

# A NEW DAWN For Digital Currency

Why China's eCNY will change the way money flows forever

Jason Ekberg Michael Ho As a country that invented the banknote in the seventh century, China led the way money moves and is used in everyday life. And now it's at it again. By introducing a central bank digital currency (CBDC), money is going fully digital, setting the standard for the way money flows globally.

The currency — known as eCNY — will be a recognized legal tender like the paper Yuan. While the Chinese payment ecosystem is already highly digitized, with RMB 8 trillion of banknotes still in circulation, the potential of going fully digital remains enormous, bringing a new dawn for digital currency. And it's coming faster than you might think. Testing of the currency, which began last year in four cities, was recently expanded by the People's Bank of China (PBOC) to bigger cities, including Beijing and Shanghai. A nationwide roll-out, meanwhile, is slated for next year's Winter Olympics in Beijing.

If they haven't done so already, financial players need to sit up and take note. The significance of eCNY is not just the digital currency itself— payments are already largely digitized today. What's more meaningful would be the introduction of large-scale instant payment infrastructure, sponsored by the Chinese government rather than the private sector, with the adoption by some of the largest companies in the world alongside a huge population that is increasingly internationally connected. And if there is an extension of eCNY into the cross-border transaction, supported by liberalization policy, this will accelerate the Renminbi further as a truly global trade currency bringing both savings and efficiency to the cross-border flows.

With eCNY issued and circulated by banks, and any conversion of paper Renminbi into digital Renminbi only permissible via them, they sit right at the heart of this new dawn.

## WHAT ECNY IS

eCNY will work like the paper Yuan. The currency will be a legal tender issued by the central bank and circulated to the public via commercial banks. Users can make payments both offline (based on smartphone Near Field Communication, NFC) and online. Payment clearing and settlement will be done through a centralized rather than a distributed approach, such as distributed ledger technology (DLT).

The digital Yuan will also be "programmable" and could be set to only be used for payments after "activation" when certain pre-defined conditions are met. This feature would provide additional levers for more flexible fiscal and monetary policies and monitoring and controls in spaces such as cross-border transactions.

## WHAT ECNY ISN'T

eCNY is not an effort by PBOC to redefine the global payments market structure. The short-term focus is the domestic market, bringing greater stabilities given the concentration of digital payment volumes and the "risk of failure" created. Only in time will eCNY go international and, in all likelihood, focus on key China-led initiatives. It is not a means to control or hinder innovation — in fact, it is meant to foster innovation by providing interoperable digital payment rails, reducing barriers to entry from aspirants and incumbents.

## THE IMPACT OF ECNY ON THE MARKET

To understand the implications of eCNY, we have looked at key payment flows driving innovation in China. Business-to-Consumer (B2C) payment is dominated by big technology companies. The cross-border investment flows are currently being liberalized via connect programs and lifting of caps. The outbound cross-border investments where China is leading efforts include financing of the Belt and Road Initiative (BRI). We believe the immediate impact of eCNY will be concentrated in B2C flows. In the medium-longer term, there will be a more profound impact on cross-border flows. Representing trillions of the Renminbi, any potential changes in these flows could reshape the competitive landscape completely.

#### **B2C flows**

B2C is at the frontier of innovation, with 90% already happening digitally and big tech players dominating. In the immediate term, we expect eCNY to accelerate the disruption that is already happening with the interoperability of QR codes. eCNY has the potential to massively level the playing field between banks and big techs while further squeezing merchant acquiring businesses. It also opens up opportunities for corporates looking to work with licensed providers and provide banking services to the end supply chain participants and end consumers, more commonly known as banking-as-a-service (BaaS).

	Domestic B2C
Immediate impact	Accelerating the interoperability:
	<ul> <li>QR code standard to merchant services firms and internet payment firms is expected to break closed-loop networks, reduce the entry barrier significantly, and diminish the value of third-party collection services.</li> </ul>
	<ul> <li>eCNY acceptance is mandated by PBOC at the merchant point of transaction, pushing open standards building on universal QR codes.</li> </ul>
Longer term potential	• An infrastructure that everyone can build on and create interoperable applications (such as eWallet) leads to more competition and challenges to existing tech incumbents.
	• Assuming this further accelerate the transition into a cashless China, there will be:
	<ul> <li>Lower costs for the banking industry, driven by further consolidation of physical branches.</li> </ul>
	– Lower fees for end-users.
	<ul> <li>Lower entry barrier to start a bank, although license availability is still constrained.</li> </ul>
	<ul> <li>Shift to pure digital mode would unlock massive capital expenditures/operating expenses for banks, reposition from 80/20 run versus grow to 40/60 with deep pockets to fund innovation.</li> </ul>
Implications on market participants	Near to medium term
	• Merchant acquirers: economic pressure further intensifies; consolidation likely. Merchant acquirers have to deal with the pricing pressure from big techs and the CBDC, bringing more burdens, let alone complexity. As a result, smaller players are unlikely to be sustainable.
	• Big techs: network advantage further diminished, and duopoly status challenged. The crown jewel payment business is now at risk. While low value at its nature, the payment business is used to generate rich data and cross-sell opportunities. The potential change will test the current business models of tech companies, enabling the possible need to reinvent themselves.
	Medium to longer-term
	• Retailers, digital attackers: potential formidable challenger to existing eWallets. eCNY's required acceptance plus ease of transacting (NFC to extract cash and universal QR code) put pressure on the need for proprietary wallets. This requirement could lead to opening existing marketplaces accepting eCNY directly from "new digital" wallets.
	• Banks: enabling dramatically lower costs and new business model. Potentially massive savings from eCNY given lower demand for legacy infrastructure; ability to funnel scarce investment into innovation; positions them to drive payments-as-a-service leveraging eCNY tapping rich transaction data "on them".

#### **Cross-border flows**

Cross-border is an area of excitement given China is one of the most prominent players in global trade and a leading provider of foreign direct investment (FDI). Business-to-business (B2B) sectors generate significant volumes (a mix of low and high value) with considerable investments in digitalization and is highly bank dominated. In the near term, we expect little change given the market structure and PBOC's focus on consumer sectors. However, we expect change to accelerate in the longer term, especially in areas such as the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) — which is already a hotbed of innovation — and increasing integration with on-and-offshore markets. We expect the payment infrastructure integration to start, beginning with retail but quickly moving into B2B.

Immediate impact	Limited
Longer term potential	<ul> <li>A sensible starting point is to leverage eCNY to integrate the GBA payment infrastructure, likely from retail.</li> </ul>
	<ul> <li>Assuming eCNY can be used overseas (for example, covering offshore Renminbi in Hong Kong) for trade settlement, it can accelerate the adoption of Renminbi for cross-border payment and trade settlement since it is cheaper and faster. We estimate that a more efficient clearing and settlement could generate a saving of 5-10% of Hong Kong's gross domestic product (GDP).</li> </ul>
	<ul> <li>Using eCNY to settle oil contracts could be a game-changer, especially given China's growing influence as an oil buyer and other major oil buyers' faster pace in carbon transition. It will also break the monopoly of the US Dollar in pricing major global commodities.</li> </ul>
	<ul> <li>Nevertheless, there are two significant dependencies:</li> </ul>
	<ul> <li>Capital and foreign exchange control: it determines the flexibility for merchants to convert trade currencies to other currencies. However, it could be mitigated by the inclusion of offshore Renminbi in the eCNY system. What's more, the programmable nature of eCNY can potentially enable the Chinese government to deploy more innovative methods on the gradual liberalization of currency. Such liberalization was considered impossible previously.</li> </ul>
	<ul> <li>The perceived stability of the Renminbi: most trade counterparts perceive lower foreign exchange risk in US Dollar because most Asian currencies remain linked (explicitly or implicitly managed) to it.</li> </ul>
	<ul> <li>eCNY is likely to accelerate the Renminbi internationalization for those already participating in China-backed projects (such as BRI). The programmable nature of eCNY could enable an "eCNY bubble" along the BRI corridor, which allows better oversight by the Chinese government while allowing a higher degree of liberalization.</li> </ul>
Implications on market participants	Medium to longer term
	• <b>Cross-border Payment Service Providers (PSPs): business model viability at risk.</b> They used to benefit from the complexity and lack of interoperability, while eCNY addresses these risks and thus puts their business models at risk.
	• <b>Domestic banks: grabbing a bigger pie in cross-border business.</b> They will benefit from growing acceptance and lower transaction costs, which will drive greater payment flows, reduced foreign exchange costs, and better liquidity. On the other hand, banks won't take advantage of "T+2" anymore. The float goes away, as does the loss of working capital lending to fund working capital (to cover inefficient payment flows).
	• Foreign banks: could be squeezed out of traditional cross-border sweet spots. Shift to eCNY away from global rails means SWIFT potentially loses, and foreign banks who lack onshore depth will have little eCNY to support cross-border business.

#### Cross-border B2B/B2C

#### **Consumer to Financial Institutions (C2F)**

C2F captures the cross-border investment flows where ongoing liberalization is to foster innovation across connect programs. Most efforts to date have focused on greater market access, such as on-and-offshore flows via connect programs and removing legacy caps on cross-border investment flows for individual and institutional customers. In the longer term, we expect further disruption when eCNY is in place, with several players squeezed with domestic banks and securities houses likely to be the big winners.

	C2F
Immediate impact	Limited
Longer term potential	The domestic market likely sees a limited impact.
	<ul> <li>On the cross-border side, if eCNY is extended to cover offshore Renminbi, it will enable more efficient and cheaper investment transactions, facilitating more flows. However, this is contingent upon the capital control policy for offshore and onshore Renminbi. A sensible starting point is to leverage eCNY to integrate the GBA payment infrastructure, likely from retail.</li> </ul>
Implications on market participants	• Banks and securities houses: mixed. Again, banks benefit from the float, yet eCNY is going to reduce it. However, the flip side is that lower transaction costs can reduce frictions. Lowered costs can also attract new flows when convertibility is available.

## **KEY STRATEGIC CONSIDERATIONS FOR BANKING INDUSTRY PLAYERS**

As the introduction of eCNY gathers pace, key players in the industry have a number of questions to consider and act on:

#### **Digital players**

It is crucial for digital players to evolve their merchant acquiring business while the core service is commoditized, as well as work out how to capture opportunities from a more open and interoperable eWallet and payment space. For example, should they build, partner, or buy/sell the business? What role could sector-tailored propositions play (for example, Food & Beverage), and what type of value-added service (VAS) will create compelling propositions (for example, B2C analytics) to help merchants grow and run their business?

#### **Big techs**

Technology companies will need to work out how to defend their existing market dominance in eWallet and payments space, especially given the significantly lowered barrier to entry. Other considerations include how would eCNY affect the current monetization model, or the path towards one, and whether they should compete or partner with potential entrants to the eWallet market. If the market does become more fragmented in eWallet, what will their role be in the new ecosystem?

#### **Domestic banks**

The decision on whether to launch an eWallet proposition on the back of eCNY is something domestic banks will need to consider, as well as how important it would be for creating incremental revenues versus defending existing shares. Banks also need to consider their corporate clients, as eCNY means they can develop a new proposition such as BaaS for their corporate clients to enable them to offer their own eWallet services.

The trajectory towards a cashless society and what it will look like should be top of mind. For example, how would an acceleration to a cashless society impact a bank's legacy infrastructure, including its hardware, software, and people? Banks should also be asking whether the adoption of eCNY will get traction in the cross-border B2B space and assess how fast that might happen.

#### **Foreign banks**

How to leverage the adoption of eCNY (such as by launching their own wallet proposition) will be a key consideration for foreign banks and could help them get a foothold in the domestic market. It is also crucial to assess innovative approaches to achieve scale more quickly, such as establishing a partnership with a corporate or customer loyalty platform.

Finally, foreign banks will need to consider how the use of eCNY in cross-border B2B payments could potentially erode their competitive advantage in this space. Therefore, how they hedge the downside risk while at the same time creating growth in their cross-border business will need to be carefully considered.

### CONCLUSION

The introduction of eCNY has the potential to elevate Renminbi to a new height. With a nationwide roll-out now under a year away, financial players need to consider the impact now. Having the potential to move into the cross-border transaction, supported by liberalization policy, Renminbi could become a truly global trade currency that brings savings and efficiency.

#### A new dawn of currency is upon us, and the time to act is now.

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For more information, please contact the marketing department by phone at one of the following locations:

Americas +1 212 541 8100 EMEA +44 20 7333 8333 Asia Pacific +65 6510 9700

#### AUTHORS

#### Jason Ekberg

Partner, Corporate and Institutional Banking Jason.Ekberg@oliverwyman.com Michael Ho

Principal, Corporate and Institutional Banking Michael.Ho@oliverwyman.com

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