



# Bitcoins-A Global Perspective

---

## Indian Legal and Tax Considerations

April 2015

---

# Bitcoins-A Global Perspective

## Indian Legal and Tax Considerations

---

April 2015

[concierge@nishithdesai.com](mailto:concierge@nishithdesai.com)

## About NDA

At Nishith Desai Associates, we have earned the reputation of being Asia's most Innovative Law Firm – and the go-to specialists for companies around the world, looking to conduct businesses in India and for Indian companies considering business expansion abroad. In fact, we have conceptualized and created a state-of-the-art Blue Sky Thinking and Research Campus, Imaginarium *ALIGUNJAN*, an international institution dedicated to designing a premeditated future with an embedded strategic foresight capability.

We are a research and strategy driven international firm with offices in Mumbai, Palo Alto (Silicon Valley), Bangalore, Singapore, New Delhi, Munich, and New York. Our team comprises of specialists who provide strategic advice on legal, regulatory, and tax related matters in an integrated manner basis key insights carefully culled from the allied industries.

As an active participant in shaping India's regulatory environment, we at NDA, have the expertise and more importantly – the VISION – to navigate its complexities. Our ongoing endeavors in conducting and facilitating original research in emerging areas of law has helped us develop unparalleled proficiency to anticipate legal obstacles, mitigate potential risks and identify new opportunities for our clients on a global scale. Simply put, for conglomerates looking to conduct business in the subcontinent, NDA takes the uncertainty out of new frontiers.

As a firm of doyens, we pride ourselves in working with select clients within select verticals on complex matters. Our forte lies in providing innovative and strategic advice in futuristic areas of law such as those relating to Blockchain and virtual currencies, Internet of Things (IOT), Aviation, Artificial Intelligence, Privatization of Outer Space, Drones, Robotics, Virtual Reality, Ed-Tech, Med-Tech & Medical Devices and Nanotechnology with our key clientele comprising of marquee Fortune 500 corporations.

NDA has been the proud recipient of the RSG - FT award for 2019, 2017, 2016, 2015, 2014 as the 'Most Innovative Indian Law Firm' and in 2016 we were awarded the 'Most Innovative Law Firm - Asia Pacific,' by Financial Times (London).

We are a trust based, non-hierarchical, democratic organization that leverages research and knowledge to deliver extraordinary value to our clients. Datum, our unique employer proposition has been developed into a global case study, aptly titled 'Management by Trust in a Democratic Enterprise,' published by John Wiley & Sons, USA.

## Accolades

A brief chronicle our firm's global acclaim for its achievements and prowess through the years –

- **IFLR1000:** Tier 1 for Private Equity and Project Development: Telecommunications Networks. *2020, 2019, 2018, 2017, 2014*
- **AsiaLaw Asia-Pacific Guide 2020:** Tier 1 (Outstanding) for TMT, Labour & Employment, Private Equity, Regulatory and Tax
- **FT Innovative Lawyers Asia Pacific 2019 Awards:** NDA ranked 2nd in the Most Innovative Law Firm category (Asia-Pacific Headquartered)
- **RSG-Financial Times:** India's Most Innovative Law Firm *2019, 2017, 2016, 2015, 2014*
- **Chambers and Partners Asia Pacific:** Band 1 for Employment, Lifesciences, Tax and TMT *2019, 2018, 2017, 2016, 2015*
- **Benchmark Litigation Asia-Pacific:** Tier 1 for Government & Regulatory and Tax *2019, 2018*
- **Legal500:** Tier 1 for Dispute, Tax, Investment Funds, Labour & Employment, TMT and Corporate M&A *2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012*
- **Who's Who Legal 2019:**  
Nishith Desai, Corporate Tax and Private Funds – Thought Leader  
Vikram Shroff, HR and Employment Law- Global Thought Leader  
Vaibhav Parikh, Data Practices - Thought Leader (India)  
Dr. Milind Antani, Pharma & Healthcare – only Indian Lawyer to be recognized for 'Life sciences-Regulatory,' for 5 years consecutively
- **Merger Market 2018:** Fastest growing M&A Law Firm in India
- **Asia Mena Counsel's In-House Community Firms Survey 2018:** The only Indian Firm recognized for Life Sciences
- **IFLR:** Indian Firm of the Year *2013, 2012, 2011, 2010*
- **IDEX Legal Awards 2015:** Nishith Desai Associates won the "M&A Deal of the year", "Best Dispute Management lawyer", "Best Use of Innovation and Technology in a law firm" and "Best Dispute Management Firm"

Please see the last page of this paper for the most recent research papers by our experts.

---

## Disclaimer

This report is a copy right of Nishith Desai Associates. No reader should act on the basis of any statement contained herein without seeking professional advice. The authors and the firm expressly disclaim all and any liability to any person who has read this report, or otherwise, in respect of anything, and of consequences of anything done, or omitted to be done by any such person in reliance upon the contents of this report.

## Contact

For any help or assistance please email us on [concierge@nishithdesai.com](mailto:concierge@nishithdesai.com) or visit us at [www.nishithdesai.com](http://www.nishithdesai.com)

# Contents

<b>1. INTRODUCTION</b>	<b>01</b>
<b>2. WHAT IS BITCOIN?</b>	<b>04</b>
<b>3. APPLICATIONS OF CRYPTOCURRENCIES</b>	<b>07</b>
<b>4. GENERAL POSITION AND VIEW AROUND THE WORLD</b>	<b>09</b>
I. Australia	09
II. Brazil	10
III. China	10
IV. Canada	10
V. Denmark	11
VI. European Union	12
VII. Germany	12
VIII. Norway	12
IX. United Kingdom	12
X. United States of America (USA)	13
XI. Thailand	14
<b>5. POSITION IN INDIA</b>	<b>15</b>
I. What is Bitcoin?	15
II. FEMA, RBI and Coinage Act	16
III. Currency	16
IV. Legal Tender	16
V. Currency Notes	16
VI. Virtual Currency	17
VII. Bitcoin as a Good and a Commodity	17
VIII. Bitcoin as Payment System or Pre-Paid Instrument	18
IX. Applicability of SCRA	19
X. Bitcoin – Contracts and Enforceability	19
<b>6. REGULATORY CONCERNS REGARDING BITCOIN</b>	<b>21</b>
I. KYC Norms – Applicability to Bitcoin	22
II. Cross border transfer of Bitcoin	22
III. Taxation of Bitcoin	23
IV. Income Tax	23
V. Currency	23
VI. Central Sales Tax / Value Added Tax	25
VII. Service Tax	26

<b>7. INTELLECTUAL PROPERTY ISSUES</b>	<b>27</b>
I. Trademark	27
II. Patent	27
III. Copyright	28
<b>8. SECURITY ISSUES</b>	<b>29</b>
I. Hacking	29
II. Hacking with Criminal Intention	30
III. Identity Theft	30
IV. Cyber Terrorism	30
<b>9. PRIVACY AND DATA PROTECTION</b>	<b>32</b>
<b>10. RISKS RELATED TO BITCOIN</b>	<b>34</b>
I. Cyber Attacks and Hacking: “Virtual Bank Robbery”	34
II. Price Fluctuation and Inflation	34
III. Fraud	34
IV. Uncertainties in the Government Policies	35
<b>11. VULNERABILITIES IN BITCOIN TRANSACTIONS</b>	<b>36</b>
I. Money Laundering	36
II. Drug Trafficking	36
III. Tax Avoidance and Evasion	36
IV. Blackmailing	36
V. Terrorist Financing	37
<b>12. SETTING UP BITCOIN RELATED BUSINESS IN INDIA</b>	<b>38</b>
<b>13. REGULATORY CONSIDERATION</b>	<b>39</b>
<b>14. E-CURBING VULNERABILITIES: KNOW YOUR CUSTOMER (KYC), CUSTOMER DUE DILIGENCE (CCD) AND SUSPICIOUS TRANSACTION REPORTING REQUIREMENT</b>	<b>40</b>
<b>15. FUTURE OF BITCOIN</b>	<b>41</b>
<b>16. CONCLUSION</b>	<b>42</b>
<b>17. FAQs</b>	<b>43</b>
<b>BITCOIN PRACTICE GROUP</b>	<b>45</b>

---

# The World On Bitcoin

---

■  
*“[VIRTUAL CURRENCIES] MAY HOLD LONG-TERM PROMISE, PARTICULARLY IF THE INNOVATIONS PROMOTE A FASTER, MORE SECURE AND MORE EFFICIENT PAYMENT SYSTEM.”*

Ben Bernanke, Chairman of the Federal Reserve USA

*“BITCOIN IS THE BEGINNING OF SOMETHING GREAT: A CURRENCY WITHOUT A GOVERNMENT, SOMETHING NECESSARY AND IMPERATIVE.”*

Nassim Taleb, author of The Black Swan

*“WITH E-CURRENCY BASED ON CRYPTOGRAPHIC PROOF, WITHOUT THE NEED TO TRUST A THIRD PARTY MIDDLEMAN, MONEY CAN BE SECURE AND TRANSACTIONS EFFORTLESS.”*

Satoshi Nakamoto, Bitcoin developer

*“I THINK THE INTERNET IS GOING TO BE ONE OF THE MAJOR FORCES FOR REDUCING THE ROLE OF GOVERNMENT. THE ONE THING THAT’S MISSING BUT THAT WILL SOON BE DEVELOPED, IS A RELIABLE E-CASH.”*

Milton Friedman, Nobel laureate for Economic Sciences

---

■

# 1. Introduction

It is not ironic that Milton Friedman, author of a leading treatise on the interaction of currency, macroeconomics and governmental action<sup>1</sup> prophesied of a time when the internet would help evolve a new currency.

Most of the currencies in the world at present, including the reserve currencies, are fiat currencies.<sup>2</sup> The term ‘fiat currencies’ refers to currencies that are issued by a government, and the government promises to pay the holder of such currencies an equivalent amount in gold, if needed.<sup>3</sup> Thus, these currencies usually have a central regulatory body which issues them, and are consequently called ‘centralized’. In fact, at the end of the day, they have the value they have, because somebody said so.<sup>4</sup> The modern state can make anything it chooses as acceptable currency, without any further backing of any kind, even without a connection with gold.<sup>5</sup>

A cryptocurrency is a medium of exchange that uses cryptography to manage the creation of new units as well as secure the transactions.<sup>6</sup> These are a subset of digital currencies.<sup>7</sup> One of the most striking features of cryptocurrency is that it weeds out the need for a trusted third party such as a governmental agency, bank etc. The cryptocurrency system collectively creates the units. The rate at which such units are created is defined beforehand and is publicly

known<sup>8</sup> unlike the traditional currencies where the government or the authorized banks control the supply. The fundamental system on which most cryptocurrencies are based today was created by Satoshi Nakamoto.<sup>9</sup>

The production of most cryptocurrencies is designed to gradually decrease, eventually placing a cap on the number of units that will ever be in circulation. This can lead the currency to mimic the scarcity that is usually seen in the supply of precious metal, thus avoiding hyperinflation.<sup>10</sup> The cryptocurrencies today, are pseudo-anonymous, though newer currencies like Zerocoin have been suggested to allow for complete anonymity.<sup>11</sup>

In 2008, in the aftermath of the subprime mortgage crisis, the confidence in the government issued currency and governments’ and bank’s ability to manage the economy, the supply of money had almost hit rock bottom. Millions of dollars were used to bail out banks and insurance companies after the “quantitative easing” measures adopted by the Federal Reserve. This essentially meant that money was being printed in order to stimulate the economy. The glut of currency backed with little or no economic productivity led to a global recession ultimately precipitating a sovereign

1. A Monetary History of the United States, 1867 – 1960, Milton Friedman and Anna Schwartz, Princeton University Press.

2. Vincent Scheurer, The Magic of Money: Can our current system of fiat money survive in the long term?, The Motley Fool, <http://news.fool.co.uk/news/investing/2011/07/01/the-magic-of-money.aspx>.

3. Abba P. Lerner, *MONEY AS A CREATURE OF STATE*, The American Economic Review, 37 (2), 312 (1947).

4. *INCIDENTALLY, THE TERM ‘FIAT’ IS LATIN FOR “LET IT BE DONE” OR “IT SHALL BE”*

5. Abba P. Lerner, “*MONEY AS A CREATURE OF STATE*”, The American Economic Review, 37 (2), 312 (1947).

6. Andy Greenberg (20 April 2011). “Crypto Currency”. Forbes.com.

7. Jerry Brito, Houman B. Shadab and Andrea Castillo, Bitcoin Financial Regulation: Securities, Derivatives, Prediction Markets, and Gambling, 16 Colum Sci and Tech J

8. Nicholas A. Plassaras, Regulating Digital Currencies: Bringing Bitcoin within the Reach of the IMF, 14 Chi J Intl L 377 (2013).

9. Jerry Brito and Andrea Castillo (2013). “Bitcoin: A Primer for Policymakers”. Mercatus Center. George Mason University.

10. This is Huge: Gold 2.0 - Can code and competition build a better Bitcoin?, New Bitcoin World.

11. Zerocoin’ Add-on For Bitcoin Could Make It Truly Anonymous And Untraceable, Forbes, 26 May 2013

debt crisis in several countries. The price of gold was constantly rising. At this point, the paper by Satoshi Nakamoto<sup>12</sup> was published online describing the Bitcoin for the first time. In the opinion of Nakamoto, the major problem with conventional currency today was that trust was required to make the system work. He makes it clear in his paper, that while looking at the history of fiat currencies, one can see that it is full of breaches of such trust. He further goes on to state that banks use the currency entrusted to them to lend it out in ‘waves of credit bubbles’, with hardly anything left in reserve.<sup>13</sup>

Thus, Nakamoto’s ideologies in creating Bitcoin would seem to be entirely political. Supporting this argument is the fact that he introduced the currency just a few months after the collapse of the global banking sector.<sup>14</sup> His Bitcoin software would allow its users to send money over the internet directly to each other without an intermediary, and no outside party could create Bitcoin,<sup>15</sup> entirely cutting out the role of central banks and governments in online transactions. As Nakamoto said, ‘*EVERYTHING IS BASED ON CRYPTO PROOF INSTEAD OF TRUST*’.<sup>16</sup> Furthermore, unlike banks and governments which can print more money whenever they deem fit, the bots that are currently creating Bitcoin are supposed to stop doing so in or around the year 2140 according to their programming itself.<sup>17</sup> And unlike fiat currencies, whose value is derived through regulation or law and underwritten by the state, Bitcoin derive their value through the simple principles of supply and demand – they have no

intrinsic value and no backing, and their value depends entirely on what people are willing to trade for them.

Hence, no faith or trust towards the financiers or politicians was required in case of Bitcoin, but only in Nakamoto’s well-designed algorithms. Not only the public ledger of Bitcoin, i.e. the ‘block chain’ seemed to fend off fraud, but also kept the money supply of Bitcoin growing at a predictable rate due to the prearranged release of the virtual currency. The Bitcoin network came into existence with the release of open source Bitcoin client and with the issuance of the first Bitcoin. Satoshi mined<sup>18</sup> the first 50 Bitcoin which are famously known as the “Genesis Block”. In the same year the exchange rate of Bitcoin was first published by liberty standard at \$1 for 1,309.03 BTC.<sup>19</sup> Within a couple of years, around February 2011, Bitcoin achieved dollar parity and was now being accepted all over the world as a mode of payment for a plethora of products.<sup>20</sup> Even Wikileaks and other organizations started accepting Bitcoin as donations. Although, during the same year, Bitcoin suffered a security breach in one of the largest Bitcoin exchanges, Mt. Gox and crashed. But, it also bounced back being stronger than before. Since then, Bitcoin have been extremely volatile but have not seen any major security breaches.<sup>21</sup>

12. This name has been used in this paper to refer to the pseudonymous identity of the creator Bitcoin.

13. Taken from a five-hundred word essay written by Satoshi Nakamoto, where Bitcoin were mentioned for the first time. A copy of the essay is available at: <http://Bitcoin.org/Bitcoin.pdf>

14. Joshua Davis, The Crypto-Currency, The New Yorker, [http://www.newyorker.com/reporting/2011/10/10/1110101ofa\\_fact\\_davis](http://www.newyorker.com/reporting/2011/10/10/1110101ofa_fact_davis).

15. *IBID*

16. Taken from a five-hundred word essay written by Satoshi Nakamoto, where Bitcoin were mentioned for the first time. A copy of the essay is available at: <http://p2pfoundation.ning.com/forum/topics/Bitcoin-open-source>.

17. Benjamin Wallace, The Rise and Fall of Bitcoin, Wired, Nov. 23, 2011, [http://www.wired.com/magazine/2011/11/mf\\_Bitcoin/](http://www.wired.com/magazine/2011/11/mf_Bitcoin/).

18. For the definition of “Mining”, See, <https://Bitcoin.org/en/vocabulary#mining>

19. *SEE*, <http://stanford.edu/~eaortiz/cs181report/history.html>

20. *SEE*, <http://newlibertystandard.wikifoundry.com/page/2009+Exchange+Rate>

21. *SEE*, [www.nytimes.com/interactive/technology/Bitcoin-timeline.html](http://www.nytimes.com/interactive/technology/Bitcoin-timeline.html)

Nakamoto had created the first working cryptocurrency, making it as different from the existing fiat currencies as possible. It was meant to be an alternative to them, a new method of transaction, entirely free of government control, and, perhaps a challenge to it. It was to challenge the governments, to make people rethink the existing economic systems, to question their faith in it.

This paper examines legal aspects in relation to Bitcoin specifically and as corollary to cryptocurrencies generally and analyses transactions respecting Bitcoin in India.

---

■

*“BITCOIN IS A REMARKABLE CRYPTOGRAPHIC ACHIEVEMENT AND THE ABILITY TO CREATE SOMETHING THAT IS NOT DUPLICABLE IN THE DIGITAL WORLD HAS ENORMOUS VALUE.”*

---

■

Eric Schmidt, CEO of Google

## 2. What Is Bitcoin?

Bitcoin is a cryptocurrency, a form of payment that uses cryptography to control its creation and management, rather than relying on central authorities.<sup>22</sup> According to Nakamoto, Bitcoin is a software-based online payment system and introduced as open-source software in 2009.<sup>23</sup> By some, it is also considered to be the world's first decentralized currency ('currency' is used in a loose sense and does not mean fiat currency as stated above).<sup>24</sup> Unlike usual forms of currency, it is in virtual form and may be used to transact in physical as well as online transactions. The origin of the concept of Bitcoin can be traced to Satoshi Nakamoto, who discussed in his research paper the design of Bitcoin as a new digital currency.<sup>25</sup> The idea of a digital currency – expedient and imperceptible, freed from the supervision of banks and the government has been one of the most discussed and strived for ideas since the advent of the modern internet. Many proposals for such a currency were floated but none were successful. In order to understand Bitcoin, it is important to understand the type of financial instrument it represents. Bitcoin, is a peer-to-peer digital system of payment. As Satoshi Nakamoto, the creator of Bitcoin puts it – “an electronic cash system”.<sup>26</sup>

Payments are recorded in a public ledger using its own unit of account. When the algorithm was created by Nakamoto, a finite limit of 21 million on the number of Bitcoin that would

ever exist was set.<sup>27</sup> Currently, over 12 million are in circulation.<sup>28</sup> The number of Bitcoin mined has skyrocketed since 2009. The system was intended to be set up in a way where the difficulty of mining every next Bitcoin is greater than the previous one. The final Bitcoin will be mined in the year 2140, at the current rate.<sup>29</sup>

Designing of a digital/virtual currency, involves many challenges. One of the most fundamental challenges is that of double spending. Since the unit of this currency is just information, free from physical structures of metal or paper, there is nothing much to keep people from reusing that piece of information more than once. This would result in spending the same unit of currency more than once. The usual answer for such a problem would be to depend on a central clearing house that would keep a real-time record of all transactions done in that particular currency. This would ensure that the same unit of the currency could not be spent again. Although, this solution would prevent fraud, but it would also require a trusted third party for its administration. This was the problem in the first place that led to the birth of Bitcoin. It is clear from Nakamoto's paper that this currency, unlike all the others, was based on math/cryptography and not trust.<sup>30</sup>

To tackle this fundamental but crippling problem faced by the virtual currency, Nakamoto used “block chains”. A block chain is a ledger that is shared publicly where all transactions are recorded. This way transactions could be verified and the problem of double spending could be kept under a check. The chronological order and the authenticity of the block chain are also maintained through

22. Jerry Brito, Andrea Castillo, “*BITCOIN: A PRIMER FOR POLICYMAKERS*” [2013], available at [http://mercatus.org/sites/default/files/Brito\\_BitcoinPrimer.pdf](http://mercatus.org/sites/default/files/Brito_BitcoinPrimer.pdf)

23. Satoshi Nakamoto, Bitcoin: “A Peer-to-Peer Electronic Cash System”, Bitcoin.org, available at: <http://Bitcoin.org/Bitcoin.pdf>

24. *SEE* <http://thomsonreuters.com/business-unit/legal/digital-economy/Bitcoin-101.pdf>

25. Satoshi Nakamoto, ‘Bitcoin: A peer to peer electronic cash system’ 2009 <http://Bitcoin.org/Bitcoin.pdf>

26. Satoshi Nakamoto, ‘Bitcoin: A peer to peer electronic cash system’ (Ibid.) See also; Plassaras, Nicholas, Regulating Digital Currencies: Bringing Bitcoin within the Reach of the IMF (April 7, 2013). Chicago Journal of International Law, 14 Chi J Intl L (2013). Available at SSRN: <http://ssrn.com/abstract=2248419>

27. Benjamin Wallace, *THE RISE AND FALL OF BITCOIN*, Nov. 23, 2011 available at : [http://www.wired.com/2011/11/mf\\_Bitcoin/](http://www.wired.com/2011/11/mf_Bitcoin/)

28. See, <http://www.forbes.com/sites/samanthasharf/2014/01/15/10-one-perspective-on-what-Bitcoin-will-be-worth-in-2014/>

29. See, <http://www.cnn.com/id/101332124#>.

30. Satoshi Nakamoto, Bitcoin: *A PEER-TO-PEER ELECTRONIC CASH SYSTEM*, Bitcoin.org, available <http://Bitcoin.org/Bitcoin.pdf>.

a process called cryptography.<sup>31</sup> Cryptography is used to protect information by converting it into an unreadable format (encryption), called cipher text. Each such encryption is secured by a unique key. Only those who have the key can decipher the message into plain text (decryption). Sometimes these messages can be accessed by cryptanalysis (code-breaking), although modern cryptography techniques are practically unbreakable. Ordinarily, cryptography systems can be classified into:

- i. symmetric-key systems that use a single key that both the sender and recipient have, and
- ii. public-key systems that use two keys, a public key known to everyone and a private key that only the recipient of messages uses.

iii. Obtaining Bitcoin

There are three primary ways to obtain Bitcoin:

- i. mining new ones.
- ii. buying on an exchange; and
- iii. accepting them for goods and services.

‘Mining’ is discovering new Bitcoin. In reality, it’s simply the verification of Bitcoin transactions.<sup>32</sup> In order to make sure a Bitcoin is genuine, miners verify the transaction.<sup>33</sup> There are many transactions that individuals are trying to verify and not just one. These transactions are gathered into boxes with a virtual padlock on them which make up the ‘block chains’. ‘Miners’ run software to find the key to open that padlock. Once the computer finds it, the box pops open and the transactions are verified.<sup>34</sup> Hence, it can be said that while Bitcoin are “mined” by individuals, they are “issued” by the software.

A ‘centralized’ currency system is one where all of the currency is monitored by a central agency.<sup>35</sup> Certain centralized forms of virtual currencies also exist in centralized forms, such as Facebook credits.<sup>36</sup> These are also subject to similar regulation, and are monitored by banks and governments.<sup>37</sup> The central authority makes controlling and monitoring customers and their transactions much easier. Since, money is traditionally centrally regulated, the surge in Bitcoin has invited mixed reactions from regulators across the globe. It has been treated differently in different parts of the world as regards to taxation and other issues.<sup>38</sup> The recent past has seen an enormous growth in Bitcoin as a form of payment. This is because the fee charged in case of making payments with the use of Bitcoin is lower than the general 2-3% interest imposed by credit card processors.<sup>39</sup>

In India, entrepreneurs have shown enthusiasm towards the Bitcoin system and all eyes are on the Reserve Bank of India (RBI), which has not yet come out with an ultimate verdict. Although, RBI has issued a press release cautioning users, holders and traders of Virtual currencies, including Bitcoin, about the potential financial, operational, legal, security related risks that they are exposing themselves to.<sup>40</sup> Pending this, it is also time to think about the tax treatment of

31. Block Chain, ‘My Wallet Be Your Own Bank’ <<https://blockchain.info/wallet/>>  
 32. Ibid.  
 33. Dean, Andrew, “Online Gambling Meets Bitcoin” available at <https://www.moneypot.com/online-gambling-meets-Bitcoin>  
 34. Blocks, BITCOIN WIKI, <https://en.Bitcoin.it/wiki/Block>

35. Dr. Rhys Bollen, “The Legal Status of Online Currencies: Are Bitcoin The Future?” *Journal of Bank. & Fin. L. & Pr.*, 3, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2285247](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2285247).  
 36. <http://developers.facebook.com/blog/post/2012/06/19/introducing-subscriptions-and-local-currency-pricing/>  
 37. For instance, in the US, the FinCEN has extended its regulations to Virtual Currencies, thus requiring agencies like Facebook which issue virtual currencies to monitor their customers and their transactions; FinCen, Application of FinCEN’s Regulations to Persons Administering, Exchanging, or Using Virtual Currencies, available at: [http://fincen.gov/statutes\\_regs/guidance/html/FIN-2013-G001.html](http://fincen.gov/statutes_regs/guidance/html/FIN-2013-G001.html).  
 38. See, <http://www.livemint.com/Money/3qcKrBcAMiisahVOyOygYK/Are-Bitcoin-currency-or-asset.html>  
 39. A. Rogojanu and L. Badea, “The issue of competing currencies. Case study – Bitcoin”; *Theoretical and Applied Economics* Volume XXI (2014), No. 1(590), pp. 103-114.  
 40. SEE, [http://rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=30247](http://rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=30247)

Bitcoin as the transactions in virtual currency are increasing in India.<sup>41</sup> According to Nishith Desai, Bitcoin per se are not illegal in India and this is in consonance with an international approach. Bitcoin creation and transfer are based on open source cryptographic protocol managed in a decentralized manner, and, if harnessed properly, Bitcoin could deliver many benefits to the Indian economy.<sup>42</sup>

Today, real currency is being used to purchase and sell Bitcoin at the current exchange value. Once the purchase has been made the value of the particular amount of Bitcoin is transferred from one wallet to another.<sup>43</sup> Since every wallet has its own unique 33 characters and all Bitcoin wallets are synchronized, thus a false entry by any single person being made is almost impossible.<sup>44</sup> Although pseudonyms are used for trading purposes, the history of every transaction in the form of continuously updated block-chain information is stored in the wallets.<sup>45</sup>

---

41. *SEE*, [www.livemint.com/Money/.../Are-Bitcoin-currency-or-as-set.html](http://www.livemint.com/Money/.../Are-Bitcoin-currency-or-as-set.html)

42. *SEE*, <http://www.thehindu.com/business/Economy/Bitcoin-per-se-are-not-illegal-in-indianishithdesai/article5538900.ece>

---

43. *SEE*, <http://timesofindia.indiatimes.com/tech/tech-news/Trade-in-Bitcoin-gains-currency-among-youth-in-Mumbai/articleshow/27378658.cms>

44. *SEE*, <http://www.coindesk.com/meet-tiny-Bitcoin-wallet-lives-skin/>

45. *SEE*, <https://blockchain.info/wallet/wallet-faq>

### 3. Applications of Cryptocurrencies

There are a growing number of businesses and individuals using cryptocurrencies like Bitcoin. These include brick and mortar businesses like restaurants, apartments, law firms, and popular online services such as Namecheap, WordPress, Reddit and Flattr. While cryptocurrency remains a relatively new phenomenon, it is growing fast. According to CoinDesk, they are being used in North and South America, Europe, Africa, and Asia.<sup>46</sup> The number of companies accepting Bitcoin has also soared in the past year.<sup>47</sup>

Bitcoin is steadily increasing in popularity as an accepted currency all around the world. The primary areas of Bitcoin use are by individuals and merchants working in technology; however, the users and uses of Bitcoin are rapidly increasing. Several vendors and marketplaces now accept Bitcoin as a mode of payment. This trend holds particularly true for vendors who accept micropayments, such as payments for digital music downloads. Such vendors value the use of Bitcoin to avoid the transaction costs associated with traditional electronic payment methods. Many other vendors do not accept Bitcoin directly, rather, they use an intermediary to accept Bitcoin payments and convert it into a standard currency. In short, Bitcoin has become a popular method of transacting with vendors of goods and providers of services. Bitcoin is also a popular currency with individuals who protest the U.S. monetary system or government.<sup>48</sup> However, it has been used for nefarious activities as well. This includes donations to illegitimate organizations, such as the infamous site, Silk Road.<sup>49</sup> Bitcoin is also growing rapidly in the area

of online gambling.<sup>50</sup> The growing use of Bitcoin as a standard currency gives rise to a host of potential income tax and other regulatory issues. Unfortunately, the current state of the law fails to provide insight as to what the proper treatment of these Bitcoin transactions should be.<sup>51</sup>

One of the ways to classify virtual currencies is to study its interactions with the fiat money in circulation. This can happen in two ways: a. currency flow through exchanges; and b. flow of currency due to purchasing and sale of real goods and services. The following three types of schemes can be distinguished on this basis:

i. *CLOSED VIRTUAL CURRENCY SCHEME:*

This type of scheme has minimal link to the actual economy and is occasionally called “in-game only” scheme. In this scheme, a subscription fee is paid by the user to earn virtual currency by performing specified online tasks. This currency can only be used to buy virtual goods and services within such community.

ii. *VIRTUAL CURRENCY SCHEMES WITH UNIDIRECTIONAL FLOW:*

In this scheme real currency is used directly to purchase the virtual currency at a specified rate (exchange rate). Real goods and services may be bought in such a scheme using the virtual currency.

iii. *VIRTUAL CURRENCY SCHEMES WITH BIDIRECTIONAL FLOW:*

In this case the virtual currency resembles any other currency capable of exchange. The currency can even be bought and sold according to the set exchange rates. Real as well as virtual goods and services can be bought and sold through this currency. Bitcoin and most other currencies follow this scheme.

46. <http://www.coindesk.com/data/bitcoin-total-circulation/>

47. <http://www.coindesk.com/information/what-can-you-buy-with-Bitcoin/>

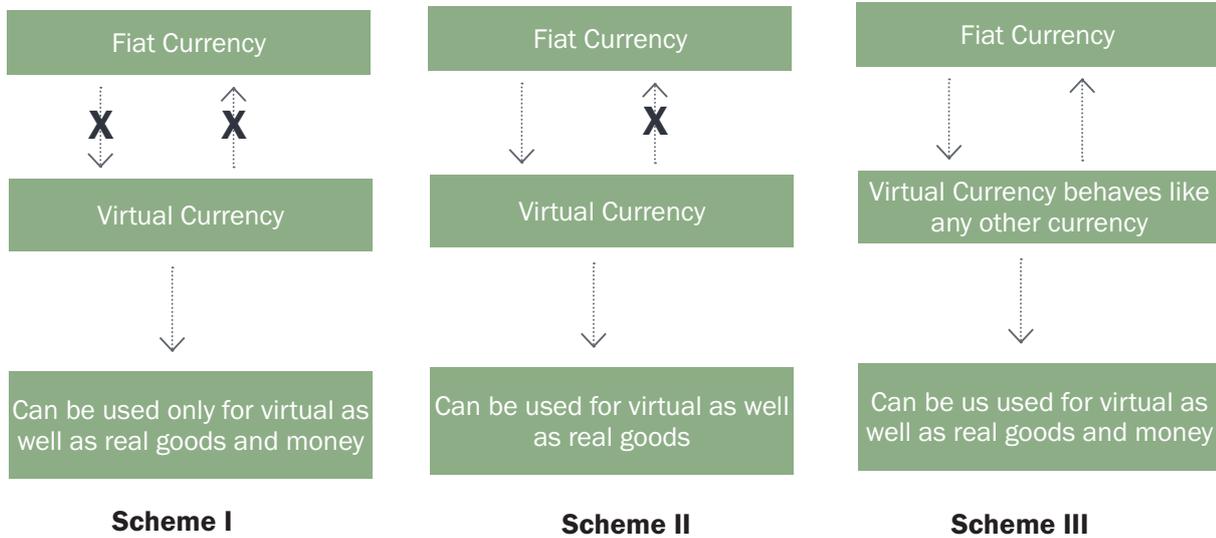
48. Akins, Benjamin W. and Chapman, Jennifer L. and Gordon, Jason M., “A Whole New World: Income Tax Considerations of the Bitcoin Economy” Pittsburgh Tax Review. Available at SSRN: <http://ssrn.com/abstract=2394738>

49. Ibid.

50. <http://www.coindesk.com/the-wild-world-of-Bitcoin-and-gambling/>

51. Ibid.

The following diagrams depict the flow of fiat and virtual currencies as explained in the schemes above:



## 4. General Position and View Around the World

After the glorious comeback of Bitcoin after the crash of 2011, and its constant growing popularity, it has received much attention from various jurisdictions around the world.<sup>52</sup> Central banks and governments of many nations have issued official statements, regulation and reports on handling of Bitcoin and other significant uses with regard to effecting business transactions. Governments have issued such statements on a wide range of topics from concerns regarding fraud, tax considerations, possibility of negative impacts on national currencies to whether Bitcoin are recognized as legal tender/currency.

It must be noted that this debate over how to deal with this new virtual currency is still in its infancy. Also, the characterization of Bitcoin as currency has been rejected by most jurisdictions which have taken steps to regulate it. The major reason for doing so seems that they would not want to confer such a status to peer-to-peer units. Certain countries like China<sup>53</sup> and Brazil<sup>54</sup> have made efforts to warn people of the risks associated with trading in Bitcoin. RBI too has issued a similar caution. Several nations such as Canada,<sup>55</sup> Norway<sup>56</sup>

and Singapore<sup>57</sup> have declared Bitcoin as 'assets'. Although, it may be noted that such an approach might lead to several difficulties. For instance, once Bitcoin have been mined by a party, the transfer of these Bitcoin may not be subjected to capital gains tax, if treated in a similar manner as the self-acquired tangible assets.<sup>58</sup>

Virtual currencies have also not been covered under the exceptions that have been carved out in some specific types of transactions with regard to sale of self-generated assets in cases where Bitcoin are characterized as assets. Payments to contractors and sub-contractors, the whole of which may not be characterized as income or profits in the hands of the recipient, may not be subject to withholding obligations where Bitcoin are characterized as assets.<sup>59</sup>

"The following is an analysis of specific statements/rules/regulations published by governments of various nations specifically addressing the issue of Bitcoin."

### I. Australia

The Australian Taxation office (ATO) had informed that it was keeping a close watch on the "volatility [of Bitcoin], how widely it is accepted, its interaction with conventional currencies through exchange mechanisms and international developments". A Draft ruling of Goods and services tax (GST), a guidance paper and four tax determinations on the taxation treatment of Bitcoin and other virtual currencies were also issued in August 2014.<sup>60</sup>

52. *SEE*, <http://www.economist.com/node/21563752>

53. Banks and payment institutions in China are thus prohibited from dealing in Bitcoin. China Bans Financial Companies From Bitcoin Transactions, BLOOMBERG NEWS (Dec. 5, 2013), available at : <http://www.bloomberg.com/news/2013-12-05/china-s-pboc-bans-financial-companies-from-bitcoin-transactions.html>; [Notice on Precautions Against the Risks of Bitcoin] (issued by the People's Bank of China, the Ministry of Industry and Information Technology, China Banking Regulatory Commission, China Securities Regulatory Commission, and China Insurance Regulatory Commission, Dec. 3, 2013) YIN FA, 2013, No. 289, [http://www.pbc.gov.cn/publish/goutong-jiaoliu/524/2013/2013120515315683222251/2013120515315683222251\\_.html](http://www.pbc.gov.cn/publish/goutong-jiaoliu/524/2013/2013120515315683222251/2013120515315683222251_.html) (China).

54. *SEE*, <http://www.bcb.gov.br/pt-br/Paginas/bc-esclarece-sobre-os-riscos-decorrentes-da-aquisicao-das-chamadas-moedas-virtuais-ou-moedas-criptografadas.aspx>

55. Jasper Hamill, "Canadian Regulators Welcome US Bitcoin Refugees with Open Arms", REGISTER (May 20, 2013), available at: [http://www.theregister.co.uk/2013/05/20/canada\\_welcomes\\_bitcoin\\_traders\\_fintrac\\_letter/](http://www.theregister.co.uk/2013/05/20/canada_welcomes_bitcoin_traders_fintrac_letter/).

56. *SEE*, <http://www.bloomberg.com/news/2013-12-12/bitcoin-fail-real-money-test-in-scandinavia-s-wealthiest-nation.html>

57. *SEE*, <http://www.forbes.com/sites/kellyphillipserb/2014/03/25/irs-says-bitcoin-other-convertible-virtual-currency-to-be-taxed-like-stock/>

58. *SEE*, <http://www.livemint.com/Money/3qcKrBcAMiisahVOyOygYK/Are-Bitcoin-currency-or-asset.html>

59. *SEE*, <http://www.livemint.com/Money/3qcKrBcAMiisahVOyOygYK/Are-Bitcoin-currency-or-asset.html>

60. Kate Walsh & Jason Murphy, ATO Targets Bitcoin Users, AUSTRALIAN FINANCIAL REVIEW (June 24, 2013), [http://www.afr.com/p/technology/ato\\_targets\\_bitcoin\\_users\\_oawpzLQHDz2vEUWtvYLTWI](http://www.afr.com/p/technology/ato_targets_bitcoin_users_oawpzLQHDz2vEUWtvYLTWI).

In October 2013, an Australian Bitcoin bank was hacked, resulting in the theft of over US\$1 million worth of the Bitcoin.<sup>61</sup>

## II. Brazil

Through Law No. 12865, enacted by Brazil on October 9, 2013, the possibility for creation of electronic/virtual currencies, including Bitcoin, was introduced. Among other things the law laid down the kind of payment systems and payment arrangements that are included in the Brazilian Payment System (*SISTEMA DE PAGAMENTOS BRASILEIRO, SPB*).<sup>62</sup> “Payment institution” is defined as a legal entity that, by adhering to one or more payment arrangements, has as a principal or secondary activity, alternatively or cumulatively, one of the activities listed in article 6(III). “Electronic currency” is defined as resources stored on a device or electronic system that allow the end user to perform a payment transaction.<sup>63</sup>

## III. China

The central bank of China and four other central government ministries and commissions, issued a Notice on Precautions against Risks of Bitcoin in December 2013<sup>64</sup>. The notice clearly stated that the nature of Bitcoin is that of a “virtual commodity” and not a currency. Owing to this fact, Bitcoin should not be traded as a currency

in the market.<sup>65</sup> The notice also prohibited the Financial Institutions in China from dealing in Bitcoin. The notice further mentioned that overseeing of internet sites that dealt in services relating to the Bitcoin was to be made much more stringent. It also issued a general warning issues relating to money laundering with the use of Bitcoin.<sup>66</sup>

## IV. Canada

Canada is the first country to implement a national law on Bitcoin use. As a result of recent legislative amendments, businesses dealing in digital currency have now been subject to the Proceeds of Crime (Money Laundering) and Terrorist Financing Act of 2000 (“**PCMLTF**”). Under the PCMLTF, ‘dealing in virtual currencies’<sup>67</sup> has been subjected to the same reporting requirements as other money-services businesses.

Dealers in digital currency in Canada need to register as Money Services Businesses (“**MSBs**”). Anyone dealing with customers in Canada will need to register as an MSB with the Financial Transactions and Reports Analysis Centre of Canada (“**FINTRAC**”). The process involves contacting FINTRAC to provide initial information and gaining access to the MSB registration site. There are a number of questions about the owners of the business, senior officers, banking relationships and projected revenues. While the process is not costly, it can take time (in particular if the regulator requires clarification). Some of the reportings / filings that will need to be made to FINTRAC are<sup>68</sup>:

61. Jim Urquhart, Bit-Heist: Over \$1mn in Bitcoin Stolen from Australian Online Bank, RT.COM (Nov. 8, 2013), <http://rt.com/news/Bitcoin-hacking-stolen-million-417/>.

62. Lei No. 12.865, de 9 de Outubro de 2013 [Law No. 12,865 of October 9, 2013], <http://www.receita.fazenda.gov.br/Legislacao/leis/2013/lei12865.htm> (Braz.).

63. Ibid. Article 6 (VI)

64. 中国人民银行等四部门《关于防范比特币风险的通知》[Notice on Precautions Against the Risks of Bitcoin] (issued by the People’s Bank of China, the Ministry of Industry and Information Technology, China Banking Regulatory Commission, China Securities Regulatory Commission, and China Insurance Regulatory Commission, Dec. 3, 2013) Yin Fa, 2013, No. 289, <http://www.pbc.gov.cn/publish/goutongjiaol>

[iu/524/2013/2013120515315683222251/2013120515315683222251\\_.html](http://www.btcchina.com/page/bocnotice2013) (China). An unofficial English summary of the Notice is available at BTC CHINA, <https://vip.btcchina.com/page/bocnotice2013> (last visited Jan. 5, 2015).

65. Ibid. Section 1

66. Ibid

67. The phrase “dealing in virtual currencies” was not defined and it is not known what the defined term will encompass in terms of transactions but the government has clarified that it will apply only to digital currency exchanges.

68. <http://www.duhaimelaw.com/2014/06/22/canada-implements-worlds-first-national-bitcoin-law/>

- Digital Currency MSBs are required to report to FINTRAC every suspicious financial transaction and attempted suspicious financial transaction. There is no monetary threshold (i.e., dollar amount) that triggers the requirement to report a suspicious transaction.
- Digital Currency MSBs have to file with FINTRAC, a terrorist property report when it has property in its possession or control that it knows is owned or controlled by or on behalf of a terrorist or terrorist group; and when it has property in its possession or control that it has reason to believe is owned or controlled by or on behalf of a listed person.
- Digital Currency MSBs are required to report to FINTRAC when they receive an amount of \$10,000 or more in cash in the course of a single transaction, unless the funds are received by a public body or a financial entity.
- When a Digital Currency MSB sends or receives an international money transfer of \$100,000 or more, it must determine if it involves a politically exposed person (“PEP”) inside or outside of Canada, and if it determines that the funds involve a PEP, it must confirm the source of funds.
- Digital Currency MSBs have to undertake obligations to ascertain the identity of persons and companies using their services to complete certain financial transactions.
- Digital Currency MSBs are subject to fairly onerous record-keeping obligations under the PCMLTFA. They must keep large cash transaction records, records regarding third parties when certain transactions are conducted for third parties.
- Digital Currency MSBs have to undertake a risk assessment to evaluate and identify, in the course of its activities, the risk of the commission of money laundering offences and terrorist activity financing offenses.
- Digital Currency MSBs are required to implement a compliance program to meet reporting, record keeping and client identification obligations under the PCMLTFA.

Failures to comply with certain obligations under the PCMLTFA are criminal offences and can subject directors, officers, employees and the Digital Currency MSB to terms of imprisonment and fines. Digital Currency MSBs should obtain compliance advice in respect of their exposure and should understand the connection in Canada between the compliance regime and a due diligence defence.

In April 2013, Canada’s Revenue Agency (“CRA”) reportedly stated that users of bitcoins will have to pay tax on transactions in the digital currency, based on two separate tax rules that apply to barter transactions and things that are bought and sold for speculative purposes. These rules were confirmed in November, 2013. In essence, the matter will be dealt with on a case by case basis. Under Canadian law, barter transactions are allowed, but the CRA states that the value of goods or services obtained by bartering digital currencies must be included into the taxpayer’s income, if business related.<sup>69</sup>

## V. Denmark

The Financial Supervisory Authority (Denmark’s *FINANSTILSSYNET*) in addition to stating that it will not be regulating Bitcoin, clarified the status of Bitcoin stating that it was not a currency.<sup>70</sup> In the same statement it was explained that since Bitcoin did not fall under any kind of financial services categories, including electronic money, currency exchanges etc., it cannot be covered under the financial regulation.<sup>71</sup>

This statement by the Financial Supervisory Authority suggests that Bitcoin should be treated as an electronic service and earnings from its use would therefore be taxable. However, the tax authorities have not published any comment yet as to whether Bitcoin earnings should be or will

69. <http://www.coindesk.com/information/is-bitcoin-legal/>

70. Advarsel mod virtuelle valutaer (Bitcoin m.fl.) [Warnings Against Digital Currencies (Bitcoin etc.)], Finanstilsynet (Dec. 17, 2013), <http://www.finanstilsynet.dk/da/Nyhedscenter/Pressemeddelelser/2013/Advarsel-mod-virtuelle-valutaer-bitcom-mfl-2013.aspx>.

71. Ibid.

be taxed. Even though there is no clarification from the tax authorities regarding taxation of the Bitcoin, the Danish Tax Authority (SKAT) published a reply wherein it stated that an invoice cannot be issued in Bitcoin but must instead be issued in Danish Kroner or another recognized currency. It was also stated that losses in Bitcoin could not be deducted as a cost of business.<sup>72</sup> Hence, currently, although it is clear that Bitcoin is not a recognized currency, there still is some lack of clarity with regard to the taxability of Bitcoin under the jurisdiction.

## VI. European Union

No legislation yet has been passed by the EU relating to the status of Bitcoin as a currency. A detailed report on virtual currency which discussed the Bitcoin system and briefly analyzed its legal status within the EU was issued by the European Central Bank.<sup>73</sup> However in the conclusion of the report, the Bitcoin was kept outside the purview of directive 2007/64/EC since the directive does not deal with electronic money and the financial institutions are not allowed to deal in it either.<sup>74</sup> In December 2013, European Banking Authority (EBA), the regulatory and advisory agency of the EU in matters of banking institutions, e-money regulation etc. issued a warning on the dangers of using virtual currency. It also clarified that the consumers might still be taxed when using virtual currency as Bitcoin is not regulated.<sup>75</sup>

72. European Central Bank, Virtual Currency Scheme <http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>.

73. Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on Payment Services in the Internal Market, Amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and Repealing Directive 97/5/EC, 2007 O.J. (L 319) 1, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:319:0001:0036:EN:PDF>

74. Press Release, European Banking Authority, EBA Warns Consumers on Virtual Currencies (Dec. 13, 2013), <http://www.eba.europa.eu/-/eba-warns-consumers-on-virtual-currencies>.

75. Jens Münzer, Bitcoin: Aufsichtliche Bewertung und Risiken für Nutzer [Bitcoin: Supervisory Evaluation and Risks for Users], BaFin [http://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Fachartikel/2014/fa\\_bj\\_1401\\_Bitcoin.html](http://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Fachartikel/2014/fa_bj_1401_Bitcoin.html).

## VII. Germany

BaFin (*BUNDESAMT FÜR FINANZDIENSTLEISTUNGENISSUED*), the German Federal Financial Supervisory Authority issued a communication on Bitcoin on December 19, 2013.<sup>76</sup> In Germany Bitcoin have been classified as a financial instrument but not any form of currency.<sup>77</sup> The Federal Ministry of Finance discussed briefly the tax treatment of Bitcoin in some statement. The ministry, among other things, discussed the possibility of levying value-added tax liability for Bitcoin transfers, lack of long term capital gains liability for Bitcoin that are held for more than a year.<sup>78</sup>

## VIII. Norway

A principle statement was issued by the Norwegian Tax Authority stated that as far as the question of taxation of Bitcoin is concerned, it will be treated as capital gains. The legislation governing the capital property imposes taxes on winnings and deductions for losses. Even though travelling currencies are exempted from the capital gains tax, Bitcoin cannot be exempted as it is not covered under travelling currencies. In addition to this, a commercial sale of Bitcoin will attract 25% of VAT.<sup>79</sup>

## IX. United Kingdom

The Bank of England has published no statement clarifying its position on Bitcoin. Although, Bitcoin has been expressly excluded

76. Kreditwesengesetz [Banking Act] (updated Sept. 9, 1998), Bundesgesetzblatt I at 2776, as amended, See <http://www.gesetze-im-internet.de/kredwlg/index.html> (Ger.).

77. Franz Nestler, Deutschland erkennt Bitcoins als privates Geld an [Germany Recognizes Bitcoin as Private Money], Frankfurter Allgemeine Zeitung, <http://www.faz.net/aktuell/finanzen/devisen-rohstoffe/digitale-waehrung-deutschland-erkennt-bitcoin-als-privates-geld-an-12535059.html>.

78. *SEE*, <http://www.skatteetaten.no/no/Radgiver/Rettskilder/Uttalelser/Prinsipputtalelser/Bruk-av-Bitcoin-skatte-og-avgiftsmessige-konsekvenser/>.

79. Mona Naqvi & James Southgate, Bank of England, Banknotes, Local Currencies and Central Bank Objectives, 53: 4 Quarterly Bulletin 319 n. 3 (2013), <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2013/qbr1304.pdf>.

in the latest quarterly reports published.<sup>80</sup> It has been indicated by the HMRC (The UK customs and tax department) that Bitcoin will be considered as ‘single purpose vouchers’.<sup>81</sup> This classification will render a levy of VAT extending up to 10-20% on the sale of Bitcoin. This move has been vehemently criticized by those involved in the sale of Bitcoin alleging that this would lead to a tremendous slowdown in the UK Bitcoin industry.<sup>82</sup>

## X. United States of America (USA)

A bill submitted to the Congress called HR 5777, proposed a five-year moratorium on regulation of digital currency within the US. The bill is titled “The Crypto-currency Protocol Protection and Moratorium Act” and would hold off any “statutory restrictions or regulations” for a period of five years after 15th June 2015.<sup>83</sup> The draft law also proposes that virtual currencies be classified as traditional currencies under tax regulations of the US. Currently, the Internal Revenue Service (“IRS”) taxes Bitcoin holdings as though they were a type of property. The moratorium bill contains legislative language that implies that the IRS should be treating Bitcoin and distributed ledger systems as currencies rather than assets.<sup>84</sup> The bill criticizes the current property-focused tax perspective, arguing that it fails to address the multifaceted characteristics of cryptocurrency. The bill, if passed, would require the IRS to revisit and rework its current regulatory framework regarding digital currencies.<sup>85</sup>

As already said, IRS currently treats Bitcoin as “property” for tax purposes. According to the IRS, the classification means that:<sup>86</sup>

- Digital currency payments made to independent contractors and service providers must be reported via Form 1099.
- Profits and losses from the sale of digital currencies are subject to capital gains when being used as capital assets.
- Wages paid to employees in digital currencies are taxable and must be reported.

According to IRS, only US bills and coins have legal tender status in the United States so Bitcoin simply defaults to property status since it’s not legal tender. It’s ironic that Bitcoin is used as a currency but taxed like property.<sup>87</sup> Presently, there are no final rules at the US state level yet. In March, 2014, the New York State Department of Financial Services had officially invited Bitcoin exchanges to apply with them, and published draft regulations for virtual currency businesses. Businesses would have to provide transaction receipts, disclosures about risks, policies to handle customer complaints, maintain a cyber-security program, hire a compliance officer and verify details about their customers to follow anti-money-laundering rules, per FinCEN.<sup>88</sup>

AB 129 has been signed into law in June 2014 to take effect in 2015. The bill was meant to repeal the law that renders illegal, any use of alternative currencies. Other types of alternative currencies besides Bitcoin that now fall within the purview of AB 129 include gift cards, reward points such as are used at shopping malls and virtual tokens.<sup>89</sup> For the purposes of taxation, the IRS in the US considers Bitcoin as ‘property’ and not currency. However, it was recently ruled

80. Pete Rizzo, “UK Eliminates Tax on Bitcoin Trading, Publishes Official Guidance”, available at <http://www.coindesk.com/top-uk-tax-agency-eliminate-20-levy-bitcoin-trading/>

81. Tom Gullen, The Challenge of Being a Bitcoin Trader, Financial Services Club Blog (Nov. 13, 2013), <http://thefinanser.co.uk/fsclub/2013/11/the-challenge-of-being-a-bitcoin-trader.html>.

82. <http://www.coindesk.com/proposed-us-moratorium-bitcoin-regulation/>

83. <http://www.coindesk.com/us-congressman-submit-bitcoin-tax-bill/>

84. <http://www.coindesk.com/proposed-us-moratorium-bitcoin-regulation/>

85. <http://www.coindesk.com/internal-revenue-service-treat-digital-currencies-property/>

86. [http://www.wallstreetandtech.com/compliance/Bitcoin-taxation-a-gift-from-the-irs-and-the-coffee-problem/a/d-id/1318419?\\_mc=RSS\\_WST\\_EDT](http://www.wallstreetandtech.com/compliance/Bitcoin-taxation-a-gift-from-the-irs-and-the-coffee-problem/a/d-id/1318419?_mc=RSS_WST_EDT)

87. “In the Matter of Virtual Currency Exchanges”. Public Order. New York State Department of Financial Services. 11 March 2014. Retrieved 30 March 2014.

88. <https://www.cryptocoinsnews.com/ab-129-california-legally-approves-use-bitcoin/>

89. <https://ia800904.us.archive.org/35/items/gov.uscourts.txed.146063/gov.uscourts.txed.146063.23.o.pdf>

by a District Court of Eastern District of Texas<sup>90</sup> that Bitcoin, is in fact a form of currency or money.<sup>91</sup>

## XI. Thailand

The Bank of Thailand was given a presentation about how the currency works in a bid to operate in the country. At the end of the meeting, senior members of the Foreign Exchange Administration and Policy Department advised that due to lack of existing applicable laws, controls on capital and the fact that Bitcoin affects more than one financial sphere; the following Bitcoin activities are illegal in Thailand:<sup>92</sup>

- i. buying Bitcoin
- ii. selling Bitcoin
- iii. buying any goods or services in exchange for Bitcoin
- iv. selling any goods or services for Bitcoin
- v. sending Bitcoin to anyone located outside of Thailand
- vi. receiving Bitcoin from anyone located outside of Thailand

However, according to a letter from the Bank of Thailand, it is declared that Bitcoin can be traded in Thailand so long as it's only converted to/from Thai baht. Therefore, Bitcoin cannot be used as a way of converting foreign currencies in the nation. Bank of Thailand says it has no plans to expand the laws to regulate Bitcoin.<sup>93</sup>

90. Vaneesa Abhishek, "Growing interest in Bitcoin: Time for India to welcome it as "currency"?", available at [http://articles.economictimes.indiatimes.com/2014-06-18/news/50678868\\_1\\_currency-notes-Bitcoin-satoshi-nakamoto](http://articles.economictimes.indiatimes.com/2014-06-18/news/50678868_1_currency-notes-Bitcoin-satoshi-nakamoto)

91. "Bitcoin banned in Thailand". Telegraph UK. 13 July 2013. Retrieved 16 December 2013.

92. "Bank of Thailand says country's top Bitcoin exchange can resume operations". Technasia. 17 February 2014. Retrieved 27 February 2014.

93. See, [http://web.bundesverband-Bitcoin.de/wp-content/uploads/2014/05/Press-Release-Bundesverband-Bitcoin-PM-14-002\\_eng.pdf](http://web.bundesverband-Bitcoin.de/wp-content/uploads/2014/05/Press-Release-Bundesverband-Bitcoin-PM-14-002_eng.pdf)

In the UK, the Financial Conduct Authority has stated that Bitcoin are not recognized as a currency within the jurisdiction. Countries such as Germany<sup>94</sup> and the UK<sup>95</sup> have attempted to extend value-added taxation ("VAT") laws to Bitcoin transactions and it is possible that in the future India might include barter transactions in goods within the newly proposed Goods and Services Tax regime.<sup>96</sup> Bitcoin have not been made illegal in china but financial institutions have been prohibited from dealing directly in them.<sup>97</sup> Monetary Authority of Singapore (MAS) maintains that virtual currencies are not regulated in Singapore.<sup>98</sup> While the MAS has warned speculators about trading in cryptocurrencies, it has also said that the choice to accept Bitcoin is a commercial decision in which the MAS will not intervene.<sup>99</sup> Hence, it is easy to see that the status of Bitcoin within the economies of various jurisdictions is far from settled.

---

*"I UNDERSTAND THE POLITICAL RAMIFICATIONS OF [BITCOIN] AND I THINK THAT GOVERNMENTS SHOULD STAY OUT OF THEM AND THEY SHOULD BE PERFECTLY LEGAL."*

---

Ron Paul, Republican Texas Congressman and former candidate for US President

94. This approach was put forward in HRMC, Tax treatment of activities involving Bitcoin and other similar cryptocurrencies, Revenue & Customs Brief 09/14, (3 Mar. 2014), available at: <http://www.hmrc.gov.uk/briefs/vat/brief0914.htm> (accessed 25 July 2014).

95. See, <https://www.law.ufl.edu/flalaw/wp-content/uploads/2014/03/73TI0971.pdf>

96. Gerry Mullany, "China Restricts Banks' Use of Bitcoin," The New York Times, (December 5, 2013). Available at: <http://www.nytimes.com/2013/12/06/business/international/china-bars-banks-from-using-bitcoin.html>.

97. Terence Lee, "Singapore Government Decides Not to Interfere with Bitcoin," TechnAsia (Dec. 23, 2013), available at: <http://www.techinasia.com/singapore-government-decides-interfere-bitcoin/>.

98. See, <http://www.moneysense.gov.sg/understanding-financial-products/investments/consumer-alerts/virtual-currencies.aspx>

99. I.R. Coelho v. State of Tamil Nadu (2007) 2 SCC 1.

## 5. Position in India

### 1. What is Bitcoin?

The Constitution of India provides for matters in respect of which the Central Government has powers to regulate and legislate. To understand if Bitcoin are capable of government review, an analysis of the Indian Constitution has been undertaken. In this regard, Article 246 read with Seventh Schedule of the Constitution enumerates the list of activities that the Central Government and the State Governments are allowed to legislate.

Entry 36 and 46 of List I of the Seventh Schedule of the Constitution states that the Central Government is allowed to legislate in respect of currency, coinage, legal tender, foreign exchange and bills of exchange, cheques, promissory notes and other like instruments respectively.

If Bitcoin (as discussed below) falls within the purview of any of the above outlined categories of instruments, then the Central Government would have exclusive powers to legislate.

In the hierarchy of laws, the Constitution is supreme. All laws are subordinate to the Constitution. A law may be struck down as being unconstitutional due to lack of legislative competence or because it violates fundamental rights.<sup>100</sup> Decisions of the Union or State Executive, including decisions of statutory authorities, constitutional functionaries and quasi-judicial authorities may be challenged in a State High Court under the Constitution. Rules, regulations, notifications and circulars passed by authorities under the relevant statute may also be challenged on the ground that the same violate the Constitution.

The Constitution empowers, and the Supreme Court of India (“**Supreme Court**”) has recognized, authorities created under a statute to delegate certain functions to subordinate

authorities.<sup>101</sup> To facilitate in the effective implementation of government policies certain executive authorities have the power to pass rules and regulations which have the force of law. These rules and regulations are subordinate to the parent law and cannot transgress the limits set out by the parent law. Rules and regulations cannot confer excessive discretion on subordinate authorities.

It is also settled law that authorities acting in furtherance of a statute must carry out their functions in a manner that best achieves the objectives of the statute. These principles are designed to reduce the scope of discretion and eliminate arbitrariness in executive action. Ordinarily, decisions of these authorities may be challenged in appeal before an appellate authority. However, in exceptional circumstances, where there is an egregious violation of fundamental rights, principles of natural justice or when an authority acts in violation of its jurisdiction, an aggrieved party may file a petition in the State High Court.

It is important to note that while challenging the decision of a statutory authority, generally the scope of appeal is limited and there is a high degree of deference by courts. The Supreme Court has recognized that in matters relating to economic policy, courts must not interfere unless arbitrariness is writ large in the decision making process. Even in cases where intervention of the court is justified, the court would only examine the decision making process and not the decision itself.

The principal laws concerning Bitcoin are:

- i. The Constitution of India, 1950;
- ii. The Foreign Exchange Management Act, 1999 (“**FEMA**”);
- iii. The Reserve Bank of India Act, 1934 (“**RBI Act**”);
- iv. The Coinage Act, 1906 (“**Coinage Act**”);

100. Gwalior Rayon Silk Manufacturing (Weaving) Company Ltd. V. Asst. Comm. Sales Tax (1974) 2 SCR.

101. Section 2(h) of The Foreign Exchange Management Act, 1999

- v. The Securities Contracts (Regulation) Act, 1956 (“**SCRA**”);
- vi. The Sale of Goods Act, 1930 (“**Sale of Goods Act**”); and
- vii. The Payment and Settlement Systems Act, 2007 (“**Payment Act**”).
- viii. Indian Contract Act, 1872 (“**Contract Act**”)

## II. FEMA, RBI and Coinage Act

The three statutes together define and regulate the issuance, utilization and disposal of currencies (and money). The terms legal tender and bank notes have not been clearly defined in any of the three aforementioned statutes. However, from an analysis of the provisions of the relevant regulatory statute, the nature and characteristics of the terms legal tender and bank notes have been determined.

## III. Currency

The RBI Act does not specifically define currency, but it does define foreign currency to have the same meaning as in Foreign Exchange Regulation Act, 1973, which has since been replaced by FEMA.

‘Currency’ has been defined under FEMA to include, ‘all currency notes, postal notes, postal orders, money orders, cheques, drafts, travelers cheques, letters of credit, bills of exchange and promissory notes, credit cards or such other similar instruments, as may be notified by the Reserve Bank’.<sup>102</sup> FEMA defines ‘foreign currency’ as any currency other than Indian currency.<sup>103</sup> Definition of ‘Indian Currency’ under FEMA states that Indian currency is the currency which is expressed or drawn in Indian Rupees. The definition excludes special bank notes and special one rupee issued under section 28A of the RBI Act.<sup>104</sup>

## IV. Legal Tender

Although there is no definition for legal tender under Indian law, the power to issue bank notes vests exclusively with the Reserve Bank of India (“**RBI**”). The bank note issued by RBI is considered legal tender (S. 26 of RBI Act).

For any instrument to qualify as a legal tender it must fulfill the test prescribed in Section 13 of the Coinage Act which states that coins issued under the authority of Section 6 of the Coinage Act, shall be legal tender in payment or on account i.e. provided that a coin has not been defaced and has not lost weight so as to be less than such weight as may be prescribed.

Over a period of time various instruments have been defined to mean legal tender, such as One Rupee issued under Currency Ordinance, 1940 as well as bank notes issued by RBI under the RBI Act.

From the above, it could be argued that so far as Bitcoin are not specifically designated by the government to be legal tender, they should not fall within this category.

## V. Currency Notes

The term currency notes are specifically defined in Section 2(i) of FEMA to mean and include cash in the form of coins and bank notes. This definition therefore does not cover Bitcoin which are not issued either under the Coinage Act or RBI Act.

S. 22 of the RBI Act provides that RBI has the sole right to issue bank notes and S. 26 provides that bank notes shall be legal tender in India.

From the above it appears that while Bitcoin have several features of a currency or legal tender it is not bank notes and is consequently not legal tender in India. Accordingly, it is left to be examined if it falls within the purview of securities, derivatives, or commodities.

<sup>102</sup>.Section 2(m) of The Foreign Exchange Management Act,1999

<sup>103</sup>.Section 2(q) of The Foreign Exchange Management Act, 1999

<sup>104</sup>. [1969] 3 S.C.R. 1

## VI. Virtual Currency

The question at hand is whether a ‘virtual currency’ such as Bitcoin can be said to come under the purview of the definition of currency above. The answer to this question can be found in the maxim ‘*EXPRESS UM FACIT CESSARE TACITUM*’. The maxim represents the principle ‘when there is express mention of certain things, then anything not mentioned is excluded’. The maxim has been recognized by Indian courts and was also relied upon by the Supreme Court in *SHANKARA RAO BADAM & ORS. v. STATE OF MYSORE & ANR.*<sup>105</sup> and *UNION OF INDIA & ANR. v. TULSIRAM PATEL.*<sup>106</sup> In light of the provisions of the law, it can be reasonably concluded that ‘virtual currency’ should be considered excluded from the definition of currency. While it may be argued that it may fall under ‘such other similar instruments’ under Section 2(h), but such ‘other instruments’ need to be specifically notified by the RBI which is not the case. There is no such declaration in respect of cryptocurrencies in general or Bitcoin in particular. RBI has merely advised the public to be cautious regarding the trading of virtual currencies.<sup>107</sup> Therefore, under the provisions of existing law, Bitcoin are not currency.<sup>108</sup>

## VII. Bitcoin as a Good and a Commodity

The term commodity has not been defined anywhere under the law in India. In the case of *TATA CONSULTANCY SERVICES V. STATE OF ANDHRA PRADESH*,<sup>109</sup> Hon’ble Justice Sinha concurring with the court’s view stated that a commodity is generally understood to mean goods of any

kind, something of use or an article of commerce.<sup>110</sup> Since Bitcoin are an intangible asset, it leaves open the possibility of being characterized as a commodity under Indian law.

Bitcoin may very well fall under the meaning of “goods” and may be covered under the Sale of Goods Act. The act defines “good” as:

“EVERY KIND OF MOVABLE PROPERTY OTHER THAN ACTIONABLE CLAIMS AND MONEY; AND INCLUDES STOCK AND SHARES, GROWING CROPS, GRASS, AND THINGS ATTACHED TO OR FORMING PART OF THE LAND WHICH ARE AGREED TO BE SEVERED BEFORE SALE OR UNDER THE CONTRACT OF SALE.”<sup>111</sup>

Bitcoin are listed and traded on stock exchanges in various jurisdictions around the world. Some examples are (i) Mt. Gox in Japan (previously one of the most widely exchanges); (ii) BTC China; (iii) BitBox in the United States; (iv) Bitcurex in Poland and (v) Bitsamp in Slovenia. Although there is no formal Bitcoin exchange in India at present there are numerous websites through which Bitcoin can be bought and sold. At present, as many as 23,000 Indians possess e-wallets where their digital currency is stored.<sup>112</sup>

Bitcoin wallets keep a secret piece of data called a “private key” for each Bitcoin address. Private keys are used to sign transactions, providing a mathematical proof that they have come from the owner of the addresses. Thus, it can be stated that, it can be stored and transferred. Therefore, in the light of the above discussion and case law, Bitcoin may be liable to tax.

<sup>105</sup>.1985 AIR SC 1416

<sup>106</sup>.RBI Cautions Users of Virtual Currencies Against Risks, Press Release : 2013-2014/1261 dated December 24, 2013 available at: [http://rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=30247](http://rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=30247)

<sup>107</sup>.According to Section 26 of the RBI Act, 1934 bank notes can be considered as “Legal Tender”. Further, according to Section 24 of the same only RBI has a power to issue it and no one else. See also Are Bitcoin currency or asset?, note 48 above.

<sup>108</sup>.2002 178 ELT 22 S.C

<sup>109</sup>.Hon’ble Mr. Justice S.B. Sinha’s view in Tata Consultancy Services v. State of Andhra Pradesh, 271 ITR 401 (2004).

<sup>110</sup>.Section 2 of The Sale of Goods Act, 1930

<sup>111</sup>.See, [http://articles.economicstimes.indiatimes.com/2013-08-14/news/41409715\\_1\\_Bitcoin-gox-virtualcurrency](http://articles.economicstimes.indiatimes.com/2013-08-14/news/41409715_1_Bitcoin-gox-virtualcurrency)

<sup>112</sup>.271 ITR 401 (2004) (Paragraph 84)

In *TATA CONSULTANCY SERVICES V. STATE OF ANDHRA PRADESH*,<sup>113</sup> THE SUPREME COURT STATED THAT, “COMPUTER SOFTWARE IS INTELLECTUAL PROPERTY, WHETHER IT IS CONVEYED IN DISKETTES, FLOPPY, MAGNETIC TAPES OR CD ROMS, WHETHER CANNED (SHRINK-WRAPPED) OR UNCANNED (CUSTOMIZED), WHETHER IT COMES AS PART OF COMPUTER OR INDEPENDENTLY, WHETHER IT IS BRANDED OR UNBRANDED, TANGIBLE OR INTANGIBLE; IS A COMMODITY CAPABLE OF BEING TRANSMITTED, TRANSFERRED, DELIVERED, STORED, PROCESSED, ETC. AND THEREFORE AS A ‘GOOD’ LIABLE TO SALE TAX.”

Similarly, Bitcoin being of an incorporeal nature may fall under the ambit of the term “goods”.

## VIII. Bitcoin as Payment System or Pre-Paid Instrument

The RBI regulates and supervises the payment systems in India under the Payment Act. Bitcoin, though often referred to as the peer-to-peer payment system, cannot clear or settle the payment between the payer and the beneficiary. Thereby it is not to be treated as a ‘payment system’ under the Payment Act.<sup>114</sup>

In India, pre-paid instruments are regulated by RBI in pursuant of its power conferred under the provisions of Payment Act.<sup>115</sup> The directions issued by RBI stipulate that a pre-paid instrument can be used to discharge any payment obligation equivalent to the value attached to it.<sup>116</sup> On the other hand, Bitcoin

need not be traded to discharge payment obligations equivalent to its value. Since the value of a Bitcoin are determined by market speculation, it can be either less or more than the payment obligation it is traded for.<sup>117</sup> Therefore, it cannot be said that the value stored in the instrument represents the value paid by the holders.

Further, Bitcoin can be generated by a user to himself by the use of software. These Bitcoin issued by the software will not fall in any of the three permitted categories of pre-paid payment instruments in India: Closed system payment instruments, Semi-closed system payment instruments and Open system payment instruments.<sup>118</sup>

The maximum value of these pre-paid payment instruments cannot exceed INR 50,000 with a minimum validity of six months from the date of activation or issuance to the holder.<sup>119</sup> Banks that comply with the eligibility criteria are authorized to issue three kinds of pre-paid payment instruments and Non-Banking Financial Companies (“NBFC”) and other persons have been authorized to issue only semi-closed system payment instruments. This infers that the issuer of a pre-payment instrument needs to be either a bank, NBFC or a ‘person’. Therefore Bitcoin issued by the software cannot be classified as pre-paid instruments since a server or software cannot be termed as a ‘person’.<sup>120</sup>

The software further cannot be regulated within the minimum capital adequacy requirements set for issuers of pre-paid instruments as issuers require a capital of Rs. 100 lakh and specific sanction from the RBI.<sup>121</sup> Additionally, only banks which have been permitted to provide Mobile Banking

113. Section 2(i) of The Payment And Settlement Systems Act, 2007 reads as follows:

“(1) “PAYMENT SYSTEM” MEANS A SYSTEM THAT ENABLES PAYMENT TO BE EFFECTED BETWEEN A PAYER AND A BENEFICIARY, INVOLVING CLEARING, PAYMENT OR SETTLEMENT SERVICE OR ALL OF THEM, BUT DOES NOT INCLUDE A STOCK EXCHANGE.

114. Section 18 of The Payment and Settlement Systems Act, 2007

115. Master Circular – Policy Guidelines on Issuance and Operation of Pre-paid Payment Instruments in India “2.3 PRE-PAID PAYMENT INSTRUMENTS: PRE-PAID PAYMENT INSTRUMENTS ARE PAYMENT INSTRUMENTS THAT FACILITATE PURCHASE OF GOODS AND SERVICES, INCLUDING FUNDS TRANSFER, AGAINST THE VALUE STORED ON SUCH INSTRUMENTS. THE VALUE STORED ON SUCH INSTRUMENTS REPRESENTS THE VALUE PAID FOR BY THE HOLDERS BY CASH, BY DEBIT TO A BANK ACCOUNT, OR BY CREDIT CARD.” Available at: [http://www.rbi.org.in/scripts/BS\\_ViewMasCircularDetails.aspx?id=8993](http://www.rbi.org.in/scripts/BS_ViewMasCircularDetails.aspx?id=8993)

116. See, <http://www.forbes.com/sites/nathanlewis/2014/03/06/Bitcoin-proves-friedmans-big-plan-was-a-joke/>

117. See, [http://www.rbi.org.in/Scripts/bs\\_viewcontent.aspx?id=1902](http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?id=1902)

118. See, [http://www.rbi.org.in/Scripts/bs\\_viewcontent.aspx?id=1902](http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?id=1902)

119. Section 3(42) of the General Clauses Act, 1897; “3(42) “person” shall include any company or association or body of individuals, whether incorporated or not”.

120. RBI Database, “DRAFT GUIDELINES FOR ISSUANCE AND OPERATION OF PREPAID PAYMENT INSTRUMENTS IN INDIA”.

121. See, [http://www.rbi.org.in/Scripts/bs\\_viewcontent.aspx?id=1902](http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?id=1902)

Transactions by RBI are permitted to launch mobile based pre-paid payment instruments (m-wallet and m-accounts).<sup>122</sup> Thereby rendering Bitcoin issued by a mobile-app outside the purview of regulation of pre-paid instruments as these Bitcoin are not circulated by a bank that has prior approval of the RBI. In conclusion, Bitcoin do not fall within the recognized definition of pre-paid instruments.

## IX. Applicability of SCRA

The SCRA regulates transactions relating to and involving securities. Section 2(h) of the SCRA defines “securities” to include:

- i. shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities of a like nature in or of any incorporated company or other body corporate;
  - a. derivative;
  - b. units or any other instrument issued by any collective investment scheme to the investors in such schemes;
  - c. security receipt as defined in clause (zg) of section 2 of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002;
  - d. units or any other such instrument issued to the investors under any mutual fund scheme;
- ii. Government securities
- iii. such other instruments as may be declared by the Central Government to be securities;
- iv. rights or interest in securities

The first issue in this regard is that while all of the above instruments have an underlying capital asset (the assets of the company issuing them for example and hence the reference to the term “security”), there is no underlying asset

in relation to Bitcoin. The second issue is that Bitcoin are not “issued” by anybody but are created from the activity of mining.

The above aspects also apply in relation to whether Bitcoin could qualify as “derivatives”. Section 2(ac) of the SCRA defines a derivative as:

- i. a security derived from a debt instrument, share, loan, whether secured or unsecured, risk instrument or contract for differences or any other form of security; or
- ii. a contract which derives its value from the prices, or index of prices, of underlying securities. Since Bitcoin do not fulfil any of the above criteria, they may not qualify as a security (or a derivative) from an Indian law perspective.

The same criteria (related to an underlying security / asset) applies to a derivative as well. Accordingly, Bitcoin cannot be categorized as “derivatives”.

## X. Bitcoin – Contracts and Enforceability

S. 23 of the Contract Act provides that certain considerations are unlawful and certain contracts may be opposed to public policy. Public policy has not been defined in the Contract Act and is an evolving expression. The Supreme Court has held that courts ought not to be quick to expand on the scope of what is public policy, they may, in the context of facts and circumstances take into account new developments and explain the same in the context of public policy.

Section 23 of the Contract Act provides:

<sup>122</sup>In Re: Special Reference No.1 of 2012 (dt. 27.09.2012), Relying on Premium Granites v. State of TN (1994) 2 SCC 691 and Delhi Science forum v. Union of India (1996) 2 SCC 405

■

*WHAT CONSIDERATION AND OBJECTS ARE LAWFUL, AND WHAT NOT*

*THE CONSIDERATION OR OBJECT OF AN AGREEMENT IS LAWFUL, UNLESS - IT IS FORBIDDEN BY LAW; OR IS OF SUCH NATURE THAT, IF PERMITTED IT WOULD DEFEAT THE PROVISIONS OF ANY LAW OR IS FRAUDULENT; OF INVOLVES OR IMPLIES, INJURY TO THE PERSON OR PROPERTY OF ANOTHER; OR THE COURT REGARDS IT AS IMMORAL, OR OPPOSED TO PUBLIC POLICY. IN EACH OF THESE CASES, THE CONSIDERATION OR OBJECT OF AN AGREEMENT IS SAID TO BE UNLAWFUL. EVERY AGREEMENT OF WHICH THE OBJECT OR CONSIDERATION IS UNLAWFUL IS VOID.*

■

The Supreme Court has held that courts would not arbitrate on soundness or otherwise of general policy decisions. Further, courts ought not to engage in the exercise of whether one particular policy is good over the other.<sup>123</sup>

There is nothing in law to suggest that Bitcoin are opposed to public policy or otherwise unlawful. A contract relating to Bitcoin, prima facie, is not such that its enforceability would defeat the provisions of law or is otherwise fraudulent. Therefore, a contract respecting Bitcoin, whether it is in relation to mining of Bitcoin, transfer of Bitcoin or transfer of Bitcoin for consideration, is not per se illegal.

An interesting issue that arises is the implications of a contract that provides Bitcoin as consideration, i.e., payment, under the contract. Contract Act does not provide the form or manner in which consideration may be paid by one party to another party. However, in a contract for sale of goods under the Sale of Goods Act, consideration cannot be in kind. As held by the Supreme Court in *COMMISSIONER OF INCOME TAX, HYDERABAD V. MOTORS AND GENERAL STORES (P.) LTD.*<sup>124</sup>, Section 2(10) of the Sale of Goods Act defines “price” as meaning the money consideration for a sale of goods. The presence of money consideration is therefore an essential element in a transaction of sale under the Sales of Goods Act and not a transaction under Contract Act. If the consideration is not money but some other valuable consideration it may be an exchange or barter but not a sale.

As long as Bitcoin are not currency / legal tender, they can only be considered as ‘value for money’ or goods. Therefore, Bitcoin would qualify as a consideration under the Contract Act but not as consideration under the Sale of Goods Act.

<sup>123</sup>.AIR 1968 SC 200

<sup>124</sup>.See, [http://rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=30247](http://rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=30247)

## 6. Regulatory Concerns Regarding Bitcoin

There is a growing need for adoption of a concrete regulatory policy regarding cryptocurrencies like Bitcoin in India. So far, the RBI has adopted a hands-off but cautious approach towards the regulation of Bitcoin. RBI on December 24, 2013, issued a press release cautioning users, holders and traders of virtual currencies (VCs), including Bitcoin, about the potential financial, operational, legal, security related risks that they are exposing themselves to.<sup>125</sup> RBI mentioned that it has been looking at the developments relating to certain electronic records claiming to be “Decentralized Digital Currency” or “Virtual Currency”, such as, Bitcoin, litecoins, bbqcoins, and dogecoins etc., their usage or trading in the country and the various media reports in this regard. The creation, trading or usage of VCs including Bitcoin, as a medium for payment is not recognized by the central bank or any monetary authority. No regulatory approvals, registration or authorization is stated to have been obtained by the entities carrying on such activities.<sup>126</sup> RBI in its press release also laid down several risks which included:

- VCs being in digital form are stored in digital/ electronic media that are called electronic wallets. Therefore, they are prone to losses arising out of hacking, loss of password, compromise of access credentials, malware attack etc. Since they are not created by or traded through any authorized central registry or agency, the loss of the e-wallet could result in the permanent loss of the VCs held in them.
- Payments by VCs, such as Bitcoin, take place on a peer-to-peer basis without an authorized central agency which regulates such payments. As such, there is no established

framework for recourse to customer problems / disputes / charge backs etc.

- There is no underlying or backing of any asset for VCs. As such, their value seems to be a matter of speculation. Huge volatility in the value of VCs has been noticed in the recent past. Thus, the users are exposed to potential losses on account of such volatility in value.
- It is reported that VCs, such as Bitcoin, are being traded on exchange platforms set up in various jurisdictions whose legal status is also unclear. Hence, the traders of VCs on such platforms are exposed to legal as well as financial risks.
- There have been several media reports of the usage of VCs, including Bitcoin, for illicit and illegal activities in several jurisdictions. The absence of information of counterparties in such peer-to-peer anonymous/ pseudonymous systems could subject the users to unintentional breaches of anti-money laundering and combating the financing of terrorism (AML/CFT) laws.

A similar approach was taken by People’s Bank of China that ordered financial institutions not to provide Bitcoin-related services and cautioned against its potential use in money-laundering.<sup>127</sup> Following the RBI’s notice and similar actions carried out in foreign markets, India’s biggest Bitcoin Trading Platform “BuysellBitCo.com” closed its platform amidst growing concern surrounding the trading in digital currencies.<sup>128</sup>

125. RBI Press Release, “RBI cautions users of Virtual Currencies against Risks”, 24 December 2013. Available at: [http://rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=30247](http://rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=30247)

126. Gerry Mullany, “China Restricts Banks’ Use of Bitcoin,” The New York Times, (December 5, 2013). Available at: <http://www.nytimes.com/2013/12/06/business/international/china-bars-banks-from-usingBitcoin.html>.

127. Agence France, “India’s biggest Bitcoin trading platform halts trade after RBI warning”, 28 December 2013.

128. RBI, *MASTER CIRCULAR – KNOW YOUR CUSTOMER (KYC) NORMS / ANTI-MONEY LAUNDERING (AML) STANDARDS/COMBATING OF FINANCING OF TERRORISM (CFT)/OBLIGATION OF BANKS UNDER PMLA*, 2002, RBI/2013-14/94, available at: [http://www.rbi.org.in/scripts/BS\\_ViewMasCirculardetails.aspx?id=8179](http://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=8179).

## I. KYC Norms – Applicability to Bitcoin

In India, KYC Norms are the norms set by the RBI that require banks to continuously monitor their customers' transactions, keep an up-to-date record of their identity, and take steps simply in case any of the transactions of a customer break from his or her usual pattern of behavior.<sup>129</sup>

As already discussed above, the system of Bitcoin uses the block chain technology which allows the system to keep a proper track of the transactions being made. Due to its lack of physical presence, bringing Bitcoin under the current Indian laws can be difficult. The KYC requirements are also being followed by some Bitcoin exchanges before allowing customers to open accounts with them.<sup>130</sup>

Section 3 of the Prevention of Money Laundering Act, 2002 (“PMLA”) will lose its purpose if the authorities are not able to identify the person, making the investigation involving money laundering much more difficult. Financial Institutions, banks and intermediaries are mandated to collect information of the clients.<sup>131</sup> However, it would appear that certain aspects of transactions in Bitcoin cannot be adequately regulated under the existing legal and regulatory framework.

Ultimately, both financial institutions<sup>132</sup> and Intermediaries<sup>133</sup> are poles apart from what the Bitcoin system is. With the advent of

<sup>129</sup><https://Bitcointalk.org/index.php?topic=454795.0>

<sup>130</sup>Section 12 of the Prevention of Money Laundering Act, 2002

<sup>131</sup>Section 45 IA of Reserve Bank of India Act, 1934

<sup>132</sup>See SECURITIES AND EXCHANGE BOARD OF INDIA (INTERMEDIARIES) REGULATIONS, 2008 (g) “intermediary” means a person mentioned in clauses (b) and (ba) of sub-section (2) of section 11 and sub-section (1) and (1A) of section 12 of the Act and includes an asset management company in relation to the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996, a clearing member of a clearing corporation or clearing house and a trading member of a derivative segment of a stock exchange but does not include foreign institutional investor, foreign venture capital investor, mutual fund, collective investment scheme and venture capital fund.

<sup>133</sup>An authorized person is defined as an authorized dealer, money changer, offshore banking unit or any other person for the time being authorized under sub-section (1) of section 10 to deal in foreign exchange or foreign securities.

Bitcoin the idea that a person or entity handles financial instrument has changed. The question to be answered is, whether the KYC norms as prescribed today are capable of regulating such a system. Even in the event when such norms are applied strictly, there will be others who can, by simply working with the software, mine more Bitcoin.

## II. Cross border transfer of Bitcoin

FEMA regulates all inbound and outbound foreign exchange related transactions, in effect regulating (or managing) the capital flows coming into and moving out of the country. Section 3 of FEMA states that other than as provided (and specifically enunciated) in either FEMA (or its underlying rules and regulations) or unless special or general permission of RBI has been obtained, no person shall:

- 
- *‘DEAL IN OR TRANSFER ANY FOREIGN EXCHANGE OR FOREIGN SECURITY TO ANY PERSON NOT BEING AN AUTHORIZED PERSON ;’<sup>134</sup>*
  - I. MAKE ANY PAYMENT TO OR FOR THE CREDIT OF ANY PERSON RESIDENT OUTSIDE INDIA IN ANY MANNER;*
  - II. RECEIVE OTHERWISE THROUGH AN AUTHORIZED PERSON, ANY PAYMENT BY ORDER OR ON BEHALF OF ANY PERSON RESIDENT OUTSIDE INDIA IN ANY MANNER; AND*
  - III. ENTER INTO ANY FINANCIAL TRANSACTION IN INDIA AS CONSIDERATION FOR OR IN ASSOCIATION WITH ACQUISITION OR CREATION OR TRANSFER OF A RIGHT TO ACQUIRE, ANY ASSET OUTSIDE INDIA BY ANY PERSON.’*
- 

From the above, it could be argued that purchasing of Bitcoin by a resident Indian from a person resident outside India (where money for purchase of Bitcoin is transmitted through legitimate banking channels) will not be in

<sup>134</sup>Article 246 of the India Constitution,

violation of FEMA. Further, Bitcoin transaction between two residents should also not trigger FEMA and should not therefore be in violation of the same. However, the sale of Bitcoin to a non-resident person (i.e. to a person outside India) by a resident Indian will be in violation of the provisions of FEMA. Further, it can also be regulated by RBI in this condition.

### III. Taxation of Bitcoin

In India, taxes are levied either by the central and the state governments. Article 246 of the Indian Constitution confers powers related to legislation of tax rules to state as well as central legislatures. Schedule VII enumerates these subject matters in 3 separate lists.<sup>135</sup> Taxes may be on income or expenditure. When taxation is on income, it may be on Bitcoin representing such income or on Bitcoin representing asset value. Additionally, it may also be on expenditure – cost of acquiring Bitcoin, such as Central Sales Tax, Value-Added Tax or Service Tax. For the purpose of taxation, three possible scenarios emerge:

- i. mining of Bitcoin (similar to self-generated goodwill),
- ii. transfer of Bitcoin (where Bitcoin are either a capital asset or a stock-in-trade depending on the activity undertaken by the tax payer), and,
- iii. transfer of Bitcoin as consideration (where Bitcoin are either a capital asset or a stock-in-trade depending on the activity undertaken by the tax payer).

### IV. Income Tax

Taxation of income in India is governed by the provisions of the Income Tax Act, 1961 (“ITA”). Under the ITA, residents are subject to tax in India on their worldwide income, whereas non-residents are taxed only on income sourced in India. However, non-residents, who are resident of a country with which India has signed a tax

treaty, have the option of being taxed as per the tax treaty or the ITA whichever is more beneficial. Every person, who is an assessee<sup>136</sup> and whose total income exceeds the maximum exemption limit, should be chargeable to the income tax at the rates prescribed.

Bitcoin may be considered to be currency or a capital asset. However, this is not yet clear under Indian law which makes it difficult to conclude how it may be taxed. The following discussion considers the tax implications on Bitcoin related transactions under the Indian Income tax law.

### V. Currency

Although for the purpose of general regulatory and commercial laws, Bitcoin may not be treated as currency, the income tax authorities may still treat Bitcoin as currency for the purpose of taxation. In such a case, Bitcoin are to be treated as consideration and the tax implication is not on Bitcoin but the transaction itself. For instance, if the seller is a regular trader, the income should be considered as business income at the rate of 30%. If not business income, such income would be in the nature of capital gain.

Under Indian law when a capital asset is transferred, the profit/gain that arises out of such transfer is taxable as income.<sup>137</sup> The tax liability, when such a transfer is made, is calculated by deducting the cost of acquisition of the capital asset from the sale proceeds and applying the tax rate to the difference.<sup>138</sup> According to the Supreme Court, it is required that the income be both “computable as well as chargeable” under the provisions of the ITA for capital gains to be taxable in India.<sup>139</sup> A study of recent case laws reveals that it has been held consistently by the Indian courts that the “computation” machinery as provided under the ITA is inextricably linked

<sup>136</sup>. See, [http://business.gov.in/taxation/capital\\_gains.php](http://business.gov.in/taxation/capital_gains.php)

<sup>137</sup>. See, <http://www.incometaxindia.gov.in/incometaxindia/contents/tpi/Unedited%20How%20to%20compute%20your%20capital%20gains%202008-09.pdf>

<sup>138</sup>. CIT v. B.C. SrinivasaSetty, (1981) 128 ITR 294 (SC).

<sup>139</sup>. Except those acquired through inheritance, gift, will, partition etc. (situations are not relevant here).

<sup>135</sup>. Section 2 (7) of the Income Tax Act, 1961.

with the chargeability of tax on capital gains. It has also been held that, if in a particular case, the computation provisions cannot be applied, it is suggestive of the fact that it was not in the contemplation of the charging section and consequently, when the computation provision fails, no tax can be levied.<sup>137</sup>

An amendment was made to the ITA to specify that in relation to a trade mark or brand name associated with a business or a right to manufacture, produce or process any article or thing, the cost of acquisition should be considered to be the following:

- i. the amount of the purchase price in the case of acquisition of such asset by way of purchase from a previous owner; and
- ii. nil in all other cases.<sup>140</sup>

Hence, the entire sale proceeds will attract capital gains tax levy, where the cost of acquisition is nil.

Bitcoin however is not covered by this exception. Thus, there might be some instances where the taxpayer could enjoy tax-free income. But in cases where the Bitcoin have been mined, it is possible that authorities will treat income of sale as taxable business income, even though it might be difficult to determine the cost.

Mining of Bitcoin	Transfer of Bitcoin	Transfer as consideration
<p>Mining should not be considered as an activity which is taxable. Considering that Bitcoin is not covered by the exception as provided above, mining should not be taxed as capital gains or business income under the ITA.</p> <p>However, it is possible that tax authorities will treat the income that arises on sale as taxable business income, even though it might be difficult to determine the cost</p>	<p>Bitcoin may either be capital asset or stock-in-trade. Since Bitcoin is not covered by the exception, there might be some instances where the taxpayer could enjoy tax-free capital gains which arise on transfer of Bitcoin.</p> <p>Ordinarily, there are no such exceptions in respect of income that arises on transfer of Bitcoin as stock-in-trade. However, deductions are permitted may be claimed on income that arises from transfer of Bitcoin as stock-in-trade.</p>	<p>In this case, Bitcoin represents consideration for the asset transferred / service provided and is treated as if it is currency.</p> <p>The transaction will be subject to tax depending on whether the underlying asset is a capital asset or stock-in-trade.</p> <p>However the Bitcoin <b>itself</b> cannot be taxed since the Bitcoin, in this case, represent ‘currency’ and the transaction has already been subjected to taxation (either as business income or capital gains).</p>
	<p>Gains on transfer of Bitcoin as capital assets are taxed under the following two heads:</p> <p><i>i. Long-term capital gain:</i></p> <p>When the property is held for more than 36 months, the gains are taxed as long-term capital gains.</p> <p><i>ii. Short-term capital gains:</i></p> <p>Cases in which the capital asset is held for less than 36 months the gains will be taxed as short-term capital gains.</p>	

<sup>140</sup> <http://www.incometaxindia.gov.in/incometaxindiacr/contents/tpi/Unedited%20How%20to%20compute%20your%20capital%20gains%202008-09.pdf>

## VI. Central Sales Tax / Value Added Tax

The Central Sales Tax Act, 1930 (“CST Act”) provides for the levy, collection and distribution of taxes on sales of goods in the course of inter-state trade. For a Bitcoin transaction to be taxed under the CST Act, there should be a sale – i.e., transfer of property and transfer of goods. “Sale” is defined under Section 2(g) of the CST Act, as follows:

“SALE”, WITH ITS GRAMMATICAL VARIATIONS AND COGNATE EXPRESSIONS, MEANS ANY TRANSFER OF PROPERTY IN GOODS BY ONE PERSON TO ANOTHER FOR CASH OR DEFERRED PAYMENT OR FOR ANY OTHER VALUABLE CONSIDERATION, AND INCLUDES,—

- I. A TRANSFER, OTHERWISE THAN IN PURSUANCE OF A CONTRACT, OF PROPERTY IN ANY GOODS FOR CASH, DEFERRED PAYMENT OR OTHER VALUABLE CONSIDERATION;
- II. A TRANSFER OF PROPERTY IN GOODS (WHETHER AS GOODS OR IN SOME OTHER FORM) INVOLVED IN THE EXECUTION OF A WORKS CONTRACT;”

The essentials that need to be fulfilled by a transaction to be categorized as sale are:

- i. Transfer of property by one person to another in goods
- ii. Payment in the form of cash, deferred payments or any other valuable consideration.

Where Bitcoin is exchanged for currency or any other consideration, the above essentials of sale should be satisfied. However, it also needs to be established whether Bitcoin can be considered as ‘goods’ under the CST Act. Goods under CST act are defined as:

“GOODS” INCLUDES ALL MATERIALS, ARTICLES, COMMODITIES AND ALL OTHER KINDS OF MOVABLE PROPERTY, BUT DOES NOT INCLUDE NEWSPAPERS, ACTIONABLE CLAIMS, STOCKS, SHARES AND SECURITIES;”

As already discussed in the previous sections, Bitcoin may fall under the category of commodity and thus come under the definition of goods under the CST Act and thus fulfilling the essentials of a transaction of sale.

Similarly, Section 6 of the Maharashtra VAT Act 2002 (“MVAT Act”) provides that tax should be levied on goods mentioned in Schedule B, C, D and E of the MVAT Act. Schedule C, entry 39 includes goods of “intangible or incorporeal nature” as notified from time to time by the State Government in the Official Gazette. The State Government pursuant to the above sections has issued notifications to classify various kinds of intellectual property including patents, trademarks, copyright etc. as goods.<sup>141</sup>

However, MVAT Act clearly states that for a property to be considered as “goods” for tax purposes, it should be notified by the Government. Virtual currencies like Bitcoin have not been notified are hence should not be liable to be taxed as goods under the abovementioned provisions and consequently, transfer of Bitcoin cannot be taxed under MVAT Act.

In another situation, where Bitcoin are exchanged for goods, Bitcoin can be considered as “consideration in kind”. The definition of sale under the CST Act, as stated above, provides that a sale is said to have been made when any transfer of goods takes place for cash, deferred payment or “other valuable consideration”. However, the issue that needs to be considered is whether Bitcoin can be considered as “other valuable consideration”. Courts have, on many occasions delved into the meaning of this phrase.<sup>142</sup> The Supreme Court in the case of

141. Notification No. No. VAT-1505/CR-114/Taxation-1

142. Vijaya Aluminium Industries Vs. State of Andhra Pradesh (1996) 103 STC 508

*DEVI DAS GOPAL KRISHNA AND OTHERS V. STATE OF PUNJAB*<sup>143</sup> while interpreting the same phrase in the Punjab General Sales Tax Act has opined:

“EXPRESSION “VALUABLE CONSIDERATION” IN THE DEFINITION OF “SALE” TAKES COLOUR FROM THE PRECEDING EXPRESSION “CASH OR DEFERRED PAYMENT” AND THEREFORE THE CONSIDERATION FOR SALE CAN ONLY MEAN SOME OTHER MONETARY PAYMENT IN THE NATURE OF CASH OR DEFERRED PAYMENT AND WOULD NOT COMPREHEND A TRANSACTION IN THE NATURE OF BARTER.”

Hence, the coverage provided by this definition is to be ascertained on case to case basis since there is no straight jacket formula to know what will constitute as “valuable consideration”.

## VII. Service Tax

Service tax is levied by the central government at 12.36% on all services provided in India except certain specified services. Service providers can take credit for service tax paid on input services utilized and for excise duty paid on inputs and capital goods (barring certain specified inputs). Services provided outside India are not subject to service tax in India. Typically, services are considered to be provided in India if the service recipient is located in India (even though the services may actually be provided outside India), except when specifically provided otherwise.<sup>144</sup> In case of online information and database access or retrieval services, it has been specifically provided that the services would be construed to be provided at the location of the service provider.

The 2015 Budget proposes to increase the rate of service tax to from 12.36% (inclusive of cesses) to 14%.

For service tax to apply, Bitcoin needs to fall under the category of “taxable service” (charging section). “Taxable Service” is defined in Section 65(105) of the Chapter V of the Finance Tax Act, 1994. Here it may fall under Clause (zh) which states that taxable service includes services to any person, by [any person], in relation to on-line information and database access or retrieval or both in electronic form through computer network, in any manner; or Clause (zzze) stating “to its members, [or any other person], by any club or association in relation to provision of services, facilities or advantages for a subscription or any other amount”.

Therefore, the act of mining may be considered as a taxable service in terms of the clauses under the Finance Act as stated above.

Transfer of Bitcoin itself may not attract service tax since service tax is leviable on provision of services and not transfer of goods. Unless there is a service which is provided in relation to transfer of Bitcoin or mining of Bitcoin, service tax may not be levied on Bitcoin related transactions. However, Section 67 (1) (iii) contemplates receipt of consideration in kind or in some other manner which is not ‘ascertainable’ and consequently, merely because consideration has been made in the form of Bitcoin the transaction will not be exempted from service tax.

<sup>143</sup>.(1967) 20 STC 430 (S.C.)

<sup>144</sup>.Place of Provision of Services Rules, 2012

## 7. Intellectual Property Issues

Traditionally, inventions, literary works, artistic works, designs and trademarks formed the subject matter of intellectual property law protection. However, with the advent of new technologies coupled with the advancements in the digital space, various forms of intellectual property rights are evolving. The challenge for a business would be in identifying best methods for protection of its intellectual assets. With the development of virtual currencies (including Bitcoins) and other modes of online payment systems, we examine some of the key intellectual property rights available.

### I. Trademark

To trace the history of the origin of the term, the word 'Bitcoin' first appeared in Satoshi Nakamoto's white paper explaining the details of the Bitcoin software.<sup>145</sup> As of date, MtGox, the world's most prominent Bitcoin exchange based in Tokyo, currently holds the trademark for 'Bitcoin'.<sup>146</sup>

As per Indian trademark law, a trademark protection can be accorded to a mark<sup>147</sup> which is capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others.<sup>148</sup> Thus, the word 'Bitcoin' and any logos<sup>149</sup> connected with Bitcoins could acquire trademark protection in India under this law. However, a question that arises is whether the term "Bitcoin" should be accorded trademark

protection in the first place. Since the term "Bitcoin" is widely used by the public in a generic manner, without association or reference to a particular entity providing an online Bitcoin payment system or other Bitcoin related financial services, it may be difficult for anyone to prove distinctiveness and uniqueness of the Bitcoin mark at the time of seeking registration of the mark.

In India, there are trademark applications filed by Bitcoin traders for registration of various word marks that include the term "Bitcoin" within them. These applications are currently pending registration before the Indian Trade Marks Registry ("TMR"). Specifically, there is also an application pending before the TMR for registration of the word mark "Bitcoin" made by URS Wafler.<sup>150</sup> Trademark protection for the word marks that include the term "Bitcoin", and various Bitcoin logos is essential for financial institutions dealing in Bitcoin transactions and online payment systems. However, if several entities use similar word or logo marks, it is likely to confuse the members of public regarding the various Bitcoin platforms / Bitcoin exchanges represented with various visually or phonetically similar Bitcoin marks.

### II. Patent

In India, a patent may be registered for an invention that is novel, non-obvious and has utility. While Bitcoins are "mined" by individuals using software and specialized hardware and result in creation of complex algorithms, the process of mining Bitcoins may not qualify for patent protection in India, especially if the techniques and processes are available in the public domain. Further, under Indian patent law, a mathematical or business method or a computer program per se or algorithms are not inventions<sup>151</sup> and are hence

145. Bitcoin: A Peer-to-Peer Electronic Cash System Available at: <https://bitcoin.org/bitcoin.pdf> Last accessed: January 30, 2015.

146. Mt. Gox to Sell Bitcoin Trademark, But Could a Buyer Enforce It? Available at: <http://www.coindesk.com/mt-gox-sell-bitcoin-trademark-buyer-enforce/> Last accessed: January 30, 2015.

147. Section 2 (m) of the Trade Marks Act, 1999 defines mark to include a "device, brand, heading, label, ticket, name, signature, word, letter, numeral, shape of goods, packaging or combination of colours or any combination thereof."

148. Section 2(zb) of the Trade Marks Act, 1999

149. One of the most popularly used Bitcoin logos / symbols may be viewed at: <http://bitcoinsymbol.org/>. Last accessed: February 2, 2015.

150. Trademark Application Number 2638963

151. Section 3(k) of the Patents Act, 1970.

not patentable in India. In addition, it may be also difficult to establish novelty for Bitcoin related algorithms and computer programs for the purpose of terming them as 'inventions'.

### III. Copyright

As described above, Bitcoin is a software-based system which was introduced as open-source software in 2009<sup>152</sup> Under the Indian Copyright Act, 1957, a computer program is protected as literary work. Section 2 (ffc) of the Copyright Act, 1957 defines a 'computer program' as a "set of instructions expressed in words, codes, schemes or in any other form, including a machine readable medium, capable of causing a computer to perform a particular task or achieve a particular result."

The program in the underlying platform used in the generation and trading of Bitcoins or the programs which run in the back end of the

Bitcoin exchange and facilitate trading, would constitute a 'computer program'. However, the Bitcoin protocol and software are published openly and any developer around the world can review the code or make their own modified version of the Bitcoin software.<sup>153</sup> No exclusivity is generally claimed in open source software. Since developers can review the code and make their own modified version of the Bitcoin software,<sup>154</sup> each revision may give rise to a new copyright and thus it will be difficult to ascertain who holds the copyright in the codes. In the mining process, new Bitcoins are generated and introduced into the system, thus possibly leading to the creation of new codes, schemes or other components of the computer program, which may be entitled to copyrighted protection. Such an issue may arise with respect to who may be the author of such new works created. However, there does not appear to be any commercial value in the codes. Hence, the issue appears to be more of academic nature.

---

<sup>152</sup>.*SUPRA* note 23.

---

<sup>153</sup>.<https://bitcoin.org/en/faq>. Last accessed: February 5, 2015

<sup>154</sup>.<https://bitcoin.org/en/faq> Last accessed: February 5, 2015

## 8. Security Issues

One of the most important issues in the digital space and use of virtual currency is security. Bitcoin exchanges and other financial institutions dealing in Bitcoin transactions have been prone to security threats and hacks in the recent past; one instance being early in 2014 when hackers reportedly stole more than USD 5 million in virtual currency from Bitstamp, a major Bitcoin exchange.<sup>155</sup> In early 2014, Mt. Gox announced that it lost Bitcoins of value equivalent to USD 620 million of which a major portion belonged to its customers at the time.<sup>156</sup>

In the Indian context, the Information Technology Act, 2000 (“IT Act”) contains certain provisions which may be relevant to examine from a security perspective when discussing Bitcoins. The IT Act deals with various offences such as hacking and tampering with computer source documents which may be relevant when discussing security issues relating to Bitcoins.

The IT Act defines a ‘computer’ as “*ANY ELECTRONIC, MAGNETIC, OPTICAL OR OTHER HIGH-SPEED DATA PROCESSING DEVICE OR SYSTEM WHICH PERFORMS LOGICAL, ARITHMETIC AND MEMORY FUNCTIONS BY MANIPULATIONS OF ELECTRONIC, MAGNETIC OR OPTICAL IMPULSES, AND INCLUDES ALL INPUT, OUTPUT, PROCESSING, STORAGE, COMPUTER SOFTWARE OR COMMUNICATION FACILITIES WHICH ARE CONNECTED OR RELATED TO THE COMPUTER IN A COMPUTER SYSTEM OR COMPUTER NETWORK.*”<sup>157</sup>

Since Bitcoins (i) are virtual software-based crypto-currency, (ii) are transacted through online payment systems, platforms and portals, (iii) there is an underlying software used in such systems, platforms and portals, it is quite likely that Bitcoins would fall within the ambit of a ‘computer’.

If Bitcoins are considered to fall within the ambit of ‘computers’ as defined in the IT Act, it would be prudent to analyze various provisions of the IT Act relating to computer-related offences, some of which are criminal in nature.

### I. Hacking

Section 43 of the IT Act provides that any person, without the permission of the owner or any person in charge of a computer, computer system or computer network:

- i. *ACCESSES OR SECURES ACCESS TO SUCH COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK;*
- ii. *DOWNLOADS, COPIES OR EXTRACTS ANY DATA, COMPUTER DATA BASE OR INFORMATION FROM SUCH COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK INCLUDING INFORMATION OR DATA HELD OR STORED IN ANY REMOVABLE STORAGE MEDIUM;*
- iii. *INTRODUCES OR CAUSES TO BE INTRODUCED ANY COMPUTER CONTAMINANT OR COMPUTER VIRUS INTO ANY COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK;*
- iv. *DAMAGES OR CAUSES TO BE DAMAGED ANY COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK, DATA, COMPUTER DATA BASE OR ANY OTHER PROGRAMMES RESIDING IN SUCH COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK;*
- v. *DISRUPTS OR CAUSES DISRUPTION OF ANY COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK;*
- vi. *DENIES OR CAUSES THE DENIAL OF ACCESS TO ANY PERSON AUTHORISED TO ACCESS ANY COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK BY ANY MEANS;*
- vii. *PROVIDES ANY ASSISTANCE TO ANY PERSON TO FACILITATE ACCESS TO A COMPUTER, COMPUTER SYSTEM OR COMPUTER NETWORK IN CONTRAVENTION OF THE PROVISIONS OF THIS ACT, RULES OR REGULATIONS MADE THEREUNDER;*

<sup>155</sup>. *HACKERS STEAL \$5 MILLION FROM MAJOR BITCOIN EXCHANGE*; Available at: <http://fortune.com/2015/01/05/bitstamp-bitcoin-freeze-hack/> Last accessed: January 29, 2015.

<sup>156</sup>. *THE TROUBLING HOLES IN MtGox's ACCOUNT OF HOW IT LOST \$600 MILLION IN BITCOINS*; Available at: <http://www.technologyreview.com/view/526161/the-troubling-holes-in-mtgoxs-account-of-how-it-lost-600-million-in-bitcoins/> Last accessed: January 29, 2015.

<sup>157</sup>. Section 2(i), IT Act

VIII. CHARGES THE SERVICES AVAILED OF BY A PERSON TO THE ACCOUNT OF ANOTHER PERSON BY TAMPERING WITH OR MANIPULATING ANY COMPUTER, COMPUTER SYSTEM, OR COMPUTER NETWORK, SHALL BE LIABLE TO PAY DAMAGES BY WAY OF COMPENSATION TO THE PERSON AFFECTED BY SUCH ACTS.

## II. Hacking with Criminal Intention

Section 66 of the IT Act states that if any of the abovementioned acts as enlisted under Section 43 are performed dishonestly<sup>158</sup> or fraudulently,<sup>159</sup> such person performing such acts shall be punishable with imprisonment for a term of up to 3 years or with a fine of up to INR 5,00,000, or both.

## III. Identity Theft

- Section 66C of The IT Act provides for a punishment of imprisonment of a term of up to 3 years and a fine of up to INR 1,00,000 in case of offences relating to identity theft, i.e., where a person fraudulently or dishonestly makes use of the electronic signature, password or any other unique identification feature of any other person.
- Section 66D of The IT Act provides for a punishment of imprisonment of a term of up to 3 years and a fine of up to INR 1,00,000 in case of offences relating to cheating by impersonation by using a computer resource.

Although the general perception is that the making of false entries by any person is almost impossible and that the use of pseudonyms in dealing with Bitcoins is a generally safe practice, given technological advances, there could be some scope of impersonation or identity theft.

<sup>158</sup>Section 24 of the Indian Penal Code (“IPC”) defines “dishonestly” “AS WHOEVER DOES ANYTHING WITH THE INTENTION OF CAUSING WRONGFUL GAIN TO ONE PERSON OR WRONGFUL LOSS TO ANOTHER PERSON, IS SAID TO DO THAT THING “DISHONESTLY.”

<sup>159</sup>Section 25 of the IPC defines “fraudulently” as “A PERSON IS SAID TO DO A THING FRAUDULENTLY IF HE DOES THAT THING WITH INTENT TO DEFRAUD BUT NOT OTHERWISE.”

## IV. Cyber Terrorism

Section 66 F(1) of The IT Act provides a punishment of imprisonment which may extend to imprisonment for life, for acts of cyber terrorism. Section 66F of the IT Act provides that whoever,

“(A) WITH INTENT TO THREATEN THE UNITY, INTEGRITY, SECURITY OR SOVEREIGNTY OF INDIA OR TO STRIKE TERROR IN THE PEOPLE OR ANY SECTION OF THE PEOPLE BY-

- I. DENYING OR CAUSING THE DENIAL OF ACCESS TO ANY PERSON AUTHORIZED TO ACCESS COMPUTER RESOURCE; OR
- II. ATTEMPTING TO PENETRATE OR ACCESS A COMPUTER RESOURCE WITHOUT AUTHORIZATION OR EXCEEDING AUTHORIZED ACCESS; OR
- III. INTRODUCING OR CAUSING TO INTRODUCE ANY COMPUTER CONTAMINANT; AND BY MEANS OF SUCH CONDUCT CAUSES OR IS LIKELY TO CAUSE DEATH OR INJURY TO PERSONS OR DAMAGE TO OR DESTRUCTION OF PROPERTY OR DISRUPTS OR KNOWING THAT IT IS LIKELY TO CAUSE DAMAGE OR DISRUPTION OF SUPPLIES OR SERVICES ESSENTIAL TO THE LIFE OF THE COMMUNITY OR ADVERSELY AFFECT THE CRITICAL INFORMATION INFRASTRUCTURE SPECIFIED UNDER SECTION 70, OR

(B) KNOWINGLY OR INTENTIONALLY PENETRATES OR ACCESSES A COMPUTER RESOURCE WITHOUT AUTHORIZATION OR EXCEEDING AUTHORIZED ACCESS, AND BY MEANS OF SUCH CONDUCT OBTAINS ACCESS TO INFORMATION, DATA OR COMPUTER DATABASE THAT IS RESTRICTED FOR REASONS FOR THE SECURITY OF THE STATE OR FOREIGN RELATIONS, OR ANY RESTRICTED INFORMATION, DATA OR COMPUTER DATABASE, WITH REASONS TO BELIEVE THAT SUCH INFORMATION, DATA OR COMPUTER DATABASE SO OBTAINED MAY BE USED TO CAUSE OR LIKELY TO CAUSE INJURY TO THE INTERESTS OF THE SOVEREIGNTY AND INTEGRITY OF INDIA, THE SECURITY OF THE STATE, FRIENDLY RELATIONS WITH FOREIGN STATES, PUBLIC ORDER, DECENCY OR MORALITY, OR IN RELATION TO CONTEMPT OF COURT, DEFAMATION OR INCITEMENT TO AN OFFENCE, OR TO THE ADVANTAGE OF ANY FOREIGN NATION, GROUP OF INDIVIDUALS OR OTHERWISE, COMMITS THE OFFENCE OF CYBER TERRORISM.<sup>160</sup>

<sup>160</sup>Section 66-F(1), IT Act.

Acts of security breaches and hacking may constitute damage or destruction to property and in exceptional cases, such unauthorized access to data may pose a threat to the security of the State or foreign relations. Such acts may be construed as acts of cyber terrorism if there is an intention to threaten the unity, integrity, security or sovereignty of India or to strike terror in the people or any section of the people. However, in the present scenario, due to the limited use and extent of Bitcoin transactions in India, it is unlikely that such acts would affect

the unity, integrity, security or sovereignty of India or cause terror among people. If, however, Bitcoin exchanges and the use of Bitcoins were as wide spread as the securities market, then if such security breaches were initiated in the securities market, such actions may be construed as acts of cyber terrorism due to the widespread extent and high value of securities held by numerous people and, as such acts would cause rippling adverse effects in the Indian economy and derail public order, as well as the sovereignty and security of the nation.

## 9. Privacy and Data Protection

The paper on Bitcoins that was authored by Satoshi Nakamoto<sup>161</sup> acknowledges that since the use of Bitcoins essentially means that all transactions will be announced publicly, there may be privacy concerns. This paper addresses privacy concerns by stating the following:

*THE NECESSITY TO ANNOUNCE ALL TRANSACTIONS PUBLICLY PRECLUDES THIS METHOD, BUT PRIVACY CAN STILL BE MAINTAINED BY BREAKING THE FLOW OF INFORMATION IN ANOTHER PLACE: BY KEEPING PUBLIC KEYS ANONYMOUS. THE PUBLIC CAN SEE THAT SOMEONE IS SENDING AN AMOUNT TO SOMEONE ELSE, BUT WITHOUT INFORMATION LINKING THE TRANSACTION TO ANYONE. THIS IS SIMILAR TO THE LEVEL OF INFORMATION RELEASED BY STOCK EXCHANGES, WHERE THE TIME AND SIZE OF INDIVIDUAL TRADES, THE “TAPE”, IS MADE PUBLIC, BUT WITHOUT TELLING WHO THE PARTIES WERE*

In India there is no separate legislation dealing with right to privacy. The Supreme Court has recognized the “right to privacy” as a subset of the larger “right to life and personal liberty” under Article 21 of the Constitution of India. However a right under the Constitution can be exercised only against any government action. Non-state initiated violations of privacy may be dealt with under principles of torts such as defamation, trespass and breach of confidence, as applicable. However the law of torts is not very well developed in India. Accordingly there does not appear to be a special legislation dealing with privacy issues in the use of Bitcoins.

Apart from privacy issues, there are issues of data control and protection that may be discussed.

The IT Act<sup>162</sup> accords protection to certain items of sensitive personal data or information (“SPDI”) which are capable of identifying

natural persons and sets out a set of compliances to be undertaken by entities that collect, store or process such SPDI in India or transfer such SPDI to or from India.

It does not seem that the legislature had taken into account Bitcoins (and the impact of the use of peer to peer cryptocurrency) when formulating the data protection rules under the IT Act. Given the legal uncertainty, it may be prudent to discuss whether there is any aspect in the use of Bitcoins which can attract the provisions of the data protection rules under the IT Act.

The definition of SPDI contains a list of personal information which can identify a natural person. From this list, the items of SPDI which are relevant to be considered when discussing Bitcoins are

- i. passwords<sup>163</sup> and
  - ii. financial information such as Bank Account or Credit Card or Debit Card details or other payment instrument details.
- When dealing with Bitcoins, it is possible that different types of passwords (which by its definition include encryption and decryption keys) are collected, stored and processed – thus ostensibly triggering the applicability of the data protection provisions of the IT Act. However, the next question to be addressed is who generates such encryption keys and how are they shared. Given that such encryption keys are randomly created and given that the Bitcoin network is not really controlled by any one entity in any jurisdiction<sup>164</sup> there is a grey area whether the IT Act would apply in such situations.

<sup>161</sup> *BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM* available at <https://bitcoin.org/bitcoin.pdf>

<sup>162</sup> Read along with *THE INFORMATION TECHNOLOGY (REASONABLE SECURITY PRACTICES AND PROCEDURES AND SENSITIVE INFORMATION) RULES 2011*

<sup>163</sup> The IT Act defines passwords as follows: Password means a secret word or phrase or code or pass phrase or secret key, or encryption or decryption keys that one uses to gain admittance or access to information.

<sup>164</sup> <https://bitcoin.org/en/faq#who-controls-the-bitcoin-network>

- It is not entirely clear whether a Bitcoin would be considered to be financial information within the definition of SPDI. The definition contemplates payment instrument details rather than a currency form, which is what a Bitcoin (being a cryptocurrency) is. Further Bitcoins are not associated with any established financial institution (such as the apex bank), a situation which does not seem to have been contemplated by the legislature

# 10. Risks Related to Bitcoin

The question of how far adherent users of the Bitcoin currency will derive satisfaction in Bitcoin currency is shrouded with speculations. However, certain factors and recent incidents inform current and potential users of what could unfold in the Bitcoin regime.

## I. Cyber Attacks and Hacking: “Virtual Bank Robbery”

Attacks by “cyber thieves” are becoming frequent with the passing of time. Especially the Bitcoin community has been hit by such thefts quite repeatedly. This not only creates panic in the Bitcoin community but also leads to a decline in the value of the currency. Cyber security will be a constant concern, mostly because the transactions are restricted only to the cyber environment.<sup>165</sup>

One of the most discussed examples of such an attack (Distributed Denial-of-service) was targeted at Mt. Gox, one of the largest Bitcoin exchanges. The result of this attack was that the value of Bitcoin went down rapidly.<sup>166</sup> It is suggested by some that these hackers are trying to sustain a loop where “they sell Bitcoin when values are high, then mount an attack that forces prices to crash, buy up the cheaper coins and then let the value climb again”.<sup>167</sup> These issues and frequent attacks have majorly contributed in damaging the reputation of Bitcoin by scaring investors who do not want to take the risk of suffering huge losses without any insurance to cushion the blow. Due to lack of confidence in Bitcoin and hence lack of insurance, there is no sign of consumer protection in the Bitcoin community.

<sup>165</sup>.Nicholas A. Plassaras, ‘Regulating digital currencies: Bringing Bitcoin within the reach of the IMF’, Forthcoming, 14 Chi J Intl L (2013) Pg. 12.

<sup>166</sup>.BBC News Technology, ‘Hack attacks hit Bitcoin exchange rates’ <<http://www.bbc.co.uk/news/technology-22026961>>

<sup>167</sup>.Ibid.

## II. Price Fluctuation and Inflation

One of the major reasons why today many businesses and merchants avoid using Bitcoin is that it is new and the volatility of Bitcoin value is extremely high.<sup>168</sup> This again leads to the uncertainty and reduced confidence in the currency. Although, some think that in spite of these flaws, one of the most valuable consolations might be that there can be no artificial inflation or deflation of the currency.<sup>169</sup>

## III. Fraud

Some say that Bitcoin will keep appealing to charlatans coming up with destructive schemes as explained above since Bitcoin offers benefits of privacy as well as limited oversight by the regulators. When compared with the traditional fiat currency that not only has extensive regulatory oversight but also offers very less privacy, Bitcoin does seem like the better option for the fraudsters.<sup>170</sup> It may also be noted that fraud of this nature in addition to harming the customers personally and decreasing the value of the currency itself, can also lead to severe damage to the economies as well.<sup>171</sup>

<sup>168</sup>.Joshua Davis, Department of Technology ‘The Crypto-Currency’, The New Yorker (10 October 2011) Pg. 68

<sup>169</sup>.Nicholas A. Plassaras, ‘Regulating digital currencies: Bringing Bitcoin within the reach of the IMF’, Forthcoming, 14 Chi J Intl L (2013) Pg. 8.

<sup>170</sup>.US Securities and Exchange Commission’s Office of Investor Education and Advocacy, ‘Investor Alert (Ponzi Schemes Using Virtual currencies “[http://www.sec.gov/investor/alerts/ia\\_virtualcurrencies.pdf](http://www.sec.gov/investor/alerts/ia_virtualcurrencies.pdf)” accessed 07/01/2015.

<sup>171</sup>.See, <http://uk.reuters.com/article/2014/09/11/uk-britain-boe-Bitcoin-idUKKBN0H61HL20140911>

## IV. Uncertainties in the Government Policies

Since most jurisdictions have not made a decision regarding the status and treatment of Bitcoin in the economy, as already discussed above, the uncertainty is a deal breaker for many new prospective users of Bitcoin. One of the major dangers here is that any government might come around and declare it illegal, leaving the investors without remedy and helpless.

# 11. Vulnerabilities in Bitcoin Transactions

This arena of virtual transactions is relatively novel and largely untested. This means that, just like any new technology or innovation there is a high possibility that many loopholes might exist in this system that have not been detected yet. This only adds to the appeal of the Bitcoin for financial criminals. Most prominent of these offences which are already existent in the traditional financial world and which may extend to Bitcoin are money laundering and terrorist financing.

## I. Money Laundering

One of the major enabling factors for money laundering is lack of uniform financial jurisdiction across the globe. This is the reason why certain areas are labelled as “tax havens”. It may be noted that money laundering contributes largely to the deteriorating state of economies in the world. In most matters, the funds that are being laundered are earnings through corruption and bribery, which needless to say are rampant in under-developed and developing nations. There is sharp contrast between the effects of money laundering on developed and developing nations. By utilizing these funds for economic stability, it supports the economic development of developed countries. On the other hand, developing nations due to being cash starved, face stagnated political and economic growth.<sup>172</sup> Hence, this could be a serious threat to India.

## II. Drug Trafficking

Silk Road, launched in June 2011, and only reachable by people using Tor, the software that lets one surf the dark web anonymously. Silk Road was used by countless people to get access to illegal merchandise, spanning from drugs to assassins for hire. An estimate of \$1.9 million

<sup>172</sup>. Nikolei M Kaplanov, 'Nerdy money: Bitcoin, the private digital currency, and the case against its regulation' (2012) 25 Loy. Consumer L. Rev. 111, 121.

dollars' worth of Bitcoin transactions per month were done according to a research.<sup>173</sup> This came as a confirmation of the fact that Bitcoin is fast becoming the first choice for drug dealers to shelter themselves from the scrutiny of the law.

## III. Tax Avoidance and Evasion

There are very few nations who have released rules or guidelines regarding the treatment of Bitcoin for the purpose of taxation. While most countries have not resolved the issue of taxation of Bitcoins and transactions in relation to Bitcoins, it is speculated that the answer might be in affirmative.<sup>174</sup> However, in case other countries follow suit and bring Bitcoin under tax laws, it must be kept in mind that since it is not a government backed currency, people might not report all transactions made when Bitcoin is appreciated. This will make it even more difficult for the government to detect and curb tax evasion.<sup>175</sup>

## IV. Blackmailing

Mitt Romney, the Republican presidential candidate in 2012 was blackmailed by a man who claimed to have gained access to his tax record through PwC network. He threatened to reveal the information to the public if a payment of \$1 million worth of Bitcoins was not made to him. The incentive in this case seems to be the anonymity that Bitcoin transaction affords to the parties.

<sup>173</sup>. The Economist, 'Monetarists Anonymous; Bitcoin' The Economist (London, Sept 29, 2012) Vol 404, Issue 8804, Pg. 80.

<sup>174</sup>. Crypto-Currency Legal Advocacy Group, Inc., 'Staying Between the Lines: A Survey of U.S Income Taxation and its Ramifications on Crypto-Currencies' Available at <http://theclag.org/CM%231001Final.pdf>.

<sup>175</sup>. Thomas S. GrothEsq, 'Tax implications of Bitcoin (and traditional alternative currencies)' Available at <http://www.irsmedic.com/2013/04/05/can-you-be-taxed-for-spending-Bitcoin/>

## V. Terrorist Financing

The concepts of terrorist financing and money laundering have been distinguished by the International Compliance Association. Terrorist Financing is concealment of future application of financial resources that may be illegal wherein such resources are obtained from a legitimate source. On the other hand Money laundering refers to a past or present benefit.<sup>176</sup> Traditionally terrorism has been defined as the use of threat or violence to achieve a political end. However, this definition is stale. Many jurisdictions are now making an effort to overhaul the definition to keep it viable in today's world. For example, under the Terrorism Act 2000, it has been defined as follows:

“the use or threat of action which:

- i. is designed to influence the government or an international government organization or to intimidate the public or a section of the public;
- ii. involves serious violence against a person;
- iii. involves serious damage to property;
- iv. endangers a person's life other than the person committing the action;
- v. creates a serious risk to the health or safety of the public or a section of the public.”<sup>177</sup>

Undeniably, the counter-terrorist financing measures could easily be evaded by using Bitcoin owing to its virtual nature. If the legislations on counter terrorism and other forms of laundering issues are not amended

to cover digital currencies as Bitcoin, the problem could very much worsen. The Joint Money laundering Steering Group (JMLSG) Board approved a revision to guidance with regard to Electronic Money. In addition, the Financial Action Task Force (FATF) recognized that the crypto and digital currency pose very real threats and recommended among other things that countries should identify and assess the terrorist financing risks that may arise in relation to use of new or developing technologies.

It is widely known that today owing to the popularity of the currency; donations by many groups, legitimate and illicit alike are being accepted in the form of Bitcoin.<sup>178</sup> For example the responsibility for break in, in one of the Sony (SME) websites was claimed by a group called LulzSec, who also confirmed that they had received over \$18,000 worth of Bitcoin in the form of donations. Also, as already mentioned, Wikileaks, Mint, Dell etc. also accepted donations in the form of Bitcoin. It is pertinent to note that, the volume of the amounts donated to illicit groups is immaterial, since to the people seeking to finance terrorism anonymously, Bitcoin might come in handy as not many formalities and account information is required to complete the transaction as opposed to the traditional fiat currencies.

<sup>176</sup>.International Compliance Association 2013 Workshop Note on Anti Money Laundering Awareness, Pg. 38

<sup>177</sup>.Toby Graham, Evan Bell, Nicholas Elliot, Money Laundering (1st Edition, Reed Elsevier (UK) Ltd 2003) Pg. 56-57. See also, Terrorism Act 2000, s.1.

<sup>178</sup>.<http://www.Bitcoinvalues.net/who-accepts-Bitcoin-payment-companies-stores-take-Bitcoin.html>

## 12. Setting up Bitcoin Related Business in India

It must be noted that in order to carry out any business in India, a foreign person has to either operate through a branch, or through a subsidiary in India. An Indian person may choose to operate either individually (as a sole proprietor), through a firm (such as a partnership) or a body corporate (such as a company or a limited liability partnership). There are other mechanisms for operating a business as well, but the above mentioned are the most common.

Broadly speaking, in order to commence business in India, various structures/ entities (incorporated and unincorporated) may be adopted. A brief overview of the different entities is provided below.

Incorporated entities in India are governed by the provisions of the Companies Act, 2013 and the rules thereunder (“Act”). As per the Act, two kinds of entities may be established: (i) private limited company; and (ii) public limited company. Some of the key characteristics of a private limited company are as follows: (i) minimum paid-up capital of INR 100,000; (ii) number of shareholders must be a minimum of 2 and maximum of 200; (iii) transferability of shares is restricted; (iv) invitation to the public to subscribe to the securities of the private company is prohibited.

A few distinguishing characteristics of a public limited company are as follows: (i) minimum paid-up capital of INR 500,000; (ii) number of shareholders must be a minimum of 7, with no maximum prescribed; (iii) shares of a public company are freely transferable; (iv) public company may invite the public to subscribe to its securities.

The incorporation process of a private company is faster when compared with that of a public company. Further, private companies provide

more flexibility than public companies in conducting operations, including the management of the company and the payment of managerial remuneration. However, since public companies provide for better exit options and allow for inviting the public to subscribe to its securities, public companies may be preferred over private companies depending on the nature of business involved.

Other than when persons operate individually or without association, unincorporated entities in India are primarily of two types: (i) limited liability partnership; and (ii) partnership. A limited liability partnership (“LLP”) is a form of business entity which permits individual partners to be shielded from the liabilities created by other partners’ business decisions or misconduct. In India, LLPs are governed by the Limited Liability Partnership Act, 2008. LLP is a body corporate and exists as a legal person separate from its partners.

A partnership, on the other hand, is a relationship created between persons who have agreed to share the profits of a business carried on by all of them, or any of them acting for all of them. A partnership is not a legal entity independent of its partners. The partners own the business assets together and are personally liable for business debts and taxes. In the absence of a partnership agreement, each partner has an equal right to participate in the management and control of the business and the profits / losses are shared equally amongst the partners. Any partner can bind the firm and the firm is liable for all the liabilities incurred by any partner on behalf of the firm.

Various legal, commercial and tax considerations have to be taken into account before zeroing down on the nature of entity to be established.

## 13. Regulatory Consideration

The primary concern for a foreign person looking to invest in a company which provides Bitcoin related services relates to whether foreign investment is allowed under the foreign direct investment policy.

The foreign direct investment (“**FDI**”) policy in India is formulated by the Department of Industrial Policy and Promotion (“**DIPP**”), Ministry of Commerce and Industry, Government of India (“**GoI**”). In formulating the sector-specific FDI policy for various sectors, the DIPP also takes into account the guidelines issued by the other ministries of the GoI. The FDI policy governing foreign investments in Indian companies is currently laid down in the Consolidated FDI Policy (effective from April 17, 2014) issued by the DIPP (referred to as the “**Consolidated FDI Policy**”).

Under the prevailing FDI regime, foreign investment in most sectors, other than certain restricted sectors, is permitted (without requiring any specific approvals) up to 100%. The ‘restricted sectors’ include certain sectors such as insurance, telecom, banking, real estate, retailing and defense related industries where either no foreign investment is permitted, specific approval of one or more regulators is required or foreign investment is capped.

Further, where foreign investment is permitted on an automatic basis, (i.e. without the need for any prior approval of the Foreign Investment Promotion Board (“**FIPB**”) or the RBI, such general permission is subject to specific conditions set out in the Consolidated FDI Policy.

Last, there are certain sectors under the Consolidated FDI Policy wherein foreign investment is specifically prohibited such as gambling and betting, chit funds, Nidhi company, trading in transferable development rights, real estate business or manufacturing of cigars and cigarettes.

Companies which only provide online services may be categorized either under the automatic category (since they would be providing only software platform for purchase / sale of Bitcoin) or under the category of a non-banking financial services company.

If categorized as a non-banking financial financial company, specific conditions are prescribed under the Consolidated FDI Policy related to capitalization requirement amongst other such conditions.

## 14. E-Curbing Vulnerabilities: Know your Customer (KYC), Customer due Diligence (CCD) and Suspicious Transaction Reporting Requirement

International criminal law is not a new spectator to the above mentioned financial security issues. They are just means through which lacunas in the traditional financial system have been exploited by criminals. International as well as national law enforcement systems have devised means to fend off such attacks such as implementation of the know your customer guidelines, suspicious transaction reporting<sup>179</sup> and customer due diligence.<sup>180</sup> Although these measures sound promising in theory, due to lack of a central authority and intermediaries, compliance with anti-money laundering programs and customer due diligence would be next to impossible to carry out.<sup>181</sup>

It may be noted that while some of the Bitcoin exchanges conduct some form of know your customer measures, it must be kept in mind that the structure of the Bitcoin system was designed to bypass this particular measure, by ensuring that customers could not be identified by any means. Hence, where one needs to provide sufficient proof of identity and address according to the procedures for opening an account in a bank in the case of fiat currencies, the same is not the case in opening an account of a digital currency, leaving the latter system vulnerable to abuse.<sup>182</sup>

179. <http://rbi docs.rbi.org.in/r docs/content/Pdfs/68787.pdf>

180. Money Laundering Regulation 2007, s.7, FATF Recommendations 2012 General Glossary (R.10), JMLSG Guidance, s.5.

181. Federal Bureau of Investigation (FBI) Intelligence assessment (UNCLASSIFIED) *'BITCOIN VIRTUAL CURRENCY: UNIQUE FEATURES PRESENT DISTINCT CHALLENGES FOR DETERRING ILLICIT ACTIVITY.* <[http://www.wired.com/images\\_blogs/threatlevel/2012/05/Bitcoin-FBI.pdf](http://www.wired.com/images_blogs/threatlevel/2012/05/Bitcoin-FBI.pdf)>

182. James Melik, 'Digital Currency: Brave New World or Criminal Haven?' (BBC.co.uk, 3 October 2012) <<http://www.bbc.co.uk/news/business-19785935>>

## 15. Future of Bitcoin

It is estimated that, the success of Bitcoin can get two kinds of reactions from the government: first, where the government intervenes and fights to take down the system and the second where it uses legislation to take it over.

However, it can be speculated that the second reaction is more likely for two major reasons. One, if governments consider an intervention indispensable, a hostile and aggressive stance would not be the solution to keep fiat currencies strong. The second reason is that taking over the Bitcoin is an easier task than to fight it. This is mainly because of the fact that the system effectively maintains anonymity. It would be important for government to articulate a policy and based on its legislative powers and economic objectives effectively articulate such policy. As stated above, any peremptory or absolutist measures in relation to Bitcoin may be challenged on the ground that government lacks legislative competence under the present legal framework or that governmental action can potentially interfere with constitutional right of an individual or entity to trade / transact in Bitcoin.

In relation to formulation of policy and judicial review of policy, the Supreme Court has held that it is not open to courts to draft a theory that a particular bylaw is not desirable and would be opposed to public policy.<sup>183</sup> As a general rule, it has been held that while courts should not be quick to expand on the meaning and scope of 'public policy', courts must, '...in consonance with public conscience and in keeping with public

good and public interest, declare practices which were considered normal at one time, but have become obnoxious and oppressive to public conscience, to be opposed to public policy.'<sup>184</sup> The Supreme Court has held that courts would not arbitrate on soundness or otherwise of general policy decisions. Further, courts ought not to engage in the exercise of whether one particular policy is good over the other.<sup>185</sup>

In *BALCO EMPLOYEES' UNION (REGD.) V. UNION OF INDIA AND ORS.*<sup>186</sup> The Supreme Court of India further pointed out that courts ought to stay away from judicial review of efficacy of policy matters, not only because the same is beyond its jurisdiction, but also because it lacks the necessary expertise required for such a task. Affirming the previous views of the Supreme Court, the Supreme Court observed that while dealing with economic legislations, courts, while not jettisoning its jurisdiction to curb arbitrary action or unconstitutional legislation, should interfere only in those cases where the view reflected in the legislation is not possible to be taken at all. The Supreme Court went on to emphasize that unless the economic decision, based on economic expediencies, is demonstrated to be in violation of constitutional or legal limits on power or so abhorrent to reason, that the courts would decline to interfere. Legislative amendments can only be indicative of intent and may not be policy in themselves. A clear policy is necessary to harness the economic potential of Bitcoin.

*"EVERY INFORMED PERSON NEEDS TO KNOW ABOUT BITCOIN BECAUSE IT MIGHT BE ONE OF THE WORLD'S MOST IMPORTANT DEVELOPMENTS."*

Leon Louw, Nobel Peace prize nominee

<sup>183</sup>. Zoroastrian Cooperative Housing Society Ltd. v. Dist. Reg. Cooperatives Societies, 2005 SC 2306

<sup>184</sup>. Associated Cement Companies v. State of Rajasthan AIR 1981 Raj. 133

<sup>185</sup>. In Re: Special Reference No.1 of 2012 (dt. 27.09.2012), Relying on Premium Granites v. State of TN (1994) 2 SCC 691 and Delhi Science forum v. Union of India (1996) 2 SCC 405

<sup>186</sup>. (2002) 2 SCC 333

## 16. Conclusion

Bitcoin is unique not because it is a virtual currency, but because it is proof of concept of a decentralized non-issued electronic currency. Bitcoin has a number of weaknesses and may have long-term viability issues for the economic reasons referred to earlier.<sup>187</sup> But it shows that virtual currencies can and probably will succeed in time, as innovators build on the lessons from the Bitcoin experience. The evidence suggests that virtual currencies – Bitcoin and others – might play an increasing role in payments system, worldwide. According to CoinDesk, they are being used in North and South America, Europe, Africa, and Asia. The number of companies accepting Bitcoin September 2014 soared to over 80,000.<sup>188</sup> “useBitcoin.info” reported more than 2,000 businesses using Bitcoin worldwide.<sup>189</sup>

It must be kept in mind that, the issue with cryptocurrency, hacking, is one that any software must face. But all the attempts that have to date been made to hack the coding of Bitcoin themselves have met with failure,<sup>190</sup> though attempts at hacking Bitcoin exchanges and wallets have been more successful.<sup>191</sup> According to Nakamoto, as long as the total computing power of the ‘honest’ nodes dedicated to keeping the Bitcoin network up and running is more than the computing power of a group of attackers, the network will remain unharmed.<sup>192</sup> Crucially,

this does not mean that the Bitcoin software will certainly remain un-hackable forever. Just as Nakamoto’s genius created the Bitcoin, it is quite possible that someone will someday successfully crack the Bitcoin software.

In the final analysis however, Government of India ought to recognize Bitcoin as an opportunity and harness this opportunity for the social and economic betterment of the Nation. As the internet represented an opportunity, Bitcoin too represents an opportunity which, as highlighted by various eminent commentators, can help in decentralization of economic power, greater financial access and ultimately, break down socio-economic barriers. While the Union Government does have legislative powers to provide for transactions relating to Bitcoins, however, it should not legislate merely for the sake of legislating. Needless laws only complicate business transactions and leads to restrictions rather than regulation of business. Eminent economists such as George Stigler and Avinash Dixit have emphasized the need for intelligent and dynamic regulations rather than a ‘one-size-fits-all’ measure. Given the dynamic nature of Bitcoin, Government should engage with the Bitcoin community and explore self-regulatory measures rather than pass counter-productive laws. The Indian Government would do well to use the opportunity to fulfil aspirations reflected in the Constitution of India through technology such as Bitcoin.

187. Paul Krugman, “Golden Cyberfettters”, New York Times, “(krugman.blogs.nytimes.com/2011/09/07/golden-cyberfettters)”

188. See, <http://www.entrepreneur.com/article/23702>

189. See, <http://useBitcoin.info/index.php/Bitcoin-related/informational>

190. Joshua Davis, The Crypto-Currency, The New Yorker, Oct. 10, 2011, 62 [http://www.newyorker.com/reporting/2011/10/10/111010rfa\\_fact\\_davis](http://www.newyorker.com/reporting/2011/10/10/111010rfa_fact_davis).

191. See Dan Goodin, Bitcoin Talk forum hacked hours after making cameo in Silk Road takedown, ARSTechnica, Oct. 4, 2013, <http://arstechnica.com/security/2013/10/Bitcoin-talk-forum-hacked-hours-after-making-cameo-in-silk-road-takedown/>; also see Timothy B. Lee, Hacker steals \$250k in Bitcoin from online exchange Bitfloor, ARSTechnica, Sept. 5, 2012, <http://arstechnica.com/techpolicy/2012/09/hacker-steals-250k-in-Bitcoin-from-online-exchange-bitfloor/>.

192. Satoshi Nakamoto, Bitcoin: “A Peer-to-Peer Electronic Cash System”, available at: <http://Bitcoin.org/Bitcoin.pdf>.

■

*“EVERY NEW TECHNOLOGY COMES WITH NEW LEGAL AND TAX PROBLEMS AND TECHNOLOGY IS A DOUBLE-EDGED SWORD. IT IS VERY IMPORTANT THAT THE NEW TECHNOLOGY IS UNDERSTOOD IN TIMELY BASIS AND APPROPRIATE REGULATORY REGIME IS DEVELOPED SO THAT INDIA DOES NOT MISS OUT FROM A VAST OPPORTUNITY. WESHOULDNOTTHROTTLETHISBUSINESS.”*

■

**Nishith M. Desai**

## 17. FAQs

### Q. Would RBI Act apply?

Answer: As such, it does not apply.

- i. It does not come under the ambit of “Currency”

Section 2(m) of the FEMA defines “foreign currency” Section 2 (q) of FEMA defines “Indian Currency” . Section 2(h) of FEMA defines “currency”. Since “virtual currency” is not included in the definition, the Act does not apply.

- ii. It does not comes under the ambit of “legal Tender”

According to Section 26 of the RBI Act, 1934 bank notes can be considered as “Legal Tender”. Further, according to Section 24 of the same only RBI has a power to issue it and no one else. Since this does not include “Virtual Currency” expressly not any court of the country has interpreted this in including the same. Thus, Bitcoin does not come under the ambit of “legal Tender”.

- iii. It does not comes under the ambit of “foreign exchange”

Section 2(n) of FEMA 1999 defines “Foreign Exchange. Since, it does not fall under currency, thus cannot fall under credits and balances payable in any foreign currency.

### Q. Would FEMA apply? If not why not?

Answer: It depends on the nature of what a Bitcoin is, how it is used and the transaction itself.

#### NON-APPLICABILITY

- i. Bitcoin does not fall under the ambit “currency” under Section 2(h) of FEMA or “currency notes” under Section 2(i) of the same.

#### APPLICABILITY:

Referring to Section 3 of FEMA it can be stated here that, purchasing of Bitcoin by a resident Indian from a person resident outside India (through legitimate banking channels) will not be in violation of FEMA. Further, Bitcoin transaction between two residents should also not trigger FEMA and should not therefore be in violation of the same. However, the sale of Bitcoin to a non-resident person (i.e. to a person outside India) by a resident Indian will be in violation of the provisions of the FEMA. Further, it can also be regulated by RBI in this condition.

### Q. Would Sale of Goods Act apply?

Answer: It may apply.

While Bitcoin itself may qualify as “goods” within the meaning of the Sale of Goods Act, where Bitcoin is used as consideration, Sale of Goods Act will not apply since consideration can only be in the form of price and not otherwise (i.e., consideration cannot be in kind under Sale of Goods Act).

### Q. Would Sales tax apply?

Answer: It may apply.

It falls under the ambit of Sale under Section 2(g) of the Central Sales Tax Act, 1956, which defines “Sale”. Relying on *Tata Consultancy Services v. State of Andhra Pradesh*, since, Bitcoin wallets keep a secret piece of data called a “private key” for each Bitcoin address. Thus, it can be stated that, it can be stored and transferred. Therefore, on this basis, it may be liable to tax.

### Q. Would service tax apply?

Answer: It may if any service provided in relation to a transaction on Bitcoin falls under taxable service.

- i. It falls under “Taxable Service” in Section 65 (105) of the Chapter V of the Finance Tax Act, 1994 with the recent Amendment of 2014. Here it may fall under Clause (zh) ] or Clause (zzze) .
- ii. It falls under the ambit of “Goods”

**Q. Whether Bitcoin are legal in India? If so why?**

Answer: As such, there is no prohibition to mining or trading in Bitcoin or transfer of Bitcoins.

Following points to be kept in mind:

**Constitution of India, 1950;**

If we look at the present entries enumerated under Entry 36 and 46 of List I of the Seventh Schedule read with Article 246 of the Constitution, which states that the Central Government is allowed to legislate in respect of currency, coinage, legal tender and other like instruments respectively. It is also stated that each entry will be read in a broader and widest possible sense. However, Court has never interpreted these entries to include “Virtual Currency”. Thus, even if parliament has power to make law on the “Virtual Currency” under Article 248 of the Indian Constitution. However, the same has not been done.

Since, in the present scenario “contract” also includes “electronic contract”. Thus, Section 23 and Section 24 of the Contract Act, provide that certain considerations are unlawful and certain contracts are opposed to public policy. Public policy has not been defined in the Contract Act. A court is empowered to hold that Bitcoin are opposed to public policy and therefore not valid consideration under Indian law. However, the same has neither been amended nor been interpreted by the Court to include Bitcoin. Hence, it falls under the ambit of Contract Act but it will be limited for only that contract of Bitcoin which will be against public policy and will not extend to the all Bitcoin contract.

**Q. what are the steps to be taken for setting up Bitcoin trading business? Do you need to register as stock exchange? If not, why?**

Answer: Registering as Stock Exchange depends on the condition that whether Bitcoin fall under the Securities or Derivative.

As such, a Bitcoin is neither a security nor a derivative under the Securities Contracts (Regulation) Act, 1955.

Apart from the term derivative, the only other way in which Bitcoin can be brought under the definition of ‘securities’ is if the Central Government notifies Bitcoin as such.

## Bitcoin Practice Group

Nishith Desai Associates (NDA) are pioneers in Bitcoin Practice in India and have advised start-ups, entrepreneurs and investors. We were also engaged by Bitcoin Association of India to examine legality of virtual currency in India and raise policy related issues. We have advised traders, exchanges and Bitcoin wallet companies in exchange control, regulatory, compliance, data privacy and tax issues. We have worked

on several key transactions in the technology sphere and also made policy suggestions. Expert understanding of legal, regulatory and tax issues enables us to be trusted advisors to clients. The Bitcoin Practice Group consists of professionals with background in tax, regulatory matters, intellectual property law and technology and Nishith Desai, the leader of the Practice Group, is an expert in Bitcoins Practice.

The following research papers and much more are available on our Knowledge Site: [www.nishithdesai.com](http://www.nishithdesai.com)

 <p>Private Equity and Private Debt Investments in India Strategic, Legal, Tax and Financial Issues May 2019</p>	<p><b>Private Equity and Private Debt Investments in India</b></p> <p>May 2019</p>	 <p>International Commercial Arbitration Law and Recent Developments in India May 2019</p>	<p><b>International Commercial Arbitration: Law and Recent Developments in India</b></p> <p>May 2019</p>	 <p>Are we ready for Designer Babies? Analysis of law, policy and ethics surrounding genome editing June 2019</p>	<p><b>Are we ready for Designer Babies?</b></p> <p>June 2019</p>
 <p>Dispute Resolution in India An Introduction April 2019</p>	<p><b>Dispute Resolution in India: An Introduction</b></p> <p>April 2019</p>	 <p>The Indian Medical Device Industry Regulatory, Legal and Tax Overview April 2019</p>	<p><b>The Indian Medical Device Industry: Regulatory, Legal and Tax</b></p> <p>April 2019</p>	 <p>Impact Investment: Innovation for India's Education Sector Only for Private Circulation April 2019</p>	<p><b>Impact Investment: Innovation for India's Education Sector</b></p> <p>April 2019</p>
 <p>IP Centric Deals Key legal, tax and structuring considerations from Indian law perspective February 2019</p>	<p><b>IP Centric Deals: Key legal, tax and structuring considerations from Indian law perspective</b></p> <p>February 2019</p>	 <p>Fund Formation: Attracting Global Investors Global, Regulatory and Tax Environment Impacting India focused funds February 2019</p>	<p><b>Fund Formation: Attracting Global Investors</b></p> <p>February 2019</p>	 <p>Building a Successful Blockchain Ecosystem for India Regulatory Approaches to Crypto-Assets December 2018</p>	<p><b>Building a Successful Blockchain Ecosystem for India</b></p> <p>December 2018</p>

## NDA Insights

TITLE	TYPE	DATE
Bombay High Court Quashes 197 Order Rejecting Mauritius Tax Treaty Benefits	Tax	May 2019
Payments For Online Subscription Services Not To Be Taxed As Royalty	Tax	May 2019
Taxation Of Unexplained Cash Credits: Recent Developments	Tax	May 2019
Taxing Cross-Border Production Activities – Contract Language Re-Emphasized	Tax	May 2019
Delhi High Court Sets Aside The Arbitral Award Passed In The Airport Metro Express Dispute	Dispute Resolution	May 2019
Arbitration Clause In An Unstamped Agreement? Supreme Court Lays Down The Law	Dispute Resolution	May 2019
English Court’s Dictum On The “Without Prejudice” Rule	Dispute Resolution	May 2019
Bombay High Court Settles Dust Over Validity Of ‘Options’ Under Securities Law	Dispute Resolution	May 2019
Stamp Duty Stumps Brokers And Demat Transfers	Regulatory	May 2019
External Commercial Borrowings: Regulatory Framework Substantially Relaxed	Regulatory	May 2019
NDA Presents Regulatory Approaches On Crypto-Assets To The Government Of India	Regulatory	May 2019
To Strike While The Iron Is Hot: Sebi Relaxes Norms For Listing Of Start-Ups	Regulatory	May 2019

## Research @ NDA

**Research is the DNA of NDA.** In early 1980s, our firm emerged from an extensive, and then pioneering, research by Nishith M. Desai on the taxation of cross-border transactions. The research book written by him provided the foundation for our international tax practice. Since then, we have relied upon research to be the cornerstone of our practice development. Today, research is fully ingrained in the firm's culture.

Our dedication to research has been instrumental in creating thought leadership in various areas of law and public policy. Through research, we develop intellectual capital and leverage it actively for both our clients and the development of our associates. We use research to discover new thinking, approaches, skills and reflections on jurisprudence, and ultimately deliver superior value to our clients. Over time, we have embedded a culture and built processes of learning through research that give us a robust edge in providing best quality advices and services to our clients, to our fraternity and to the community at large.

Every member of the firm is required to participate in research activities. The seeds of research are typically sown in hour-long continuing education sessions conducted every day as the first thing in the morning. Free interactions in these sessions help associates identify new legal, regulatory, technological and business trends that require intellectual investigation from the legal and tax perspectives. Then, one or few associates take up an emerging trend or issue under the guidance of seniors and put it through our "Anticipate-Prepare-Deliver" research model.

As the first step, they would conduct a capsule research, which involves a quick analysis of readily available secondary data. Often such basic research provides valuable insights and creates broader understanding of the issue for the involved associates, who in turn would disseminate it to other associates through tacit and explicit knowledge exchange processes. For us, knowledge sharing is as important an attribute as knowledge acquisition.

When the issue requires further investigation, we develop an extensive research paper. Often we collect our own primary data when we feel the issue demands going deep to the root or when we find gaps in secondary data. In some cases, we have even taken up multi-year research projects to investigate every aspect of the topic and build unparalleled mastery. Our TMT practice, IP practice, Pharma & Healthcare/Med-Tech and Medical Device, practice and energy sector practice have emerged from such projects. Research in essence graduates to Knowledge, and finally to *INTELLECTUAL PROPERTY*.

Over the years, we have produced some outstanding research papers, articles, webinars and talks. Almost on daily basis, we analyze and offer our perspective on latest legal developments through our regular "Hotlines", which go out to our clients and fraternity. These Hotlines provide immediate awareness and quick reference, and have been eagerly received. We also provide expanded commentary on issues through detailed articles for publication in newspapers and periodicals for dissemination to wider audience. Our Lab Reports dissect and analyze a published, distinctive legal transaction using multiple lenses and offer various perspectives, including some even overlooked by the executors of the transaction. We regularly write extensive research articles and disseminate them through our website. Our research has also contributed to public policy discourse, helped state and central governments in drafting statutes, and provided regulators with much needed comparative research for rule making. Our discourses on Taxation of eCommerce, Arbitration, and Direct Tax Code have been widely acknowledged. Although we invest heavily in terms of time and expenses in our research activities, we are happy to provide unlimited access to our research to our clients and the community for greater good.

As we continue to grow through our research-based approach, we now have established an exclusive four-acre, state-of-the-art research center, just a 45-minute ferry ride from Mumbai but in the middle of verdant hills of reclusive Alibaug-Raigadh district. **Imaginarium AliGunjan** is a platform for creative thinking; an apolitical ecosystem that connects multi-disciplinary threads of ideas, innovation and imagination. Designed to inspire 'blue sky' thinking, research, exploration and synthesis, reflections and communication, it aims to bring in wholeness – that leads to answers to the biggest challenges of our time and beyond. It seeks to be a bridge that connects the futuristic advancements of diverse disciplines. It offers a space, both virtually and literally, for integration and synthesis of knowhow and innovation from various streams and serves as a dais to internationally renowned professionals to share their expertise and experience with our associates and select clients.

We would love to hear your suggestions on our research reports. Please feel free to contact us at [research@nishithdesai.com](mailto:research@nishithdesai.com)

# Nishith Desai Associates

LEGAL AND TAX COUNSELING WORLDWIDE

## MUMBAI

93 B, Mittal Court, Nariman Point  
Mumbai 400 021, India

tel +91 22 6669 5000  
fax +91 22 6669 5001

## SILICON VALLEY

220 California Avenue, Suite 201  
Palo Alto, CA 94306-1636, USA

tel +1 650 325 7100  
fax +1 650 325 7300

## BANGALORE

Prestige Loka, G01, 7/1 Brunton Rd  
Bangalore 560 025, India

tel +91 80 6693 5000  
fax +91 80 6693 5001

## SINGAPORE

Level 30, Six Battery Road  
Singapore 049 909

tel + 65 65509855

## MUMBAI BKC

3, North Avenue, Maker Maxity  
Bandra-Kurla Complex  
Mumbai 400 051, India

tel +91 22 6159 5000  
fax +91 22 6159 5001

## NEW DELHI

C-5, Defence Colony  
New Delhi 110 024, India

tel +91 11 4906 5000  
fax +91 11 4906 5001

## MUNICH

Maximilianstraße 13  
80539 Munich, Germany

tel +49 89 203 006 268  
fax +49 89 203 006 450

## NEW YORK

375 Park Ave Suite 2607  
New York, NY 10152

tel +1 212 763 0080