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Bitcoins – means of payment for the poor?

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Bitcoins (BTC) are an unregulated, private means of payment which only exists in digital form, i.e. on the Internet, and not in cash. There is no person or company behind bitcoins, but rather a decentralised network of users. The invention of bitcoins is attributed to Satoshi Nakamoto. This is presumably a pseudonym for the person or group which developed the original code and the network protocol for bitcoins. Today, the network protocol can only be changed by the user collective.

How do bitcoins work?

Legal tender (such as EUR) can be exchanged for bitcoins on special, generally unregulated online markets or exchange offices at the daily rate. They can be used to preserve value, to make money transfers or to purchase items, provided the recipient accepts bitcoins. The recipient can store the bitcoins free of interest, use them for other transactions or convert them into legal tender at the daily rate. The daily rate depends on supply and demand. Depending on their acceptance and prevalence, bitcoins can be used as a unit of account, a means of exchange and a measure of value, just like established forms of money.

Bitcoins are stored in a digital wallet (e-wallet, bitcoins wallet), for instance in an app on a smartphone. While there is a currency monopoly for established forms of money with seignorage flowing to the state (or the central bank), the creation of money through bitcoins takes places on a decentralised basis via the network of users: for providing computing capacity for the network, users are rewarded with created bitcoins, i.e. with seignorage ("mining"). The size of the reward is based on an algorithm which determines that the profitability of bitcoins creation decreases, as the number of bitcoins in circulation increases.The network protocol determines that no more than 21 million bitcoins can be generated. At present there are roughly 15 million bitcoins in circulation. At current exchange rates this corresponds to almost USD 7 billion in market capitalisation (1 BTC corresponds to roughly USD 450).

There are transaction costs for bitcoins transactions, which are generally much lower than those for legal tender (currently about 0.0006 BTC per transfer). In addition, a relatively high fee is charged when exchanging for legal tender and vice versa (0.2 to 1% in online markets and 1.5 to 5% at exchange offices). It can be assumed that the transaction costs for bitcoins will rise sharply with both the phasing-out of the seignorage and the increasing regulation of online markets and exchange offices.

What are the pros and cons of using bitcoins in poorer countries?

So far, bitcoins have been used almost exclusively in high and medium-income countries. They are mostly used for shopping with online retailers, for payments to information and communication service providers, travel and hotel booking websites as well as donations to charitable organisations.

With the help of bitcoins, however, international money transfers (e.g. remittances) can be processed way more quickly than through traditional providers of international cash transfers: for instance, a transfer from Germany to Kenya takes only 10 minutes or so for bitcoins users. In countries with a high inflation rate, bitcoins could eventually take root as an alternative means of storing value, yet bitcoins exchange rates are still highly volatile (fluctuations of several percent a day are common), i.e. they are rather not suitable as a stable store of value. Unlike cash, bitcoins are as yet considered forgery-proof thanks to the underlying block chain technology. By contrast, digital bitcoins deposits must be protected against theft (especially malicious hacker attacks).

To carry out transactions with bitcoins you do not need an identity document, a bank account or a debit or credit card, just a digital wallet. Thus, bitcoins could in principle be used to enhance "financial inclusion" and therefore reduce poverty, especially in regions that are less attractive for (regulated) financial institutions. However, to date there are no relevant products or services for poor people locally offered in bitcoins. In addition, using bitcoins requires access to the internet via a computer or smartphone as well as a certain degree of digital and financial literacy – conditions which hardly apply to the poorest of the poor.

The possibility to completely anonymize transactions has also fuelled concerns that this system could facilitate illegal businesses (money laundering, tax evasion, etc.).

There is little added value for the poor so far

Bitcoins are an interesting alternative to legal tender. They have certain advantages (online availability, low transaction costs, quick processing) but also risks (fluctuations in value, Internet fraud, etc.). To summarize, bitcoins appear better suited for processing online purchases and international money transfers than for fighting poverty in LDCs. ■