP is the first and somewhat revolutionary step towards the digitisation of the RMB.
- 2.2 Over time, the authorities could gradually enlarge its monetary functions from a single payment tool to a safe store of value and/or even a new tool in the monetary policy toolkit. It would thus be pertinent to consider not just the ramifications of its current form but also the potential economic impact based on the modalities in which the DC/EP may evolve.

³ For a discussion on the technology underlying the digital currency, refer to Liu Bojian and Bert Hofman, "A Digital RMB: Plans, Features and Implications", *EAI Background Brief*, No. 1519, 2020.

Banking sector

- 2.3 The introduction of the CBDC could have profound consequences for the banking system. As things currently stand, the PBOC will use commercial banks to distribute CBDC to users, issuing them to commercial banks against reserves deposited at the central bank.
- 2.4 If the PBOC levies an interest rate on the CBDC, it could potentially remove the effective lower bound on interest rates, providing policymakers with greater flexibility in stimulating economic activities. Goodfriend (2016), Kimball and Agarwal (2015) and Rogoff (2016) all suggest that replacing cash with a CBDC could make it easier to set a negative rate on central bank money and thus alleviate the lower bound on interest rates.⁴
- 2.5 However, a key caveat is that as the CBDC is expected to only complement rather than substitute cash and bank deposits, there could still be a limit to how effective this negative interest rate is transmitted. If a negative interest rate on CBDC was introduced at a large enough magnitude, economic agents could end up choosing to hold physical cash or deposits instead of the CBDC. Negative returns on currency holdings could also prove to be unpopular with the public as it penalises savers.⁵ Such a measure amounts to financial repression and negative interest rates might prompt the introduction of capital controls to avoid flight to higher yielding assets.
- 2.6 However, given that central banks have traditionally used interest rates to stimulate the economy, it is arguably better to use CBDC instead of quantitative easing that expands the central bank's balance sheet. Negative interest rates have been shown to have a positive effect on the economy by lowering the funding costs and boosting asset prices. An easing of financial conditions support credit creation and economic

⁴ Goodfriend, Marvin. 2000. "Overcoming the Zero Bound on Interest Rate Policy", *Journal of Money, Credit, and Banking*, 32, 1007-1035; Agarwal, R and Kimball, M. 2015. "Breaking through the Zero Lower Bound", IMF Working Paper No. 15-224. Washington: International Monetary Fund; Rogoff, Kenneth. 2016. *The Curse of Cash*. Princeton, NJ: Princeton University Press.

⁵ A yield-bearing CBDC with universal access would appear to help central banks overcome the zero lower bound on interest rates. Physical cash would also need to be actively abolished by the authorities to make the negative interest rates work.

activity, while the resulting decline in risk aversion increases asset prices and expected future income and consumption through the wealth effect.⁶

- 2.7 A common concern when lowering the base rate is the financial health of the banking sector. Jobst and Lin (2016) argue that a higher lending volume balances out lower margins but how far the interest rate can drop is unclear. Therefore, they suggest using credit easing measures in correspondence with this to mitigate risks to banks' profitability.⁷ Arteta et. al (2018) postulated that negative interest rates add monetary stimulus to the economy while also highlighting the potential threat this poses to the financial health of the banking industry by reducing net interest margins.⁸

Monetary policy

- 2.8 China's DC/EP is designed to avoid disrupting core central banking functions or competing with other financial products. Hence, there is unlikely to be any impact on China's monetary policy implementation. Instead of a fractional reserve system used in the traditional banking system, the Chinese CBDC would require financial institutions to maintain a 100% reserve ratio. As a result, there would not be any money multiplier as the deposits would not be used for lending. The DC/EP would thus not likely have any impact on the existing monetary policy of the PBOC.
- 2.9 Monetary policy implications are likely more pronounced if the CBDC emerges as an attractive asset to hold, relative to bank deposits. It may be worthwhile to consider whether CBDC should be paid interest at a rate similar to other risk-free assets such as government bonds. If it is not paid interest, the CBDC would be analogous to physical cash, having a constant nominal value. This remuneration aspect would have an important bearing on how it affects monetary policy. The interest rate on

⁶ In principle, a negative nominal interest rate should encourage consumption by making it costly for households to maintain cash positions.

⁷ Jobst, Andreas and Lin, Huidan. 2016. "Negative Interest Rate Policy (NIRP): Implications for Monetary Transmission and Bank Profitability in the Euro Area", International Monetary Fund Working Paper 16/172.

⁸ Arteta, Carlos, M Ayhan Kose, Marc Stocker and Temel Taskin. 2018. Implications of Negative Interest Rate Policies: An Early Assessment. *Pacific Economic Review* 23(1), 8-26.

CBDC would serve as the primary tool of monetary policy. In particular, policymakers would be able to push market interest rates to below zero in response to a severe adverse shock, providing the central bank with an appropriate degree of monetary accommodation without resorting to measures aimed at modifying the size or composition of its balance sheet—often referred to as quantitative easing (QE) or credit easing.⁹

- 2.10 The interest rate on CBDC could also improve the transmission mechanism by which policy rates impact market rates. Crucially, the central bank could control the rate on the CBDC, the first stage of the monetary transmission mechanism which is the setting of the policy instrument – either the interest rate on, or quantity of, electronic central bank money in the secondary market. The central bank could use the interest rate paid on CBDC balances, and the expectation thereof, to guide rates in the rest of the economy. It could also vary the aggregate quantity of the CBDC as an (operationally) independent instrument to stimulate the economy.¹⁰
- 2.11 In addition to potentially changing the structure of interest rates in the economy, several features of the CBDC could affect the extent of pass-through between changes in the policy rate to lending rates for commercial bank money. For a given change in the policy rate, larger changes in the deposit and wholesale rates would mean a larger impact on banks’ funding costs, all else equal, and consequently larger impact on loan rates.¹¹ The increased sensitivity of both funding costs and lending rates to changes in the policy rate could act to strengthen the bank lending channel.
- 2.12 A universally accessible CBDC would most likely strengthen the impact of changes in the policy rate on the real economy, predominantly through increased pass-through from policy rates to other interest rates on the economy. If households consider CBDC to be an alternative to commercial bank deposits, banks would have less scope for independently setting the interest rate on retail deposits. For instance,

⁹ The ZLB (zero lower bound) is a problem that occurs when the short-term nominal interest rate is close to zero, and due to the nature of fiat money, it limits the central bank's ability to stimulate the economy. Therefore, central banks have had to explore other options.

¹⁰ BOE (Bank of England) 2018.

¹¹ Ibid.

banks would find it harder not to increase deposit rates in tandem when the central bank was raising the CBDC rate. The presence of an attractive CBDC would put pressure on commercial banks to raise their retail deposit rates to avoid losing retail funding. As such, a change in the policy rate could be more directly transmitted to bank depositors.¹²

2.13 Banks are also crucially involved in money creation, a key part of the bank lending channel. Currently, banks lend by issuing new deposits, in effect creating new money and purchasing power. With the introduction of the CBDC, banks can continue to make loans by issuing deposits, thus strengthening the bank lending channel. A universally accessible CBDC might also enable greater competition in the provision of credit. CBDC could allow non-bank institutions to make loans more easily, assuming non-banks would now have the option to hold funds at the central bank, in the form of CBDC. The additional competition in credit provision may make the pass-through from policy rates to lending rates more complete.¹³ This may however change if deposit rates are above policy rates. In this case, the net interest margins of the banking sector could be squeezed, thereby constraining the ability of banks to lend and weakening the bank lending channel.

2.14 To the extent that CBDC increases financial inclusion, monetary policy transmission could also strengthen. When financial inclusion is low, a large share of the money stock is typically accounted for by currency in circulation, with many households saving in cash “under the mattress”. As financial inclusion increases, a growing share of broad money is likely to be made up of interest-bearing bank deposits. Given that the incentives for saving (and the cost of borrowing) are affected by interest rates, greater financial access implies that a bigger share of economic activity comes under the sway of interest rates, making them a more potent tool for policymakers.¹⁴

¹² BIS (Bank for International Settlements). March 2018. *Central Bank Digital Currencies*.

¹³ BOE May 2018. *Broadening narrow money: monetary policy with a central bank digital currency*, Staff Working Paper No. 724.

¹⁴ Mehrotra, Aaron and James Yetman. 2014. “Financial Inclusion and Optimal Monetary Policy”, Bank for International Settlements Working Paper, No. 476, December.

- 2.15 A related issue is whether non-bank and informal financial institutions are less sensitive to policy interest rate changes than traditional commercial banks.¹⁵ In developing countries like China, informal financial institutions such as Fintech lending platforms already play a significant role. If these institutions do not rely on wholesale funding and have other ways of intermediating between savers and borrowers, then the central bank might face significant challenges to the effectiveness of monetary policy transmission.
- 2.16 In theory, retail CBDCs could be interest bearing, influencing monetary policy transmission. However, since CBDC would complement cash rather than replace it, the monetary policy effects might be contained in practice. A former PBOC official suggested that the digital yuan could be programmed in such a way as to target the money supply, reduce the time-lag in monetary policy transmission and support the implementation of the monetary policy. As such, the digital RMB could still be considered as a potential tool in the PBOC's monetary toolbox, despite the discount facilities remaining as the main tools for China's monetary policy.¹⁶
- 2.17 The literature on CBDC is growing but still nascent and there remains a wide range of questions that still need to be explored. The possible benefits to the monetary policy are recognised but this depends on the design elements of the CBDC. Should a CBDC be a very close substitute for commercial bank deposits, it could strengthen the pass-through of the policy rate to money and lending markets.
- 2.18 However, it could also frustrate the central bank's monetary policies as banks' deposit bases may be reduced, making it more difficult to extend credit to support economic activity which the central bank may try to promote especially during an economic downturn. It also increases the speed of a digital run on the banking sector in times of financial stress, since remuneration increases the potential for greater disintermediation of the banking system by increasing the incentive for households and businesses to shift large amounts of money into the CBDC. While it is not certain that this risk would necessarily be increased under a CBDC, the authorities

¹⁵ Prasad, Eswar. April 2018. "*Central Banking In a Digital Age: Stock-Taking and Preliminary Thoughts*", Hutchins Centre on Fiscal and Monetary Policy at Brookings.

¹⁶ Yao Qian, *A Glimpse of Digital Currency*. China Finance Publish House (Beijing: 2018).

could manage such a risk by introducing a notice period for large CBDC withdrawals or imposing fees on unusually large cash balances to discourage large-scale runs to cash.¹⁷

Financial stability

- 2.19 With the introduction of the DC/EP, banks may begin to lose deposits as the digital currency replace banks' main source of funding, causing banks to rely more on costly and less stable wholesale funding and possibly restricting lending and credit supply in the economy. However, some studies have shown that such a scenario of financial disintermediation is not considered likely, especially in the short to medium term.
- 2.20 For instance, the CBDC would not be a perfect substitute for bank deposits and would not offer many of the services that deposit accounts with commercial banks do, such as overdrafts.¹⁸ Furthermore, banks could also respond to the competition from CBDC on price terms, offering a higher return to maintain their deposit base.
- 2.21 In China, the PBOC has carefully considered the possibility of disintermediation in the design of the DC/EP. As it does not pay any interest on the CBDC, there is no incentive for the public to draw large amounts of money from bank accounts into their digital wallets. Nevertheless, risks of financial disintermediation might still exist. Whereas time deposits are not likely to be replaced, demand deposits face a greater chance of being superseded given e-CNY's safety and convenience, making disintermediation practically unavoidable.¹⁹

¹⁷ IMF (International Monetary Fund) Staff Discussion Note, *Casting Light on Central Bank Digital Currency*, 2018.

¹⁸ BOE 2018.

¹⁹ Li Shiyun and Huang Yiping. 2021. "The Genesis, Design and Implications of China's Central Bank Digital Currency", *China Economic Journal*, DOI: 10.1080/17538963.2020.1870273.

Transparency and the Fiscal System

- 3.1 The widespread use of the CBDC and the obsolescence of paper currency would be helpful in discouraging and combating tax evasion, money laundering and other illegal activities (e.g. terrorist financing). However, the e-CNY will not completely stamp out illegal transactions in China's underground economy as criminals will likely settle deals using alternative means such as the dollar or euro bills, gold chains or valuable artwork.
- 3.2 The PBOC's ability to monitor DC/EP transactions could also help policymakers target fiscal policy more effectively to meet its policy goal. As the DC/EP would enable broader visibility of money flows in the economy, it could allow the governments to target spending and put purchasing power in selected wallets with greater efficiency. Since digital wallets will be linked through a digital identification to a legal person or entity, expenditure could be targeted with greater efficiency to meet whatever social or economic goal the policy was aimed at achieving.²⁰
- 3.3 The greater transparency that DC/EP provides could help address the inefficiencies arising from China's current fiscal system. The long-standing misalignment of revenue and spending across levels of government has been a source of inefficiency and tension between central and local governments. With the centralised nature of tax raising powers, resulting in uneven tax revenue distribution between central and local governments, the local governments have become highly dependent on selling land to raise revenue to finance expenditure. Moreover, local governments still and often have to resort to large off-balance sheet borrowings to finance investment in local infrastructure, which leads to high leverage that could undermine financial stability.
- 3.4 The implementation of the DC/EP could provide the means to levy taxation at the local level with greater efficiency and ease. Moreover, given that the underlying transactional information on which taxes are levied would be traceable and known to both local and national authorities, it may encourage the national government to

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Refer to source in footnote 1.

devolve tax raising powers to the regions, which in turn may alleviate their debt burden.

- 3.5 Indirect taxation (like VAT and consumption-based tax) provides a large share of total taxation revenue in China. Such taxes are often difficult to collect as there is substantial scope for tax avoidance and evasion on indirect and consumption taxes in a cash economy. Further, the rapid growth of the digital economy exacerbates this issue. Consequently, a significant “tax gap” – the difference between collections and (estimates of) legal liabilities – has materialised, and this is challenging to address with existing enforcement measures.²¹ The introduction of a digital currency in China has the potential of closing the tax gap meaningfully. Unlike cash transactions, digital money will leave an electronic trail. The reduction in use of physical cash will help bring part of the “black economy” into the measured (and taxable) economy.

Renminbi Internationalisation

- 4.1 DC/EP is structured to meet the strategic economic and political goals of the Chinese government. One of the key motivations behind China’s push of the DC/EP is to avoid “dollarisation”. Former PBOC governor Zhou Xiaochuan had explicitly said that one of the aims was to prevent the dominance of the US dollar, a point that was subsequently reinforced by the PBOC that introducing a digital fiat currency would help safeguard the monetary sovereignty of the central bank.²²
- 4.2 To some extent, the DC/EP could enhance the yuan’s international clout and help facilitate the RMB’s internationalisation.²³ With the development of China’s Cross-Border Payment System (CIPS), which allows yuan-denominated transactions to

²¹ The extent of the estimated tax gap for China’s VAT laws, for example, stood at 40% in 2000, and while it had fallen to a (still significant) 25% by 2010, in more recent years the rise of the digital economy and online shopping is likely to have reversed this progress. The OECD has estimated that perhaps up to 55% of VAT in China is not accounted for properly. Refer to Paterson, 2020.

²² “China’s digital yuan aims to halt US. ‘dollarisation’, boost retail payments, former central bank governor says”, *South China Morning Post*, 29 October 2020.

²³ According to SWIFT data on international payments, the RMB’s share in global payments rose from 0.31% in 2011 to 2.27% in 2021. See P S Srinivas and Cheng Ruijie, “Renminbi Internationalisation: Progress and Prospects”, *EAI Background Brief*, No. 1598, 2021.

bypass the Western-dominated SWIFT system for international payments, China's reliance on SWIFT could be reduced. As an alternative to the dominant US dollar, a digital yuan will allow China to bypass sanctions, enabling users to avoid the scrutiny of the SWIFT system that monitors cash flows on behalf of Western law enforcement and international agencies. This could make China less vulnerable to sanctions from Washington and allow China to carve out a stronger role for itself in the global economy as it creates its own international payment architecture, especially given talk of US-China decoupling.

- 4.3 The digital currency is expected to promote the settlement of cross-border payment, trade or investment in a faster, safer and lower-cost manner, thus improving transaction efficiency.²⁴ The Belt and Road projects, for instance, could provide the testing ground for the internationalisation of the digital yuan. In addition, Chinese tourists using the digital RMB may well encourage vendors in other countries to accept the digital currency as a mode of payment.²⁵ This could further expedite the use and circulation of the digital yuan abroad.
- 4.4 Further, in February 2021, China announced that it will be participating in a central bank digital currency project for cross-border payments – the Multiple Central Bank Digital Currency (m-CBDC) Bridge, together with Hong Kong, Thailand and the United Arab Emirates. This project will explore the cross-border use of the CBDC in payments and facilitate the settlement of both international trade and capital market transactions. This will be of practical help to China's efforts to internationalise the RMB.
- 4.5 However, digitalisation on its own cannot solve the problem of internationalisation. The degree of internationalisation of a currency depends on the flexibility of its exchange rate, the openness of its market and the trust as well as desire of foreign investors to use it. The RMB faces several obstacles to gaining widespread acceptance as a reserve currency. Currently, there are still constraints on the RMB

²⁴ Cross-border use of CBDCs could help firms and households in issuing countries better manage risks (for instance, by issuing debt denominated in their own currency).

²⁵ The e-CNY is starting to extend its reach beyond mainland China. The Hong Kong Monetary Authority is working with the PBOC to test the usage of e-CNY for the purpose of cross-border retail and tourism spending.

in international transactions, the most important of which is China's capital controls and the limited currency conversion on the capital account.

- 4.6 China's financial market is also shallow relative to the size of its economy and it is therefore uncertain if the DC/EP would anytime soon be used as a major vehicle for international payments since swings in the external demand for the CBDC could drive large movements in capital flows and affect the ability of the PBOC to conduct monetary policy.

Issues and Challenges

- 5.1 The wider application of the DC/EP is expected to bring about new challenges and potential risks. Operational and reputational risks arising from malfunctions of the digital infrastructure or cyberattacks are likely to remain as challenges. A successful cyberattack on a CBDC system could quickly threaten a significant number of users and their confidence while the central bank could risk losing its credibility.
- 5.2 The number of issues relating to CBDCs are numerous and the research debate on them is only in its infancy as the topic is still new and the construction of this digital equivalent of bank currency has yet to be crystalised in most economies. However, it is expected that the launch of the DC/EP will have significant ramifications for monetary policy and the banking and fiscal system, potentially transforming China's financial landscape in particular. The scale of these effects would however depend on demand for this new form of money as well as its design features as determined by policy objectives and the country's circumstances.
- 5.3 Appropriate design and policies are needed to mitigate ensuing risks prior to launching the CBDC. The PBOC will need to develop monitoring, oversight and risk management functions, which are critical for the functioning of the DC/EP. Over time, as digital cash becomes ubiquitous, the authorities should strengthen the monetary system by providing a form of money that serves as a practically costless medium of exchange, a secure store of value and a stable unit of account.