

Digital Currency and its risk

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Abstract

Digital currency is a type of currency available only in digital form, not in physical form. It exhibits properties similar to physical currencies, but allows for instantaneous transactions and borderless transfer of ownership. Examples include virtual currencies and cryptocurrencies or even central bank issued “digital base money”. Like traditional money, these currencies may be used to buy physical goods and services, but also be restricted to certain communities such as for use inside an online game or social network. Digital currency is a broad medium of monetary exchange in which the value is both stored and transferred electronically.

In 1983, a research paper by David Chaum introduced the idea of digital cash. In 1997, Coca-Cola offered buying from vending machines using mobile payments. Digital currency has only a limited user base and the regulatory framework as well as tax treatments of digital currencies is still evolving. The infrastructure needed to support digital currency is still being determined and developed. As payments are made directly between payers and payees, digital currencies can eliminate intermediaries, process steps and costs related to infrastructure unlike traditional payment methods which cannot bypass banks or clearing houses. It can also help in making the funds flow more simply and transparently. There are also risks associated with digital currencies such as security, currency, volatility and payment beneficiary identification. Virtual currencies and crypto currencies are both types of digital currencies. Digital currencies can include a multitude of common products, gift cards, product rebate cards, airline reward points, credit card cash-back rewards. Virtual currencies are centralized, internet based currencies, which are used as a medium of exchange in the framework of a virtual world. Similarly, crypto currencies are a form of digital currency but differ in that they are not denominated in an official currency and are not controlled by a centralized authority. Some areas of uncertainty like compliance with regulations and customer identification along with risk, limit the acceptance of digital currencies in the payment industry,

Research methodology

The research methodology is mainly based upon the understanding of the growing use of digital currency and the risks associated with it. The era of digital currency has revolutionized the global world. The world has now come up with the new concept of the payment system over the traditional concept to facilitate and enhance the payment mechanism without any delays and to conduct the business in much effective and more efficient way. Under this research methodology, bitcoin has been emphasized because of its growing popularity and the hype that it is creating in the market. People are getting fascinated by it because of its growing face value and its market worthiness. People do not understand the risks and volatility associated with it. It can rise up by 25 percent or crash down to zero at any moment while being traded in the market. The data used for the study of bitcoin is mainly secondary data. The data is mainly obtained from “The Economy Forecast Agency” which can be used to understand the volatility of bitcoin in the market.

Advantages of investing in Bitcoin

- I. Protection from payment fraud: Bitcoins are digital and cannot be counterfeited or reversed arbitrarily by the sender, as with credit card charge-backs.
- II. Reduced possibility of identity theft: When we give the credit card to a merchant, we give him/her access to our full credit line, even if the transaction is for a small amount. Credit cards operate on a “pull” basis, where the store initiates the payment and pulls the designated amount from our account. Bitcoin use a “push” mechanism that allows the bitcoin holder to send exactly what he or she wants to the merchant or recipient with no further information. Furthermore, bitcoins do not require names- just digital wallets.
- III. Direct transfers for immediate settlement: Purchasing real property typically involves a number of third parties, delays and payment of fees. Bitcoin contracts can be designed and enforced to eliminate or add third party approvals, reference external facts, or be completed at a future date or time for a fraction of the expense and time required to complete traditional asset transfers.
- IV. Access to historically inaccessible markets: There are approximately 2.2 billion individuals with access to the internet or mobile phones who don’t currently have access to traditional exchange systems. These individuals are primed for the bitcoin market.

- V. Lower fees: There aren't transaction fees for bitcoin exchanges because the bitcoin miner is compensated by the network with newly issued bitcoins. Even though there's no bitcoin transaction fee, many observers expect that most users will engage a third-party service, such as Coinbase, in lieu of creating and maintaining their own bitcoin wallets.

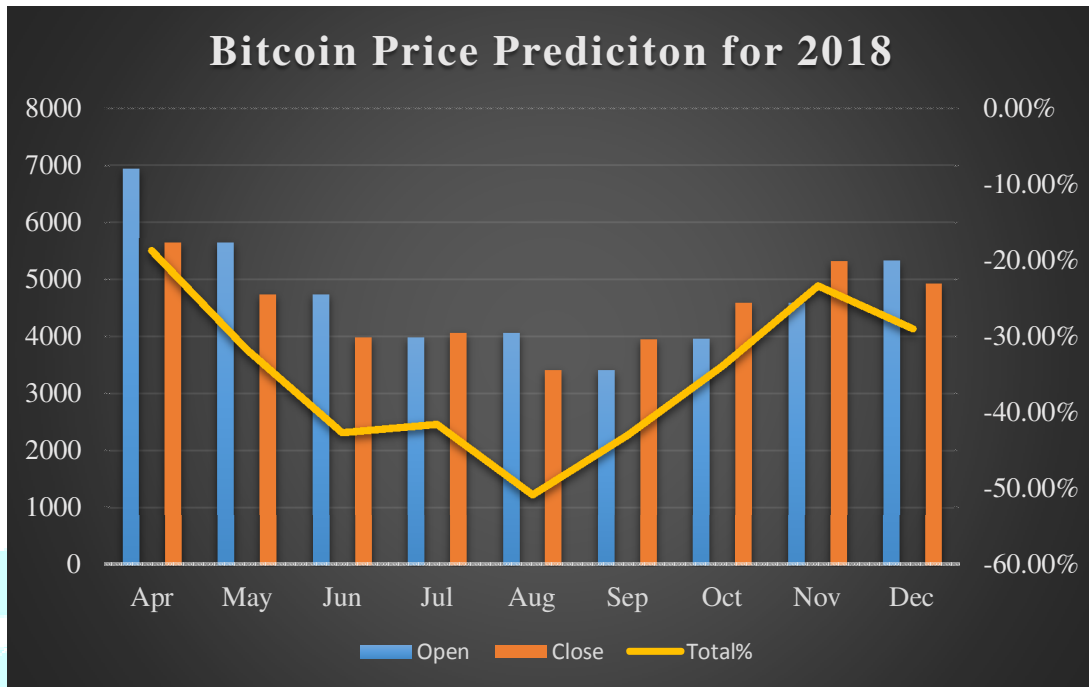
Disadvantages of investing in Bitcoin

- I. Financing illegal and immoral activities: Some believe that appeal of a bitcoin is that it can be used anonymously for illegal or antisocial acts. On October 2013, the FBI closed the notorious website Silk Road, seizing more than 144,000 BTC worth \$28 million. Digital currencies like bitcoin are being used to assist a broad array of criminal activities including illegal drug sales, stolen identities, and illegal weapon sale. It is also being used as a favorite of cyber criminals to pay for services such as developing and distributing malicious software to the movement of stolen funds resulting from account takeovers.
- II. Lack of security: There is no safety net or perfect way to protect the bitcoins from human error, technical glitches, or fiduciary fraud. According to an article in the UK edition of Wired, 18 of 40 web-based offering to exchange bitcoins into fiat currencies have gone out of business, with only six exchanges reimbursing their customers.
- III. Limited scaling: The design of the system limits the speed and number of transactions processed, making it unlikely that bitcoins will replace conventional credit card transactions.
- IV. Increased regulation: While relatively “Benign” guidelines are currently in place, law enforcement agencies could decide that bitcoins are a “giant money laundering scheme”, and enact more stringent regulations that would diminish the currency’s value.
- V. Excessive volatility: According to an analysis published in “The Wall Street Journal” by Campbell Harvey, a finance professor at Duke University, bitcoins have been 7.5 times as volatile as gold, and more than eight times as volatile as the S&P 500 over the last three years. This coincides with the analysis of Marie Brière, associate professor of University Paris Dauphine in France, who calculated an annualized return of 370% for bitcoins with 175% volatility. Such violent price movements within short time periods are not consistent with an ideal exchange medium for buyers or sellers, limiting bitcoins as a significant vehicle for businesses.

Tabular and graphical representation for the study:

Bitcoin price prediction for 2018

Month	Open	Min-Max	Close	Total %
Apr	6945	5253-7533	5648	-18.70%
May	5648	4412-6252	4744	-31.70%
Jun	4744	3706-4744	3985	-42.60%
Jul	3985	3780-4348	4064	-41.50%
Aug	4064	3175-4064	3414	-50.80%
Sep	3414	3414-4237	3960	-43.00%
Oct	3960	3960-4916	4594	-33.90%
Nov	4594	4594-5702	5329	-23.30%
Dec	5329	4587-5329	4932	-29.00%



Interpretation:

- ❖ Bitcoin price prediction for April 2018: In the beginning price at 6945 Dollars. Maximum price \$7533, minimum price \$5253. The average for the month \$6345. Bitcoin price forecast at the end of the month \$5648, change for April -18.7%.
- ❖ Bitcoin price predictions for May 2018: In the beginning price at 5648 Dollars. Maximum price \$6252, minimum price \$4412. The average for the month \$5264. Bitcoin price forecast at the end of the month \$4744, change for May -16.0%.
- ❖ Bitcoin price prediction for June 2018: In the beginning price at 4744 Dollars. Maximum price \$4744, minimum price \$3706. The average for the month \$4295. Bitcoin price forecast at the end of the month \$3985, change for June -16.0%.
- ❖ Bitcoin price prediction for July 2018: In the beginning price at 3985 Dollars. Maximum price \$4348, minimum price \$3780. The average for the month \$4044. Bitcoin price forecast at the end of the month \$4064, change for July 2.0%.
- ❖ Bitcoin price prediction for August 2018: In the beginning price at 4064 Dollars. Maximum price \$4064, minimum price \$3175. The average for the month \$3679. Bitcoin price forecast at the end of the month \$3414, change for August -16.0%.
- ❖ Bitcoin price for September 2018: In the beginning price at 3414 Dollars. Maximum price \$4237, minimum price \$3414. The average for the month \$3756. Bitcoin price forecast at the end of the month \$3960, change for September 16.0%.
- ❖ Bitcoin price prediction for October 2018: In the beginning price at 3960 Dollars. Maximum price \$4916, minimum price \$3960. The average for the month \$4358. Bitcoin price forecast at the end of the month \$4594, change for October 16.0%.
- ❖ BTC to USD predictions for November 2018: In the beginning price at 4594 Dollars. Maximum price \$5702, minimum price \$4594. The average for the month \$5055. Bitcoin price forecast at the end of the month \$5329, change for November 16.0%.
- ❖ Bitcoin price prediction for December 2018: In the beginning price at 5329 Dollars. Maximum price \$5329, minimum price \$4587. The average for the month \$5044. Bitcoin price forecast at the end of the month \$4932, change for December -7.4%.

Conclusion:

Digital currency currently has only a limited user base and the regulatory framework as well as tax treatments of digital currencies is still evolving. The infrastructure needed to support digital currency is still being determined and developed. Cryptocurrencies and virtual currencies are categories of digital currencies. As payments are made directly between payers and payees, digital currencies can eliminate intermediaries, process steps and costs related to infrastructure unlike traditional payment methods which cannot bypass banks or clearing houses. It can also help in making the funds flow more simply and transparently. There are many benefits associated with digital currencies, such as the ability to easily make payments on time and lower transaction costs. Another manner in which digital currencies can help organization is by eliminating/reducing the exposure risks by using them as a transport currency.

At present, digital currencies are not accepted by banks, and as a result, interest cannot be earned on them by individuals or organizations. There are also risks associated with digital currencies such as security, currency volatility and payment beneficiary identification. Some areas of uncertainty like compliance with regulations and customer identification along with risk, limit the acceptance of digital currencies in the payment industry.

Reference

- Dastur, N. (2016). *cashless indian economy ? A Reality ??* Business Today magazine.
- journalist, T. c. (2017). *Why a 'cashless' society would hurt the poor: A lesson from India.* the conversation.
- mathur, H. (2016). *india's search for cashless economy.* ET Tech.
- shankaran, s. (2016). *India as a cashless society? Only in the realm of fantasy.* Economy India, TOI.
- srinet, A. s. (january 2017). *Cashless India- Importance, Implementations, Requirements and Future!*
- verma, s. (2016). *Cash withdrawal: Banks plan to add 10 lakh PoS devices by March-end.* New Delhi. wikipedia. *Book of international settlement.* wikipedia.

