# THE EMERGENCE OF CRYPTOCURRENCY AND THE ATTENDANT INTERNATIONAL TAX THREATS

**Dissertation submitted in partial fulfilment of the requirements for the LLM degree in Mercantile Law by:**

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## SUMMARY

In the age of incessant technological advancement, the phenomenon of decentralized cryptocurrency as quickly emerged as an inescapable element of social, economic and legal discourse. At the same time, pre-eminent international tax issues such as tax evasion, profit shifting and other criminal activity have deeply exacerbated. A correlation coefficient does not necessarily exist between these two variables. However, it is often intimated that the magnitude of tax evasion is predicated on the opportunities for evasion.

In cognisance of this fact, this essay tenders the argument that cryptocurrency portends serious potential as a foreboding role player in the international tax evasion rhetoric. It is highlighted that – in spite of the growing apprehension of cryptocurrency – many regulatory authorities and institutions maintain a passive disposition towards the intricacies of cryptocurrency.

As such the primary research objective is steered towards tracing the origination and operation of cryptocurrency and Bitcoin in particular. Utilizing this point of departure, certain attributes of Bitcoin are highlighted as being problematic from a tax administration and enforcement perspective. It is demonstrated how the idiosyncratic features of Bitcoin render it propitious to the general polemic of tax evasion. An argument is further appraised that depicts Bitcoin as potentially having functional intersections to conventional notions of tax havens. The rampant criminal activity that has been engendered by cryptocurrency is also portrayed.

The research is limited to examination of the potential of Bitcoin in regard to cross-border tax evasion and illicit financial flows. As such aspects such as the potential interaction of Bitcoin with Value-Added tax and exchange control are omitted.

On finality, an examination is conducted on the responses to Bitcoin from authorities in the United States and South Africa. It is found that despite a lack of regulatory congruity from different bodies in the United States, gallant strides have been made in classifying Bitcoin and attending to the tax evasion threats it poses. On the other hand, it is found that South African authorities have cognized the existence of Bitcoin. This has however

not led to any direct, concrete regulatory response. In light of this, a number of recommendations have been suggested as a catalyst for reform.

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# CHAPTER 1: INTRODUCTION

## 1.1) BACKGROUND

The turn of the new millennium has beckoned major technological and systemic advancements.[1] This phenomenon, in which complex robotics and advanced automation are rife, has been termed the digital revolution. [2] As an incident of the digital revolution, the sensation of decentralized cryptocurrencies has, in brusque fashion, become a centre of attention in the global economic neighbourhood.[3]

Cryptocurrency (or virtual currency) denotes a payment system that is entirely internet based. [4] In 2014, the Financial Action Task Force (FATF) published a report comprehensively defining cryptocurrency as a:[5]

> digital representation of value that can be digitally traded and functions as (1) a medium of exchange; and/or (2) a unit of account; and/or (3) a store of value, but does not have legal tender status…in any jurisdiction.

A contingent that has influenced the rise of cryptocurrency is the soaring proclivity for deregulation.[6] The growing integration of the global economy is attributed to the existence of competitive market processes on an interstate level. [7] As Dorn notes, central government authorities intervene in this process through strict regulatory measure. [8] However, institutions and financial instruments such as derivatives are often developed and adapted to bypass such strict regulation by central governmental authorities.[9] In this light, cryptocurrency can be seen as an instrument in the money market that has emerged in this climate of decentralization and deregulation. Decentralization of cryptocurrencies

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1 KMPG 'Technology in Tax embracing the now & thinking the future' (2017) 1.
2 As above.
3 GP Dwyer 'The Economics of Private Digital Currency' (2015) 17 *Journal of Financial Stability* 81 81.
4 FATF 'Virtual Currencies Key Definitions and Potential AML/CFT Risks' (2014) 5.
5 As above.
6 See JA Dorn 'Financial Deregulation in a Global Economy' (1993) 13 *The Cato Journal* 155 155 where it is asserted that deregulation is preferred for purposes of financial globalization.
7 JA Dorn (n 6 above) 161.
8 As above.
9 As above.

contributes greatly to the fact that they do not have legal tender status. This has the effect that, unlike fiat currency, there is no central authority or governing body to which the cryptocurrency is tethered and regulated. Although there are numerous cryptocurrencies now in existence, the most popular are Bitcoin, Ethereum and Litecoin.

## 1.2) RATIONALE

Technological advancements and innovation is not without any repercussion. Institutions, legal systems, policies and organizations are at qualms to contend with the rapidity at which the contingents of computer software, hardware and networks have proliferated.[10] It can be proffered that a nation's system of taxation in particular, whether through legal precept or administration bears a heavier onus to ensure adeptness in tune with paradigm shifts. Subsequently, the rationale for engaging with cryptocurrency can be construed from two vantage points.

First there is a socio-economic perspective. With advances in digital technologies come novel avenues of tax avoidance and the unveiling of loopholes through which tax revenue can be lost. The sizeable market capitalisation of Ethereum for example, is indicative of the potential revenue that reposes within the cryptocurrency arena that could be lost in the absence of specific regulation.[11] In this context, market capitalisation denotes the total amount of fiat money of a nation invested in the cryptocurrency market.[12] The importance of being attentive to this becomes more luminous having regard to the purposes of taxation. One of the important rationales for the existence of taxation is the attainment of socio-economic objectives.[13] In South Africa for example, this is apposite in light of the historicity of the formal racial segregation and marginalization that birthed the economic

10 E Brynjolfsson & A McAfee *Race against the machine: how the digital revolution is accelerating innovation, driving productivity, and irreversibly transforming employment and the economy* (2012) 8.

11 Staff Writer 'Bitcoin and Ethereum Market Caps now the same as South Africa's' available at https://mybroadband.co.za/news/business/241188-bitcoin-and-ethereum-market-caps-now-the-same-as-south-africas-gdp.html (accessed 12 March 2018).

12 As above.

13 B Croome et al *Tax Law: An Introduction* (2013) 8.

disparities that subsist today.[14] The Constitution of South Africa mandates an attendance to the ramifications of past oppression and subjugation.[15] In addition, the Constitution also heralds ideas associated with liberal ideology. As such, principles such as fairness, equal opportunity and dignity characterise the current dispensation.[16] Pursuant to these values, taxation comes as a tool in addressing the stark socio-economic polarities that exist in the current context. It provides an apparatus through which resources can be redistributed and social policy activities such as the funding of free tertiary education are initiated and implemented. The budget report for the 2018/19 fiscal year illustrates that majority of state expenditure remains financed through the implementation of various taxes.[17]

The second vantage point from which the rationale to examine cryptocurrency is formed spawns from the first. It relates to trenchant and ever present risk of tax evasion. Research has examined that the lack of regulation and imprecision on the treatment of cryptocurrency has the potential to exacerbate the polemic of money laundering and illicit financial flows.[18] Given the major socio-economic role that taxation plays, it is thereby not only prudential but constitutionally imperative that the tax systems come to terms problems digital advancements. Currently, there is no existing South African legislation providing proper clarity on the manner in which cryptocurrency is construed and the corollary tax implications. The South African Revenue Service (SARS) has indicated that it purports to release a practice note on this matter gleaning from the recommendations contained in the Organisation for Economic Cooperation and Development (OECD).[19]

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14 See H Horakova 'Non racialism and nation building in the new South Africa' (2011) 5 *The Annual of Language & Politics and Politics of Identity* 109 118 where it is expressed that South Africa is becoming one of the most unequal societies in the world as evidenced by the GINI coefficient that measures global economic inequality.

15 Preamble of the Constitution of the Republic of South Africa, 1996 where specific mention is made of the duty to 'heal the divisions of the past and establish a society based on… social justice'.

16 JM Modiri 'Race as/and the trace of the ghost: jurisprudential escapism, horizontal anxiety and the right to be racist in Boe Trust Limited' (2013) 16 *Potchefstroom Electronic Law Journal* 582 600.

17 National Treasury of the Republic of South Africa 'Budget Review' (2018) iv.

18 Lamprecht 'Bitcoin: brace for the tax impact' available at https://techcentral.co.za/bitcoin-brace-tax-impact/79270/ (accessed 6 March 2018).

19 Staff Reporter 'SARS will soon Release Tax rules on Crypto Currency' available at https://www.iol.co.za/business-report/technology/sars-will-soon-release-tax-rules-on-cyrptocurrencies-12702477(accessed 6 March 2018).

## 1.3) RESEARCH PROBLEM STATEMENT

Proceeding from the above context, this paper seeks to shed light on cryptocurrency. The fulcrum of the problem is made evident by Samuel Haig, a Bitcoin representative, who laments that 'Bitcoin is not currently classified under any asset or currency status, leaving businesses operating with virtual currencies unsure as to whether or not they are likely to incur retroactive capital gains taxation in the future'.[20] As such, to get a grip of the tax issues that may arise in relation to cryptocurrencies, the nature and import of cryptocurrencies has to be ascertained.

## 1.4) RESEARCH OBJECTIVES

### 1.4.1) PRIMARY RESEARCH OBJECTIVE

Trace the rise in select cryptocurrencies (mainly Bitcoin) and posit the foreboding international tax issues.

### 1.4.2) SECONDARY RESEARCH OBJECTIVES

- Provide an elucidation of the genesis of the Bitcoin and Litecoin.
- Examine the nature and inner mechanisms in the operation of decentralized cryptocurrency with special look on the operation of blockchain technology.
- Appraise an argument that proffers Bitcoin as potentially having functional intersections to conventional notions of tax havens.
- Illustrate the manner in which Bitcoin may widen certain pathways of tax evasion and exacerbate criminal activity.

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20 Staff Writer 'SARB hesitation is stifling Bitcoin and Ethereum growth in SA' available at https://businesstech.co.za/news/finance/179147/sarb-hesitation-is-stifling-bitcoin-and-etherium-growth-in-sa/\ (accessed 6 March 2018).

- Demonstrate the difficulty of construing Bitcoin as either legal tender or currency by juxtaposing it to prescripts accepted by economists as typifying currency.
- Provide an overview of regulatory strategies employed in the America and South African to encounter some of the tax issues outlined in the dissertation.

## 1.5) METHODOLOGY

For purposes of understanding the full complexion of cryptocurrencies, a host of expository sources will be consulted. To this end, the import of journal articles, books and reports will be used in offering a consolidated explication of the derivation and nature of cryptocurrency.

Further, there is an investigation into international reports and available case law in a myriad of jurisdictions such as the United States to obtain a holistic view of the tax policies adopted to confront specific cryptocurrency. The analysis is not confined to the tax rules of a single jurisdiction but leans towards a holistic analysis of the international tax problems that cryptocurrency pose. Although the problem is asserted as being of international nature, the approach does employ intermittent recourse to South African jurisprudence to provide a localized, reified exemplification of the cryptocurrency tax dynamics.

## 1.6) RESEARCH QUESTIONS

- What are the origins of cryptocurrency?
- What is the nature of cryptocurrencies such as Bitcoin and Litecoin and how do they operate?
- What are the major global concerns surrounding the emanation of cryptocurrency?
- How have other foreign jurisdictions reacted to cryptocurrency in general legal terms as well as in the arena of taxation?

# CHAPTER 2: DECRYPTING THE CONCEPT OF CRYPTOCURRENCY

## 2.1) INTRODUCTION

Although there is growing cognisance of the existence of cryptocurrency, the intricacies as to where it originates from, the manner in which it operates as well as the different variants of cryptocurrency still remain illusory to many. It has been fairly expressed that 'money is perhaps the best recognized and at the same time less understood figure of economy'.[21] One can assert the same holds true with cryptocurrency.

In mind of the above, this chapter first seeks to shed light on digital or virtual currency in general as the superset within which one can classify cryptocurrency. The importance of ascertaining the typology of cryptocurrency is twofold. First as Sartori has contended, 'classificatory activity remains the basic instrument for introducing analytical clarity in whatever we are discussing'.[22] Analytic clarity on cryptocurrency is achieved by use of the relevant precedent in analytic and policy praxis that have been established in the assessment of other virtual currency. Second, the classification permits one to channel a holistic reading of cryptocurrency in construing it in relation to other pre-existing digital currencies. The next aspect considered in this chapter revolves on the gestation of cryptocurrency into mainstream economic tapestry. Following this, there is an analysis of the operation of the various types of cryptocurrency. The manner in which transactions are performed will also be surveyed. Therefore, this chapter centres on radiating those concepts that are seemingly cryptic.

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21 A Dibrova 'Virtual currency: new step in monetary development' (2016) 229 *Social and Behavioural Sciences* 42 42.

22 G Sartori 'Concept misinformation in comparative politics' (1970) 64 *The American Political Science Review* 1033 1040.

## 2.2) TAXONOMY OF CRYPTOCURRENCY

In a bid to greater clarity on digital currency as the superset of cryptocurrency, it is helpful to consider digital currencies within the broader framework of alternative currencies.

> Alternative currencies are modes of exchange other than the fiat currency of a particular nation.[23] They can exist in digital or tangible form. Although the number of existing alternative currencies has torpedoed in recent years, Hileman observes that alternative currencies have been circulating in the monetary horizon since the early modern period.[24] An example of this is the special merchant tokens that circulated in London during the 16th -18th century and provided a tangible alternative to the fiat currency at the time.[25] One should be mindful of the risk misconstruing alternative currencies as mere alternative payment systems such as Google Wallet or PayPal. Simply, these are proxy methods of payment that do not purport to be currency on their own but are derivative from pre-existing fiat currency.[26]

Instead, as a type of alternative currency, digital currency denotes a payment system technology existing in electronic form. It is a currency utilised and accepted in a virtual or internet-based community.[27] As such, digital currency bears a sturdy resemblance to fiat currency to the extent that virtual funds are illustrative of value in exchange for goods or services.[28] Brito has cautioned that despite its functional similarity to fiat currency, one should take heed that virtual currency is neither a 'foreign currency, nor a traditional

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23 LP Nian & DLK Chuen 'Introduction to Bitcoin' in DLK Chuen (ed) *Handbook of digital currency: Bitcoin, innovation, financial instruments, and big data* (2015) 6.

24 G Hileman 'Alternative Currencies: A Historical Survey and Taxonomy' available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747975 (accessed 24 March 2018).

25 As above.

26 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 6.

27 BW Akins et al 'A whole new world: income tax considerations of the Bitcoin economy' (2014) 12 *Pittsburgh Law Review* 25 26.

28 Alina Dibrova 'Virtual currency: new step in monetary development' 229 *Social and Behavioural Sciences* 42 44.

commodity, nor is it simply a payments network'.[29] Digital currency, as type of alternative currency can further be distinguished as centralized or decentralized.

Centralized digital currency intimates a digital currency that is issued and regulated by a specific centre of authority. In fact, within the realm of centralized digital currency, the concepts of central bank-issued digital currencies (CBDC) have come to the fore.[30] These are variants of digital currency, without a cash complement, controlled and maintained by a central bank. The attributes of centralized currency coincide with what is termed as a closed-flow scheme of digital currency. With closed flow schemes, the digital currency can only be spent within the delineated virtual environment.[31] The currency cannot be used to finance goods and services outside the specific virtual environment nor can they be converted into fiat currency.[32] Examples of these include loyalty point offerings from financial or retail companies as well as air miles provided by airlines.

Another popular example of centralized digital currency that evinces the closed flow scheme is the World of Warcraft Gold (WoW Gold).[33] This platform based currency for the game World of Warcraft is incapable of being exchanged into fiat currency and can be obtained solely by participating in in-game activities.[34] Within the platform itself it is often arduous to transfer the currency between users.[35] Often, centralized currencies are designed for the focal purpose of supporting the business model of the institution that issues them.[36] Because of the limitations of having a closed flow scheme, it is advanced that they pose an insubstantial threat to national currency or the overall payment trajectory.[37]

29 As above.
30 K Stewart et al 'Digital Currency and the Future of Transacting' available at https://www.rand.org/content/dam/rand/pubs/perspectives/PE200/PE254/RAND_PE254.pdf (accessed 4 July 2018)
31 Akins et al (n 27 above) 27.
32 As above.
33 H Halaburda 'Digital Currencies: Beyond Bitcoin' (2016) 103 *DigiWorld Economic Journal* 77 88.
34 As above.
35 As above.
36 Halaburda (n 33 above) 89.
37 As above.

On the other hand, there is a type of digital currency that is decentralized. Transactions in relation to this form of currency can be effected without any external agents.[38] Unlike centralized digital currency where there is a specific entity responsible for the creation, regulation and verification of the currency – there is no legal entity responsible for the activities involving decentralized currency.[39] As a result, this form of digital currency exceeds the ambit of traditional legal regulation.

Modern cryptocurrency like Bitcoin is suitably classified under the class of decentralized digital currency.[40] It is not bound to a specific geographic location or constrained by the dictates of an issuing organization.[41] Seen in this light, Atkin appropriately observes that cryptocurrency employs an open-flow scheme.[42] In contrast to the import of a closed flow scheme outlined earlier, an open flow scheme enables fiat currency to be converted to digital currency and used within the digital and real environments.[43] In addition, open flow schemes like cryptocurrency can be reconverted back into the fiat currency.

Having considered the taxonomy within which cryptocurrency resides, it is necessary to next formulate a focused understanding of the rise of cryptocurrency.

## 2.3) ORIGINATION AND DEFINITION OF CRYPTOCURRENCY

In developing a honed understanding of the emanation of cryptocurrency, it is trenchant to consider the factual circumstance and context surrounding the origination of cryptocurrency.

Cryptocurrencies in existence today such as Bitcoin and Litecoin are widely perceived to be unique inventions that are the first of their kind.[44] However, cryptocurrency did not

38 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 7.
39 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 17.
40 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 16.
41 As above.
42 Akins et al (n 27 above) 28.
43 Akins et al (n 27 above) 27.
44 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 6.

mystically appear. For instance, it has been already demonstrated that alternative currencies have been an omnipresent feature through the ages.[45] Further, as will be seen, cryptocurrency in their modern form are the progeny of earlier similar digital inventions and recent geo-political influences.

As Chuen finds, the pioneering moment in the discourse of cryptocurrency began with the creation of an eCash system by a company called DigiCash Inc. in 1990.[46] The eCash system was based on the papers written by the founders of DigiCash Inc. According to this system, cryptographic protocols were used for the purpose of transferring payment both online and offline.[47] Cryptographic protocols made use of blind signatures to protect the privacy of eCash users.[48] As discussed in the later section, most modern cryptocurrencies make use of cryptographic protocols. In this respect it can be seen how the eCash system paved the way for the evolution of cryptocurrency in its current form.

This eCash system was accessible by bank or smart card in a number of countries such as the United States and Finland and is considered to be the first cryptocurrency.[49] Because the eCash system was created and controlled by a specific company, it was a centralized system in accordance with the taxonomy expatiated earlier.

Eventually, after a change in ownership in 1999, the collective frenzy surrounding eCash and any semblance of cryptocurrency in general dissipated.[50] According to the founder, a significant factor in the peril of the eCash system was the difficulty in getting both merchants to accept e-cash as currency.[51]

In the early 2000s the ascension of digital gold currency came to the fore. It involved rise of new forms of electronic money such as e-Gold that was based on ounces of gold.[52] This form of digital currency was prominent mainly in America. e-Gold is said to have set

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45 G Hileman 'Alternative Currencies: A Historical Survey and Taxonomy' available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747975 (accessed 24 March 2018).
46 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 8.
47 As above.
48 As above.
49 As above.
50 As above.
51 Ernie Smith 'Cashing in Early' available at https://tedium.co/2017/11/27/digicash-ecash-bitcoinhistory/(accessed 9 July 2018).
52 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 9.

the stage for new techniques and methods in e-commerce as the first successful online micropayment system.[53] A combination of issues relating to security, compliance and deficient reporting led to the seizure of the entire gold reserve of e-gold under asset forfeiture law.[54]

The global financial crisis involving the bailout of banks in 2008 is impugned as the critical moment by which interest in cryptocurrency re-intensified.[55] Many scholars at the time had argued that cryptocurrency had the ability to solve a number of the issues brought by banks and financial institutions.[56] The air of collective distrust in government and banking was at a high at this time.[57] Chuen adds that the 'loss of trust in the fiat currency system, caused mainly by quantitative and huge government debts… brought attention to cryptocurrency for those who wanted to hedge their positions with a currency that has a finite supply'.[58]

Bitcoin, the first decentralized cryptocurrency, was launched in a paper published on 31 October 2008 titled *Bitcoin: A Peer-to-Peer Electronic Cash System* under the name Satoshi Nakamoto.[59] It still remains unknown whether Satoshi Nakamoto is a group or a person. Nakamoto capitalized from the ambient financial turmoil in order to spearhead the cryptocurrency agenda. In their pioneering article, Nakamoto proffers:[60]

> The root problem with conventional currency is all the trust that's required to make it work. The central bank must be trusted not to debase the currency, but the history of fiat currencies is full of breaches of that trust. Banks must be trusted to hold our money and transfer it electronically, but they lend it out in waves of credit bubbles with barely a fraction in reserve. We have to trust them with our privacy, trust them not to let identity thieves drain our accounts.

53 As above.
54 As above.
55 DW Staat *Facing an Exponential Future: Technology and the Community College* (2018) 100.
56 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 9.
57 Staat (n 55 above) 100.
58 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 10
59 S Nakamoto 'Bitcoin: A Peer-to-Peer Electronic Cash System' (2008) (unpublished white paper) available at http://bitcoin.org/bitcoin.pdf (accessed 10 July 2018).
60 As above.

The defining element of Bitcoin, and in fact cryptocurrency as it exists today, is that it is a peer-to-peer version of electronic cash.[61] Online payments can be sent directly from one party to the other without the need for a financial institution. With contemporary online transactions, third party institutions are trusted by the involved parties to act as a third-party verifier.[62] Thus, in scepticism of the rectitude and reliability of these institutions, Bitcoin is designed to avoid the need for such institutions and eliminate the associated transaction costs.[63]

## 2.4) HOW CRYPTOCURRENCY WORKS

The evolution of cryptocurrency into an inevitable topic of public discourse has been illustrated. To understand how cryptocurrency may elicit tax questions, one must understand how it operates. Many aspects concerning the operation of cryptocurrency are imbued with complex technicalities. Since the aim is to uncover the potential issues that cryptocurrency may bear for tax purposes, a simplified explanation of the operation of Bitcoin and Litecoin will suffice.

### 2.4.1) BITCOIN

The premise in the way Bitcoin sets out to operate is the need the need to solve the problem of double-spending.[64] The import of this problem is as follows. The major risk involved with any digital currency is that whoever holds a unit of digital currency can mendaciously proceed to create several digital copies of that unit and spend each of them

61 T Slattery 'Taking a Bit out of Crime: Bitcoin and Cross-Border Tax Evasion' (2014) 39 *Brooklyn Journal of International Law* 829 831.
62 As above.
63 As above.
64 Slattery (n 61 above) 835.

at various pay points.[65] In this way double-spending impedes the legitimacy of any purported currency.

Since Bitcoin is a digital currency it possesses no physical form. Each coin constitutes a sequence or chain of digital signatures meaning that every coin has what can be referred to as a digital key.[66] Users of Bitcoin store their currency by either making use of software that must be downloaded on their computer or making use of a web-based service to hold the coins.[67] These Bitcoin storage facilities are known as wallets and are in fact analogous to an online account.[68] Each wallet contains both a private key and public key component.[69] The public key is perceptible to all participants. The private key is used to authorize a transaction while the public key enables Bitcoin owners to identify themselves and the specific Bitcoin.[70]

A typical Bitcoin transaction works in the following manner. When a Bitcoin is spent, a digital transfer is made from one computer to another.[71] In making such transfer, the owner makes authorization for payment to be made from his digital wallet to a recipient by identifying himself and the recipient using his public key and recipient's bitcoin address.[72] When this happens an identifying digital signature is left. At the same time, the owner of the Bitcoin must also enter the private key.[73] When this is done, the payment is considered to be verified from the owners end, and the Bitcoin is sent to the recipient.[74] Once the recipient acknowledges receipt they will receive the public and private key pairs for the received Bitcoin.[75] The unique public key of the next owner is always left on the

65 Unpublished: K Brander 'Cryptocurrency – the new global financial crisis? Bitcoin compared to the USD' unpublished PhD thesis, Arcada University of Applied Sciences, 2014 22.
66 As above.
67 Akins et al (n 27 above) 30.
68 As above.
69 As above.
70 EE Lambert 'The Internal Revenue Service and Bitcoin: A taxing relationship' (2015) *35 Virginia Tax Review* 88 92.
71 As above
72 As above.
73 Lambert (n 70 above) 93.
74 As above.
75 As above.

coin.[76] Through this, the receiver of the Bitcoin can track the attached signatures to confirm the chain of previous owners.

Each transaction involving Bitcoin is then published on the network and marked with timestamps.[77] Individual computers that have the Bitcoin software (nodes) constitute the peer to peer network of Bitcoin that, at regular junctures bundle information concerning transactions of a previous period into a single block.[78] In addition to transaction information, the blocks also consist of complex mathematical algorithms. These blocks are connected together to form a chain – thereby constituting the blockchain.[79] However, the blocks are only connected to the chain once a complex cryptographic algorithm is solved by a node in the network.[80]

The solving of cryptographic algorithms confirms the validity of the transactions in the block by mathematically proving that the transactions indeed occurred and double spending did not occur.[81] From this it is apparent how Bitcoin does not rely on any central authority to issue the currency.[82] The network is maintained by the participating peers.[83] This blockchain technology allows for all transactions to be recorded and verified.[84] However, the database or ledger of transactions does not record any information concerning the identity of the parties.[85] All that can be seen are the public addresses utilized in the transaction.

Bitcoin can be obtained in a number of ways. When nodes compete and successfully solve the algorithms that validate a block in the manner explained above, Bitcoins are

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76 Unpublished: K Brander 'Cryptocurrency – the new global financial crisis? Bitcoin compared to the USD' unpublished PhD thesis, Arcada University of Applied Sciences, 2014 22.

77 Lambert (n 70 above) 93.

78 ND Bhaskar & DLK Chuen 'Bitcoin Mining Technology' in DLK Chuen (ed) *Handbook of digital currency: bitcoin, innovation, financial instruments, and big data* (2015) 50

79 S Hampton 'Undermining Bitcoin' (2016) 11 *Washington Journal of Law Technology & Arts* 331 336-337.
I Goodspeed 'Bitcoin' available at *http://financialmarketsjournal.co.za/oldsite/bitcoin.html* http://financialmarketsjournal.co.za/oldsite/19thedition/printedarticles/bitcoin.pdf (accessed 14 July 2018).

81 Lambert (n 70 above) 93.

82 P McLeod 'Taxing and regulating Bitcoin: The government's game of catch up' (2014) 22 *CommLaw Conspectus* 379 382.

83 As above.

84 As above.

85 McLeod (n 82 above) 384.

awarded. This process is called mining of Bitcoin.[86] As part of the original algorithm, a total maximum of 21 million Bitcoins cans be mined.[87] On account of this, no person or authority can unilaterally accelerate the pre-determined amount of Bitcoin on the market. This allows for the preservation of value. Bitcoin can also be attained in exchange for the provision of goods or services.[88] Lastly, through the use of fiat currency, one can obtain Bitcoins from a Bitcoin vending machine, exchange, or simply from another person.[89]

### 2.4.2) LITECOIN

Litecoin is a peer-to-peer cryptocurrency created by Charles Lee. It is known to have spawned from Bitcoin and operates in a nearly identical manner making use of blockchain technology and public key addresses in the manner explained earlier.[90] The creation of Litecoin was aimed at ameliorating the known vices of Bitcoin.[91] There are a number of significant qualities that distinguish Litecoin from Bitcoin. For one, the average transaction confirmation time for Litecoin transactions is faster than that of Bitcoin.[92] Further, conventionally used computers are capable of mining Litecoin as opposed to the instance of Bitcoin which requires higher grade computers made for mining.[93] Finally, as part of the original algorithm, Litecoin is planned to produce 84 million which is substantially more than the 21 million Bitcoins that are available for mining.[94]

## 2.5) CONCLUSION

86 Lambert (n 70 above) 95.
87 McLeod (n 82 above) 384.
88 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 18.
89 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 18.
90 Unpublished: K Brander 'Cryptocurrency – the new global financial crisis? Bitcoin compared to the USD' unpublished PhD thesis, Arcada University of Applied Sciences, 2014 20.
91 As above
92 As above.
93 As above.
94 Unpublished: K Brander 'Cryptocurrency – the new global financial crisis? Bitcoin compared to the USD' unpublished PhD thesis, Arcada University of Applied Sciences, 2014 21.

In this Chapter, a contextualizing foundation has been laid for the subsequent discussion. The inquiry has been undertaken by first making recourse to the origination and genesis of cryptocurrency. It is examined that cryptocurrency constitutes a subset of alternative currencies. The existence of alternative currencies has been coextensive with that of fiat currency. It has further been established that cryptocurrency may be centralized or decentralized.

Thus, throughout the Chapter, the reverberant assertion is that that the coming of cryptocurrency is not a fortuitous event. It has been observed that the creation of DigiCash is held as one of the crucial moments to which cryptocurrency in its current form owes its existence. The other moment relates to the 2008 global financial crisis that aggravated the concerted distrust in financial institutions as intermediaries of transactions. As a result of these factors, the first and most popular decentralized cryptocurrency in the form of Bitcoin was introduced in October 2008.

Further, there has been a terse exploration into the definition and workings of certain cryptocurrency. Bitcoin has been elaborated to be a peer-to-peer version of electronic cash through which payments are sent directly from one party to the other without any financial institution. In rudimentary terms, payment with Bitcoin entails the making of a digital transfer one computer to another.

Finally, it has been highlighted that the creation of Bitcoin has probed the creation of several other cryptocurrencies. Litecoin is one cryptocurrency in particular that has gained significant acclaim. Although Litecoin operates in a nearly identical manner to Bitcoin, it is observed that the focal rationality for the creation of Litecoin was to ameliorating the known vices of Bitcoin.

# CHAPTER 3: PANORAMIC TAX ISSUES ASSOCIATED WITH CRYPTOCURRENCY

## 3.1) INTRODUCTION

Having foregrounded a terse understanding as to the manner in which cryptocurrency operates; the focus is now shifted to tax related matters. In this Chapter, a panoramic gaze is adopted in assessing the potential international tax issues ensuing from the rise in cryptocurrency. In this sense, the issues that are highlighted are suggested as not being endemic to a single jurisdiction but posing a tax concern on a global scale.

Throughout the Chapter, the analysis is pivoted to the international tax issues in relation to Bitcoin specifically. This is done, not only because Bitcoin is the most prominent form of cryptocurrency but also because all other notable cryptocurrencies operate in a similar manner to Bitcoin.

Moreover, gleaning from the explication given earlier, certain attributes in the operation Bitcoin are trenchant for the taxation landscape and will therefore be reverberant in this chapter**.** This includes the fact that, as a peer to peer network system, Bitcoin operates on a different terrain to the conventional banking system which governments play an impactful role in regulating. In South Africa for example, legislation such as the Banks Act stands as testament to the influence of government in money regulation.[95] It is also examined how the decentralized manner in which Bitcoin works may raises problems for tax reporting and administration. An investigation is conducted of how tax evasion stands to be rife in the face of the Pseudo-anonymity of Bitcoin as well as the growing trend of mining pools.

[95] See the Long Title of the Bank Act 94 of 1990 which iterates that the legislation intends to safeguard the monetary system by ensuring the
'regulation and supervision of the business of public companies taking deposits from the public'.

## 3.2) CRYPTOCURRENCIES AS TAX HAVENS

Tax havens present a tax issue that continues to garner the concern and scrutiny of tax regimes across the world. Internationally, it has been estimated that as much as $255 billion of annual worldwide revenue loss can be attributed to earnings hidden in offshore accounts.[96]

In *Are Cryptocurrencies Super Tax Havens*, Omri Marian initiates the idea that cryptocurrencies can be construed as an accentuated version of tax havens.[97] It is suggested that cryptocurrencies like Bitcoin possess mechanisms by which they 'could replace tax havens as the weapon-of-choice for tax-evaders'.[98] To illustrate how one can shape an argument that depicts Bitcoins as (super) tax havens – the concept of tax haven must be explored.

Although there is no consensus on the single categorical definition of a tax haven, the report published by the OECD in 1998 offers insightful direction.[99] The reports and recommendations of the OECD are not binding in nature and only apply to member states.[100] Nevertheless, it is incumbent on policymakers from South Africa and other jurisdictions to remain attentive to the OECD reports and recommendations as they have become accepted as a globally accepted standard.[101]

In introducing the concept of tax havens, the OECD report of 1998 indicates that a distinction must be drawn between two categories of countries. One must distinguish between countries that finance public services with nominal income tax yet still offer themselves as places to be used by non-residents to elude tax; and jurisdictions that gain substantial revenue from their income tax but whose system of taxation has features

96 O Marian 'Are Cryptocurrencies Super Tax Havens' (2013) 112 *Michigan Law Review* 38 40.
97 Marian (n 96 above) 38.
98 As above.
99 See G Tobin & K Walsh 'What Makes a Country a Tax Haven? An Assessment of International Standards Shows Why Ireland Is Not a Tax Haven' (2013) 44 *The Economic and Social Review* 401 403 where it is noted that The US Government Accountability Office (GAO), in conducting an extensive review, considers the OECD definition of tax havens to be sufficiently representative.
100 Croome et al (n 13 above) 577.
101 As above.

creating harmful competition.[102] Countries in the first category are classified as tax havens whereas those in the second category are considered as countries with potentially harmful preferential tax regimes.[103] This distinction is drawn because, countries in the first category are deemed to be unlikely to be co-operative in quelling harmful tax competition because their primary aim is the erosion of the income tax revenue of other countries.[104] In contrast, since countries in the second category have significant revenue that may be at jeopardy from the countries other than themselves having harmful tax features, they may be more likely to engage in co-operative action.[105]

Crucially, in the report several (non-exhaustive) identifying factors are provided for purposes of discerning the existence of a tax haven. In establishing the presence of a tax haven it should be ascertained whether:[106]

(a) the jurisdiction in question imposes no or only nominal taxes and presents itself, or is perceived to present itself, as a place to be used by non-residents to escape tax in their country of residence;

(b) laws or administrative practices which prevent the effective exchange of relevant information with other governments on taxpayers benefiting from the low or no tax jurisdiction;

(c) absence of transparency and

(d) the lack of a requirement that the activity be substantial, since it would suggest that a jurisdiction may be attempting to attract investment or transactions that are purely tax driven.

In similar vein to the factors mentioned above, tax havens are also characterized by exorbitant levels of secrecy especially in the banking and commercial economic sectors.[107] The absence of transparency as pointed out above occurs on account of the

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102 OECD 'Harmful Competition: An Emerging Global Issue' (1998) 20.
103 As above.
104 As above.
105 As above.
106 OECD 'Harmful Competition: An Emerging Global Issue' (1998) 22.
107 Croome et al (n 13 above) 574-575.

confidentiality that those who structure transactions through tax haven regions are often assured.[108] This results in the issue of domestic tax authorities facing difficulty in establishing the identity of relevant tax payers for the purpose of collecting tax.[109]

In order to justify the primal assertion that construes Bitcoin as a potential super tax haven, one can juxtapose the elements in the operation of Bitcoin explained above to the import from the OECD 1998. An initial factor to consider in this regard is the fact that, in conventional thought, tax havens are rightly pre-supposed to be countries. As Dharmapala and Hines add, the impugned countries tend to be small, affluent and generally having populations below one million.[110] If one adopts an expansive outlook it can be suggested that tax havens need not necessarily be countries. The underlying logic in construing tax havens envisages an emphasis on the examination of the tax attributes of a particular self-governing locality.[111] However, as opposed to having the sovereignty associated with nations, it has been noted that these localities often tend to be dependent territories.[112] In the intricate technological age, the idea of location ought to transcend mere physical site. It is advanced that digital communities can be seen as virtual localities. The digital community of Bitcoin as explained earlier is a self-regulating peer to peer community devoid of governmental interference. Consequently, it is suggested that the digital community in the context of Bitcoin ought to be acknowledged as an eccentric locality for purposes of engaging in tax haven discourse.

In respect of factor (a) from the OECD's list of identifying factors of tax havens enumerated earlier, the following can be stated. Although Bitcoin is a digital peer to peer community, it does not constitute a jurisdiction where there is an authority having power to levy little or no tax on Bitcoin users or miners. As a result, the first part of factor (a) involving whether the jurisdiction in question imposes no or only nominal taxes is impertinent relative to cryptocurrency.

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108 Croome et al (n 13 above) 575.
109 As above.
110 D Dharmapala & JR Hines 'Which Countries become Tax Havens' (2009) 93 *Journal of Public Economics* 1058 1058.
111 See Dharmapala & Hines (n 110 above) 1058-1059 where they specifically refer to tax havens using the embracing term 'locations' as opposed to 'country'.
112 See Tobin & Walsh (n 99 above) 404.

The second part of factor (a) contemplates a locality that 'offers itself, or is perceived to offer itself, as a place to be used by non-residents to escape tax in their country of residence'.[113] It is worthy to recall in this regard the value and ultimate eminence of Bitcoin as a digital currency is predicated on its attractiveness to potential users.[114]

While many make irreproachable use of Bitcoin, for numerable unscrupulous investors Bitcoin is becoming renowned for its suitability to support illicit transactions.[115] Bitcoin may be portrayed as a virtual locality that offers itself as instrument to escape tax in the following manner. One of the main connecting factors underlying the taxation of income is the residence principle. This dictates that residents of a country are taxed on their worldwide revenue irrespective of the source. The other connecting factor is the source principle of taxation. Following this principle; persons are taxed on income that finds origination within the territorial confines of a country. In Chapter 2 it was explored that Bitcoin is held in digital wallets. Accordingly, there is no specific jurisdiction in which Bitcoin operates since Bitcoin is held in cyberspace wallets that are not geographically-specific.[116] The suggestion has thus been made that Bitcoin is 'not subject to taxation at source'.[117] In countries like South Africa, this aspect of Bitcoin presents no concern when dealing with the taxable income of persons considered as residents for tax purposes. This is because of the residence based taxation system was introduced.[118]

According to section 1 of the Income Tax Act:[119]

> "Gross income", in relation to any year or period of assessment, means-
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> (i) in the case of any resident, the total amount, in cash or otherwise, received by or accrued to or in favour of such resident; or

113 OECD 'Harmful Competition: An Emerging Global Issue' (1998) 20.

114 See R Grinburg 'Bitcoin: An Innovative Alternative Digital Currency' (2011) 4 *Hastings Science & Technology Law Journal* 159 175 where it is remarked that the Bitcoin is susceptible to 'irrational or rational loss of confidence' that has an impact on its demand relative to supply.

115 Marian (n 96 above) 42.

116 As above.

117 As above.

118 Sec 1 of the Income Tax Act 58 of 1962 was amended by the Revenue Laws Amendment Act 59 of 2000. In Croome et al (n 13 above) 27 it is noted that prior to this amendment, the regnant legislation indicated only income sourced in South Africa were pertinent for income tax purposes.

119 Income Tax Act 58 of 1962 sec 1.

(ii) in the case of any person other than a resident, the total amount, in cash or otherwise, received by or accrued to or in favour of such person from a source within the Republic.

From these provisions one can extract that the definition of gross income distinguishes clearly between the basis of taxation applied to residents and that applied to non-residents.[120] Residents are susceptible to tax on income earned irrespective of where it is earned. It is for this reason that Bitcoin lacking a fixed jurisdiction presents no issue to tax residents in South Africa. This is, albeit, under the bold assumption that residents take the proactive action of reporting revenue earned in their Bitcoin dealings to the South African Revenue Service.

The same cannot be said in respect of non-residents or jurisdictions whose income tax laws are based purely on the source based precept. Section 1 of the Income Tax Act implies that the source based principle is used in respect of non-residents. Section 9(2) of the Income Tax Act further elaborates on cases where an amount is received by or accrued to a person in South Africa. As shown earlier, it can be argued that Bitcoin is not subject to taxation at source because it occupies no specific jurisdiction. In the DTC report dealing with tax challenges of the digital economy in South Africa it is acknowledged that the current scope of source rules under the Income Tax Act omits to account for proceeds derived from the supply of digital goods and services in the favour of non-resident entities.[121] The quandary in this situation is exacerbated in cases where the income tax laws of the country to which the Bitcoin user is resident are entirely based on the source based principle. One can make use of the following example to illustrate the gravity of the predicament that can arise. An example of this would be a resident of Hong Kong that makes use of a node in South Africa used to transact with Bitcoin. Since the source based principle forms the sole basis for taxation in Hong Kong, the income earned will not be taxable by the authorities of that country. For South African purposes, the source based principle would equally be inadequate in regarding the non-resident's income as taxable if one accepts the point that Bitcoin occupies no specific jurisdiction. In this way it can be seen how, consonant with the second part of factor (a) in the OECD report, Bitcoin may

120 Croome et al (n 13 above) 575.
121 Davis Tax Committee 'Second interim report on Base Erosion and Profit Shifting (BEPS) in South Africa' (2016) 4.

be perceived as an avenue used by non-residents to escape tax in their country of residence – thus bearing one of the distinctive ingredients of a tax haven.

Factors (b) and (c) earlier enumerated from the OECD's list of tax havens indicators are also apposite for purposes of investigating the extent to which the Bitcoin intersects with the traditional rubric of tax havens. Factor (b) indicates that a typically, tax havens possess laws or administrative paradigms that inhibit the proper exchange of information with other governments on taxpayers benefiting from the low or no tax jurisdiction. In related sentiment, factor (c) states that tax havens are also marked by a lack of transparency. Consequently, one must assess how propitious Bitcoin is to transparency and information exchange elements.

As discussed in Chapter 2, each Bitcoin contains an address that is an alphanumeric sequence of characters.[122] A Bitcoin transaction can only be effected by the user who has a private key.[123] This positions each user in full control of their Bitcoin. Further it is possible for Bitcoin users to create multiple online wallets to trade or mine Bitcoin without ever providing any identifying information.[124] Unlike, regular online transactions Bitcoin do not involve the use of financial intermediaries.[125] From this, one can be drawn to the conclusion that transactions involving Bitcoin present users with an element of anonymity. Reminiscent to tax havens, these aspects of Bitcoin would present difficulty for tax authorities in respect of transparency as well as obtaining identifying information of users gaining revenue from Bitcoin transactions.

However, in this enquiry that posits Bitcoin as a tax haven, there are countervailing facets to acknowledge. Several authors have cautioned that Bitcoin transactions are not entirely anonymous but rather pseudo-anonymous.[126] Although Bitcoin makes no use of third-

122 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 21.
123 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 23.
124 Marian (n 96 above) 42.
125 See LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 21 where it is observed that third-party intermediaries such as Banks and other financial institutions have interest in knowing their customers for purposes risk assessment and legislative compliance. Through this, all parties involved in a transaction can be easily traced and identified in the database of the relevant financial institution.
126 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 21. See also JA Kroll et al ' The economics of bitcoin mining, or bitcoin in the presence of adversaries (2013) 6.

party intermediaries, the application of blockchain technology is important. Earlier it was elaborated that every transaction in the history of Bitcoin has been recorded or will eventually be recorded onto the blockchain.[127] Whenever a transaction is recorded onto the digital chain, information such as the public keys of the sender and recipient, the amount involved in the transaction, and a time stamp are included.[128] The blockchain acts as a public record of all transactions. Furthermore, other personally identifiable information like an IP addresses are often captured on finalisation of a transaction.[129] Another point militating against the complete anonymity of Bitcoin is that many users opt to keep their Bitcoins on deposit with large exchanges.[130] These exchanges often require personal details of users as a prerequisite to utilize their platform.[131] These aspects intimate that with concentrated effort, it may be possible for authorities to identify a party behind a transaction – even more so if that person voluntarily links their identity to a public key.

Consequently, the pseudo-anonymity of Bitcoin countervails against the finding that Bitcoin is a tax haven. This pseudo-anonymity implies that Bitcoin does not entirely imbue the lack of transparency and difficulty in information exchange that the OECD report offers as symptomatic of tax havens. However, to the extent that the air of regulatory enigma persists concerning Bitcoin and Bitcoin intermediaries, they may resemble tax havens. Deft individuals intending on utilising cryptocurrency as a tax havens can still counter the hurdles to anonymity explained above. Certain software programs can be employed to hinder personally identifiable information from being tethered to Bitcoin addresses.[132] The possibility of Bitcoin being employed to conceal embezzled payments or divert revenue owed to the fiscus in a surreptitious manner remains ripe. In this way, the presence of the tax haven indicators relating to a lack of transparency and mechanisms which prevent the effective exchange of information with other governments on taxpayers remains a precarious issue. Indeed, critics of Bitcoin have remarked that the tax administrative

127 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 21.
128 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 22.
129 As above.
130 JA Kroll et al 'The economics of bitcoin mining, or bitcoin in the presence of adversaries' (2013) 6.
131 As above.
132 LP Nian & DLK Chuen 'Introduction to Bitcoin' in Chuen (n 23 above) 22.

difficulty involved in tracing Bitcoin transactions render it no less than a 'digital Cayman Islands'.[133]

In summation, this section has depicted how several contingents in the operation of Bitcoin do bear resemblance to the qualities known to typify tax havens. For this reason, one cannot discount cryptocurrency as a salient agent in the discourse of tax havens.

Another reason why cryptocurrency should be cognized is that the momentous spread of Bitcoin comes as an obstruction to the burgeoning strategy in countering tax havens.[134] In recent times, the global co-operative efforts towards tax havens have been re-directed towards the financial intermediaries operating in the tax haven jurisdictions.[135] Financial institutions like Banks have become recipients of stern governmental pressure to withhold tax revenue in financial accounts, to provide information concerning bearers of accounts, and to remit such taxes to relevant authorities around the world.[136] In an OECD report dealing with illicit financial flows it is examined that the amount of agreements concerning information exchange between OECD and developing countries has risen favourably since 2000.[137] South Africa for instance recently signed the OECD Mutual Administrative Assistance in Tax Matters Convention which is aimed fostering frequent and efficient sharing of information among signatories in matters of tax.[138] Many of the agreements signed since 2005 comply with the standards set in the Global Forum on Transparency and Exchange of Information for Tax purposes which are seen as useful tax deterrent edicts.[139] Granted that the mainstay of Bitcoin is the erosion of third party intermediaries, the eminence of Bitcoin is important because it comes as an ostensible pushback to concerted tax haven regulatory strategies. This is why Bitcoin has been suggested as a potential 'super tax haven'.[140]

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133 N Mirjanich **'**Digital Money: Bitcoin's financial and tax future despite regulatory uncertainty' (2014) 64 *DePaul Law Review* 213 219.
134 Marian (n 96 above) 42.
135 As above.
136 Marian (n 96 above) 39.
137 OECD 'Illicit financial flows from developing countries: measuring OECD responses' (2014) 11.
138 Davis Tax Committee 'Second interim report on Base Erosion and Profit Shifting (BEPS) in South Africa' (2016) 6.
139 OECD 'Illicit financial flows from developing countries: measuring OECD responses' (2014) 11.
140 Marian (n 96 above) 42.

Apart from its importance in the context of tax havens, the erosion of third party intermediaries prods disquiet in the realm of tax evasion and other criminal issues. This is further explored in the next section.

### 3.3) CRYPTOCURRENCY, TAX EVASION AND CRIMINAL ACTIVITY

The aggravation of the issue of tax evasion on the international front has been coextensive with the dissemination of cryptocurrency and Bitcoin in particular.[141] No evidence provides that there is a direct correlation coefficient between these two variables. Yet one must be mindful that, as some authors have suggested, the gravity of tax evasion depends on the opportunities for successful evasion.[142]

Within the tides of globalisation, multinational enterprises (MNE's) continue to upscale their strategies and render their links with any one country more tenuous.[143] On a wholesale level, businesses are honing the ability to manage their global activities on an integrated basis from central locations that are neither situated in the place where operations occur nor where customers or suppliers are located.[144] Cognisant of this, the OECD initiated the BEPS Action Plan 1 in July 2013. At the centre of alarm was the concern expressed by policymakers that MNE's around the world were engaging in tax planning strategies to artificially reduce taxable income or shift profits to low-tax jurisdictions were little income generating activity is actually performed. The BEPS Action Plan was endorsed by the G20 leaders in September 2013.

Extracting insights from the BEPS Action Plan and other sources, the extent to which Bitcoin and the digital economy carries the potentiality to forage novel avenues of tax evasion and money laundering in relation to MNE's is investigated in this section.

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141 Marian (n 96 above) 43.

142 B Schlenther 'Corruption, money laundering and tax evasion: The inter-relationship between common factors to illicit financial flows' in J Owens et al (eds) *Inter-Agency Cooperation and Good Tax Governance in Africa* (2017) 107.

143 OECD 'Harmful competition: An emerging global issue' (1998) 14.

144 OECD 'Addressing the tax Challenges of the digital economy, Action 1' (2015) 65-66.

It has already been demonstrated that in numerable respects, Bitcoin bears resemblance to tax havens. Tax havens form a facet of the issue of tax evasion. An analysis of other facets of tax evasion is explored in this section. The discussion is structured as follows. First there is a brusque probe into the dynamics of selected aspects of tax evasion namely, illicit financial flows and MNE profit shifting. Proceeding from this, it is shown how certain integral features of Bitcoin and the digital economy may further magnify the amplitude of these issues. Finally, other criminal activities that have become prominent with Bitcoin are elaborated upon.

### 3.3.1) BITCOIN IN THE PROFIT SHIFTING EQUATION

Incipiently, it is useful to contextualize the topic of profit shifting within the broader polemic of IFFs. Tax evasion in the form of IFFs has become particularly rampant in developing countries.[145] It is widely conceded that illicit flows erode the ability of developing countries to raise revenue from tax.[146] Primarily, this is because illicit financial flows may funnel resources to the informal economy or to other jurisdictions.[147]

Various definitions exist for IFFs. In essence IFFs are 'generated by methods, practices and crimes aiming to transfer financial capital out of a country in contravention of national or international laws.'[148] The origins of such flows are variegated. They may arise from illegal practices such as smuggling or fraud. Moreover, the source of the funds may be actually legitimate in law but their transfer may be illegal.[149] In this latter instance, the notion of profit shifting comes to the fore.

Base erosion and profit shifting (BEPS) is pitted by the OECD as the fundamental blemish in the international taxation system.[150] Although profit shifting involving individuals is a

145 OECD 'Illicit financial flows from developing countries: measuring OECD responses' (2014) 15.
146 C Fuest & N Riedel 'Tax evasion and tax avoidance: The role of international profit shifting' in P Reuter (ed) *Draining development? Controlling flows of illicit funds from developing countries* (2012) 109.
147 As above.
148 OECD 'Illicit financial flows from developing countries: measuring OECD responses' (2014)16.
149 As above.
150 'Should Enterprises be prepared for Bitcoin?' available at https://www.financierworldwide.com/should-enterprises-be-prepared-for-bitcoin/#.W3nK4SQza71 (accessed 19 August 2018).

regnant issue, BEPS with regard to multinational firms stands at a more menacing posture towards tax authorities globally – and to developing countries like South African in particular.

In brief, corporate profit shifting with regard to MNE's occurs either intra-firm or by way of collaborative transactions among unrelated parties. Ordinarily the taxable portion of the profits of a MNE must be allocated to the respective jurisdictions where the firm files for income taxation. This is achieved through the separate accounting methodology whereby each entity (whether subsidiary or permanent establishment) generates a calculation of the income it has incurred peculiar to its own business activities.[151] In the strict sense, transactions between different entities of a MNE (controlled transactions) are to be construed as transactions with third party entities (uncontrolled transactions).[152] Intra-firm profit shifting becomes poignant in that MNE's may make use of controlled transactions to shift income from certain jurisdictions to others with more favourable tax policy and rates.[153] Such activities are usually done by employing techniques that involve transfer pricing or intra-firm debt.[154] Profit shifting of this nature renders it difficult to properly ascertain the objective distribution of profits earned by individual entities of the MNE. The matter is further complicated because MNE's jointly utilize resources in pursuance of business operation in a way that could not be done if they were separate firms [155] These resources tend to be endemic to the firm such as firm-specific expertise.

Given this brief understanding of the dynamics of profit shifting; the begging question is in what way the features of Bitcoin stand to intensify the problem. With regard to intra-firm profit shifting, the eminence of Bitcoin is pertinent in the following way. Firstly, the fact that the possibility exists for service providers to accept remuneration for services in the form of Bitcoin is important. A growing number of service providers have begun accepting Bitcoin as a method of payment for services delivered. In 2018, Microsoft a

151 C Fuest & N Riedel 'Tax evasion and tax avoidance: The role of international profit shifting' in Reuter (n 146 above) 111.
152 As above.
153 As above.
154 C Fuest & N Riedel 'Tax evasion and tax avoidance: The role of international profit shifting' in Reuter (n 146 above) 112.
155 As above.

public MNE notably re-welcomed Bitcoin as a method of payment for its Windows and Xbox online stores.[156]

With MNE's that employ digital economy business models, non- resident subsidiaries may dispense digital products and services to consumers in a country without being physical present in that country. An example of such digitalized products is the provision of cloud computing services. In the OECD report of 2015 it is noted that these services often include the provision of configurable products which can comprise of computing, software, and data management that involve the use of shared physical and virtual resources.[157] Owing to the nature of the services provided, it is not difficult for MNE's to obfuscate the link between income earned in a specific jurisdiction and the subsidiary company or permanent establishment providing those services. Without accurate voluntary reporting by the relevant company, it is difficult for tax authorities to even discern that income earning activity has occurred from the provision of virtual resources or services. Hendrickson and Logan make the perturbing observation that 'when transacting with Bitcoin, there are no disclosures, no reporting, and no inquiries on large transactions. Regardless of origin, there is no distinction between sending funds to Arkansas or Afghanistan'.[158] Therefore, in fashion typical of intra-firm profit shifting, a MNE can insidiously misallocate the Bitcoin remuneration earned for digital services rendered by a subsidiary in a domestic jurisdiction to a Bitcoin wallet controlled by a subsidiary in a separate country with favourable regulatory measures. The acuity of this is intensified when one considers that service providers are not required to identify themselves when establishing a Bitcoin online wallet.[159] Earnings incurred by a subsidiary of the MNE that is responsible for providing the relevant service may be difficult to trace.[160] Studies have found that many that holders of Bitcoin wallets utilize them as a savings account. Often times such wallets are used solely to save Bitcoin and not send them.[161] The appeal and

156 'Microsoft Welcomes back Bitcoin' available at http://fortune.com/2018/01/10/microsoft-bitcoin-temporary-halt/ (accessed 24 August 2018).
157 OECD 'Addressing the tax Challenges of the digital economy, Action 1' (2015) 59-60.
158 JR Hendrickson et al 'The Political Economy Bitcoin' (2016) 54 *Economic Inquiry* 925 927.
159 Marian (n 96 above) 42.
160 Marian (n 96 above) 42.
161 As above.

reliance on the integrity of companies to report earnings in Bitcoin wallets creates a potential avenue for exploitation.

MNE's can also employ strategies that involve the use of subsidiaries or PE's to retain mirrored servers granting quicker consumer access to digital products sold by the group while a principal company contractually retains the risks and ownership of intangibles.[162] With the advent of Bitcoin, affairs may be structured such that remuneration earned is deposited directly into the Bitcoin wallet of the principal company while the taxable income in the domestic jurisdiction is delimited to the compensation that the PE obtains for technical and marketing support.

A further dimension that raises menacing questions for BEPS can arise with MNE's who do not maintain a physical presence because of the digitalized nature of products and services. Usually, the domestic laws of a country require an element of physical presence before business profits can be considered for tax purposes. This spirit is reflected in article 5 and 7 of the OECD Model Tax Convention indicating that, for contracting states, a company is liable for tax on its profits in a country of which it is a non-resident only if it has a physical establishment in that country.[163] In addition to income being shifted to Bitcoin wallets held by other group entities, even if tax authorities are awake to the Bitcoin remuneration there is difficulty for tax authorities to establish a basis for taxing the non-resident company where the digital services are provided (subject to double taxation agreements). A tax lacuna is created where the parent company makes use of strategies that eliminate taxation at the country of residence. As stated earlier, Bitcoin earnings are not subject to taxation at source. If the parent MNE is located in jurisdiction that is entirely predicated on the source rule of taxation, then a predicament is created because such non-resident company may also not be subject to tax in the country in which it has customers due to a lack of physical presence. Thus, in abridged terms, 'taxing authorities

162 Davis Tax Committee 'Second interim report on Base Erosion and Profit Shifting (BEPS) in South Africa' (2016) 40.

163 OECD 'Model Tax Convention on income and on capital' (2017).

are perplexed over which country should have taxation rights in complex international electronic transactions'.[164]

### 3.3.2) TAX EVASION THROUGH MINING POOLS

The mining process by which new coins enter into the Bitcoin market and previous Bitcoin transactions are verified may present a threat for tax evasion. As elaborated earlier, the verification of transactions is achieved through a process where miners solve complex mathematical algorithms and generate a 'proof of work' to everyone in the network upon completion of the problem.[165] Solving these problems requires computational power and expertise.[166] The more computation power a miner possesses, the greater their chance of verifying a block first.[167] A reward is bestowed on the miner whose proof of work solved the last block of the algorithm. Successful miners are awarded with Bitcoins in their wallets.[168] The Bitcoin software is configured in such manner that the difficulty level of the algorithms alternates depending on the number of miners attempting to solve it.[169] Therefore, if more powerful computers mine on solving the algorithms to complete a block, the lesser the likelihood that average miners will achieve that reward.

Attentive to this, the phenomenon of mining pools have arisen.[170] This entails a group of Bitcoin users who collaboratively impute computing power and collectively mine Bitcoin.[171] Members of the mining pool receive percentage of the Bitcoins earned as reward.[172] Usually the pool manager also retains a fee. Mining pools are thus beneficial because, not only do they give individuals without significant computing power a higher chance at earning Bitcoins – they produce an avenue for consistent income.[173]

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164 K Thorpe 'International taxation of electronic commerce: Is the internet age rendering the concept of permanent establishment obsolete?' (1997) 11 *Emory International Law Review* 633 634.
165 K Singh 'The New Wild West: Preventing money laundering in the Bitcoin network' (2015) 13 *Northwestern Journal of Technology and Intellectual Property* 38 44.
166 As above.
167 As above.
168 As above.
169 As above.
170 Slattery (n 61 above) 839.
171 As above.
172 As above.
173 Slattery (n 61 above) 839-840.

From a taxation vantage point, the disconcertion arises in the administrative and tax reporting complications that may arise as a result of mining pools. In most jurisdictions, the recursive reception of award in the form of Bitcoin will count as a receipt in the hand of the miner for taxation purposes. Administratively, determining where miners are situated and from where the pool's organizer is an arduous task. Computing power is contributed from miners all over the world.[174] The relative anonymity of the Bitcoin network equally extends to mining pools. Despite receiving steady payment in Bitcoin for their mining efforts, users themselves may have little verifiable data about pool managers.[175] Unless voluntarily reported, earnings attained from participation in mining pools are unlikely to be ascertained – leaving a wide cavity for tax evasion.

### 3.3.3) CRIMINAL CONDUCT AND BITCOIN

There is other criminal activity that attributes of Bitcoin pave way to. The pseudo-anonymity that Bitcoin provides is of particular significance.

Bitcoin has not been impervious to the threat of hackers. In 2010, a group of hackers facilitated a security breach in the Bitcoin code and fraudulently obtained 184 billion Bitcoins.[176] The breach was later reversed and in response, the code was modified to prevent similar future breaches.

The most infamous security breach of the Bitcoin system transpired in 2014.[177] Mt. Gox, the most prominent Bitcoin exchange at the time, reported that 850,000 Bitcoins went missing from its platform.[178] The value of investor capital stolen amounted to $400 million.[179] Because Bitcoin's anonymity makes it difficult to track and reverse fraudulent transactions, Mt. Gox initially indicated that it would be unable to recoup the Bitcoins of

174 Slattery (n 61 above) 840.
175 As above.
176 Mirjanich (n 133 above) 219.
177 As above.
178 As above.
179 As above.

investors.[180] However, with the added legal pressure Mt. Gox managed to recoup 200,000 of the 850,000 missing Bitcoins.[181]

Bitcoin also became subject to much reprobation and scrutiny for serving as a facilitating instrumentality for Silk Road – an anonymous internet-based marketplace for illegal drugs.[182] The website operated on the 'deep-net' by virtue of a network called The Onion Router.[183] Privacy and anonymity was provided to users through the concealment of the IP addresses of every computer on the network.[184] Tied to the fact the transactions were almost all exclusively paid in Bitcoin, Silk Road transactions were untraceable.[185] Eventually, these illicit operations came to a halt in September 2013 when the Federal Bureau of Investigations (FBI) instituted action against the alleged creator and operator of the Silk Road, Ross William Ulbricht shutting the website down and seizing a plentiful amount of Bitcoins.[186]

On the other side, the anonymity and difficulty in tracing Bitcoin has been useful in the abuse of typically regulated industries such that of gambling. Many gambling sites hosting a range of games accept payment and issue pay-outs in Bitcoin.[187] Markedly, the gambling site SatoshiDice permits users to send bets to unique addresses that correspond to a number from 1 to 64,000.[188] Ensuing this, the system engenders a random number by hashing a combination of the transaction ID and a secret string.[189] If the number of the address where the bet was sent is lower than the random number generated, that user obtains the respective pay-out. In the many jurisdictions, gambling is illegal or strictly regulated, the administrative difficulty of tracing transactions and ensuring accurate reporting as regnant throughout this essay persists in these instances.

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180 As above.
181 See Mirjanich (n 133 above) 220 where it is noted that legal action was instituted against the exchange pending their filing.
182 Slattery (n 61 above) 842.
183 Mirjanich (n 133 above) 220.
184 As above.
185 As above.
186 As above.
187 R Böhme et al 'Bitcoin: economics, technology, and governance' (2015) 29 *Journal of Economic Perspectives* 213 223.
188 Hendrickson et al (n 158 above) 928.
189 As above.

This together with the intricacy and relative anonymity that Bitcoin possess means that it has the potential to pose a hefty problem for law enforcement authorities.

## 3.4) BITCOIN AND THE LEGAL STATUS QUANDARY

In this section, the difficulty in attaining certitude concerning the legal characterization of Bitcoin as currency is canvassed. Whether Bitcoin constitutes a property, legal tender, financial instrument or portends serious tax implication on any country. Uncertainty as to the characterization of Bitcoin engenders uncertainty on the proper tax treatment of virtual transactions. Ensuing from this, issues relating to compliance with reporting for tax purposes are concomitant. Should regulators adopt the view that cryptocurrency constitutes property; all the relevant jurisdiction-specific principles concerning the sale of intangible property by residents are activated. Where it is construed as currency, foreign exchange precepts are triggered.

Most countries have national currencies (e.g. South African Rand) serving as the legal tender.[190] Interestingly, the contention has been brought forward that 'Bitcoin should be classified as "currency" under all regulatory laws in the same fashion as other foreign currencies. Bitcoin should not be regulated as property or as a commodity'.[191] In this section, a theoretical approach is employed in considering the tenability of classifying Bitcoin as a genre of foreign currency under all regulatory laws.

### 3.4.1) APPRAISAL OF BITCOIN AS CURRENCY

In contemporary economic thought, it is accepted that there are three distinctive functions that any purporting currency must accomplish.[192] First, currency ought to function as a

190 G Hileman 'Alternative Currencies: A Historical Survey and Taxonomy' available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747975 (accessed 24 August 2018).

191 Mirjanich (n 133 above) 214.

192 See G Hileman 'Alternative Currencies: A Historical Survey and Taxonomy' available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747975 (accessed 24 March 2018) where it is noted that this definition is also employed by the International Monetary Fund.

medium of exchange for transacting goods and services.[193] Second, currency should be capable of storing value in the sense that it retains purchasing power into the future.[194] Lastly, it should be a unit of account, that is, a gauge that indicates the manner in which goods or services are priced.[195] These features will form the prism through which it is assessed whether Bitcoin can indeed be construed as currency.

### 3.4.1.1) MEDIUM OF EXCHANGE

Detractors of Bitcoin suggest that Bitcoin cannot be considered money because it lacks inherent value and is consequently ineffective as a medium of exchange for transactions.[196] Unlike most jurisdictions, the value of Bitcoin is not regulated by a central Bank. However, the argument predicated on inherency of value in Bitcoin is unsustainable if one considers that fiat paper currency employed in almost all jurisdictions does not itself have any intrinsic value. Concerted belief that a nation's central bank or government will modulate the supply of new banknotes forms the basis for the value of most fiat currencies.[197] For Bitcoin, value is determined by market supply and demand ratios – often resulting in acute price fluctuations.[198] Since the rate of Bitcoin supply has been pre-determinately fixed, an increase in demand without a complementary increase in supply will drive drastic price increases.

Tied to its value, the other major contention against the recognition of Bitcoin as a suitable medium of exchange is reposed on an assessment of the usage of Bitcoin.[199] To be appropriately regarded as a medium of exchange a currency must be accepted as a payment for a sufficiently large set of goods or services, or other assets.[200] David Yermack remarks that 'evidence of Bitcoin's footprint in daily commerce is mostly anecdotal, consisting of newspaper stories about people living only by spending Bitcoin

193 As above.
194 As above.
195 As above.
196 Mirjanich (n 133 above) 235.
197 D Yermack 'Is Bitcoin a Real Currency? An Economic Appraisal' in DLK Chuen (ed) *Handbook of digital currency: Bitcoin, innovation, financial instruments, and big data* (2015) 33.
198 Mirjanich (n 133 above) 222.
199 D Yermack 'Is Bitcoin a Real Currency? An Economic Appraisal' in Chuen (n 197 above) 37.
200 Stephanie Lo and J. Christina Wang 'Bitcoin as Money?'

or estimates of large numbers of businesses that are willing to accept Bitcoin'.[201] Despite this assertion, the growing popularity and frequency of Bitcoin cannot be gainsaid. For example, in the developing economy of South Africa the number of companies accepting Bitcoin as a method of payment has grown from to 19 from 4 in October in 2014.[202] Additionally the products are variegated, ranging from corporate gifts, architectural solutions, packaging materials, to cloud services and software support.[203] Ostensibly, these figures appear miniscule. However, the increasing market capitalization of Bitcoin suggests its use as a medium of exchange is becoming commonplace.

### 3.4.1.2) UNIT OF ACCOUNT

It is argued by some economists that money's most decisive function is serving as a unit of account.[204] The usage of Bitcoin as a unit of account is noted to owe derivation from its medium of exchange function. [205]To persist as an effective unit of account, a purported currency must represent a common measure to value goods and services.[206] Volatility in the price of Bitcoin militates strongly against its suitability as a unit of account. The stark fluctuation in prices causes practical problems for both buyers and sellers. For example, fluctuation in Bitcoin value compels retailers to constantly recalculate the Bitcoin value of their goods.[207] Further problems can arise in instances where goods have to be returned since the price of a single Bitcoin relative to the cost of ordinary goods is relatively high; retailers have to quote prices for goods to more than four decimal places.[208] Therefore, it

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201 D Yermack 'Is Bitcoin a Real Currency? An Economic Appraisal' in Chuen (n 197 above) 37.

202 Bitcoinzar 'Business that accept bitcoin in South Africa' Available at http://www.bitcoinzar.co.za/south-africa-bitcoin-business-directory/ (accessed 3 September 2018).

203 Bitcoinzar 'Business that accept bitcoin in South Africa' Available at http://www.bitcoinzar.co.za/south-africa-bitcoin-business-directory/ (accessed 3 September 2018).

204 G Hileman 'Alternative Currencies: A Historical Survey and Taxonomy' available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747975 (accessed 24 August 2018).

205 S Lo & C Wang 'Bitcoin as Money?' (2014) 14 *Boston Federal Reserve Current Policy Perspectives* 1 10.

206 SA Wolla 'Bitcoin: Money or Financial Investment?' Available at https://files.stlouisfed.org/files/htdocs/publications/page1-econ/2018/03/01/bitcoin-money-or-financial-investment_SE.pdf (accessed 3 September 2018).

207 As above.

208 As above.

is unsurprising that most merchants who accept Bitcoin as payment prefer to quote prices in standard currencies instead of Bitcoin (or BTC).

### 3.4.1.3) STORE OF VALUE

As Bitcoin possesses no intrinsic value, the current market value of Bitcoin to any given user is tethered entirely on their expectation of others' willingness to accept it later at a stage.[209] This comes as a great diminishing factor to its efficacy as a store of value. Instead, the volatility to which Bitcoin is subject suggests strong resemblance to a speculative investment and thus subject to speculative bubbles.[210] In 2017 alone, Bitcoin went through five episodes of at least 20 percent losses. As a consequence, some economists have drawn the conclusion that the volatility of Bitcoin damages its credibility as a store of value credibility and impedes greatly against its acceptance as a currency.

On a consolidated view of the above explication, it is evident that the mechanisms of Bitcoin struggle to fall crisply into the accepted functions of money. This does not however completely negate its potentiality as an accepted currency. Many of the attributes of currency that Bitcoin falls short off can be imputed on its unsubstantial acceptance. Yet, despite Bitcoin lingering at its incipient stage in the global market, it continues to garner traction. Whether Bitcoin will be permitted to metamorphosize into a generally accepted medium of exchange will be greatly impacted by the claws of legal regulation. Regulation towards Bitcoin will be assessed.

## 3.5) CONCLUSION

Drawing from Omri Marion's concept of the super tax haven, this Chapter has first explored how intrinsic components of Bitcoin such as pseudo-anonymity and

209 Lo & Wang (n 203 above) 11.
210 Lo & Wang (n 203 above) 12.

decentralization mimic several markers of tax havens identified in an OECD report. In essence, although Bitcoin does not coincide in all respects with all the factors listed in the OECD report as indicators of tax havens, it does not need to. Earlier it was established that despite the OECD report offering useful guidance, there are no definitive markers of tax havens.

Flowing from this, the impact of Bitcoin on certain facets of tax evasion has been expatiated. With the surge of globalization; the powers of the MNE have become fortified. MNE's that specialize in the provision of digitalized products continue to developing the ability to integrate their global activities from central locations where neither customers nor suppliers are located. Special emphasis has been directed to show that there is room for arbitrary usage of cryptocurrency as an instrumentality for profit shifting and base erosion. It has been demonstrated that Bitcoin wallets are propitious to aiding MNE's in blurring the link between income earned in a specific jurisdiction and the subsidiary company or permanent establishment providing digitalized services. Further, the possibility for a tax lacuna has been assessed in light if the fact that Bitcoin is not subject to taxation at source.

The eccentric features of Bitcoin have also been depicted to pose criminal threats and risks. The anonymity and difficulty in tracing transactions has rendered it useful for drug trafficking and paved way for abuse in typically regulated industries such that of gambling.

Finally, a theoretical strategy has been employed in appraising the possibility of classifying Bitcoin as currency. It has been conceded that Bitcoin fails to fall squarely into the traits accepted by economists as being indicators of currency. Be that as it may, it has been argued that Bitcoin does nevertheless intersect with the accepted functions of money. Additionally, many of the attributes of currency that Bitcoin does fall short off can be ascribed on its unsubstantial acceptance. Ironically, the continued use of Bitcoin will fully exemplify its tenability as a currency.

# CHAPTER 4: OVERVIEW: REGULATORY RESPONSES TO BITCOIN

## 4.1) INTRODUCTION

The challenges introduced by the emanation of Bitcoin have been canvassed. This chapter conducts an exploration on the regulatory responses by selected regions to the pandemic of cryptocurrency. Specifically, the focus is foraged towards drawing an indication of regulatory activity that has influence on the tax issues canvassed in Chapter 3.

It has become palpable that the digitalized and peer-to-peer nature of cryptocurrency renders it a globally permeating issue. Intuitively, one is moved to the expectation of concerted co-operation in the treatment of this new age problem. However, concerted tax regulatory responses have been sparse while those on individual domestic levels have been inconsonant. The extension of efficient and proper tax laws to Bitcoin can aid in countermanding the risks posed by its anonymity, help in reducing criminal activity as well as modulate the price volatility in the market.[211] The regulatory strategies of USA and South Africa are selected for assessment in this Chapter. These two nations are part of the FAFT that is predicated on co-operative diminution of money laundering.

## 4.2) USA

In the United States, disparity exists in the manner in which several entities have construed Bitcoin. Principally, the point of dissention lies at the issue of ascertaining the legal characterization of Bitcoin. As iterated throughout, legislative congruity and effective tax administrative mechanisms are forerun by a unitary perspective on the way cryptocurrency is to be viewed. The impugned entities to be discussed are Financial Crime Enforcement Network (FinCEN), the Securities and Exchange Commission and the Internal Revenue Service.

211 Mirjanich (n 133 above) 248.

### 4.2.1) FINANCIAL CRIME ENFORCEMENT NETWORK

FinCEN is an entity functioning as a bureau in the United States Department of Treasury. Its primary function revolves around the regulation of regulating financial institutions and providing safeguards from money laundering.[212] In 2013, the FinCEN issued a guidance note serving to clarify whether persons involved in creating, using and distributing virtual currencies where subject to regulations under the Bank Secrecy Act.[213] This move positioned it as the first federal agency in the US to contemplate the extension of regulatory measures towards Bitcoin.[214]

In its guidance note, FinCEN observed that a digital currency like Bitcoin is 'a medium of exchange that operates like a currency in some environments'.[215] In further reading, it is apparent that FinCEN cautiously inclines towards an understanding of Bitcoin as currency. A detour from this conclusion is however made in that FinCEN examines that Bitcoin is not a real currency specifically because 'it does not have legal tender status in any jurisdiction'.[216] From this is clear that FinCEN labours under the conception that governmental recognition is a necessary prerequisite for legal tender status of a currency. However, one ought to be mindful of Hileman's economic perspective explained earlier, that 'the designation of what is and is not money does not depend on law or a government defining such a currency as legal tender'.[217]

Critically, FinCEN observed that the laws and regulations of the Bank Secrecy Act (BSA) applicable to normal regulated financial institutions and money transmitter businesses were to be equally applicable to virtual currency-based exchanges.[218] The expansion of the regulatory measures does not apply to Bitcoin users but will impugn the Bitcoin

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212 Mirjanich (n 133 above) 214.
213 Financial Crime Enforcement Network 'Application of FinCEN's regulations to persons administering, exchanging, or using virtual currencies' (2013) 1.
214 Mirjanich (n 133 above) 214. See also Singh (n 163 above) 39.
215 Financial Crime Enforcement Network 'Application of FinCEN's regulations to persons administering, exchanging, or using virtual currencies' (2013) 1.
216 As above.
217 G Hileman 'Alternative Currencies: A Historical Survey and Taxonomy' available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747975 (accessed 24 August 2018).
218 Mirjanich (n 133 above) 224.

exchanges through which Bitcoin users can operate. Bitcoin exchanges are impugned because they are construed as money transmitter businesses because they are a facilitating third party of the transmission of fiat currency and Bitcoin for a fee.[219]

In a separate report, FinCEN provided further clarification that Bitcoin miners are also not subject to the BSA regulations as money transmitters where they mine for their own purpose alone and not for the benefit of another.[220] Thus by necessary implication, it has been argued that FinCEN regulations also extend to Bitcoin miners who create Bitcoin for the purpose of realizing gain. Bitcoin miners in this instance act as money transmitters who 'after creating the currency by solving complex mathematical problems…accept payment in other currency to place Bitcoins into circulation'.[221] This is antithetical to the scenario involving individual buyers and sellers of Bitcoin because they are not involved in the business of transferring funds.

From a tax perspective, the move to extending these regulations to Bitcoin rests as a laudable response to ominous potential of Bitcoin as portrayed in the previous Chapter. By extending FinCEN regulations to include virtual currencies, Bitcoin Exchanges and Bitcoin miners must comply with registration requirements and abide by money laundering laws. On top of registration, it is mandatory for money transmitting business to file reports for suspicious activity, comply with filing requirements for transactions in currency and implement a money laundering program for cash transactions. Another anti-tax evasion benefit of the extension of the BSA regulations by FinCEN is that under that most transactions carried through Bitcoin Exchanges will be brought to the attention of authorities. The BSA obliges any money transmitter (such as a Bitcoin Exchange) who transports or receives at least $10,000 or more in a single transaction to notify the U.S. Treasury Department of that transaction by filing a report of that transaction.[222] With the average market price at August 2018 being above $7,000 – most Bitcoin Exchanges will

219 Mirjanich (n 133 above) 231.
220 Mirjanich (n 133 above) 231-232. See specifically Financial Crime Enforcement Network 'Application of FinCEN's regulations to persons administering, exchanging, or using virtual currencies' (2013) 1.
221 Mirjanich (n 133 above) 232.
222 As above.

be prompted to file such reports. These measures, although demarcated to Bitcoin Exchanges and certain Bitcoin miners, illustrate promising capacity as an affront to tax evasion that features of Bitcoin may prompt.

### 4.2.2) INTERNAL REVENUE SERVICE

The Internal Revenue Service (IRS) is the governmental agency that is responsible for the collection of taxes and the enforcement of the Internal Revenue Code (the Code).[223] The IRS had been relatively quiet on the matter of cryptocurrency. Seemingly, to disrupt the wrenching passivity of the IRS, the United States Government Accountability Office ("GAO") prepared a Report about how guidance from the IRS on virtual economies and currencies could diminish tax administrative and compliance risks.

Despite FinCEN's guidance note that demonstrated a tempered proclivity to construe Bitcoin as currency, the IRS issued Notice 2014-21 in March 2014 offering a seemingly divergent perspective. In its Notice the IRS stated that Bitcoin is to be treated as property under the Code for federal tax purposes.[224] As a consequence of the Notice taxpayers are subject to either ordinary income or capital gains tax treatment for various Bitcoin transactions.[225] Examples of taxable transactions include exchanging Bitcoin for other property or services.

Where Bitcoin is exchanged for other property it results in a realization event.[226] The taxpayer is obliged to pay tax on the gain on the exchange. If the exchange results in a loss, the party would not report the loss on their tax return.[227]

A gain is calculated by deducting the basis of the property sold or disposed from the amount realized. When exchanging property, the fair market value of the item they are

223 Mirjanich (n 133 above) 227.
224 Mirjanich (n 133 above) 227- 228.
225 Mirjanich (n 133 above) 228.
226 J Isom 'As Certain as Death and Taxes: Consumer Considerations of Bitcoin Transactions for when the IRS Comes Knocking' available at SSRN: http://ssrn.com/abstract=2365493 (accessed 12 September 2018).
227 As above.

receiving constitutes the amount realized.[228] With regard to Bitcoin, the basis is determined by the amount paid to purchase the Bitcoins. The recipient of Bitcoin utilizes the present dollar value of the Bitcoin received as the fair market value and from that subtracts their basis in the property they have relinquished to calculate their taxable gain.

Where Bitcoins are exchanged for services, the consequence of Notice 2014-21 is that the party who receives the service is obliged by the Code to include the fair market value of the service their income return.[229] This would not be the case if Bitcoins were treated as currency rather than property. A taxpayer does not include in her income the value of the services she receives in exchange for paying money.

Beneficially, the recognition of Bitcoin as property under the Code may aid in battle against tax evasion because certain compliance requisites may become pertinent to certain Bitcoin transactions. For example, taxpayers are required to complete form 1099-B serving to report transactions with a third party that exceed a certain amount. Nevertheless, detractors of this move rightfully retort that ' the IRS issued Notice 2014-12 stating that Bitcoin will be treated as property for tax purposes, there is little ability to compel payment because Bitcoin is difficult to trace'.[230]

### 4.2.3) SECURITIES EXCHANGE COMMISSION

The Securities Exchange Commission (SEC) is a federal regulatory body that was created to regulate financial products and markets through disclosure requirements.[231] Deriving its power from the Securities Act, the scope of the SEC's pronouncements is delimited to "securities". This classification includes notes, stock, treasury stock, and investment contracts.[232]

228 As above.
229 As above.
230 Mirjanich (n 133 above) 222.
231 Mirjanich (n 133 above) 225.
232 Mirjanich (n 133 above) 225.

In the landmark case of *SEC v Shavers*, the question of whether an investment in a Bitcoin financial product constituted an investment contract came to the fore. In this case, the defendant Trendon Shavers created an unincorporated Bitcoin trust that insidiously operated as a Ponzi scheme.[233] The District court came to the conclusion that an investment in a Bitcoin financial product was an investment contract, thereby providing the SEC with jurisdiction over certain Bitcoin investments.[234] Therefore, the SEC had jurisdiction to prosecute Shavers for violating antifraud provision of the securities laws. In reaching this conclusion, the court showcased a penchant to classifying Bitcoin as currency. It was noted that Bitcoin is reminiscent to conventional currency in many respects acting as store of value and medium of exchange. Regarding the IRS decision to regard Bitcoin as property, the court examined that the IRS Notice did not make categorical pronouncements on the legal status of Bitcoin - Bitcoin is treated as property solely for federal tax purposes.

On finality, several institutions in the US have grappled on the task of bringing regulatory control on Bitcoin. The major criticism to the IRS classification of Bitcoin as property is that it will lead to difficulties with reporting taxes for many of the users.[235] Abhorrent to the mention of regulation, proponents of virtual currencies have also raised concern that it will become more difficult for virtual currencies to function as a medium of exchange in the purchase of everyday items.[236]

### 4.3) SOUTH AFRICA

In polarity to the US, no substantive regulatory action has been directed towards Bitcoin in South Africa. The premier acknowledgment of virtual currency by South African regulatory authorities occurred in 2014, with an alert released by the South African

233 Mirjanich (n 133 above) 226.
234 *SEC v. Shavers* No. 4:13-CV-416 2013 WL 4028182, at 2.
235 SA Wiseman 'Property or Currency: The Tax Dilemma behind Bitcoin' (2016) 2 *Utah Law Review* 417 419.
236 As above.

National Treasury.[237] In the alert, the phenomenon of virtual currency was cognized. Although majority of the focus in the alert was dedicated at offering an exposition of virtual currency, it was noted that virtual currencies do not qualify as securities in the sense contemplated in the Financial Markets Act. [238]

In April 2018 the South African Revenue Service (SARS) publically announced that the normal income and capital gains rules of taxation would apply to cryptocurrency. Thus to determine the nature of a Bitcoin transaction, recourse will have to be made to the ordinary rules regarding the intention of the investor at the time of acquisition of the cryptocurrency. Further taxpayers are subject to normal rules requiring them to report their taxable income, gains or losses.

The SARS statement is efficacious in that it provides, to a certain extent, conceptual clarity to the treatment of cryptocurrency. In effect, the statement provides a firmer grasp on the unquestionable – that Bitcoin transactions do produce taxable events. The onus is on taxpayers to declare income made in accordance with principles of South African law.

Several areas of concern do remain forsaken in spite of the guidance offered by SARS. Although, Bitcoin is acknowledged to produce taxable events, there is no legislative guidance as to the characterization of Bitcoin when transactions do occur. The South African Reserve Bank Act makes exclusive provision for the recognition of the South African Rand as local currency – and thereby confers it sole legal tender status.[239] Logically it follows that SARS does not construe cryptocurrencies as a form of legal tender that is issued by government whether in the form of coin or notes. This ambiguity concerning the status of cryptocurrency lays individuals bare to the risks of cryptocurrency as identified in the FAFT 2014 report. For one, the FAFT observed that where there is inadequate regulatory protection, companies or individuals who agree to make use of virtual currency will lack legal recourse in the event of dissension relating the Bitcoin

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237 SA National Treasury 'Monitoring of virtual currencies' available at http://www.treasury.gov.za/comm_media/press/2014/2014091801%20-%20User%20Alert%20Virtual%20currencies.pdf (accessed 10 September 2018).

238 SA National Treasury 'Monitoring of virtual currencies' available at http://www.treasury.gov.za/comm_media/press/2014/2014091801%20-%20User%20Alert%20Virtual%20currencies.pdf (accessed 10 September 2018).

239 Sec 15(1)(a) of the South African Reserve Bank Act 90 of 1989.

system itself.[240] Moreover, the conceptual clarity does little in attending to the threat of tax evasion which, palpably from chapter 3 above, arises from mixture of

Finally, on closer assessment of the alert by the South African Treasury, the wholesale exclusion of virtual currency as a 'security' discounts the potentiality for the creation of Bitcoin products bearing grave resemblance to mutual fund securities like that in contention in the *Shavers* case.

## 4.4) CONCLUSION

In this Chapter, the regulatory strategies adopted by two countries in the FAFT have been considered. In respect of the USA, it has been illustrated that several regulatory bodies have grappled with the issue of characterization of the Bitcoin. Drawing from the *Shavers* decision, it is apparent that in certain instances Bitcoin products may take the form of traditional financial securities. Pertinently, for tax purposes it has been observed that the IRS has taken the stance that Bitcoin constitutes property in the hands of the taxpayer. In a move propitious to combatting money laundering and tax evasion, the FinCEN has issued regulations that effectively draw Bitcoin exchanges to the same reporting requisites, and regulatory scrutiny of financial institutions.

Although several statements have been released that demonstrate a cognisance of the growing use and potential of cryptocurrency, it has been shown that there remains a paucity of regulation of cryptocurrency in South Africa. The regulatory indifference in South Africa is understandable because of the relatively novel and complex nature of cryptocurrency on one hand. On the other, regulatory counsel is imperative given the high market capitalization and growing number of businesses accepting cryptocurrency in the South African market. Moreover, the argument is often made that stringent Bitcoin regulation like that of the USA may functionally foreclose potentially economically

240 FATF 'Virtual Currencies Key Definitions and Potential AML/CFT Risks' (2014) 6.

advantageous routes of progress.[241] In conclusion, this regulatory dichotomy has been put in the following manner:[242]

> Regulators of novel technologies face twin, diametrically-opposed temporal hurdles. In terms of timing, early-stage regulation of technological advancement runs the risk of acting on insufficient empirical data, and therefore causing greater harm than good. Later stage regulation, meanwhile, risks allowing advancements to achieve significant enough success to effectively create marketplace inertia, putting them beyond the reach of regulatory power.

241 ED Jeans 'Funny money or the fall of fiat: Bitcoin and forward-facing virtual currency regulation' (2015) 13 *Colorado Technology Law Journal* 99 126-127.

242 Jeans (n 239 above) 115.

# CHAPTER 5: CONCLUSION

## 5.1) REMARKS AND RECOMMENDATIONS

Bitcoin is a monumental construction in the tirade of technological innovation. In spite of the relative nascent nature of the industry, it is not insulated from the potential to inflict onerous consequence. In this essay, there has been a marked emphasis on the international tax questions that Bitcoin poses.

For South Africa, it has been demonstrated that the regulation of Bitcoin remains a musty arena. On surveying the strategies adopted in the USA it is recommended that South African regulatory authorities offer instruction on the characterization of Bitcoin. However, dissimilar to the strategy adopted in the USA, a characterization of Bitcoin as recognized currency is proffered. Consequently, it is suggested that section 15(1)(a) of the South African Reserve Bank Act be amended to provide for the inclusion of virtual currency in the definition of local currency. Further, in a bid to curb the tax evasion threats canvassed in Chapter 3, it is suggested that legislation targeting cryptocurrency exchanges be created. Such legislation should not fixate on a specific type of cryptocurrency but rather on the exchanges that offer myriad cryptocurrencies. Similar to the FinCEN regulations, the legislation ought to contain measures that are predicated on combatting tax evasion and money laundering. As such measures such as the obligation for cryptocurrency exchanges to file reports for suspicious activity can be incorporated. Gleaning from the FinCEN's regulations, it can also be required that cryptocurrency exchanges implement a money laundering program.

On the other hand, the regulation of cryptocurrency exchanges can alternatively be incorporated into existing regulatory frameworks and legislation. For example, the provisions of the Banks Act which is responsible for the regulation of financial institutions may be extended to include the recognition of cryptocurrency exchanges and render them subject to the attendant regulatory measures.

Finally, to further strengthen the barricade against money laundering, a notification requirement can be provided for similar to that operative under the FinCEN. This renders it incumbent on cryptocurrency exchanges to notify authorities of transactions involving the exchange of a threshold amount of fiat currency or cryptocurrency.

## 5.2) CONCLUSION

While the effects of Bitcoin on the global economy cannot be deemed heavily deleterious, it has been demonstrated that generally, cryptocurrency boasts noticeable potential as a role player in the tax evasion rhetoric.

Even then, regulation of cryptocurrency still remains a contentious issue. Many jurisdictions have opted to turn a blind eye to virtual currency. Others that do venture in this arena do so languidly. In end, this discussion has illustrated that technological innovation in the form of Bitcoin and cryptocurrency can play a role in unfavourably moulding the trajectory of pre-existing tax issues. On finality, in light of the purposes of taxation highlighted in Chapter 1, the imperative for international systems of taxation to contend with the rapidity of paradigm shifts cannot fully capitulate to the need to charter and embrace innovation. [243]

[243] As above.

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