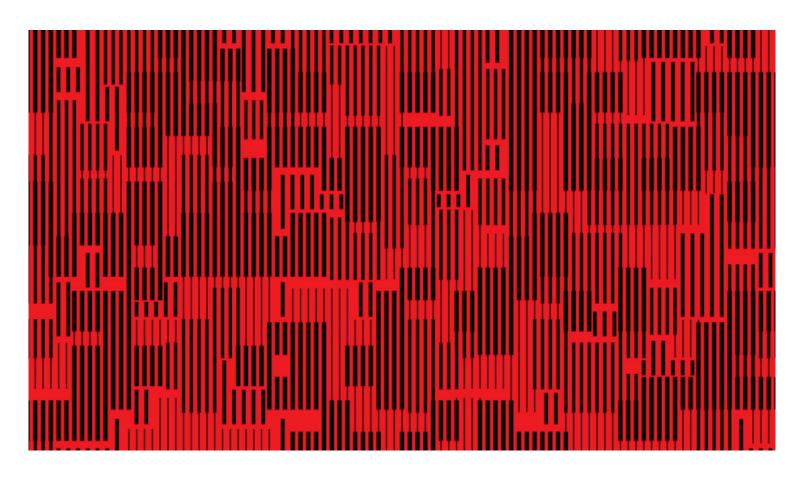
Harvard Business Review

ECONOMY

As Cryptocurrencies Rise, Who Needs Banks?

by Antonio Fatás and Beatrice Weder di Mauro

MAY 07, 2018



FILO/GETTY IMAGES

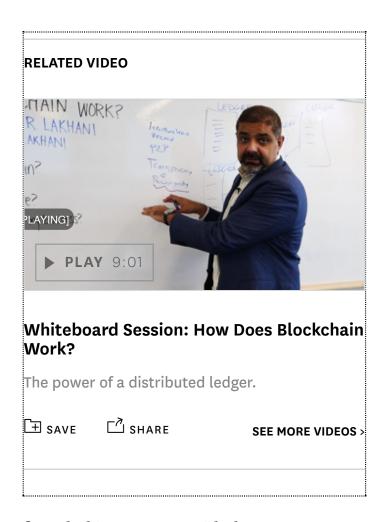
Do you value bitcoin in dollars or dollars in bitcoin? Few serious economists imagine that the new cryptocurrencies, for all the hype, will make national currencies redundant. By and large they are right, because conventional money actually does a pretty good job. The U.S. dollar and other reserve currencies have historically performed well as a medium of exchange and as a store of value — the two principal functions of a currency. Bitcoin and its derivatives perform poorly on both accounts and will not disrupt money as we know it.

But that doesn't mean that new technologies aren't going to usher in a lot of disruption to the financial system. Traditional economists (and, yes, that label could well describe both of us) often ignore a crucial separation between money (the "what") and the payment technology (the "how"). This confusion originates in the fact that for older forms of money — gold or bank notes — there is no distinction between the "what" and the "how"; you simply pay by handing dollar bills or gold coins to the seller.

Today, however, we pay out physical cash less and less often. Instead, when we transact, we usually transfer digital code in exchange for the good or service we're buying. And it is through the technology that digitizes money that new entrants are challenging the financial system.

We've already seen this sort of change in the developing world, where not everyone has access to a bank account. In East Africa, for example, mobile phone companies leapfrogged banks as payment intermediaries because they made it possible for people to transfer cash-convertible phone credits to each other. That meant that people could use phone credits as a digital medium of exchange and that the payment infrastructure became the mobile network.

Of course, in advanced economies, most consumers have access to a bank account with debit and credit cards, which means that they are already engaging in transfers of digital money. This made traditional banks in the U.S. and Europe far less vulnerable to disruptive innovators, even though their e-payment technologies may in some cases be clunky and unreliable. What's more, to compete directly with banks in a developed economy, you had to demonstrate that your technology was compatible with the existing infrastructure and pass all the regulatory hurdles to be recognized as a bank.



This is where bitcoin came in. The advantage of cryptocurrencies is not that they are electronic currencies; dollars, euros, yen, and yuan are all e-currencies today. Rather, the advantage is that blockchain technology offers a complete, self-contained alternative to the traditional payment transfer system; it is as if all bitcoin users are banking with the same bank. And because cryptocurrencies were not initially regulated, there was no need to go through any of the regulatory processes to get started as a cryptocurrency bank equivalent.

That's just what two startups did. Circle,

founded in 2013, provided a peer-to-peer payment system using bitcoin. Ripple, launched in 2012, provided a cross-border payment system that initially relied on a cryptocurrency (XRP) as the payment vehicle. Since XRP also relies on a blockchain technology (a more efficient one than bitcoin's, in fact), it would also provide a central clearing system.

So what? Traditional banks provide very similar services by relying on real-time gross interbank settlement processes through a central bank. But banks face two difficulties: changing legacy systems and coordinating across the established payment networks is costly and takes time. And in the case of international transactions, they face the difficulty of managing liquidity pools in different currencies, as there is no central bank of the world. In this environment, a brand-new system based on a cryptocurrency (a "global currency") at first looks like a winning proposition.

The trouble is that using bitcoin and its ilk requires users to cope with another currency, an exchange rate, and all the attendant uncertainty about value, which runs into concerns about the storage value of money. This necessarily limits the appeal of startups like Circle and Ripple — which is precisely why they have moved away from cryptocurrencies and are looking for ways to apply their technology to traditional currencies and link directly with banks and central banks.

Fintech companies in this space will be aided by new regulation, which may prove to be the real disruptor. Both the Open Banking initiative in the UK and the PSD2 directive of the European Union now require banks to provide access, through APIs, to customers' accounts. This is a critical change because it enables parties other than the banks holding money to effect transfers: Individuals can use their preferred smartphone app to make payments without having to embrace a world with separate money balances and possibly separate currencies. The app will access the relevant accounts through the APIs and transactions can be completed.

In effect, the new regulations will enable a separation of the functions of money. Commercial banks may continue to hold our money balances in traditional currencies and make loans to businesses with those balances, but transactions may be intermediated by a separate payment technology, at least in the eye of the final user.

And if we want payment systems to be integrated, is there any need for multiple intermediaries? Why not simply make payment transfer a central bank function instead? If every individual had accounts at the central bank, and these were linked across countries, that would create a centralized ledger for an entire economy, which would certainly increase the speed, safety, and efficiency of payments. Central banks are considering this idea but so far have concluded that the risks to the financial system are very high and the benefits are uncertain. If it happened, though, the financial system would without doubt be profoundly changed.

Antonio Fatás is a professor at INSEAD, a global business school with campuses in France, Singapore, and Abu Dhabi. He is also a Research Fellow at the Centre for Economic and Policy Research in London, England

Beatrice Weder di Mauro is the Chaired Professor of Economic Policy and International Macroeconomics at the University of Mainz in Germany. She is also a Fellow at the Emerging Markets Institute of INSEAD, a global business school with campuses in France, Singapore, and Abu Dhabi and a Research Fellow at the Centre for Economic Policy Research in London, England

This article is about ECONOMY

+ FOLLOW THIS TOPIC

Related Topics: CURRENCY | FINANCIAL MARKETS | REGULATION | FINANCIAL SERVICES

Comments

Leave a Comment

POST

7 COMMENTS

JOSEF ROSENFELD 2 days ago

You are kidding, right?

People use currency for everyday transactions, and the currency has a set value for that transaction; how would an economy work where a currency's value was not set? An economy where you bought the currency, since these crypto-ersatz currencies MUST first be bought, unless you have the ability to buy machines and electricity to 'mine' them, and then, not know from minute to minute, what it is worth, relative to the value of what you are buying, or paying for?

An economy like that would be as the Weimar Republic's.

•

o de o ep

✓ JOIN THE CONVERSATION

POSTING GUIDELINES

REPLY

We hope the conversations that take place on HBR.org will be energetic, constructive, and thought-provoking. To comment, readers must sign in or register. And to ensure the quality of the discussion, our moderating team will review all comments and may edit them for clarity, length, and relevance. Comments that are overly promotional, mean-spirited, or off-topic may be deleted per the moderators' judgment. All postings become the property of Harvard Business Publishing.