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REPORT
The Digital RMB and RMB Internationalization

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The growing emphasis on digital currencies has gain momentum in the broader investment community in recent months, embraced by central bank researchers, bitcoin evangelist, and fintech investors alike. Simultaneous events such as the pending Ant group IPO, IMF White Papers on Digital Currency, and Paypal's announcement permitting the use of cryptocurrencies on its platform have shone a light on the future of the USD's hegemony. For those skeptical about the role of the dollar and the outlook for fiat currencies in general, the use of the currency printing press by governments across the globe in response to COViD-19 has hardened their resolve that the current dollar-based model is unsustainable.

The introduction of the digital RMB has, therefore, garnered much attention. However, how realistic are the claims that this is an organic first step in the RMB being a rival to the USD in the global payment system? I have argued since 2015 that the Chinese have very little interest in the RMB competing with the dollar and that efforts such as the digital RMB and the promotion of the use of Alipay and WeChat abroad is more about moving away from a dependence on USD payment systems such as SWIFT.

On October 13th, I hosted a virtual forum on the Ant Financial IPO and the Digital RMB. This second panel focused on the digital currency and debated the issues surrounding China's ambitions and intentions over the use of its currency abroad.

I was joined by

Martin Chorzempa — research fellow, Peterson Institute of Economics

Zennon Kapron — founder of Singapore-based fintech consultancy Kapronasia

Colin Liang —head of China research, RWC Partners

Neil Sheppard — COO of the financial services group at Singapore-based Diginex

We discuss China's digital payment systems led by Ant Financial and Tencent continue to expand domestically and abroad; the Chinese government is developing a Digital Currency Electronic Payment (DCEP), or digital yuan, that may change the landscape of electronic currencies. We debate the viability of the DCEP, its potential as a geopolitical tool, and the potentials and challenges that it faces in the global financial system.

Can the RMB be truly international with a heavily restricted capital account? This, and many other fundamental issues, are considered below.

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Digital RMB: A Background

What are the intentions and priorities of the digital RMB for the PBOC?

Martin Chorzempa: The digital RMB initiative started with the initial bitcoin boom in China. Several key points:

- Chinese demand for a currency outside government control with the advent of cryptocurrencies instigated a response from authorities.
- Officials explored how to leverage new technology for their own goals and stay at the forefront of digital currency innovation.
- Central authorities started researching a central bank digital currency around 2014. As China became increasingly cashless, the government wanted to create a public payment option that would be free and somewhat anonymous.
- On China's top leaders, digital currencies are seen as a way to increase control over the country's financial system and potential dissidents.
- With blockchain technology, every transaction and its source are recorded, making it possible to control payment flows to individuals and companies
- Access to user data is dependent on cooperation from companies like Ant and Tencent, which may push back against government requests.

Whereas the excitement of the RMB's internationalization has somewhat faded since 2015, the prospects of a new digital RMB is creating a buzz for its potential as an international alternative to the US dollar.

What's the advantage of a digital RMB for a country that's been cashless for some time now?

Colin Liang: It comes down to trackability for the PBOC and the government. They want to open up capital markets, but in the meantime, make sure that there is little risk of capital flight and impose greater control on capital flows within the country.

Setting the standards

Discuss the efforts from China in influencing the debate around global standards, particularly around blockchain.

Zennon Kapron: Governments realize that they can harness new technologies like AI and blockchain. China's focus seems to be around consumer data potentially shared and exposed on so-called "DLT-based" (Distributed Ledger Technology) systems.

The government required regulations to be put in place around blockchain implementation. A foreign bank operating in China would have to replicate its technology stack in the country, and Chinese customer data needs to be stored in China. In terms of standards, China has developed a BSN or "blockchain service network," which would tie into the DCEP, China's national digital currency.

In general, standards within the financial space have taken decades to develop, and there are still obstacles to overcome. It's challenging to drive global standards, and China's record shows that it hasn't had much experience in setting global standards. The development of 5G standards may be successful, but that remains to be seen.

These standards, after all, are driven by national considerations. The PBOC, for instance, developed its chip inside chip-and-PIN credit cards. If the US could develop a blockchain system and implement it, they would do so too. The US dollar's hegemonic status is an example of a great tool that gives political and soft power to the government. One could say that blockchain technology could play the same role in China.

What is the constructive use case for digital currency in an ideal scenario, and where can this go?

Neil Sheppard: There are obvious benefits to a digital currency system, like fast transaction times, greater security, and validation of transactions — all the hallmarks of crypto-based assets. The ability to build on top of these platforms could lead to greater efficiency over time.

In an Internet of Things situation, a farmer, for instance, can utilize the blockchain to upload information such as his farm's GPS coordinates, the growth of his products, and the entirety of a product cycle. In essence, the technology then allows digital currencies to interact with products, creating an ecosystem that benefits the small-scale individual, who can scale his operation at a considerable rate with relatively low marginal costs.

The goal is to reach a level of interoperability that allows these systems to work with each other. In other words, blockchain can help build an ecosystem of the Internet of Things and information delivery, coupled with blockchain-based payments. All of this is still being developed, and the end goal is the intersection of enterprise blockchain and financial services.

The Digital Yuan abroad

Discuss the likelihood of other countries, for example, Belt and Road participants, in using a digital RMB system that involves government surveillance from China.

Martin Chorzempa: Whether other countries, including Belt and Road ones, use a digital RMB system is debatable. Some key points:

China's leverage over these countries is far more limited than many would think, has inflows to BRI countries have creased since 2017, and many countries may have trouble paying back loans given the economic situation.

Despite an unwillingness to dollarize, the dollar has an advantage for countries as it's a freely-circulating currency not subject to tracking by the US government. The RMB is different: the PBOC has the ledger, and they can block certain transactions.

Ant's payment system has succeeded thanks to organic growth, which will have to be replicated abroad. Countries could try to create their own digital currency; or, they could accept RMB-denominated money that is converted into the domestic currency to avoid the drawbacks of using the RMB.

Zennon Kapron: I think every government wants to implement a digital currency for many the same reasons that China does. For instance, the US has issues around money laundering and tax evasion, and it's only a question of when currencies shift to their digital forms. In the future, we'll see the death of cash as devices become so cheap, or there'll be alternatives for individuals around the world to handle transactions.

The other advantage is that the digital currency can be used for policymaking in China's case. Whereas small and medium enterprises, individuals, and those in underdeveloped parts may be excluded from the traditional financial ecosystem, the Chinese government can control programmable money and how it can be used. For example, the government could incentivize lending to small and medium enterprises by programming the digital currency to remain "inactive" until it reaches the hands of those targeted groups.

Despite the invention of payment ecosystems like Alipay and WeChat and the digital RMB, is there a chance that all this innovation may be dampened by regulators who want to keep capital within China's borders, for instance, by making transactions challenging to initiate?

Martin Chorzempa: Chinese policymakers made a clear-headed calculation about the benefits of spreading their system abroad and loosening capital controls versus the potential disruption to China's economic stability. They've decided that internationalization would take second fiddle to stability.

For the past few years, discussions around opening the capital account have highlighted a few benefits for China. There's no shortage of capital, interest rates were not much higher than the rest of the world, and the benefits of more competition from international financial institutions were not necessarily good for its domestic system.

On the other hand, the latest digital payment systems have inspired companies worldwide, and China is exporting some elements of that technology. For instance, India has observed China's developments and decided to pursue something government-created like NetUnion: making it easier for consumers to send money between digital wallets, bank accounts, and other elements.

Techno-national competition for payments

Discuss if the world of digital payments will continue to be dominated by Ant Financial and WeChat, or will there be competition from other countries in the age of techno-nationalism.

Colin Liang: Given China's lead in new technology, its willingness to try new things, and a big market full of entrepreneurs, the PBOC is willing to see what benefits can arise out of new initiatives. The same is true for any central government.

Bitcoin raised attention among all the major central banks, as well as Facebook. It's still unclear how this technology will play out, but we understand that transactions can be done instantaneously, which could be applied to many applications.

It's crucial to separate payment and currency. These are two different aspects: payment is a commercial application that doesn't touch on a country's core financial safety or national security. It's operated by merchants, on individual applications and e-wallets, involving business models and ecosystems that will have to be designed. All of this will be outside the domain of central banks and commercial banks. I don't think a digital currency will dampen Ant Financial's ability to expand outside China. They're very different.

Potential US dollar rival

Does China want to have an internationalized currency to rival the dollar?

Martin Chorzempa: The RMB still accounts for a minuscule of global reserves and international transactions, so there's a long way to go before the RMB can compete against the dollar. While China does want to internationalize, they won't open up the capital accounts, and the digital currency DCEP is a domestic issue. The PBOC recently announced transacting more than 1 billion RMB transactions, but these are all domestic trials.

Interestingly, a recent report on central bank digital currency from the Bank of International Settlements did not include the PBOC in its discussion among central banks. I think we're already beginning to see the emergence of two blocks in creating central digital bank currencies, with China building its own system. The interoperability level between these systems and which countries will follow specific standards and design choices will be part of future discussions.

Surveillance and digital currencies

How can China alleviate global investors' concerns of surveillance when using its payment systems?

Neil Sheppard: It comes down to trust. People are far more concerned about a government that tracks transactions compared to corporations. Building a track record of trust is key, and it is the case that concerns of privacy do not come up in discussions concerning other central banks, such as the Bank of England or the Bank of Sweden.

Initial fears about cryptocurrency-focused chiefly on the ability to move money around anonymously and not knowing who's on the other end of any deal. However, it has been the case that law enforcement can suddenly shut down the majority of these wallets involved in hacks, removing stolen assets and closing accounts quickly.

COVID-19 is undoubtedly a boon for the cashless economy, and China is well-ahead in removing cash from its economy. Libra could have been leading the way in digital payments, but it also sparked fury in the US and abroad. In the end, the use of digital currency will become widespread only if people can trust the arbiters of the network itself — and that means governments need to build a track record of trust.

Fragmenting standards

It seems that there's a bifurcated world emerging, where a series of standards governing 5G, AI, and other technologies will divide countries into alliances with China, the US, or somewhere in the middle. Discuss if the lack of a global standard will be bad for productivity.

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Martin Chorzempa: It may be more so fragmentation than bifurcation. Aside from the US and China, the European Union also wants to maintain independence: Christine Lagarde, head of the European Central Bank, recently explained that the ECB is exploring its own digital currency to not beholden to the US. They don't want the US to sanction entities, which Europe has little recourse over. Simultaneously, their hesitation towards the digital RMB comes from a sense that Chinese political values vastly differ from European ones. For instance, the General Data Protection Regulation (GDPR) is Europe's attempt at setting a global standard for standard.

In the US, the pushback against Facebook's Libra was really instructive in demonstrating general mistrust of Facebook and the US. China's PBOC has publicly questioned Libra's political motivation, and few countries would want to lose their monetary independence to a currency developed by Facebook. At the same time, Facebook has an advantage in building digital currency through its global network. However, it's likely that the world will exist as different blocks of technologies, all developed based on different integration and security standards.

What about digital RMB in the context of programmable money and more tools for the PBOC?

Martin Chorzempa: One interesting thing that is being discussed is the idea of smart contracts. While that would require legislative changes related to the central bank surrounding a digital currency issuance, they're cautious about adding functions to money that previously did not exist. As previously mentioned, the government could use it for its policy ends, e.g., encouraging money to travel to different economy areas to encourage or slow down growth or levy automatic tax payments on transactions. These macro tools would vastly increase the power of any central bank.

However, the immense potential value for money as a function comes with programmability, surveillance, and, therefore, more control. The key is to figure out how that can be done without abuse. In China, that's a huge question. In the coming year or so, the surveillance element of tracking money flows would likely be added. But increasing this programmability also requires the system to earn trust.

China's future influence on global finance

In five years, how influential will the Chinese ecosystem be on global financial services and payments?

Martin Chorzempa: The trends we see will continue. Money will be more digital, and the pervasiveness of smartphones, even in rural areas, means that cash will continue to disappear. Ant and WeChat will probably play more prominent roles, although they'll face serious competition too. It may be possible that the RMB will play a larger role in international use, perhaps surpassing the British pound or Japanese yen. The big question is whether the US will decide to sanction major PRC financial institutions; if that happens, China will be forced to urgently find an alternative to the US dollar.

Neil Sheppard: Technology will undoubtedly find more applications in the industry, but I don't see any acceleration or deceleration from the changes that we already see. From the technological perspective, digital forms of infrastructure such as blockchain, distributed ledgers, and others will become more pervasive across the financial system, leading to gains in efficiency, better pricing, and more frictionless access to capital. In the case of China, the dramatic shift to a middle class and the service economy means an ever-increasing reliance on financial services and the technology that makes it possible.

On an international scale, the key for this underlying technology is interoperability: how these systems can interact to make transactions possible at the lowest costs and highest speeds. This is a moment where a global standard could take shape, as the BIS and central banks worldwide are looking at this issue. Regulation is key in making sure that digital securities and the digital asset space remain viable for adoption.

Conclusion

In much of the PBOC literature surrounding the development of the digital RMB, the Chinese Central Bank refers to the idea of “Controllable Anonymity.” A statement like this back in November 2019,

“The demand from the general public is to keep anonymity by using paper money or coins,” according to Mu Changchun, the director-general of the PBOC’s Institute of Digital Currency. “We are not seeking full control of information on the general public,” rather using “controllable anonymity” for “people who demand anonymity in their transactions. At the same time, it will keep the balance” to allow for things like anti-money-laundering actions and combating the financing of terrorism.”

Would foreign governments trust the Chinese Communist Party to monitor transactions in their borders by embracing the digital RMB? The trust gap between most governments, especially in the West, is far too wide for this ever to happen. While small economies who have engaged with China on Belt and Road-related funding may see higher penetration rates with Alipay and WeChat, the chance of wide-ranging adoption of a digital RMB is slim based on the issues of potential surveillance.

China remains vulnerable to its exposure to the USD payment system. Chinese organizations face potential financial stress in the event of US dollar-based sanctions or if USD funding is restricted. The digital RMB is a theoretical solution, but given it will be limited to small domestic transactions, large-scale funding vulnerabilities remain. For all the Chinese payments infrastructure's efficiencies and the frictionless nature of small payments under a digital RMB, China remains entrenched in a global financial system with the dollar firmly in the middle. The RMB, even with all this innovation, is no threat to the dollar’s hegemony.

The demise of the USD appears greatly exaggerated.

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