

## Impact of Digital Economy in India

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### Abstract

In the past decade, the use of Digital Currencies has surged and millions of active users can be identified. Any currency which does not have a tangible form and can only be found electronically can be categorized as a digital currency. These currencies while primarily were used in financial markets, have now become popular ever for day to day shopping. The use of this currency however, can be limited to a single community in some cases. It is important to differentiate between Digital Currencies and digital exchanges as the two are often thought of as being the same. For example, digital currency would be bitcoin, whereas a digital exchange is Pay Tm. The latter transfers the fiat currency of the economy while bitcoin is a currency itself. Other instances of digital currencies include Ethereum, ripple, Litecoin, peercoin and so on. The trend is so popular that even Facebook is coming up with a digital currency of its own. Bitcoins are a comparative recent phenomena on the Internet online landscape and an rising force in the financial sector. The advent of digital currencies has opened up a new range of opportunities that have a potential to open up a economic growth. This paper shall discuss the potential impacts of digital currencies with reference to India.

**KEYWORDS**—Digital currencies, Bitcoin, Economic Growth, Blockchain

### INTRODUCTION

While its mass adoption is only seen in the past decade, the concept was first put forward in 1983 by David Chau. Who later went on to form Digicash, an e-money business which declared bankruptcy in 10 years. Amongst other legal reasons, the concept of Digicash was simply ahead of its time leading to its early demise. The first wildly adopted use of digital currencies was E-gold. A platform which allowed users to convert their money and store it as denomination of gold grams. Users of e-gold enjoyed instant cross-border transfers, complete anonymity and without going through long process or paying high transfer fees. Rather e-gold was so successful that they were handling more than billion dollars of transfer in a year. However, eventually due to multiple legal reasons e-gold too had to shut down in 2007.

It was finally in 2009 when the world's most successful digital currency was introduced known as Bitcoin. It was an open source software developed by Satoshi Nakamoto, the name is a pseudonym on the development team that created bitcoin. The currency was based on blockchain technology which made it more secure and rigid than any digital currency before it. In 2017, bitcoin even peaked to nineteen thousand nine hundred and nine dollars per BTC with a maximum supply of twenty-

one million BTC. However, once again, various countries have banned trading in bitcoin due to legal and regulatory challenges. The trend of legal and regulation challenges for digital currencies has still not been completely overcome to this date.

The advantages of using Digital Currencies such as instant and cross-border transfer allowing consumers to enjoy transfers no matter where in the world they might be. Being a decentralized network means that no central authority exercises control over the system and thus Digital Currencies are also not affected by various bank policies. Low operational costs as almost no money is charged to consumers for the transfer itself which in contrast to normal banks can charge up to ten percent as transfer fee. Highly secure network and anonymity aid making it nearly impossible for hackers to gain access. The high number of advantages should simply make a case to wildly accept them a legal tender. However, it is the same anonymity and decentralized characteristics that prevent this from occurring. Governments raise concerns regarding the potential misuse that can occur such as money laundering or tax evasion. This paper shall discuss the potential impacts of digital currencies with reference to India.

#### India and Digital Currencies

India as a country has always had a high adoption rate for new technology or any other digital advances. More than sixty percent of Indians have access to high speed internet and telecommunications services. Digital Currencies, however, do not follow suit with this. It was not until 2013 when digital currencies such as bitcoin started gaining some traction in India and began to be recognized. Part of this late adoption can be pinned down to the 2008 global recession. While, most countries globally experienced high levels of recession in 2008, India was rather unaffected by it. Hence, while other countries were adopting digital currencies to combat volatility associated with tangible currencies Indians did not see much reason to do so.

The push towards bitcoin was later fueled by the Digital India initiative as consumers believed that with this initiative money will eventually become digital. Another reason for India's late adoption can be the culture of the country itself. Indians only feel confident with currency whilst it is held in their hands. A completely digital currency which may exist only on their smartphones/accounts online may scare many Indians.

The first rather interesting adoption of bitcoin was seen by a south Indian restaurant in Mumbai named "Kolonial". The restaurant accepted bitcoin as form of payment and even went further to offer exclusive promotions for customers paying with bitcoin. In 2014, India's first ever bitcoin exchange known as "Unocoin" was set up. This company attracted foreign direct investment of \$250,000 and later went on to gain 3000 users within a year. Other bitcoin companies included BtcxIndia and Coinsecure. Apart from these, various crypto shops have popped up in major cities such as Delhi, Bangalore and Mumbai.

The most significant surge in adoption of Digital Currencies was seen in 2016, when Indian Prime Minister Narendra Modi announced the demonetization policy. The demonetized notes accounted for nearly eighty six percent of the nation's notes outside of banks. This meant that people would have to declare heavy taxes for holding such large amounts of wealth. Various Indians invested heavily into digital currencies simply to withdraw them on a later date and hence, avoiding high taxes which would be incurred when declaring cash at banks. The realities of digital currencies soon began to set in, however, and thus the growth once again became

stagnant. Given its gigantic population, India only accounts for two percent of the global market for digital currencies.

Amidst all these adoptions of bitcoin, the position of Reserve Bank of India relative to bitcoin was unclear at first. While RBI did issue a warning against the use of digital currencies in 2014, the complete legal ramifications of digital currency was still in question. In 2016, when demonetization occurred and the populace resorted to digital currencies to circumvent taxes it was when RBI stepped in and started banning certain crypto activities. This, however, has gone a step further today in 2019 as there are talks on the complete ban of digital currencies and a draft bill for which is already being circulated in government offices.

### Why use Digital Currencies?

To understand the impact of Digital Currencies it is best to first understand why people have been so enthusiastic about it. There exist numerous advantages that Digital Currencies provide, the most important of which for India being financial inclusion. Currently India remains as the second largest unbanked population of the world. This is due to banks being hesitant to open accounts for the poor as they assume them to be more of a liability and for some the charges of opening a bank may simply be too high. Digital currencies allow these people to become their own bank and hence, a part of the economy itself. This gives anyone irrespective of their color, caste, gender or monetary status a chance to participate in the global economy.

The next important advantage which is very important in the case of India is money transfer. India has a high rate of people who travel and settle abroad. Most of these people leave their families behind initially in hope of saving up enough to bring them abroad one day. In the meantime, they send whatever amounts they can back home. Now when sending these amounts, people with bank accounts pay large chunks of their transferred amount as a fee for the transfer. However, as discussed in the previous paragraph a lot of people in India do not even own bank accounts. These people rely on money transfers such as Western Unions or even MoneyGram. These money transfer networks charge a transfer fee as well but also provides terrible exchange. Furthermore, the receiver may have to travel long distances to receive the money depending on their location. Thus, ripping off customers twice in the whole process. Adoption of digital currencies would resolve all the above as there are no transfer fee and it is also instant.

While most Digital Currencies are privacy centered, bitcoin transactions can be made completely transparent. In a country like India where corruption is believed to be on an all time high, imagine all governments, political institutions and even NGOs using completely transparent digital currencies. This would provide more credibility to these parties as people would be able to see exactly where their money is going. Taxpayer's money would finally be put to proper use instead of ending up in the pockets of corrupt officials. Additionally, digital currencies are designed to take power away from people continuously trying to manipulate currencies. This makes fiat currencies vulnerable to such people with vast amounts of money and influence. The current volatility of digital currencies comes from the high levels of fear and uncertainty among people regarding these currencies.

Lastly, the world of payments would simply become much easier for merchants. The current form of cashless payments are credit/debit cards. These cards are majorly monitored by VISA and MasterCard, these companies take a small share of every

transaction done through credit cards. Furthermore, it costs merchants to rent out point of sale terminals as well. Merchants are, therefore, paying money to accept money, which should not be the case. Digital currencies do away with all these middlemen making it more profitable for merchants as well as more accessible to consumers unable to open bank accounts.

#### Obstacles in the way of Digital Currencies

There exist substantial challenges in the full-scale adoption of Digital Currencies in the form of various security and financial issues. As with any digital technology, the threat of security due to hackers always persists. If hackers gain access to user accounts, they may simply steal money by transferring balances or much worse as they could even break the system. While previous forms of Digital Currencies were quite susceptible to attacks, the latest iteration of bitcoin is said to be quite invulnerable to hackers as it is based on block chain technology. Block chain technology is made of singular nodes which can only be accessed by users with authority to them and only new entries are allowed. Manipulation of previous data is almost impossible, hence, making it quite robust against hackers.

Given the lack of regulation behind digital currencies, there would be no framework to determine the rate of issuing for the currency. In contrast to the rupee, the issuing of which is based on the demand and supply within the economy. Unlimited issuing could not only lead to collapse of the digital currency itself but importantly could accelerate inflation within the Indian economy. Additionally, some digital currencies within India can be used to buy real goods and services and vice-versa as well. This again could have a deteriorating effect on the rupee itself leading to lack of demand.

Another economic concern would be the rise in money laundering caused by Digital Currencies. This is especially true for platforms which allow users to exchange digital currencies for real money. In the case of India, with high levels of black money it would be relatively easy for launderers to convert their cash into white. This not only would lead to high loss of income for government in the form of taxes but also raises the number of the illegal activities in India. The anonymity that comes with the use of digital currencies while usually a strength becomes a negative here as it becomes even harder for officials to trace money launderers. Similarly, the emergence of black markets may also accelerate due to the same reasons above.

#### Legal Implications of Digital Currencies in India

In a tax heavy economy such as India's, Digital Currencies face extensive legal restrictions. These restrictions are further worsened by the government's negative stance on digital currencies. Tax notices have already been issued to more than two lakh users transitioning in bitcoin. Trading in any kind of instrument which has been recognized by the RBI for financial gain will be subject to the Foreign Exchange Management Act, 1999 (FEMA). Any digital currency when purchased for future investment is recognized as an asset and thus any gains made on the transfer of such asset can be a taxable amount. For traders continuously trading in digital currencies for financial gain the Income Tax Act of 1961 would imply. However, due to the nature of digital currencies this becomes an extremely difficult task. Interventions by Indian government is, therefore, made into trading platforms to better track the movement of such digital currencies.

Another form of Digital Currencies that have gained traction among the young are virtual in-game currencies. Examples of these include gold in world of war craft or v-

bucks in fortnite, these games are majorly played by children ranging from ages 8-15. In India, to protect these children on websites the Article sixteen of Convention on the Rights of the Child was put in place. This largely narrows down information websites can collect from children and requires websites to provide in utmost detail how and why will the data provided by them be used by the website. Moreover, before collecting such information these games/websites are also required to gain permission from a parent/legal guardian. This would, therefore, restrict these types of digital currencies.

Another potential Act that could be imposed on Digital Currencies is the Credit Information Companies Regulation Act (2005) also known as CIRCA. This has to do with the collection of the credit information of users and how this should be done. Furthermore, the storage and safe-keeping of this data is also vital as the company can be held liable in the case of cyber attacks or any potential leaks. Lastly, there exist various digital currencies which rely on gift cards to be purchased to obtain said currency. These again can be regulated by the RBI's instructions on the operations of Prepaid Payment Instruments specifically the Payment and Settlement systems Act (2007).

#### The Stance of RBI on Digital Currencies

The trend of bitcoin is clearly catching up among technology enthusiasts and investors in India. However, the RBI does not share this enthusiasm and has been trying to layout a regulatory framework since the introduction of digital currencies in India. The first step towards this was to set-up a committee to investigate the workings of digital currencies. Furthermore, various discussion forms were open on the "My Gov" forums to obtain opinion from the populace. The government's move towards digital currency was to clearly understand its workings as the acceptance of these currencies would have various implications.

The very first implication should the RBI choose to accept Digital Currencies legally would be the inclusion of taxes to both purchases and any returns made from the trading of such currencies. Additionally, as discussed earlier, these currencies would also fall under the RBI's Act of 1934 and the FEMA Act. A legal framework would also be required to put in place to protect people from malpractices such as fraud which considering the anonymous nature of these currencies can be quite difficult. This lack of framework has not, however, stopped start-ups such as Unocoin, Zebpay and so on. These are simply self-regulated exchanges with multiple anti laundering mechanisms in place.

While the initial RBI warning against Digital Currencies was issued in December of 2013, a follow-up warning of similar nature was published in the March of 2017 as various legal and financial concerns were raised by Rama Subramaniam Gandhi who at then was the Deputy at RBI. This was followed by RBI banning all financial institutions associated with it from trading digital currencies in April of 2018. This was said to be for the protection of the people from dangers associated with it. This move gave rise to the various illegal activities such as "hawala" as people would simply trade through overseas account to circumvent the ban. This has been reinforced again in 2019 where a bill is in circulation for the complete ban of digital currencies. RBI clearly is not in favor of cryptocurrencies; the impact would primarily be the loss of potential investment that could have aided the economy. However,

considering the legal and financial concerns of digital currencies perhaps the increase in investment is not worth it.

### Conclusion

Digital currencies provide another, compelling and alluring model of payment and trading that can aid business as well as consumers at the same time. It helps business reduce operating costs while enhancing payment mediums for consumers. It does have various impacts on the economy both positive and negative as discussed above. While there are various positives from different perspectives, the negatives mostly come from the lack of legislation under these currencies which lead to various financial challenges. This, however, has not stopped the confidence of various enthusiasts in India from adopting them, some going as far as to setting up bit-coin ATMs as well within the country.

So far the impact of Digital Currencies has not been quite significant considering the extensive government restrictions and with the re-election of Prime Minister Modi it seems even less likely. It is however, within reason that the Indian government is reluctant towards the full-scale adoption of Digital Currencies to prevent misuse. Tax-evasion and money laundering to this date remain some of the biggest crimes in India and considering how digital currencies could be used to accelerate said crimes, full-scale could potentially be very detrimental for the country. A regulatory body dedicated to Digital Currencies would be required for any kind of large scale adoption to take place. The future for these currencies, however, is still promising. Considering that Facebook is coming up with its own digital currency very soon, it will be interesting to see how the Indian regulatory bodies react to this. Further research needs to be carried out on the various applications of these currencies in different sectors.

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