

Regulatory Road for Cryptocurrencies: Comments on the Report of the Inter-Ministerial Committee on Virtual Currencies

31 August 2020

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In November, 2017 the Government of India constituted an Inter-Ministerial Committee ("IMC") under the Chairmanship of Secretary, (Economic Affairs), with Secretary (MeiTY), Chairman (SEBI) and Deputy Governor, RBI as members, to study the issues related to virtual currencies and propose specific action to be taken in that regard. On 22nd July, 2019 the IMC submitted its Report ("IMC Report" or "Report"), along with a Draft Bill to the Government. In this piece we will attempt to analyse the various aspects of cryptocurrencies that have been considered by the IMC in its Report.

Advantages of Distributed Ledger Technologies (DLT)

The discussion on regulatory aspects in the IMC Report recognised the fact that technological innovations underlying virtual currencies have the potential to improve the efficiency and inclusiveness of the financial system.¹ The Report notes that "DLT is an important new and innovative technology, which will play a major role in ushering-in the digital age. The DLT can be of great benefit to India in several financial and non-financial areas."² This indicates their recognition of the value of the technology behind virtual currencies such as Bitcoin.

No Inherent Value

The IMC Report asserts that non-official digital currencies do not have any inherent value other than the technology underlying them by relying on a very narrow concept of "value" i.e. the currency has to either be backed by bullion or be a legal tender.³ But a slightly deeper inquiry would lead to the question "where does bullion money (gold, silver, platinum) get its value from?". Gold and silver bullion was used as money in historical times not because these metals have any inherent value, but because of their efficacy as a medium of exchange – as a form of money.⁴ Unlike wood (which can be used to make shelter) or grain (which can be eaten) gold does not have any intrinsic value but has historically been one of the most widely used forms of money the world over. The value of money is a social construct since people attribute worth to a medium whose physical characteristics have no relevance to its monetary value.⁵ It should therefore be understood that money is a social convention and as such people's response to it is determined by what they collectively think will be other people's response to it. Therefore any item or thing used as money has value only because people agree it has value; this holds true at least for the major cryptocurrencies such as

¹ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4, at pg. 27.

² Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 1.7, at pg. 19.

³ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4, at pg. 27.

⁴ Eric Sepanek, "The Intrinsic Value of Gold and Silver",

https://www.sbcgold.com/blog/the-intrinsic-value-of-gold-and-silver/, January 29, 2013.

⁵ G. Carruthers, Bruce & Babb, Sarah, "The Color of Money and the Nature of Value: Greenbacks and Gold in Postbellum America", American Journal of Sociology, Vol. 101, No. 6 (May, 1996), pp. 1556-1591.

Bitcoin, Ethereum, etc. Therefore it would not be correct to dismiss cryptocurrencies on the ground that they have no inherent value, since the same argument could be applied to some of the most widely used forms of money historically such as gold, silver, etc.

Price Fluctuations and Volatility

While recognising the benefits of cryptocurrencies, the IMC Report qualifies this admission in a cryptic manner by claiming that the market potential for such benefits are "subject to technological and behavioural changes, as well as the scope of financial investment that the cryptocurrencies can raise."⁶ This coupled with the fact that they do not have any sovereign backing nor any verified bullion backing, in the opinion of the IMC, makes their intrinsic value negligible and subject to severe shocks and fluctuations. It is however not clear how the Report came to the conclusion that these factors make the intrinsic value of cryptocurrencies negligible and subject to severe shocks and fluctuations.⁷ Infact the IMC has neither given any example of an item being subject to severe price fluctuations just because it allegedly has no intrinsic value nor tried to delve deeper into the reasons for the price fluctuations of the major cryptocurrencies over the past few years. The Report also seems to discount the fact that the price fluctuations may have been caused by external factors such as regulatory stimulus, or a major cryptocurrency exchange going bankrupt, etc.⁸

The Report further claims that the law of one price does not seem to work effectively in cryptocurrency markets with different exchanges transacting at different rates.⁹ This seems to suggest, incorrectly, that such a price difference between different exchanges is a feature which is unique to cryptocurrencies. Price differences between different markets for the same commodity are commonplace, including in some of the most advanced securities and commodities markets; and purchasing and selling the same security at the same time in different markets to take advantage of a price difference is a legitimate form of profiting from market inefficiencies known as "market arbitrage".¹⁰

The Report then goes on to highlight certain characteristics of cryptocurrencies and suggests that because of these characteristics, it is necessary to have "regulation" for them. These characteristics are:

- "They lack intrinsic value and are subject to fluctuations.
- They are decentralised networks with no central authority.
- The transactions in cryptocurrencies are irreversible.

⁶ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4, at pg. 27.

⁷ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4, at pg. 27.

⁸Adrienne Jeffries, Inside the Bizzare Upside-Down Bankruptcy of Mt. Gox", https://www.theverge.com/2018/3/22/17151430/bankruptcy-mt-gox-liabilities-bitcoin, March 22, 2018.

⁹ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4, at pg. 27.

¹⁰ Will Kenton, "What is Market Arbitrage?",

https://www.investopedia.com/terms/m/marketarbitrage.asp, August 14, 2019.

• They provide a degree of pseudonymity, although not complete anonymity, to participants in a transaction."¹¹

This is a welcome recommendation from the IMC, it would be much more beneficial to regulate cryptocurrencies in order to harness their potential and take advantage of their unique characteristics rather than impose a blanket ban due to the fear of not being able to fully comprehend their nature.

Network Latency and Validation

The IMC Report rightly points out that since cryptocurrencies are backed by trust and consensus based algorithms, processing transactions is time consuming due to validation procedures and network latency. This is a valid concern and a widely accepted criticism of Bitcoin where transaction confirmation times range between 8 to 10 minutes;¹² although it must be mentioned that the time taken for other cryptocurrencies such as Ethereum is significantly less (15-20 seconds). The large gap in transaction processing speed for cryptocurrencies (specially Bitcoin) compared to other electronic payment methods hampers their ability to be used as a means of exchange.¹³

Reasons for Volatility

Although the IMC Report repeatedly refers to the volatility and fluctuations in the prices of cryptocurrencies as risk factors,¹⁴ it does not seem to examine in detail the reasons for such volatility other than the assumption that it occurs because of their lack of "inherent value". Whilst the lack of an inherent or "fundamental" price may be one reason for the volatility in cryptocurrency prices,¹⁵ it is not the only reason for such volatility. There is ample evidence to suggest that, just like other commodities, the price of Bitcoin may be affected by a large number of reasons such as bad news, security breaches, value of fiat currencies, regulatory developments, pre-set events such as "halving", etc.¹⁶

¹⁵ Jay Adkisson, "Why Bitcoin Is So Volatile",

¹¹ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4, at pg. 27.

¹² Adem Efe Gencer, Soumya Basu, Ittay Eyal, Robbert van Renesse and Emin Gün Sirer, "Decentralization in Bitcoin and Ethereum Networks", https://arxiv.org/pdf/1801.03998.pdf

¹³ Michael Catt, "Blockchain Fundamentals: Latency and CApacity - Featuring the Ark Ecosystem", https://medium.com/ku-blockchain-institute/blockchain-fundamentals-featuring-the-ark-ecosystem-part-1-af1f9052e579, July 24, 2018.

¹⁴ The terms fluctuation and volatility have been used repeatedly in the following places of the IMC Report - Para 2.4, pg 27; Para 2.7, pg 34; Pg 8; Para 2.1 pg 22, Para 2.4, pg 27; Para 2.4.1, pg 29; Para 2.4.2, pg. 30; Para 3.3, pg. 43.

https://www.forbes.com/sites/jayadkisson/2018/02/09/why-bitcoin-is-so-volatile/#70e3926439fb, February 9, 2018.

¹⁶ Nathan Reiff, "Why Bitcoin Has a Volatile Value",

https://www.investopedia.com/articles/investing/052014/why-bitcoins-value-so-volatile.asp, June 16, 2020; FXCM, "What Causes Volatility in Bitcoin",

https://www.fxcm.com/uk/insights/what-causes-volatility-in-bitcoin/, visited on August 24, 2020.

Consumer Protection

Discussing the issue of protecting consumers from the risks of cryptocurrencies the IMC Report gives examples of frauds and hacker attacks to highlight the risks associated with cryptocurrencies.¹⁷ The Report however does not mention that frauds and hacking attacks are an inherent risk of doing business in the digital age; these risks are not unique only to cryptocurrencies. There are innumerable examples of cyber frauds and hacker attacks in regular banking and credit card operations as well.¹⁸ The Report then refers to the risks of losing the private key to the cryptocurrency wallet leading to permanent loss of the cryptocurrencies contained in that wallet.¹⁹ It must be noted however, that the same risk is also present in dealing with banknotes, which has the additional risks of any fire, water damage, etc. that may cause permanent loss of the currency.

Protection of Economy and Financial System

The IMC Report points out that mining of cryptocurrencies is a very resource intensive process and cites a Bank of International Settlements Report which states that a virtual currency may require crippling levels of storage and processing power if it is scaled up to the level of a national level retail payment system.²⁰ The Report further points out that Bitcoin mining has already used up as much electricity as the entire nation of Switzerland with some calling it an environmental disaster. The diversion of such large amounts of resources in mining virtual currencies may have unwanted long term economic as well as environmental consequences.

The Report further points out that such decentralised currencies may pose a regulatory problem with regard to compliance with data localisation requirements of the Reserve Bank of India. They may further hamper the ability of the RBI to perform its functions since it may not be able to regulate the supply of money in such decentralised currencies, thereby weakening the RBI's ability to stabilise the economy in times of need.²¹

The decentralised nature of these currencies would also seriously hamper the RBI's ability to control and regulate cross border transactions. As per the Foreign Exchange Management Act, 1999 only entities specifically recognised and licensed by the RBI can undertake the functions of exchanging currency and dealing in foreign exchange. However, in the absence of a mechanism to monitor peer to peer cross border transactions in cryptocurrencies the RBI

¹⁷ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4.1, at pg. 29.

¹⁸ Carnegie Endowment for International Peace, "Timeline for Cyber Incidents Involving Financial Institutions",https://carnegieendowment.org/specialprojects/protectingfinancialstability/timeline, visited on August 24, 2020.

¹⁹ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4.1, at pg. 29.

²⁰ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4.2, at pg. 29-30.

²¹ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.4.2, at pg. 29-30.

would lose its ability to control the inflow and outflow of money. This could also be a haven for illegitimate "hawala" transactions which are very attractive for funding illegal activities such as tax evasion, corruption and terror financing.²² The way a hawala transaction would work is as follows:

Let us assume person "A" residing in Dubai wants to remit money to "B" in India. "A" opens an account with a Dubai based cryptocurrency exchange while "B" opens an account with a cryptocurrency exchange in India. "A" pays an amount in foreign currency (Dirhams) to the cryptocurrency exchange in Dubai and gets them to convert the Dirhams into cryptocurrency which is transferred to A's cryptocurrency wallet. "A" then transfers the cryptocurrency to "B's" cryptocurrency wallet. "B" then exchanges the cryptocurrency for Indian Rupees at the Indian cryptocurrency exchange where she has an account. Technically speaking there is no foreign exchange transaction here since the Dirhams are never exchanged into Indian Rupees. However, looking at the entire transaction as a whole, it is clearly a foreign exchange transaction where money is being remitted from a foreign country into India without the permission or knowledge of the RBI or any other enforcement agency.

Criminal Activities

The IMC Report discusses an Analytical Note by the Reserve Bank of New Zealand which suggests that virtual currencies have increased rewards for ransomware attacks²³ in the context of preventing criminal activities. However it must be observed that the Note only highlights the risks associated with cryptocurrencies but does not suggest a complete ban, as was done by the IMC Report. Infact the IMC Report concedes that out of the various jurisdictions whose regulations were studied by the IMC, China is the only country which does not permit cryptocurrency transactions and all other jurisdictions broadly permit them.²⁴

²² Daisy Roy, "Hawala: A Parallel Economy", https://blog.ipleaders.in/hawala-parallel-economy/, January 7, 2019.

²³ Aaron Kumar and Christie Smith, "Crypto-currencies - An introduction to not-so- funny moneys", Nov. 2017,

https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Analytical%20notes/2017/an2017-07.pdf, visited on August 24, 2020.

²⁴ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.5, Table 2.2 of the IMC Report, at pg 32.

Ban on private cryptocurrencies

The IMC Report asserts that private cryptocurrencies lack any intrinsic value, do not act as a store of value nor as a medium of exchange due to large fluctuations in price and therefore lack all attributes of a currency.²⁵ It is for this reason that the Report has recommended that private cryptocurrencies should not be allowed at all. The criticisms of such an argument have been pointed out in the earlier sections. Further the fact that cryptocurrencies are so popular around the world both as a means of exchange as well as a store of value, belies the argument that they are unfit to be used as a currency or even as an investment.²⁶

While discussing a ban on cryptocurrencies the IMC Report accepts the fact that owing to their networked nature a complete ban may not be implementable and gives the example of China, where some customers have been circumventing the ban on cryptocurrencies by trading on international exchanges using VPNs and other IP shielding technology.²⁷ Even in India the prohibition on banks and financial institutions from dealing with cryptocurrencies was being evaded by certain customers through various means.²⁸ The Report further acknowledges that it has been possible to link address clusters of buyers and sellers to real world identities and research has been going on to disconnect IP shielding technologies from the Bitcoin network as well as attempts to de-anonymize completely anonymous currencies such as Zerocoin.²⁹ After taking into account all of these considerations, and given the nascent yet evolving nature of the technology, the IMC acknowledged that it would be advisable to keep a close watch on developments both globally and within the country.³⁰

The abovementioned "wait and watch " suggestion seems to conflict with the recommendation of the IMC to ban cryptocurrencies in India.³¹ Perhaps this contradiction stems from the fact that the initial view of the IMC was to regulate cryptocurrencies rather than ban them as is seen from the minutes of the meeting held on November 27, 2017.³² However as per the minutes of the meeting held on February 22, 2018,³³ it appears that the Deputy Governor of the RBI expressed a view strongly in favour of banning private

²⁵ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.7(2), at pg. 34.

²⁶ David Yermack, "Is Bitcoin a Real Currency: An Economic Appraisal", National Bureau of Economic Research Working Paper Series, Working Paper 19747, http://www.nber.org/papers/w19747, visited August 24, 2020.

²⁷ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.6, at pg. 34.

²⁸ Kevin Helms, "Indians Use Creative Means to Trade Bitcoin Amid RBI Ban",

https://news.bitcoin.com/indians-trade-bitcoin-rbi-ban/, August 2, 2018.

²⁹ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.6, at pg. 34.

³⁰ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.6, at pg. 34.

³¹ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Para 2.7, at pg. 34.

³² Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Annexure A-2, pgs. 82-83.

³³ Report of Inter-Ministerial Committee on Virtual Currencies, Department of Economic Affairs, Ministry of Finance, India, Dated February 28, 2019, Annexure A-3, pgs. 84-86.

cryptocurrencies which was echoed by the Chairman, (Central Board of Direct Taxes), although there were still certain members who were in favour of regulating cryptocurrencies rather than banning them.

Supreme Court on the IMC Report

On March 4, 2020 the Supreme Court of India gave a landmark decision on the legality of cryptocurrencies and declared that dealing in cryptocurrencies in India is not illegal.³⁴ The decision came about in the backdrop of a challenge to the RBI Circular dated April 6, 2018 preventing banks and other financial institutions from not only dealing in virtual currencies themselves but also directing them to stop providing services to all entities which deal with virtual currencies. The Supreme Court eventually struck down the RBI Circular on the grounds that it violated the right to trade guaranteed under Article 19(1)(g) of the Constitution of India. This judgment also referred to the IMC Report and its findings in a number of places, even pointing out the process of the Committee changing its mind on the issue of banning virtual currencies over the course of two meetings in November 2017 and February 2018.

Oddly enough, the Supreme Court cited the previous version of the Crypto-token Regulation Bill, 2018 (and not the version in the final IMC Report) which suggested regulating cryptocurrencies rather than banning them, in reaching its decision to quash the RBI Circular "banning" cryptocurrencies. Such an endorsement of the earlier position of the IMC by the Apex Court is perhaps the Court's way of tacitly suggesting to the government a method to deal with cryptocurrencies in the future.

Suggestions for Regulation

One of the biggest problems with decentralised cryptocurrencies is that they cannot be regulated through a single centralised point for all transactions. It is also not feasible (and in some cases technically impossible) to regulate cryptocurrencies by trying to supervise and regulate each and every user. A pragmatic compromise between these two extremes could be to regulate the points at which fiat currency or valuable goods enter the cryptocurrency system, i.e. the cryptocurrency exchanges where people may trade cryptocurrencies for actual fiat currency or legal tender, or websites which offer cryptocurrencies as a means of payment. Such an approach would reduce the number of points of supervision and lead to effective enforcement of the regulations. The regulations may require any entity providing services such as buying and selling of cryptocurrencies for actual money, trading in cryptocurrencies (such as non-cash exchanges) or providing other cryptocurrency related services (such as wallets, merchant gateways, remittance facilities, etc.) to be registered with a central government agency, preferably the Reserve Bank of India.³⁵ The power of the RBI to

³⁵ Vipul Kharbanda, "Regulating Bitcoin in India",

³⁴ Internet and Mobile Association of India v. Reserve Bank of India.

https://cis-india.org/internet-governance/blog/regulating-bitcoin-in-india, April 20, 2017.

regulate cryptocurrencies has recently been recognised by the Supreme Court in Internet and Mobile Association of India v. Reserve Bank of India.³⁶

Once the RBI decides to exercise its power to frame regulations, rules can then be made to address various issues such as capital adequacy requirements, data security standards, KYC requirements, consumer education requirements, etc. to address the various issues and risks associated with cryptocurrencies.³⁷ Such a proactive approach would go a long way in increasing the size of the cryptocurrency market in the country thereby bringing more liquidity and price stability, which was a major concern for the IMC.

Conclusion

The IMC Report touches upon a large number of issues with regard to cryptocurrencies and when it comes to regulatory responses, emphasises the risks associated with them as well as their unsuitability to be used as a currency. In this regard the IMC Report seems somewhat biased inasmuch as the main reason given for recommending an absolute ban on cryptocurrencies seems to be the volatility associated with them and not their potential to be used for criminal activities or the difficulties that may arise in enforcing regulatory mechanisms owing to their distributed nature. However after the judgment of the Supreme Court in Internet and Mobile Association of India v. Reserve Bank of India, it seems unlikely that the government would continue on the previous position of trying to ban cryptocurrencies. It is much more likely that the RBI will issue rules to regulate cryptocurrency activities which should at the very least address issues such as KYC, capital adequacy, consumer protection, data security, etc.

³⁶ For an analysis of this judgment please see: Vipul Kharbanda, "Cryptocurrencies in India get a secong wind", available at

https://cis-india.org/internet-governance/blog/cryptocurrencies-in-india-get-a-second-wind, June 19, 2020.

³⁷ In the fifth revision of the Anti Money Laundering Directive ("AMLD5") published in 2018 (DIRECTIVE (EU) 2018/843), the European Union has also used similar approach and included cryptocurrency exchanges and custodian wallet providers within the scope of AML/CTF obligations. See https://www.elliptic.co/our-thinking/5th-aml-directive-eu-regulation-cryptocurrency