

49. Benefits and risks of using bitcoin as a payment instrument

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Introduction. The model predicting Bitcoin price formation remains a mystery to academia and investors. Bitcoin system is built on a transaction database that is distributed across a network. However, this system has certain risks, as the irreversibility of transactions: If bitcoins are sent due to error or fraud, there is no built-in mechanism to undo the error. Nevertheless, this technology is looking forward for future development and to widespread in the context of global economic system.

Materials and methods. The research is based on methods of analysis and synthesis.

Results and Discussion. Bitcoin is a digital currency in which transactions can be performed without the need for a credit card or central bank. Compared with conventional payment systems, Bitcoin lacks a governance structure other than its underlying software. This has several implications for the functioning of the system: Bitcoin imposes no obligation for a financial institution, payment processor, or other intermediary to verify a user's identity; Bitcoin imposes no prohibition on sales of particular items; in contrast, for example, credit card networks typically disallow all manner of transactions unlawful in the place of sale; Bitcoin payments are irreversible in that the protocol provides no way for a payer to reverse an accidental or unwanted purchase, whereas other payment platforms, such as credit cards, do include such procedures.

Bitcoin's design presents distinctive risks that differ from other payment methods and stores of value. Any user holding bitcoins faces market risk via fluctuation in the exchange rate between bitcoin and other currencies. The relatively low weekly trade volumes suggest that Bitcoin users also experience a shallow markets problem. The irreversibility of Bitcoin payments creates heightened transaction risk. If bitcoins are sent due to error or fraud, the Bitcoin system offers no built-in mechanism to undo the error. In a world of competing payment methods, irreversibility puts Bitcoin at a disadvantage: all else equal, consumers should favor a payment system that allows reversal of unwanted or mistaken charges.

Conclusions. Bitcoin transactions do not clear (and hence are not final) until they have been added to the authoritative block chain. Transaction batches are only added every ten minutes on average. This creates at least two potential avenues for abuse. Bitcoin raises certain privacy risks, most notably the risk that transactions can be linked back to the people who made them. Bitcoin transactions are not truly anonymous: instead, they are pseudonymous. Finally, Bitcoin systems face numerous legal and regulatory risks across countries.

References

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