COMMENTARY

Can Digital Money Replace Cash? Central Banks Are Charging Ahead.

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Oct 15, 2021, 6:00 am EDT

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As governments around the world redesign the financial sector with new infrastructure and digital money, it is time to reconsider what matters. Moves by central banks to issue new digital currencies need to be scrutinized for how they affect people's rights, such as privacy, choice, and access to the economy.

The People's Bank of China has led the world in developing a national central bank digital currency, the digital Yuan or e-CNY. Research began in 2014. Now China's official digital currency has logged over $5.3 billion in transactions. Recently, the PBOC published a report in English highlighting the digital Yuan's development and the central bank's guiding policy principles of inclusiveness, privacy, safety, efficiency, regulatory compliance, and interoperability. Taken individually, these principles are sound. At the same time, they each have system-level implications for the design of CBDC. Where they conflict, as values and requirements often do, trade-offs are made around "what matters" for the goals and objectives of the

CBDC system. A new report by the G7 on guiding principles for CBDC notes that it will be necessary to strike a "careful balance" among the principles, such as privacy and inclusion versus regulatory compliance and private sector business interests.

The decisions China makes about new national payment infrastructure will have broad importance even outside the country. Governments and central banks around the world face the same questions. Many central banks have been guided by the PBOC and have replicated several of its design decisions. Some central banks have even argued that special relaxed standards somehow apply to them compared to other central banks, and that users should simply trust central bankers as they chose what principles to follow and trade-offs to make in developing digital public payment infrastructure. We recently wrote an analysis of the PBOC report wherein we highlighted two main issues with these approaches.

First, there are issues with retail CBDC, which everyday people would use, for instance, to buy a coffee. A central bank has to choose whether users of a digital currency can only access their funds through an account provided by a regulated entity such as a bank. Alternatively, allowing access outside of such an account would preserve the anonymity that has long been enjoyed by those who use and have the choice to use cash. In its report, the PBOC discusses a proposal for what it calls "wallets": a pseudonymous option for "small-value" transactions that is provided and managed by "authorized operators." The PBOC characterizes its approach as "quasi-account-based."

The PBOC design tweaks the relationship between retail consumers and financial custodians that control and permit the use of money. This is a significant departure from cash. Users of CBDC designed around PBOC-style wallets would only ever be able to own and use money with the say-so of the gatekeeper.

We must ask: Why are states even considering CBDC? This starts with the declining use of cash for payments over the last decade in many countries, as consumers move to debit cards and internet payments through custodial accounts. The motivation has evolved into protecting monetary sovereignty against the threat of cryptocurrencies, risks posed by privately issued money such as certain stablecoins by big tech companies, and against other states internationalizing their own digital money. It has also become part of states' longer term technology sovereignty plans.

Privacy, the full-blooded and robust kind wherein users are free from being profiled entirely by any organization, entity, or individual, is and ought to be a public good.

Users of cash generally do not have reason to fear that their activities will be profiled on the basis of their transactions. Many cashless payment methods, however, leave behind a data trail that can be used to construct a detailed history of an individual's habits, location, and circumstances. Consumers have a right to conduct low-risk transactions with providers of goods and services, without revealing personally identifiable information that can be used to associate themselves with the transaction.

Since consumers are unable to verify the trustworthiness of digital payments infrastructure and its operators, profiling is a real risk with dangerous consequences. Users cannot trust what they cannot verify for themselves and should not be forced to do so without payment alternatives that maintain the properties of cash. This principle must be a policy imperative in the redesign of the new social construct of money, both at home and abroad.

It is also perfectly possible to regulate transactions without connecting the transactions to the personally identifiable information of the consumer. It is possible to collect information about the payee for compliance with tax and anti-money-laundering/know-your-customer regulations, along with information about the size, location, and nature of the transaction, while allowing the payer to be anonymous.

The second issue is that the PBOC takes the position that CBDC is part of the monetary base, and, as such, is a direct substitute for cash. This is only half right. Indeed, a CBDC, like cash and banknotes, would be direct obligations of the central bank. At the same time, that does not mean it is a one-to-one substitute for cash.

In fact, there is a panoply of reasons people use cash. In addition to privacy, people also want to avoid discrimination. Many lack bank accounts. Others suffer from a lack of infrastructure, such as internet connectivity. Some desire to transact anonymously, or make the simple choice to be the owner and possessor of their assets. In fact, the very option of having the choice to use a medium of exchange that checks all those boxes is of value in and of itself.

Many central banks have a clear policy of ensuring that persons within their jurisdiction have complete and unfettered access to the economy. Presumably that is the main point of a central bank. Such access includes modes and mechanisms of payment, including cash, which entails access to public payment infrastructure and payment instruments with the properties of cash.

The fanciful notion that somehow a CBDC would obviate the obligation of central banks to ensure access to cash-like payment instruments, or that a central bank could satisfy this policy requirement directly by issuing a digital currency, rests on viewing CBDC as a perfect substitute for cash, which it is not.

We must be cautious not to treat CBDC as a panacea for financial inclusion. A secular decline in cash would prevent many groups, including the impoverished, the elderly, the disabled, those lacking appropriate technological expertise or infrastructure, members of remote communities, and the unbanked from fully participating in the modern economy. In particular, it would undermine the right of all persons to engage with the economy privately. This is especially the case if we conflate “wallets” with "accounts" as the PBOC has done. Under that regime, a digital yuan, or dollar, or pound sterling could only ever be ever used with the say-so of some gatekeeper that could always say no or change the rules, especially if those gatekeepers maintain business models predicated on data harvesting and profiling.

One might imagine that there is no other way to design a digital currency, and that some balancing act must deliver a set of compromises among compliance, efficiency, inclusivity, safety, business interests, and privacy. Not so. Central banks must have the ingenuity and fortitude to develop a CBDC policy that guarantees four key principles: first, accessibility, to ensure that nearly everyone can use it; second, non-discrimination, to ensure that any one person's money is as good as everyone else's; third, privacy, to ensure that no user would fear that he or she would be profiled on the basis of his or her transactions; and, finally, ownership, to ensure that CBDC can be owned by its bearer, just as cash is owned, and used without the risk of being blocked by a third-party actor.

These four fundamental principles are constraints for redesigning the social construct of money and replacing the foundations of the financial sector through new national payment systems that should be a democratizing force. By overlooking them, and driving compromises among what matters, we forego rights and choices that have long been afforded to the public. Without them, the new digital economy will fail before it gets off the ground.

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