



Should Central Banks Start Issuing Cyber-Cash?

To move the fintech debate forward, we need to distinguish between money and payments.

New technologies in the financial sector – **cryptocurrencies, M-Pesa, WeChat** – are opening the door for potential disruptions. Many of them are considered alternatives to either traditional currencies issued by central banks or to the intermediary role played by commercial banks.

In these discussions, there is often the assumption that “money” and “payments” are basically interchangeable features. The confusion originates in the standard definition of money: It is the asset that allows us to purchase goods and services, the “medium of exchange”. The ultimate example is physical currency where a piece of paper that says €50 or \$100 is both the asset (that holds value) and the medium of exchange (the vehicle of payment). Transfer of the asset cannot be separated from the “technology” used to make the payment. By giving the note to a seller, you get in return goods and services for exactly that value.

Clarifying the distinction between money and payments

But the moment we think about electronic forms of money, there emerges a clear separation between the asset and the payment technology. The asset is a balance typically held in a bank (but it can also be in a mobile operator system as in the case of M-Pesa). The payment technology is how the value of that

asset is transferred to someone else. This technology could be a debit card or a near-field communication (NFC) chip inside a watch combined with a terminal at a store, or it could be a messaging application via your mobile device that connects your balance with that of the seller.

Therefore, at least in theory, the two features can be treated as separate. A commercial bank can move from a cumbersome, costly payment technology involving cheques and inefficient wire transfers to a digital process with payments and interbank transfers facilitated by a real-time system. The nature of money has not changed (the balance in your bank account) but the way money is being used as a medium of exchange (the payment technology) has become much more efficient.

In the real world, the two features might sometimes come together. Take M-Pesa in Kenya, where a mobile phone provider offers a form of money that combines a balance within its systems and a technology to make the payments (via mobile phone). This is of course more likely to happen in a country where bank accounts are rare, so the only way to offer an efficient payment technology would be to combine it with a provision of the asset through these balances.

Digital currency and privacy

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Here is another example where money and payments are being mixed: Christine Lagarde, IMF managing director, speaking at the **Singapore Fintech Festival**, discussed the benefits of digital currencies issued by central banks (i.e. allowing individuals to hold accounts at the central bank). One of these benefits is privacy. Quoting from her speech:

“Consider a simple example. Imagine that people purchasing beer and frozen pizza have higher mortgage defaults than citizens purchasing organic broccoli and spring water. What can you do if you have a craving for beer and pizza but do not want your credit score to drop? Today, you pull out cash. And tomorrow? Would a privately-owned payment system push you to the broccoli aisle? Would central banks jump to the rescue and offer a fully anonymous digital currency? Certainly not. Doing so would be a bonanza for criminals.”

This debate about the benefits and costs of different solutions demands that we separate money from payment technologies. Governments may want to have all the relevant information about the identity of individuals holding money accounts. But they might not care about whether you buy pizza or broccoli, i.e. the information about the actual payment. One could imagine a system where the institutions that are holding the assets (money) are highly regulated and compliant with KYC (know your customer) regulations. But the companies that have access to that balance to execute payments do not need to share any information with governments. In fact, we might want them to be forced to maintain strong privacy rules regarding the information they collect or sell. No need to create a central bank digital currency for all.

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