

# Central banks of developing nations should issue digital currency

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Over the past few months, academics and central bankers have been involved in a dialogue over whether central banks issue digital currency. We have made [our own contribution to this conversation](#), but perhaps we should be asking a different question. In addition to *whether* central banks should issue digital currency, we should ask *which* central banks should.

Thus far, the central banks of England, Canada, and Ireland have all addressed the question, and South Korea joined the discussion with an announcement earlier this week. While there may certainly be benefits to these developed nations from adopting digital currency, many are rightfully concerned about the dramatic increase in state power and the temptation for chicanery that would follow from a national, centralised banking institution with access to citizens' bank accounts. Transparency here could become a vice given the background norm of the rule of law that undergirds these societies.

Contrast this with developing nations whose commitment to the rule of the law is on shakier grounds. Here, the transparent nature of open blockchains could offer a number of advantages. They could encourage foreign investment and ameliorate the uncertainty that comes with investing in countries that have histories of monetary mismanagement and nationalisation. Investors may have more confidence in code that they can examine themselves than in the temporary assurances of individual leaders.

Loose monetary policy represents an endemic problem for many countries. The temptation of the printing press is great, and without a firm commitment to central bank independence, the money supply could be subject to the vicissitudes of political or personal caprice. For governments anxious to re-launch their monetary policy in a credible way, a digital currency incorporating self-executing "smart contracts" could make practical a rules-based monetary policy.

In countries where monetary discretion is sometimes abused, an algorithmic monetary policy could be valuable, much like a country deciding to peg its currency to the U.S. dollar. There is a great deal of academic literature on whether rules-based or discretionary approaches to monetary policy are preferable. Countries like Argentina and Zimbabwe have less of an ability to effect counter-cyclical monetary policy on a global level, and so limiting their discretion has less of a cost than it would in more developed economies.

There would be no need for these smart contracts to tie one nation's currency to another's. Instead, a country could adopt something like Milton Friedman's  $k$ -percent rule, which calls for a central bank to increase the money supply a certain percent regardless of the phase in the business cycle. The Taylor Rule is another alternative. Whatever the alternative, however, certainty in monetary policy is the hallmark of an advanced nation, and the emergence of blockchain technology combined with the use of smart contracts has made this a legitimate possibility.

Another advantage for countries with unstable commitments to the rule of law of adopting blockchain technology is that bank accounts would be less likely to be tampered with. The reason why grey markets exist for currency in countries like Iran and Argentina is that the citizens have more faith in exogenous staples than in their own leadership. Similarly, placing faith in the cryptography that underlies a blockchain and not in the good faith of their governments may be wise for citizens of certain countries. Governments looking to attract foreign investment would be able to show a certain degree of public transparency to combat misperceptions if they are, in fact, incorrect. Nigeria and its oil corruption scandals, for instance, could benefit from bank accounts and ledgers where there is a certain degree of transparent accountability that a blockchain offers.

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- *This blog post is based on the authors' paper [Digital Currencies, Decentralized Ledgers, and the Future of Central Banking](#), NBER Working Paper No. 22238, May 2016*
- *The post gives the views of the authors, not the position of LSE Business Review or the London School of Economics.*
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**Max Raskin** is a fellow at the New York University School of Law.



**David Yermack** is the Albert Fingerhut Professor of Finance and Business Transformation and Chairman of the Finance Department at New York University's Stern School of Business, where he has been a member of the faculty since 1994.



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