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COMMENTARY

Preparing for a World Without Cash

The Federal Reserve has done almost nothing to study how a digital currency might work.

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Photo: Getty Images

Central bankers throughout the world, from Canada to Ireland, have recently indicated that they might issue digital currency in the future. Yet the U.S. has been absent from the debate. As the world's central monetary power, America should play a leading role in studying the benefits and pitfalls of a digital-currency future. While plenty of risks would come with such a conversion, the potential perks are so great that it merits serious consideration.

What would a government-backed digital currency look like? A country's central bank would need to become a deposit-taking institution and hold accounts on behalf of citizens and businesses. All of their debits would be tracked on the central bank's blockchain, a digital ledger resistant to tampering. The central bank would pay interest electronically by adjusting the balances of depositor accounts. While the current system of physical notes and bills could be continued in parallel, it would likely wind down over time.

Though such a system seems relatively simple, implementation wouldn't be easy. In "Digital Currencies, Decentralized Ledgers, and the Future of Central Banking," a new paper prepared for a forthcoming research anthology on central banking, we analyze potential costs and benefits of a sovereign digital currency.

There are plenty of advantages. The government would save nearly $1 billion annually by not having to print, store, transport and safeguard physical currency. Tax collection would become much simpler, and tax evasion and money laundering could become prohibitively difficult. Depositors would no longer have to rely on commercial banks to hold their checking accounts, and the government could get out of the risky deposit-insurance business. Commercial banks that wished to keep making loans would raise long-term capital in the debt and equity markets, ending the mismatch between demand deposits and long-term loans that can cause liquidity problems.

Central banks would be able to expand credit and control the monetary system without the need for commercial banks to intermediate. The central bank could more easily adjust its monetary policy, because it would have the ability to target specific accounts. For example, the Fed could loosen monetary policy only in economically depressed regions of the country, or for certain depositors, such as senior citizens.

Yet the centralization of banking under this system would also create a Leviathan with the power to monitor and control the personal finances of every citizen in the country. This is one of the chief reasons why many are loath to give up on hard currency. With digital money, the government could view any financial transaction and obtain a flow of information about personal spending that could be used against an individual in a whole host of scenarios. In other words, it would be virtually impossible to hide money under your mattress. But creating and respecting privacy firewalls and rethinking legal-tender laws could mitigate the dangers of monopoly and stifled competition in currency markets.

Implementation would probably create the toughest problems. Today bitcoin and other digital currencies are mostly used by relatively affluent men between the ages of 19 and 44. Not all citizens would be comfortable switching to a virtual currency, and the poor and computer-illiterate would be most vulnerable to being left behind. To accommodate these users, the U.S. Mint could place a digital token in each newly issued dollar bill, with a cryptographic key embedded in a hologram to enable digital tracking on the central bank's blockchain. Such physical manifestations of digital currency already exist in the bitcoin market and would allow individuals to participate in a scheme of digital currency without having to change their behavior.

However, a transition to digital currency

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might come at a large cost for the U.S. in particular, because the dollar remains the world's de facto reserve currency. The U.S. collects enormous seigniorage revenue that accrues to the economy when the Federal Reserve prints dollars that are exported abroad in exchange for foreign goods and services. These bank notes ultimately end up in countries with less reliable central banks where locals prefer to hold U.S. currency instead of their own. Forfeiting this franchise as the world's reserve currency might be too costly, as the U.S. currency held abroad exceeds half a trillion dollars, according to reliable estimates. Unless it is prepared to take deposits from people all over the world who are looking for safe havens, the Fed might sit on the sidelines and watch other countries take the lead in replacing their physical money with digital.

Despite its shortcomings, would this system make sense for the U.S.? With less physical currency being used every year, the Federal Reserve would be negligent not to consider the possibilities. The march of digital commerce may eventually make the benefits seem overwhelming, and it would be wise to be ahead of the game rather than trying to catch up at the last minute.

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