A NEW DAWN FOR DIGITAL CURRENCY

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

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As a country that invented the bank note 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 recognized legal tender like the paper Yuan. While Chinese payment ecosystem is already high digitized, with 8TN RMB of bank notes still in circulation, the potential of going fully digital remains huge, 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 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. 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 a large-scale instant payment infrastructure, sponsored by the Chinese gov't rather than private sector, with the adoption by some of the largest companies in the world alongside with a huge population that is increasingly internationally connected. And if there is an extension of eCNY into cross-border transaction, supported by liberalization policy, this will accelerate the RMB further as a true global trade current bringing both savings and efficiency to the cross-border flows.

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

WHAT ECNY IS

eCNY will work like the paper Yuan. Currency will be a legal tender issued by central bank and circulated to the public via commercial banks. Payments can be made offline (based on smartphone NFC) as well as online. Payment clearing and settlement will be done through a centralized approach 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 would provide additional levers for more flexible fiscal and monetary policies, as well as monitoring and controls, such as cross border.

WHAT ECNY ISN'T

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 stymie innovation— in fact, it is meant to foster innovation by providing digital bank rails that are interoperable, reducing barriers to entry from aspirants and incumbents.

THE IMPACT OF ECNY TO THE MARKET

To understand the implications of eCNY we have looked at key flows driving innovation in China— B2C dominated by big tech; cross-border investment flows currently being liberalized via connect programs and lifting of caps; and outbound cross-border investments where China is leading efforts including through financing of the belt and road initiative. We believe the immediate impact of eCNY will be concentrated B2C and in the medium-longer team more profound impact on the cross-border flows. Given these flows represent trillions of RMB, the potential changes could reshape the competitive landscape.

B2C flows

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

	Immediate impact	Longer term potential	Implications on market participants
Domestic B2C	Exacerbate impact from interoperability from • QR code standard to merchant services firms and internet payment firms, i.e. closed-loop networks are broken, barrier to entry significantly reduced, value of 3rd party collection service diminished and • eCNY acceptance is mandated by PBOC at merchant point of transaction— pushes open standards building on universal QR code	• Infrastructure that everyone can build on to create applications (e.g., wallet) that is interoperable à more competition and innovation and challenges to existing tech incumbents • Assuming this further accelerate the transition into a cashless China • Lower costs for banking industry— physical branches can consolidate much more significantly • Lower fees for end users • Lower barrier to entry to start a bank— although license availability can continue to be constrained • Shift to pure digital would unlock massive CAPX/OPEX for banks— reposition from 80/20 run vs grow to 40/60 with deep pockets to fund innovation	**Near to medium term** • **Merchant acquirers: Economic pressure further intensifies; consolidation likely.** In addition to dealing w big tech pricing pressure, they have central bank's CBDC to deal with creating greater pricing pressure let alone complexity— smaller players unlikely to be sustainable • **Big tech: Network advantage further diminished, and duopoly status challenged.** Payments business— a crown jewel— now at risk— while low value it generated rich data and cross-sell at risk— will test current business models— potential need to reinvent themselves **Medium to longer term** • Retailers, digital attackers: Potential formidable challenger to existing e-wallets. eCNY's required acceptance plus ease of transacting— NFC to extract cash and universal QR— put pressure on need for proprietary wallets— could lead to opening of 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 a one of the largest players in global trade and a leading provider of foreign direct investment (FDI). Business-to-business (B2B) generates big volumes with a mix of low and high value with huge investments in digitization and is highly bank dominated. In the near-term, we expect little change given the market structure and PBOC's focus on consumer sectors. But in the longer term we expect change to accelerate, especially in areas such as Greater Bay Area (GBA) — which is already a hot-bed of innovation— and increasing integration with on-and-offshore markets. Here we expect payment infrastructure integration to start, beginning with retail but quickly moving into B2B.

	Immediate impact	Longer term potential	Implications on market participants

Cross-border Business-to-business (B2B)/ B2C	*Limited*	• Sensible starting point is to use this to integrate GBA payment infrastructure— likely starting from retail side
		• Assuming eCNY can be used overseas (e.g. in HK covering CNH) for trade settlement, this can accelerate adoption of RMB for cross-border payment/ trade settlement, since it is cheaper and faster— estimated 5-10% of HK GDP could be generated from more efficiency clearing and settlement
		• Using eCNY to settle oil contracts could be a game changer— especially given China's growing influence as an oil buyer and the faster pace of carbon transition in other major oil buyers; this will break the monopoly of USD in pricing major global commodities
		• However there are two other key dependencies
		  •Capital and FX control— flexibility for merchants to convert trade currencies to other currencies— however this could be mitigated by inclusion of CNH in eCNY system; programmable nature of eCNY can potentially enable the Chinese gov't to deploy more innovative methods to allow more gradual liberalization of the currency that are previously not possible
		  •Perceived stability of RMB— most trade counterparts perceive lower FX risk in USD because most Asian currencies remain linked (explicitly or implicitly managed) to USD
		• Overall likely to accelerate RMB internationalization for those already participating in CN-backed programs, e.g., BRI; programmable nature of eCNY could enable an "eCNY bubble" along BRI corridor which allows better oversight by CN gov't while allowing higher degree of liberalization
			Medium to longer term
			• Cross-border Payment Service Providers (PSPs): business model viability at risk. They benefit from complexity and lack of interoperability; eCNY addresses these risks and puts their business models at risk
			• Domestic banks— grabbing a bigger pie in cross-border business. Stand to benefit from growing acceptance and lower transaction costs driving greater payment flows, reduced FX costs and better liquidity; however the flip side is banks also benefited from T+2— 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. Shifts 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 potentially being squeezed

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 consumer and institutional. With eCNY we expect further disruption in the longer term, with a number of players squeezed with domestic banks and securities houses likely to be the big winners.

	Immediate impact	Longer term potential	Implications on market participants
C2F	*Limited*	• Domestic likely see limited impact • On cross-border, assuming eCNY is extended to cover CNH, this will enable more efficient and cheaper cost for investment transactions—facilitating more flows; however, this is contingent upon the capital control policy for CNH vs. CNY Sensible starting point is to use this to integrate GBA payment infrastructure—likely starting from retail side	• **Bank and securities houses—mixed;** here again banks benefit from float which will be reduced w eCNY however flip side is lower transaction costs should reduce frictions and could attract new flows however limited until true convertibility is in place

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

For digital players, working out how to evolve their merchant acquiring business while the core service is commoditised will be crucial. As will working out how to capture opportunities from a more open and interoperable eWallet/ 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, e.g., B2C analytics to help merchants grow and run their business.

Big tech

Big techs will need to work out how to defend their existing market dominance in eWallet/ payments, especially given the significantly lower barrier to entry. Other considerations include how would eCNY affect the current monetization model, or the path towards one, as well as whether they should compete or partner with potential entrants to the eWallet market. If the market does become more fragmented, for example in eWallets, 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 share. Corporate clients also need to be considered. eCNY means banks have the opportunity to create a new proposition for their corporate clients, such as a bank as a service (BaaS) to enable them to offer their own eWallet services.

The trajectory towards a cashless society, and what it's going to look like, should be top of mind. 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, as well assessing 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 foot-hold in the domestic market. In addition, assessing whether there are innovative ways to achieve scale more quickly, for example by establishing a partnership with a corporate or customer loyalty platform, will also be key.

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. 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 RMB to a new height. And with a nationwide roll-out now under a year away, financial players need to consider the impact now. With the potential for the new currency to move into cross-border transaction, supported by liberalization policy, RMB could become a true global trade that will bring savings and efficiency.

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

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