

Bitcoins and Fiat Currencies: India's Concerns and Implications

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Summary

As most of the developed world embraces the idea of crypto assets and cryptocurrencies, emerging economies like India have been debating the path they should take to accommodate the newest advances in financial technology into the financial system. This paper attempts to analyse the bitcoin as the most popular cryptocurrency, its major features in comparison with fiat currencies, the stance of India thus far and the possible path ahead.

The financial technology (fintech) revolution has resulted in many advances in global finance and has opened the doors to unprecedented possibilities in global business. Cryptocurrencies, a typical variant of digital currencies have experienced increased usage in transactions globally with most governments across the world trying to find ways to track and regulate cryptocurrencies and crypto transactions. Bitcoins are, by far, the most commonly used and most popular cryptocurrency.

For anything in the world to act as currency, it needs to fulfil the basic conditions that money of any kind needs to fulfil. It must be acceptable as (a) a medium of exchange; (b) a unit of account (that is, it should be possible to value other commodities in units of the currency); and (c) a store of value. Traditional fiat currencies backed by government decree fulfil all the above conditions primarily due to government support. Each country has a central bank which is responsible for maintaining financial stability and hence keeps account of transactions, balances total money supply etc. which help maintain financial stability. Hence most currencies are national or at best regional. A currency like the American dollar has the highest acceptability across the world given the status of the United States as the largest global consumer as well as the stability and strength of the US dollar in terms of its exchange value vis-à-vis other currencies of the world.

Bitcoins were launched in early 2009 and the global economic slowdown coincided with the acceptance and growth of bitcoins being used as a cryptocurrency. The success of the bitcoin with respect to the previously launched digital currencies lies in its ability to tackle the double spending problem¹ efficiently using cryptography and a system of validating transactions through consensus. The decade following 2009 has seen the bitcoin becoming increasingly popular and today a lion's share of the digital currency space is commanded by

¹ The double spending problem refers to multiple transactions with the same unit of a currency. While most files shared digitally are copies of an original file, this feature conflicts with the idea of a currency system where each unit of value can be exchanged one per transaction. The ability to make copies of a digital currency is akin to having fakes generated which can have catastrophic effects on the value of the currency and hence its exchange value.

bitcoins.² If one looks at the three main properties of money as outlined above, the bitcoin's acceptability has been growing fast as a medium of exchange with the first transaction happening in 2009.³ The bitcoin is a unit of account today as it can be traded with most traditional fiat currencies in exchanges and each commodity is in turn valued accordingly to the fiat currencies. Hence any commodity has a value in terms of bitcoins as well. Finally, the bitcoin is traded in currency exchanges and many individuals buy and sell bitcoins to lock in gains out of change in value and hold bitcoins as an asset.⁴ Hence the three main properties for bitcoins to act as a currency are fulfilled. In addition to all of it, it is a global currency provided transactions are held to be legal by respective governments across the world. A good question to ask here is, "Why should the world shift to bitcoins when the fiat currency system is acting just fine to facilitate needs?"

Major Advantages and Risks with Bitcoins

The advocates of bitcoins or cryptocurrencies cite major advantages of bitcoins over fiat currencies. That bitcoins are said to have the following advantages. First, the bitcoin as a currency is not controlled by any central authority and is not regulated by any government. Hence, the rules of supply or exchange value cannot be controlled according to the whims of any regulatory authority or a central bank or a dictator. Hence problems of hyperinflation of the type witnessed in Zimbabwe can never arise. The exchange value of the bitcoin is determined by market forces and the supply of bitcoin increases at a decreasing rate according to pre-defined rules which is again agreed to by consensus.

The supporters of the bitcoin argue in favour of the currency as a decentralised currency giving power to the individuals like in a true democracy. The greater the number of people adopting it, the higher the acceptability as a currency.

While this may sound encouraging, till date the power to validate transactions, build blocks in the blockchain network of bitcoins, etc., rests with individuals who have the best computing powers.⁵ Hence, the power to change rules and form a fork to start a different cryptocurrency with advantageous rules for a counted few rests with the same individuals and there is nothing to stop it. This may happen in the face of a global economic turmoil or instability of the nature of 2009. Previously, there have been attempts of forks in the bitcoin blockchain. However, the bitcoin has survived the test on such occasions.

A second advantage of bitcoins with respect to other currencies is that it is a true global currency and one can transfer it seamlessly without as much time lag as would be required in the traditional system or without having to pay fees for such a transfer. In addition, if bitcoins are legal in both geographies, there is absolutely no exchange rate risk or loss of

² As per latest statistics (25th June, 2019), the market capitalisation of bitcoins is more than US\$125 billion. Ethereum is a distant second with a market cap of US\$50 billion. (See <https://www.investopedia.com/news/top-5-cryptocurrencies-market-cap/>)

³ Transactions using bitcoins are considered illegal by several governments.

⁴ The usage of bitcoins as a store of value or as an investment option has been most significant of late despite wide fluctuations in its value.

⁵ The process of validating a transaction is an extremely energy intensive process and individuals with the ability to invest in greater computing or processing power are the more successful bitcoin miners.

wealth trying to convert currencies. Once again, while this is indeed true, we increasingly find that validating transactions requires a fee if one needs the transaction to be validated quickly.

A third advantage lies for currency traders and investors. The bitcoin has seen phenomenal appreciation in value between 2009 when it started from no exchange value to the present day when it is valued at about US\$11,000 (\$15,000 approximately). Various events have helped the appreciation in value of the bitcoin including increasing global acceptance. Hence asset holders looking for quick appreciation in wealth find investing in bitcoins a lucrative option. Additionally, since the exchange rate with national currencies is market-driven, the possibility of value erosion due to a pegged or a managed float exchange rate is mitigated.⁶ Residents of such economies where exchange rate is managed or pegged can see their wealth appreciate without any controls and hence it works to their advantage.

The associated risk is a situation where the bitcoin starts losing value fast due to a misuse of the asset for illegal or underworld activities or otherwise. If there is no way such depreciation of the bitcoin can be checked, it has extreme risks for world currencies and especially those of the emerging economies. Global experiences thus far suggest that foreign investors in emerging economies quickly withdraw their financial market investments to the safe havens of their countries in the wake of financial risk in the developed or the developing worlds. With bitcoin investments being dominated by the developed countries of the world, once the asset starts losing value quickly, a retraction to fiat currencies whose value is guaranteed by respective governments is a sure possibility and this would lead to a quick erosion in assets for those who hold the bitcoin as an asset.

In the past the bitcoin has been used by drug peddlers and the US Federal Bureau of Investigation has foiled rackets of drug peddling and money laundering.⁷ The risk of misuse of the currency which is free from government regulation cannot be underestimated. The more global the currency becomes and the less the regulations and accountable monitoring, the higher the risks of misuses.

India and Bitcoins

Most emerging economies like India are wary of the consequences of cryptocurrencies despite its advantages as described above. At present, it is not illegal to transact in cryptocurrencies in India, but any financial institution under the governance of the Indian central bank i.e. the Reserve Bank of India (RBI), is not allowed to deal in bitcoins.⁸ Successive commissions have submitted reports to the government advising against legalising the

⁶ Exchange rates of fiat currencies are monitored and not allowed to freely float in the market due to concerns of destabilising the financial system of emerging economies.

⁷ See <https://archives.fbi.gov/archives/newyork/press-releases/2013/manhattan-u.s.-attorney-announces-seizure-of-additional-28-million-worth-of-bitcoins-belonging-to-ross-william-ulbricht-alleged-owner-and-operator-of-silk-road-website>

⁸ See "RBI bars banks from supporting bitcoins" The Hindu Business Line, 5th April 2018 (<https://www.thehindubusinessline.com/money-and-banking/rbi-bars-banks-from-supporting-bitcoins/article23444493.ece>)

bitcoin or any other cryptocurrency. Media reports tend to suggest that bitcoins may indeed get banned in India.

If one analyses the implications of legalising bitcoin transactions in India, several points emerge. First, it could lead to added foreign investment in India. While India is a leading recipient of foreign institutional investments, the positive growth opportunities presented by India may see a significant influx of wealth through bitcoins into the economy. Indeed, many multinational corporations (MNCs) deal in bitcoins. Legalising the bitcoin would lead to wealth flowing in which could be further beneficial for the investment in the country. On the other hand, wealth can leave the economy equally fast. Currently, there are capital account controls maintained by India which debar corporates from repatriating unlimited amounts of capital from the country. A legalisation of bitcoins would result in easy unregulated outflow of capital. The threat of a global crisis leading to quick flight of capital or hot money is the other risk that economies like India would be worried about.

There is reasonable global consensus that, given the advantages the digital currency provides, there is definite merit in accommodating the innovation into the financial system. However, appropriate regulations need to be drawn up and once this is done, the current lure of the unregulated currency that the bitcoin is, may cease to be true.

Various MNCs have launched their own cryptocurrency and this helps in their business bypassing the wealth erosion that results while transacting through traditional fiat currencies. This trend would go up even as most national governments mull their own cryptocurrency. Facebook is about to launch its digital currency, the Libra coin, which will not be launched in India. This currency is scheduled to be pegged to the US dollar and hence offer significant security in terms of value and hedge in terms of value fluctuations. It may well be termed as a digital fiat currency.

The RBI has repeatedly discouraged the use of bitcoins and other cryptocurrencies and some reports suggest that the RBI may be considering launching of its own cryptocurrency.⁹ For most emerging economies this may be a good move provided it is launched with enough regulations after understanding the cryptocurrency space. A regulated cryptocurrency would be a good substitute for the existing fiat currency with typical exchange rates but could do away with the time and charges required for international transactions. This would help the central bank have a handle on cryptocurrency transactions as well as offer most advantages of the bitcoin to interested individuals. However, regulations would need to be significantly tightened and if required, a fixed exchange rate of the fiat currency with the bitcoin would need to be maintained which in turn could add to foreign exchange management responsibilities of the RBI.

In sum, while the cryptocurrencies need to be embraced for sustaining and improving India's position in the global markets, it needs to be done with appropriate caution. While declaring it illegal runs the risk of losing out on investments, legalising completely exposes the economy to significant risks of possible flight of capital as well as further depreciation of the

⁹ See "RBI looking to introduce central digital currency", The Times of India 5th April, 2018 (<https://timesofindia.indiatimes.com/business/india-business/rbi-may-introduce-its-own-version-of-digital-currency/articleshow/63627093.cms>)

Indian rupee through contagion effects. Global regulations must be passed at the earliest to govern crypto currency transactions across the world (which, in turn, would reduce the lure of cryptocurrencies) such that emerging economy concerns are addressed. In addition, India may consider launching its own cryptocurrency with all requisite regulations which in turn would allow most benefits of the cryptocurrency market while hedging against the risks of quick value erosion due to financial market turbulences elsewhere. This would come at added regulatory costs to the central bank but may be necessary for the progress and development of India's business climate.

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