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# **Legal implications of virtual currencies**

by

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## Declaration

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## Summary

The advance in technology brings its own challenges and legal implications. As time went by, we came to know the internet and ultimately developed laws regulating certain things about the internet and the legal implications thereof. Lately a new concept has come into the picture, namely the concept of virtual currency. The concept of virtual currencies has presented its own challenges and hence this mini dissertation seeks to look at some of the legal implications and challenges associated with the concept of virtual currency. Whenever the term virtual currency is mentioned people usually think of bitcoin as it is the biggest virtual currency. Therefore, most of the discussion will use bitcoin as an example of a virtual currency.

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# Chapter 1:

## General introduction

### 1.1 Introduction

As time moves so does the development of technology. We have moved from an era of darkness to electricity, from telegrams to emails. In as much as technology has brought many solutions, it has also presented us with many challenges. This dissertation shall consider one such relatively recent technological innovation, namely the concept of virtual currencies. The specific purpose is to investigate some of the legal implications of virtual currencies.

### 1.2 Brief background

Virtual currencies are a product of the internet age.<sup>1</sup> The reason for this is that the internet is a precondition for the creation of virtual currencies, and as such it can be said that the life and existence of virtual currencies is largely dependent on the internet. Virtual currencies do not only exist because the internet exists, but their function is dependent on the internet and the communication network in general. For example, an individual who concludes a transaction while present at a place where network connectivity is not a problem will not be able to conclude the same transaction in areas where connectivity is limited.

When the internet was invented, it sparked a lot of interest and confusion at the same time.<sup>2</sup> A lot of research was done during and after the invention of the internet, which led to things like cyber laws and other regulations that deal with the use of internet.<sup>3</sup> The fact that when the internet was created a lot of problems regarding regulation ensued, supposes that any other invention that stems from the existence of the internet will probably also be questioned and ultimately put to test. The above can be noted with reference to things such as laws relating to electronic money (e-money) and electronic banking (internet banking).

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<sup>1</sup> R Farell *An analysis of Cryptocurrency Industry* University of Pennsylvania Wharton Research Scholars (2015) 4.

<sup>2</sup> J Curran *Misunderstanding the internet* (2012) 34.

<sup>3</sup>.3.

Although we cannot attribute the origin of virtual currencies to one source, we can at least look at the pioneering virtual currencies and their origin. The pioneers of virtual currencies, though some of them may fall within the subtype of crypto currencies, include Bitcoin. In fact, it is said that the concept of virtual currencies dates back as early as the 1990s, but it cannot be said for sure that those early virtual currencies were virtual currencies according to the scope of today's modern definitions.<sup>4</sup> What all these virtual currencies have in common when it comes to their origin is that all of them are founded by the internet and cannot operate without the internet.<sup>5</sup>

Among the many virtual currencies, Bitcoin has perhaps attracted the most attention. Like other virtual currencies, Bitcoin is an invention of so-called "developers". Simply defined, a developer is someone with vast knowledge of computer coding.<sup>6</sup> The developer who invented Bitcoin is known by the name Satoshi Nakamoto.<sup>7</sup> However, this is not the developer's real name but a name he used in an attempt to protect his true identity.<sup>8</sup> Satoshi's real identity is yet to be known. Satoshi introduced his virtual currency in 2009.<sup>9</sup> Bitcoin operates at an international level because many people are using it globally, and the challenges it presents to South Africa are therefore similar to those that other jurisdictions are facing.

A virtual currency is intangible and exists only in cyber space.<sup>10</sup> In other words, it is an intangible asset that allows you to effect payment in certain contexts. When Bitcoin was introduced in 2009, it was preceded by a white paper<sup>11</sup> supposedly authored by Satoshi. In this paper Satoshi states that transacting on the internet depends largely on financial institutions that can be trusted. He further indicates that these transactions are less effective in that they require that one must trust a third party, namely the financial institution. The problem with traditional transactions, as pointed out by Satoshi, is that the costs of transaction are higher exactly because of

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<sup>4</sup> Farrell, 4.

<sup>5</sup> Spruyt W 'An assessment of emergent functions of virtual currencies' 2018 TSAR 707-725 707.

<sup>6</sup> <https://www.techopedia.com/definition/17095/developer> (accessed 10 August 2018).

<sup>7</sup> 27.

<sup>8</sup> 27.

<sup>9</sup> Farrell, 5.

<sup>10</sup> Farrell, 6.

<sup>11</sup> S Nakamoto *Bitcoin: A Peer-to-Peer Electronic Cash System* (available at <https://bitcoin.org/bitcoin.pdf>)



the involvement of third parties, such as commercial banks and central banks. Hence, it is arguable that when Satoshi pointed out these problems, he was advocating for a solution in the form of Bitcoin. This is also evidenced by the number of users Satoshi convinced to use his virtual currency. Satoshi's intention with creating bitcoin was thus to invent a digital coin that does not rely on a third party or on a central authority, while also removing the need to trust a third party by creating a cryptographic proof-based trust. When Bitcoin was introduced in January 2009, it did not possess as much value as it does today.<sup>12</sup> The value of a single Bitcoin was less than the value of a dollar but in the year 2013 the value of bitcoin started increasing significantly.<sup>13</sup> Indeed, on 17 December 2017 the value of Bitcoin reached an all-time high of 19,783.06 US Dollar per Bitcoin.

After the birth of Bitcoin, many other virtual currencies followed.<sup>14</sup> The most prominent one was Litecoin in 2011.<sup>15</sup> Litecoin enjoyed the spotlight until Ripple was introduced in 2014. The main reason why Litecoin did not survive the invention of Ripple was that, unlike Litecoin, Ripple involved an entirely new model of virtual currency that was not a mere copy and improvement of Bitcoin.<sup>16</sup> In fact, Ripple is just a few steps behind Bitcoin in terms of market dominance. In addition to these examples, over 500 subtypes of virtual currencies were invented after Bitcoin.<sup>17</sup>

### 1.3 Brief chapter overview

This dissertation is composed of three main chapters other than the introduction and the conclusion chapter. The first of these, chapter 2, deals extensively with what virtual currencies are as well as the types of virtual currencies. Chapter 2 also sets out how some of these virtual currencies work. Chapter 3 then deals with the core issues. It focuses on the challenges that virtual currencies present for the law, while chapter 4 considers the possible future of virtual currencies globally. Chapter 5 contains the overall conclusion of this dissertation.

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<sup>12</sup> Farrell, 6.

<sup>13</sup> W Bolt 'On the value of virtual currencies' staff working paper 2016-42 1.

<sup>14</sup> E Retief "Accounting for Cryptocurrency" (2018) *Professional accountant* 10-12 10.

<sup>15</sup> R Balmahoon *Understanding price fluctuations of cryptocurrencies* (2017) MBA thesis Gordon Institute of Business Science University of Pretoria 12.

<sup>16</sup> 14.

<sup>17</sup> Farrell, 1.



## Chapter 2: What are virtual currencies?

### 2.1 Introduction

The purpose of this chapter is to consider what virtual currencies are and to identify the different types. Hence, I will investigate the different definitions attributed to the concept by various institutions, including South African regulatory bodies. Moreover, a special focus will fall on some of the examples of a subtype of virtual currencies, namely cryptocurrencies. An understanding of virtual currencies is essential to understand the discussions in subsequent chapters.

### 2.2 The South African Reserve Bank (SARB)

The SARB is the central bank of South Africa. It is a juristic person *inter alia* responsible for the maintenance of price stability and ensuring financial stability.<sup>18</sup> In 2014 the SARB saw it necessary, following an escalating interest in virtual currencies, to release a position paper on virtual currencies.<sup>19</sup> Position papers are often used to outline the position of the SARB on certain burning issues and in this instance the position paper was used to set out the position of the SARB on virtual currencies. These papers are not binding but have persuasive power.<sup>20</sup>

In the position paper, the SARB defines virtual currencies as referring to something that is electronically or digitally stored, can be bought or sold, possesses the ability to function as a medium of exchange and as a storage of certain value or unit of account but that does not have the status of legal tender.<sup>21</sup> It is especially crucial to emphasise at this point that virtual currencies do not qualify as legal tender. The definition of the SARB suggests that where a form or type of virtual currency is used as a method of payment, the transaction simply amounts to

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<sup>18</sup> <https://www.resbank.co.za/AboutUs/Pages/About%20Us-Home.aspx> (accessed 20 July 2018).

<sup>19</sup> The SARB *National Payment System Department Position Paper on Virtual Currencies* (Position paper number 02/2014).

<sup>20</sup> The SARB *Annual Regulatory and Oversight Report National Payment System Department* (2016/17) 5.

<sup>21</sup> The SARB *National Payment System Department Position Paper on Virtual Currencies* (Position Paper number 02/2014) 2.

bartering. Hence, the parties make an exchange, with one offering a virtual currency and the other offering in exchange a thing desired by the holder of the virtual currency.

The SARB, in explaining what virtual currencies are, divided virtual currencies into two types or categories.<sup>22</sup> These categories are namely convertible and non-convertible virtual currencies. The convertibility of such virtual currencies refers to whether they can be exchanged for real money or fiat currency, which in South Africa would be coins and notes issued or caused to be issued by the SARB. Apart from being convertible or non-convertible, virtual currencies can further be divided into centralised and decentralised virtual currencies. The centrality of virtual currencies refers to the existence of an administrative authority or body responsible for such virtual currencies. Virtual currencies controlled by such an administrative authority are therefore centralised and are usually not convertible into real money. The crucial difference notable here is that decentralised virtual currencies can be either convertible or non-convertible whereas centralised virtual currencies can never be convertible. Cryptocurrencies are typical examples of virtual currencies that are decentralised and convertible. The main reason why cryptocurrencies are considered to be an example of virtual currencies that are decentralised and convertible is that not only do most cryptocurrencies not have a central authority but they can also be exchanged for real money (fiat currency).

### **2.3 The Financial Action Task Force (FATF)**

The FATF is a body that was formed in 1989 by a group of ministers of countries who became the first members.<sup>23</sup> The FATF is an intergovernmental organisation and is currently made up of 37 member countries, including the Republic of South Africa.<sup>24</sup> The FATF's primary focus is to combat money laundering and the financing of terrorism activities.<sup>25</sup> Since South Africa is a member of the FATF, it is notable that the approach of the SARB does not differ that much from the FATF's approach. After

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<sup>22</sup> The SARB *National Payment System Department Position Paper on Virtual Currencies* (Position Paper number 02/2014) 2.

<sup>23</sup> <http://www.fatf-gafi.org/about/> (accessed 21 July 2018).

<sup>24</sup> <http://www.fatf-gafi.org/about/membersandobservers/> (accessed 21 July 2018).

<sup>25</sup> <http://www.fatf-gafi.org/about/whatwedo/> (accessed 21 July 2018).

discussing the FATF's approach, which is very similar to that of the SARB, some differences will be noted.

According to the FATF, virtual currencies should be distinguished from fiat currencies because they do not qualify as real currency, real money or national currency.<sup>26</sup> The primary reason for this is because they are not issued by any jurisdiction or authority entrusted with the issuing of legal tender. A question of interest would be what would happen should an authority in future give legal tender status to a virtual currency.

The FATF equates the meaning of virtual currency to both digital currency and e-money.<sup>27</sup> The effect of this is that such words are synonymous and thus usable interchangeably, which (as explained below) essentially differs from the South African position. The FATF more specifically defines virtual currencies as "a digital representation of value that can be digitally traded and functions as a medium of exchange, and/or a unit of account, and/or a store of value, but does not have legal tender status in any jurisdiction".<sup>28</sup> The definition of virtual currencies according to the FATF is in line with the primary objectives of this institution (as mentioned above) to combat the financing of terrorism as well as money laundering. It is unlikely that the FATF intends to encourage the recognition of virtual currencies but instead its goal is probably to caution against its use considering the opportunities such currencies create for money laundering and terrorism financing. The possible results would be to decrease the market and thus minimise the possibilities of money laundering and other criminal activities.

Like the SARB in South Africa, the FATF divides virtual currencies into two types. These types are (1) convertible or open virtual currencies and (2) non-convertible or closed virtual currencies. The term convertible virtual currencies here also mean that such virtual currencies can be converted into money, but according to the FATF this is because there is a market wherein people are willing to offer virtual currencies in exchange for money and thus not because it is regulated by law as such.<sup>29</sup> It can be assumed that in the absence of this market, convertible virtual currencies cannot exist. The FATF compares centralised virtual currencies to non-

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<sup>26</sup> The FATF *Report Virtual Currencies Key Definitions and Potential AML/CFT Risks* (2014) 4.

<sup>27</sup> 4.

<sup>28</sup> 4.

<sup>29</sup> 5.

centralised virtual currencies by pointing out that the crucial difference between the two is that centralised virtual currencies have an issuer who acts not only as an issuer but also as the administrator who establishes the rules for using such a currency.<sup>30</sup> On the other hand, decentralised virtual currencies have no central administrator but are issued by an open source math-based system that operates on a peer to peer basis.

As mentioned above, unlike the SARB, the FATF does not recognise the difference between electronic money (e-money) and virtual currencies. Therefore, the terms are regarded as synonymous. According to the SARB Position Paper, the crucial difference between e-money and virtual currencies is that e-money represents an existing set of amounts that the issuer has in his or her account and which can be exchanged for physical money at the bank or equivalent institution.<sup>31</sup> Another important difference is that virtual currencies function without the involvement of a central or even a commercial bank, whereas e-money falls under the scope of the Banks Act 94 of 1990.<sup>32</sup> The SARB Position Paper defines e-money as “electronically stored monetary value issued on receipt of funds and represented by a claim on the issuer”.<sup>33</sup> Therefore, in South Africa e-money and virtual currencies are two different concepts with different statuses.

## **2.4 The National Treasury User Alert**

It is evident at this point that there are various definitions of the concept of virtual currency, although the different definitions tend to be very similar. It is also important to establish a common understanding of this concept particularly when considering the expected future regulation and law enforcement developments. Such a common ground came in 2014 when the National Treasury together with the SARB, the SARS (the South African Revenue Services), the FIC (the Financial Intelligence Centre) and the FSB (the Financial Services Board – now known as the Financial Services Conduct Authority), issued a user alert to warn those who are subscribers of virtual

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<sup>30</sup> 5.

<sup>31</sup> The SARB *National Payment System Department Position Paper on Electronic Money* (Position Paper number 01/2009) 4.

<sup>32</sup> Section 11.

<sup>33</sup> The SARB *Annual Regulatory and Oversight Report National Payment System Department* (2016/17) 5.

currencies or who may want to subscribe.<sup>34</sup> The user alert naturally contained a definition of virtual currencies.

The explanation contained in the user alert was relatively straightforward. It refers to virtual currencies as a unit of account that is created electronically or digitally and stored in the same manner.<sup>35</sup> Moreover, the subscribers of virtual currencies accept or equate the value of virtual currencies to the South African Rand or any other fiat currency of another country. Hence, if a subscriber values a certain sum of virtual currency units as equal to R100, he or she will likely accept such virtual currency as payment for goods worth such value. Although subscribers of virtual currencies view them the same as traditional fiat currencies, a crucial difference noted in the user alert is that there is no central authority similar to a central bank and thus a virtual currency is not regulated. The alert makes use of the famous Bitcoin as an example of one of the virtual currencies in circulation. It points out that Bitcoin can be bought and sold using traditional currencies such as the South African Rand and the US Dollar.<sup>36</sup> The nature of this form of virtual currency allows it to serve as what can be viewed or perceived as an “international currency” because it knows no borders and can be used to make payment all over the world, provided that the payee is willing to accept it.

## **2.5 Examples of virtual currencies and a brief explanation of how Bitcoin operates**

There are many virtual currencies – whether centralised or decentralised, and whether convertible or non-convertible. Some of the most well-known examples are as follows:

- Ethereum, with an estimated market value of more than €28,6 billion, was created by Vitalik Buterin in 2015.<sup>37</sup>
- Ripple, with a market value of more than €10,3 billion, was created by Ryan Fugger, David Schwartz and Authur Britto and was introduced in 2012.<sup>38</sup>

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<sup>34</sup> National Treasury *User alert monitoring of virtual currencies* (2014) 1.

<sup>35</sup> 1.

<sup>36</sup> 3

<sup>37</sup> M Milutinovic “Cryptocurrency” (2018) 64 *Scientific Review Article* 104-122 113.

- Litecoin, viewed as the younger brother of Bitcoin, was introduced by Charles Lee in 2011.<sup>39</sup> It is said that since Litecoin has not yet find its real use, it serves as a backup for the possible fall of Bitcoin.

In this research regular reference is made to Bitcoin and this is because Bitcoin is the most used virtual currency and indeed one of the pioneering virtual currencies. As such it is necessary to briefly consider how Bitcoin works. The focus here will be on what the inventors of Bitcoin would want a person who uses it to know and not necessarily the technology behind it, since the current research focusses not on technology but on law.

The starting point is what I would like to call the “mint of Bitcoin”, which is where Bitcoin is created. The creation of Bitcoin is by a process known as Bitcoin mining.<sup>40</sup> This process is done by participants who are known as Bitcoin miners. Due to the nature of Bitcoin mining the Bitcoin miners are usually people with broad knowledge of computers and particularly computer programming. On top of the knowledge that the miner must necessarily possess, he or she must also download the free software which will then be used to solve the complex math problem. The math problem in this context is no ordinary math but solving problems that verify such Bitcoin. Solving this problem entails combining numerous transactions to form a block and therefore proving that the transaction took place to avoid the double spending of the Bitcoin. Bitcoin mining takes approximately 10 minutes.

Furthermore, a Bitcoin miner can join forces with other Bitcoin miners to solve the problem forming what is known as a mining pool. If the math problem has been successfully solved, the Bitcoin network will accept such solution and consequently generate a new Bitcoin and award it to the Bitcoin miner. This is similar to gold mining but different in that here the miner himself is rewarded. This is therefore the way in which a Bitcoin enters a Bitcoin circulation. In addition to this, those in need of Bitcoins can obtain Bitcoins that are already in the circulation as gifts or by buying them at a Bitcoin kiosk. The most common use of Bitcoin is its acceptance as a method of payment or remuneration. The transferring of Bitcoin is done by obtaining the Bitcoin address of the person whom the owner wants to transfer the Bitcoin to. A

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<sup>38</sup> 113.

<sup>39</sup> 113.

<sup>40</sup> K Lyndell *Virtual currencies: regulatory and tax compliance issues* (2014) 9.



Bitcoin address is basically a string of numbers and letters which is safeguarded by cryptography to avoid any form of tampering.<sup>41</sup> The person who is transferring the Bitcoins will then authorise the transfer by using his or her private key.<sup>42</sup> The private key is like a password that ensures that the person transferring it is the rightful owner. After the transaction has taken place, it can never be revoked. Bitcoin transactions are recorded in a blockchain, which is a public ledger containing all the transactions' dates, amounts and times.<sup>43</sup>

## 2.6 Conclusion

A few international institutions are trying to study the concept of virtual currency to come up with a proper definition and classifications of virtual currencies. Understanding what virtual currencies generally are, is the beginning of finding the solutions that we may later need given the growing number of cryptocurrencies. In this chapter we noted that virtual currency is a broad term. It for instance comprises subtypes, namely convertible and non-convertible virtual currencies. Virtual currencies can also be divided into centralised and non-centralised virtual currencies.

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<sup>41</sup> 8  
<sup>42</sup> 8.  
<sup>43</sup> 8.

## Chapter 3:

# The challenges and legal implications of virtual currencies

### 3.1 Introduction

The purpose of this chapter is to investigate the legal implications of virtual currencies, particularly when it comes to law enforcement and regulation. Therefore, this chapter will discuss some of the main the legal implications of cryptocurrencies with reference to money laundering, terrorism financing, taxation, and consumer protection. Each of these aspects will be discussed below under separate headings.

### 3.2 Money laundering

It is important to first establish what exactly money laundering is in the South African context before showing the link between virtual currencies and money laundering. In South Africa, apart from money laundering being defined by authors, it is also defined by the Financial Intelligence Centre Act 38 of 2001 (FICA). The Act defines money laundering as “an activity which has or is likely to have the effect of concealing or disguising the nature, source, location, disposition or movement of the proceeds of unlawful activities or any interest which anyone has in such proceeds and includes any activity which constitutes an offence in terms of section 64 of this act”.<sup>44</sup> This definition is broad and can be narrowed down to simply meaning the concealment of the proceeds of illegal or criminal activities. Money laundering in South Africa is not addressed only in terms of the FICA but also by other statutes.

Another statute dealing with money laundering is the Prevention of Organised Crimes Act 121 of 1998 (POCA). The FICA defines money laundering as an activity but the POCA defines money laundering as a criminal offence. Hence the crime of money laundering and other related activities are created by the POCA. In this regard the POCA states that

“anyone who knows or ought reasonably have known that property is or forms part of the proceeds of unlawful activities and enters into agreement or engages

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<sup>44</sup> S 1 of FICA.

in any arrangement or transaction is legally enforceable or not; or performs any other act in connection with such property whether it is performed independently or in concert with any other person, which has or is likely to have the effect of concealing or disguising the nature, source, location, disposition, or movement of the said property or the ownership thereof or any interest which anyone may have in respect thereof or of enabling or assisting any person who committed or commits an offence, whether in the Republic or elsewhere to avoid prosecution, or to remove or diminish any property acquired directly or indirectly, as a result of the commission of an offence shall be guilty of an offence".<sup>45</sup>

Although the definition appears to be very long, the length is justifiable in that it broadens the scope of offences that could fall under the definition.

The Financial Intelligence Centre (FIC) is responsible for the combating of money laundering.<sup>46</sup> This means it also has a role to play with respect to the future of virtual currencies in South Africa.

The FATF has complimented South Africa on its pursuits regarding the fighting of money laundering.<sup>47</sup> Hence, considering the level at which the FATF addresses money laundering, it is safe to say that South Africa is one of the countries that are doing well in fighting money laundering. This makes it important to also consider the definition of money laundering as defined by the FATF. The definition of the FATF is less broad, since it defines money laundering as a process that criminals use to disguise the proceeds of their illegal activities.<sup>48</sup> Basically money laundering allows criminals to spend money without any fear of it being found that such money was generated from illegal activities.<sup>49</sup>

The possible use of virtual currencies to commit money laundering signals a red light for subscribers and those who would like to subscribe to virtual currencies. To understand how virtual currencies and money laundering are connected, it is necessary to consider the process of money laundering. Money laundering in most cases takes place in what can be titled "the three stages of money laundering".<sup>50</sup> These stages are namely placement, layering and re-integration. It is worth noting

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<sup>45</sup> S 4 of POCA.

<sup>46</sup> S 3 (1) of FICA.

<sup>47</sup> The FAFT *Mutual evaluation report anti-money laundering and combating the financing of terrorism: South Africa* (2009) 6.

<sup>48</sup> <http://www.fatf-gafi.org/faq/moneylaundering/> (accessed 25 September 2018).

<sup>49</sup> MS Moodley *Money laundering and countermeasures: a comparative security analysis of selected case studies with specific reference to South Africa* (2008) Master of Security Studies thesis University of Pretoria 8.

<sup>50</sup> 8.

that these three stages are not a rigid requirement to qualify an activity or chain of events as money laundering.

The placement stage in the money laundering cycle begins with the procurement of money through illegal activities. This illegal activity could be something like drug dealing or bank robbery, but conceivably it can be any crime that earns the assailant money. After procuring the illegal money, it is introduced to (or placed in) a legitimate financial market. There could be a wide variety of placement methods, but one example is the opening of multiple bank accounts and then depositing small amounts of cash in them, which would probably not attract the attention of the authorities. The method of placement will often depend on the manner in which the illegal proceeds were generated.

The layering stage is the stage where multiple transactions take place. It entails the conversion or movement of the relevant funds. The purpose of this stage is to separate, as far as possible, the illegal activity from the proceeds that derived from such an activity.

The third stage, namely integration, generally involves the return of these proceeds to the criminals. At this stage the returned proceeds will appear to be the proceeds of a lawful activity, since the money has been successfully “cleaned” of their illegality by the three-stage circle. The successful execution of these three stages will at most result in the criminals getting away with both the original offence itself as well as the proceeds of such offense. Hence, the introduction of another platform through which money laundering can be carried out (namely the trade in virtual currencies) represents an increase in the potential problems that the law enforcement and regulatory bodies could experience to combat money laundering.

When considering the three stages of the money laundering cycle, virtual currencies fit in the placement stage in that a criminal committed a criminal offense (for instance by selling drugs) and was remunerated by way of a virtual currency. Virtual currencies could also become part of money laundering in the layering stage. For instance, the proceeds of a crime (in normal currency) could be used to purchase various virtual currencies for distribution. Lastly, virtual currencies could be relevant at the integration stage, where the proceeds of illegal activities are returned to the criminals in the form of a virtual currency. This could allow them to make

various purchases within platforms that accept virtual currencies as a method of payment.

To my knowledge, there has not yet been a reported case in South Africa where money laundering had taken place using virtual currencies or where virtual currencies were used for illegal activities. In a case that was heard in the United Kingdom,<sup>51</sup> a company applied for an extension of an injunction order it had sought from the court a quo and that was granted against an unknown person. This unknown person against whom the order was sought had managed to hack into the computer systems of this UK company and stole a large amount of data from this company. The information was valuable because it included confidential files that would cause chaos if it was leaked. As expected, the unknown person started to use the information to blackmail the company by requesting money in exchange for not exposing their information to the public. For present purposes it is not necessary to delve into the details of the judgment, except to point out that this person demanded payment in a virtual currency, namely Bitcoin, due to the high level of anonymity and protection that it offers. The demand was for Bitcoin to the value of £300.

Another case worth considering is that of *R v Mudd*.<sup>52</sup> In this case the appellant had created what he had named the Titanium Stressor. This Titanium Stressor was a computer system which could be used for what is known as DDoS (distributed denial of service). The DDoS could be used against the users of the World-Wide-Web (www). The way these attacks worked was that it slowed down or completely interrupted the regular traffic of a website by filling it with a load of additional bogus data requests.

The appellant in this case produced this device in his room despite being less than 18 years of age. He started distributing these devices to his customers so that they too could launch their own attacks. The appellant had 112298 users who had launched close to 1738828 attacks, including the attacks launched by the appellant himself. The appellant had received a total of 269.81 Bitcoins as payment for the packages he supplied to his users. The value of the proceeds that the appellant had received was US\$74 306.40. This case provides an example of how virtual currencies can be used for money laundering. A person in the position of this

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<sup>51</sup> *PML v Person (s) Unknown* [2018] EWHC 838 (QB).

<sup>52</sup> [2017] EWCA Crim 1395.

appellant could have been apprehended easier had he been paid through an ordinary payment method, since the fact that he was unemployed would have attracted attention to him when he started receiving huge sum of money. This would not necessarily be the case if one receives payment in Bitcoin.

In *R v Teresko*<sup>53</sup> the police searched the home of the defendant, a suspect of drugs and money laundering of which he was later successfully convicted. When the police were searching, they discovered a small paper which contained information of a Bitcoin recovery phrase. The phrase enabled the police to seize 295 Bitcoins worth €975 000. This case is just another example to show how fragile and susceptible virtual currencies are to be used for criminal activities, including but not limited to money laundering. In this case, if it were not for the almost coincidental discovery of the piece of paper, the authorities might never have discovered the compensation paid to the defended in relation to the drug sales.

The reason why it is tempting to use cryptocurrencies like Bitcoin as a method of payment in the context of illegal activities is because of their high level of anonymity.<sup>54</sup> Indeed, in an effort to try to jointly come up with ideas to fight the use of virtual currencies for illegal activities, the law enforcement agencies of South Africa and the United States of America met in the beginning of April 2018 in Pretoria.<sup>55</sup> It cannot be denied that South Africa can learn a lot from the US law enforcement agencies because early in 2018 they successfully prosecuted Thomas Mario Costanzo who was responsible for money laundering involving virtual currencies, in particular Bitcoin.<sup>56</sup> The Bitcoins involved in the latter instance of money laundering was about 80.95.

### 3.3 Terrorism financing

Whenever money laundering is discussed, terrorism financing comes into the picture as well, because the two concepts are closely related. It is thus important to discuss

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<sup>53</sup> [2018] Crim.L.R.81.

<sup>54</sup> A Kempen "Investigations: when criminals use the dark web and virtual currency to hide their illegal activities" (2018) 111 *Servamus* 54-55 55.

<sup>55</sup> 54.

<sup>56</sup> *United States v Costanzo* (2:17- Cr-00585) District Court 17 Arizona.

the relationship or connection between virtual currencies and the financing of terrorism activities.

The United Nations (UN) Security Council defines terrorism as “criminal acts, including against civilians, committed with the purpose to provoke a state of terror in the general public or in a group of persons or a particular person, intimidate a population or compel a government or an international organisation to do or to abstain from doing any act”.<sup>57</sup> The UN has gone further to describe an act of terrorism as an act intended to result in harmful consequences including both death and severe bodily harm.<sup>58</sup> This act is aimed at intimidation, be it of a group of people or of the authorities.<sup>59</sup>

One offence potentially associated with virtual currencies is the act of purchasing illegal items such as weapons, child abuse material and drugs.<sup>60</sup> In essence, virtual currencies can possibly be utilised for the purchase of unlawful instruments by perpetrators of illicit crimes such as mass killing of civilians or threatening the authorities. These instruments might be purchased on what is known as the “dark web” using various types of virtual currencies such as Bitcoin. The dark web is like the “black market” of websites but can only be accessed by those with advanced knowledge of computers.<sup>61</sup> The dark web (also known as the “deep web”) is involved in the sale of a lot of illegal items, including drugs, since the true identities of buyers and sellers are not revealed or known. Hence the dark web is the perfect market for terrorists to buy their weapons using Bitcoins or other virtual currencies without the authorities finding out.

A typical example of a website that was used for the purchase of illegal instruments is the Silk Road website.<sup>62</sup> The website accepted Bitcoins for the purchase of illicit instruments such as malicious software programs and fake passports. When the law enforcement agencies discovered the website, they seized approximately 174000 Bitcoins, which was valued at approximately US\$34 million (about R544 800 000) at the time of seizure. As evidence of how difficult it is to

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<sup>57</sup> UN Security Council Resolution 1566 (2004).

<sup>58</sup> UN Security Council Resolution 1566 (2004).

<sup>59</sup> UN Security Council Resolution 1566 (2004).

<sup>60</sup> UNODC *Basic manual on the detection and investigation of the laundering of crime proceeds using virtual currencies* (2014) 26.

<sup>61</sup> ZK Goldman *Terrorist use of virtual currencies: containing the potential threat* (2017) 6.

<sup>62</sup> Lyndell 27.

discover illegal dealings involving virtual currencies and dark websites, it took the FBI (Federal Bureau of Investigations), the DEA (Drug Enforcement Administration) and other crime investigation agencies from Australia, Iceland, Ireland and France to solve the Silk Road case. Another example is found in research conducted by the FFI (Norwegian Defence Research Establishment), wherein evidence was presented that terrorists were making use of the internet to move funds using virtual currencies.<sup>63</sup>

The FAFT has also conducted research on the use of virtual currencies for the financing terrorism activities, since one of its primary objectives is to combat the financing of terrorism. In this research the FAFT identified the existence of virtual currencies as presenting a high risk for the use of terrorist financing.<sup>64</sup>

The use of virtual currencies for terrorism financing has already begun, since certain terrorist websites have been identified as requesting donations in the form of virtual currencies.<sup>65</sup> Instances of terrorists discussing the possibility of using virtual currencies to purchase weapons have also been discovered on the internet. A case in this regard is that of Ali Shakri Amin who was convicted for conspiracy.<sup>66</sup> Amin had used Twitter in his crime of conspiracy, where he gave assistance on how Bitcoin can be used to fund the Islamic State, a terrorist group commonly known as ISIS. According to Amin, Bitcoin was the most convenient way of securing donations to assist in transporting and support of FTFs (Foreign Terrorist Fighters). Amin even went to the extent of sharing an article on how virtual currencies, especially Bitcoin, could be used to fund Jihadis.

The reason why virtual currencies are attractive for terrorists is because of the benefits they offer, most importantly the anonymity that they offer.<sup>67</sup> Indeed, anonymity makes virtual currencies appealing to terrorist because virtual currencies can potentially be used without attracting the attention of the authorities.<sup>68</sup> One reason for this is that the requirements for creating a digital wallet (in which the virtual currency is stored) are not as rigid as those for opening a bank account. All

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<sup>63</sup> N Magnus *Understanding terrorist finance: modus operand and national CTF-regimes* (2015) Swedish Defence University Report 6.

<sup>64</sup> The FATF Report *Emerging Terrorist Financing Risks* (2015) 35.

<sup>65</sup> 33.

<sup>66</sup> 36.

<sup>67</sup> J Everette "Risks and vulnerabilities of virtual currency: cryptocurrency as a payment method" *public-private analytic exchange program* (2017) 10.

<sup>68</sup> 10.



that is required to open a digital wallet is an email address, but when opening a bank account, one needs to comply with the requirements of the FICA. These requirements include the providing of proof of identity and of one's residential address.<sup>69</sup> This means that if terrorists were to use bank accounts, the authorities will more easily become aware of illegal activities. On the other when creating an email address to open your digital wallet, you are not compelled to use your actual name, and therefore a false identify can be used. This in turn means that the same false identity used to create an email address could be used to create a digital wallet.

Another feature that attracts terrorists to virtual currencies is that there is currently either limited or no authorities regulating or imposing laws on the users of virtual currencies. A central goal of terrorists is naturally to stay away from the authorities as far as possible, and thus virtual currencies seem ideal. Another useful feature of virtual currencies is that they can be easily transferred globally without involving commercial banks or central banks. This makes it ideal for international terrorist groups.

According to Europol, the use of virtual currencies for financing terrorism is only an emerging and potential threat or risk.<sup>70</sup> Notwithstanding, there remains a risk that the use of virtual currencies for the financing of terrorism could become more common as time goes by. For instance, it was reported by the Indonesian government that Bahrun Naim, an ISIS organisation in Indonesia suspected of a terrorist attack at Jakarta in 2016, used Bitcoin transactions to fund itself and other Jihadis.<sup>71</sup> The US government has also found evidence of a Palestinian group raising funds through low-value Bitcoins.<sup>72</sup>

### **3.4 Taxation and tax evasion**

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<sup>69</sup> FICA requirements.

<sup>70</sup> D Carlisle *Occasional paper virtual currencies and financial crime challenges and opportunities* Royal United Services Institute for Defence and Security Studies 17.

<sup>71</sup> K Milt *Virtual currencies and terrorist financing: assessing the risks and evaluating responses counter terrorism* Policy Department for Citizens' Rights and Constitutional Affairs European Parliament 38.

<sup>72</sup> Carlisle, 18.

Tax evasion refers to the non-payment of tax under circumstances where there was a legal duty for the person to pay tax.<sup>73</sup> Tax evasion falls in the broader category of financial crimes and is therefore achieved through illegal means. One of the ways in which tax payers evade tax is by concealing information from the authorities, more specifically SARS (the South African Revenue Services). The question is whether the nondisclosure of income derived from transactions involving virtual currencies can amount to tax evasion. This question can be answered by investigating the taxation laws in South Africa.

The first step in determining a person's taxable income is to look at the definition of gross income. Gross income is defined in terms of the Income Tax Act 58 of 1962, in respect of South African residents and in relation to the year or period of assessment, as the total amount, in cash or otherwise received by or accrued to or in favour of such South African resident or in the case of any other person other than a South African resident, as the total amount in cash or otherwise received by or accrued to or in favour of such person from a source within or deemed to be within the Republic of South Africa.<sup>74</sup> This definition reveals certain issues that could have an impact on whether or not virtual currencies should be subjected to income tax.

One of the questions is what qualifies as "cash or otherwise" per the definition. The Income Tax Act does not define "cash or otherwise" and as such answers must be found in case law. In this regard it was found in the case of *WH Lategan v CIR*<sup>75</sup> that:

"unless the word 'amount' meant something more than amount of money the definition given in the act would not seem to be wide enough to include the 'value' of property or rights earned by the taxpayer unless they were benefits granted in respect of employment. The legislature could hardly, however have intended such a result because then it would be open to any taxpayer (who did not earn his income by employment) to receive payment in some form other than money and thus escape taxation".

In the case *Watermeyer J* suggested that if the term "in cash or otherwise" was limited to money, those who received their income in other forms would escape taxation or will not be liable for tax. Based on this reasoning, one can deduce that it

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<sup>73</sup> J Viljoen *Lessons learnt from history: tax evasion* (2016) MCom Taxation thesis University of Pretoria 14.

<sup>74</sup> S 1.

<sup>75</sup> 1926 CPD 203 209.

does not matter whether or not virtual currencies are legal tender; it is enough that they have a monetary value. Virtual currencies fall within the scope of “cash or otherwise” because they can be converted into money. What follows will be to consider whether virtual currencies that cannot be converted into money also qualify as “cash or otherwise”.

In the case of *CSARS v Brummeria Renaissance (Pty) Ltd*<sup>76</sup> emphasis was placed on the fact that the concern is not whether the receipts are convertible to money but that they must have monetary value. Therefore, in this context even virtual currencies that are not convertible but that at least have a monetary value, can probably be regarded as “cash or otherwise”.

The definition of a person’s gross income excludes receipts or accruals of a capital nature, but this does not automatically exclude such receipts from being taxed, since they can still be subjected to capital gains tax.<sup>77</sup> There is unfortunately no legislative definition of what constitutes capital. The informative case in this regard is the case of *CIR v Visser*.<sup>78</sup> In this case Maritz J distinguished income from capital by using the so-called fruits test. According to this test income is the fruits while capital is the tree. Hence, income is the product of capital. When considering the taxation of virtual currencies, we should also consider what happens when virtual currencies are sold or disposed of. The question demands that we define the term “asset”. An asset is defined as a variety of property, whether immovable or movable to the exclusion of currency.<sup>79</sup> This definition qualifies virtual currencies as assets because the SARB position paper (discussed in chapter 2) states that virtual currencies are not legal tender or currency. This means that the sale of virtual currencies at a profit will attract liability for capital gains tax.<sup>80</sup>

Various authors and jurisdictions have discussed the taxation of virtual currencies and the challenges relating to it. It is generally accepted that virtual currencies should be taxed. For instance, Berger holds that the present taxation laws in South Africa allow for the taxation of Bitcoins although they do not explicitly

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<sup>76</sup> [2007] 4 All SA 1338 (SCA).

<sup>77</sup> S 1.

<sup>78</sup> 1987 TPD, 8 satc 271 at 276.

<sup>79</sup> Income Tax Act 58 of 1962, schedule 8.

<sup>80</sup> LL Berger *Bitcoin exchange transactions: Income tax implications to consider within the South African environment* (2016) MCom Taxation North West University 53.

classify Bitcoins as taxable.<sup>81</sup> Although the laws in place suggest the taxation of virtual currencies, there is still some degree of uncertainty, which SARS sought to address in 2018.<sup>82</sup> The challenges that SARS and other tax authorities all over the world are faced with are that they sometimes depend on third parties to share information about a taxpayer's dealings.<sup>83</sup> Hence, virtual currencies present a challenge because there is no third party (like a bank) that could provide the necessary information. This would instead require taxpayers themselves to disclose their income or gains to the tax authorities. The fact that virtual currencies are not physical money but are electronically stored (in a digital wallet) renders it relatively easy for taxpayers to lie about their taxable income and/or capital gains in as far as these are held via a virtual currency.

There is a debate on whether virtual currencies can be regarded as tax havens.<sup>84</sup> Tax havens generally allow tax payers to evade tax in that they have no duty of sharing information, do not levy tax at all, or charges tax at low rates.<sup>85</sup> The debate is based on the fact that authorities find it difficult to ascertain who has virtual currencies or who engages in the trade of virtual currencies, unless such a person him- or herself discloses such information. Virtual currencies, particularly cryptocurrencies, are therefore potentially attractive for tax evaders. What makes cryptocurrencies a tax haven is basically two of its characteristics. Firstly, they do not fall within any particular jurisdiction and thus exist only in the web.<sup>86</sup> Secondly, they offer anonymity to taxpayers. Another possible issue in the context of the taxation of virtual currencies is that some people might have no knowledge of the fact that their virtual currencies form part of their taxable income.<sup>87</sup>

Another form of tax to be considered is indirect tax and in particular Value Added Tax (VAT). In South Africa VAT is regulated by the Value Added Tax Act 89 of 1991. This Act exempts financial services from VAT liability.<sup>88</sup> An example of this exemption is when a person exchanges South African Rands for US Dollars or vice

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<sup>81</sup> 75.

<sup>82</sup> Retief, 11.

<sup>83</sup> 11.

<sup>84</sup> O Marian "Are cryptocurrencies super tax havens?" (2013) *Michigan Law Review* 38-48 39.

<sup>85</sup> 40.

<sup>86</sup> 42.

<sup>87</sup> A Bal *Taxation of virtual currency* (2014) PhD thesis Leiden University 272.

<sup>88</sup> J Lebos *Value-added tax and financial services* (2017) MCom Taxation thesis University of the Witwatersrand 3.

versa. To determine whether this exemption applies to the exchange of virtual for real currencies (and vice versa), one must consider the definition of financial services per this Act and other relevant definitions. The VAT Act defines financial services for the purpose of VAT as “the exchange of currency (whether effected by the exchange of bank notes or coin, by crediting or debiting accounts, or otherwise); the issue, allotment, drawing, acceptance, endorsement or transfer of ownership of a debit security [...]”.<sup>89</sup> Other definitions that are relevant for this discussion are the definitions of currency and of a cheque. The Act defines a cheque as “a bill drawn on a bank payable on demand, a postal order, a money order, a traveller’s cheque, or any order or authorisation (whether in writing, by electronic means, or otherwise) to a financial institution to credit or debit any account”.<sup>90</sup> Currency refers to “any banknote or other currency of any other country, other than when used as a collector’s piece, investment article, item of numismatic interest, or otherwise than as a medium of exchange”.<sup>91</sup>

In view of the above, it is important to note the position of SARS regarding cryptocurrencies. According to SARS, normal tax laws shall apply to virtual currencies with the onus resting on the holder of the virtual currencies to disclose that he or she possesses such virtual currencies.<sup>92</sup> Although SARS threatens that failure to disclose may result in the charging of interest and penalties, it does not explain how they will know who owns such virtual currencies considering the anonymous nature of ownership of such currencies. SARS is still waiting for policy reviews as to whether VAT registration will be required for the purposes of supplying virtual currencies.<sup>93</sup> If SARS decides that a person must register for VAT to supply virtual currencies, one difficulty may be that they could struggle to identify the suppliers of virtual currencies, since these tend to be anonymous (or operate under fictitious names) as well – as is the case with Bitcoin.

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<sup>89</sup> S 2 of the VAT Act.

<sup>90</sup> S 2(2)(i).

<sup>91</sup> S 2(2)(ii).

<sup>92</sup> The SARS SARS’ stance on the tax treatment of cryptocurrencies (available at <http://www.sars.gov.za/Media/MediaReleases/Pages/6-April-2018---SARS-stance-on-the-tax-treatment-of-cryptocurrencies-.aspx>).

<sup>93</sup> The SARS SARS’ stance on the tax treatment of cryptocurrencies (available at <http://www.sars.gov.za/Media/MediaReleases/Pages/6-April-2018---SARS-stance-on-the-tax-treatment-of-cryptocurrencies-.aspx>).

The main reason why we need to look at the possible regulation of virtual currencies is because most of the challenges presented by virtual currencies probably stem from the absence of regulation. Globally, there are over 700 virtual currencies that are operating in the absence regulation.<sup>94</sup> In South Africa, there is currently no legislation that explicitly deals with virtual currencies. We should, however, give credit to the regulatory bodies of South Africa that came together to issue a “user alert” to warn South Africans of some of the implications of virtual currencies. The most recent development is the draft of the Taxation Laws Amendment Bill,<sup>95</sup> which is intended to amend the Income Tax Act 58 of 1962.<sup>96</sup> The Amendment Bill proposes to amend the definition of “financial instrument” in the Income Tax Act.<sup>97</sup> The current definition read as follows:

“Financial instrument includes:

- (a) Loan, advance, debt, stock, bond, debenture, bill, share, promissory note, banker's acceptance, negotiable certificate of deposit, deposit with a financial institution, a participatory interest in a portfolio of a collective investment scheme, or a similar instrument;
- (b) Any repurchase or resale agreement, forward purchase arrangement, forward sale arrangement, futures contract, option contract or swap contract;
- (c) Any other contractual right or obligation the value of which is determined directly or indirectly with reference to-
  - (i) A debt security or equity;
  - (ii) Any commodity as quoted on an exchange; or
  - (iii) A rate index or a specified index;
- (d) Any interest-bearing arrangement; and
- (e) Any financial arrangement based on or determined with reference to the time value of money or cash flow or the exchange or transfer of an asset.”

The Amendment Bill proposes the removal of the word “and” at the end of paragraph (d) and the insertion of the word “and” at the end of paragraph (e). Hence, a new paragraph (f) will also be introduced, which will insert the words “any cryptocurrency”. Therefore, the affected paragraphs will now read as follows:

“(d) Any interest-bearing arrangement;

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<sup>94</sup> K Mothokoa *Regulating crypto-currencies in South Africa: the need for an effective legal framework to mitigate the associated risks* (2017) LLM dissertation University of Pretoria 2.

<sup>95</sup> Draft Taxation law bill 16 July 2018.

<sup>96</sup> Clause 1.

<sup>97</sup> Section 1.

- (e) Any financial arrangement based on or determined with reference to the time value of money or cash flow or the exchange or transfer of an asset; and
- (f) Any cryptocurrency.”

The Bill further proposes the amendment of section 20A of the Income Tax Act.<sup>98</sup> The proposed amendment will move the word “or” from the end of subsection (2)(b)(vii) to the at the end of subparagraph (viii), while a new subparagraph (ix) will also be introduced. The effect of the addition of subparagraph (ix) is the addition of the words “the acquisition or disposal of any cryptocurrency”. The new wording of the Act, after the proposed amendments, will read as follows:

- “(vii) Any form of performing or creative arts practised by that person or any relative;
- (viii) Any form of gambling or betting practised by that person or any relative; or
- (ix) The acquisition or disposal of any cryptocurrency.”

Another Act that will be amended by this Bill is the Value Added Tax Act.<sup>99</sup> The section to be amended in this Act is section 2(1).<sup>100</sup> The Bill introduces subparagraph (o), which will read as follows:

“The issue, acquisition, collection, buying or selling or transfer of ownership of any cryptocurrency”

The effect of this insertion is that the issue, acquisition, collection, buying or selling, or transfer of ownership of cryptocurrency will fall within the definition of financial services for purposes of value added tax. The purpose of this proposed amendment is to answer the question of whether virtual currencies should be taxed and if so, how. Noteworthy is that the Bill is yet to come into effect. Although the proposed amendment sheds some light on the challenge of taxation, it does not address the issue of how SARS will know who has virtual currencies and who does not. Hence, until such time that SARS and other bodies, including international bodies, come up with a way of identifying parties who have virtual currencies, virtual currencies will probably remain a tax haven for those who want to evade tax.

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<sup>98</sup> Clause 35.

<sup>99</sup> 89 of 1991.

<sup>100</sup> Clause 88.

### 3.5 Enforcement of the law

The definition of law has always suggested that where there are laws put in place or to be put in place such laws will be enforceable by law enforcement agencies.<sup>101</sup> We learn from the debate of jurisprudence on what is law. One of the views is that law becomes law when it is backed by a sanction.<sup>102</sup> In this instance it is of no relevance whether or not the aforementioned view by ancient jurists is correct or not but we adopt the view that law ought to be enforceable as the impossibility of such may as well render such laws as irrelevant. This challenge is notable from the enforcement of international law.<sup>103</sup> We shall therefore in light of this argument look at the challenge virtual currencies pose when it comes to the enforcement of the law.

The fast of challenges when it comes to this phenomenon is that it is still growing and new in the society which also means that little is known about it particularly by law enforcement agencies.<sup>104</sup> Hence there is a need for law enforcement agencies to accumulate knowledge when it comes to this concept in order to be able to come up with laws together with other relevant bodies and consequently be able to enforce such laws.

What is interesting is that most law enforcement agencies are making effort not only to try and come up with laws that will address this issues but also to try and study this concept, understand how it works and also determine the challenges that it pose to them as law enforcement agencies.<sup>105</sup> The fact that different authorities are making effort to study virtual currencies and thus establish proper mechanisms to not only regulate it, is evident from the move by the SARB along with other regulatory bodies to impose regulation that is similar to that of inter alia Canada and Argentina.<sup>106</sup> Hence the SARB has currently proposed what it intends to do in a discussion paper released early in 2019. On the other hand other law enforcements

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<sup>101</sup> MD Mccubbins "Concepts of Law" (2013) *Southern California law review* 517.

<sup>102</sup> AT Kronman "Hart, Austin, and the Concept of Legal Sanctions" (1975) *Faculty Scholarship Series*. (Accessible at [http://digitalcommons.law.yale.edu/fss\\_papers/1077](http://digitalcommons.law.yale.edu/fss_papers/1077)) 584.

<sup>103</sup> MŠ Štulajter "Problem of enforcement of an international law – analysis of law enforcement mechanisms of the United nations and the World Trade Organization" (2017) *Journal of Modern Science* 325-335 325.

<sup>104</sup> Regional Organized Crimes Information Center "Special Research Report Bitcoin and Cryptocurrencies Law enforcement investigative guide" (2018) 2.

<sup>105</sup> 2.

<sup>106</sup> N Moodley "Regulation of crypto assets moves forward in SA" (<https://www.moneyweb.co.za/news/south-africa/regulation-of-crypto-assets-moves-forward-in-sa/> accessed on the 22 January 2019).



as led by Thomas Goger of the Bavarian Central Office for the Prosecution of Cybercrime has determined some of the challenges law enforcement agencies face as one of the following<sup>107</sup>:

- a) The unavailability of persons willing to report such activities.
- b) The fact that the activities of virtual currencies take place at an international level.
- c) The nature of digital leads and evidence which is that they are extremely volatile.
- d) The rate at which technology develop which may result in enforcement agencies not keeping up with all the development or some of the fundamental development.
- e) The complexity of the technologies involved which requires specialised knowledge to understand.
- f) The huge amounts of data or information to be evaluated and analysed.

### **3.6 Conclusion**

The purpose of this chapter was not to provide clear and final answers to the various legal challenges posed by virtual currencies, but to survey some of the problems and emphasise some of the aspects that would need to be clarified by lawmakers. Almost all of the challenges that virtual currencies present to society and to law enforcement agencies exist because there is currently no solution to the issue of anonymity. This can be noted from the question of taxation where taxing authorities like SARS require knowledge about whether you have such virtual currencies but are unable to access such information, since the users of virtual currencies either do not disclose that they have virtual currencies as part of their income or make use of a fake identities. These issues can only be addressed by looking to the future and seeing what advanced technologies we can make use of. It can be said that South Africa as a country can learn from other countries on how they are addressing challenges prevalent to the use of virtual currencies, but the problem is that almost every other country is faced with the same challenges as South Africa. At least one

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<sup>107</sup> T Goger "Bitcoins and other cryptocurrencies Challenges for law enforcement" (2018) *Bavarian Central Office for the Prosecution of Cybercrime* 12.

good thing is the progress South Africa is making by also following the FATF and other international organisations that are seeking answers to this challenge.

# Chapter 4:

## Examples from some foreign jurisdictions

### 4.1 Introduction

Because virtual currencies are used globally, South Africa is naturally faced with challenges similar to those in other countries. It may therefore be worthwhile to seek guidance from other countries as to how they addressed some of the issues. In view of this, the chapter will consider three categories of examples, namely some examples of countries where new regulations have been enacted with reference to virtual currencies; examples of countries where virtual currencies have been banned; and examples of countries where the formal adoption of a national virtual currency is under consideration.

### 4.2 Examples of countries with new regulations

#### 4.2.1 Japan

A country where there seems to be some progress in terms of regulating virtual currencies is Japan.<sup>108</sup> Japan began its regulation of virtual currencies by amending its Payment Services Act 59 of 2009 in June 2016, which became operative on 1 April 2017. The amendment is one of the few legislative definitions of cryptocurrencies. It defines cryptocurrency as:

“Property value that can be used as payment for the purchase or rental of goods or provision of services by unspecified persons, that can be purchased from or sold to unspecified persons, and that is transferable via an electronic data processing system; or property value that can be mutually exchangeable for the above property value with unspecified persons and is transferable via an electronic data processing system”.<sup>109</sup>

The definition excludes normal currency or fiat currency (notes and coins) and as such only applies to virtual currencies stored electronically.<sup>110</sup> In Japan not everyone is allowed to acquire virtual currencies for business or profit purposes, since only

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<sup>108</sup> The Law Library of Congress *Regulation of cryptocurrency around the world* (2018) 111.

<sup>109</sup> S 10.

<sup>110</sup> Article 2(5).

businesses registered with the relevant authority are allowed to trade in cryptocurrencies.<sup>111</sup> It is further required that such a company must have offices in Japan and must have someone of a senior position who comes from Japan. The company must further be a stock company or a company from another country created for the same purpose under foreign laws that are identical to those of Japan.<sup>112</sup> One of the duties of these cryptocurrency businesses under the Act is to manage every customer's cryptocurrency. The management of cryptocurrencies by such companies is subject to a review by a qualified accountant.<sup>113</sup> Other duties include proper record keeping and having an agreement with designated dispute resolution centres who are experts in cryptocurrencies. The records that these companies must keep should be submitted to a regulatory body called the Financial Services Agency (FSA) annually. Japan has chosen an approach that potentially deals with most of the issues surrounding cryptocurrencies. For instance, the approach arguably minimises the possibilities of terrorism financing, money laundering and the risks that consumers are exposed to.

#### 4.2.2 South Korea

Another country that has accommodated cryptocurrencies is South Korea, albeit with some qualifications.<sup>114</sup> In South Korea the use of cryptocurrencies requires the involvement of commercial banks. The reason for this is that, from 1 January 2018, South Korea allows the use of cryptocurrencies only by persons with real bank accounts and identities.<sup>115</sup> They require that dealers must have a contract with a bank (or banks) regarding their trade of virtual currencies. Before signing with a dealer, the bank is required to look at the books and cyber systems of the dealer to determine the quality of management.

In as much as the customer may have a digital wallet, it is further required that the customer must have an account with the bank that has a contract with the dealer. These rules assist in ascertaining the identity of the customer who has opened the account. The rules in South Korea also prohibit minors and persons who are not

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<sup>111</sup> The Law Library of Congress *Regulation of cryptocurrency around the world* (2018) 111.

<sup>112</sup> 112.

<sup>113</sup> 112.

<sup>114</sup> 121.

<sup>115</sup> 121.

South Koreans from using virtual currencies. Where a user has an anonymous identity, he or she may not make new deposits but is only allowed to withdraw.<sup>116</sup> The approach in South Korea represents a significant attempt at addressing some of the problems surrounding the use of virtual currencies. The effect of this solution is that cryptocurrencies are deprived of the special nature that attracted users to them in the first place – most notably the anonymity factor. It is accordingly not clear whether virtual currencies will survive the strict imposition of regulations like this.

#### 4.2.3 Mexico

In Mexico a statute was enacted in March 2018 to regulate financial technologies companies.<sup>117</sup> The statute is known as *Ley para regular las instituciones de tecnología financier*.<sup>118</sup> Similar to the position in Japan, this Act contains a definition for virtual currencies. In fact, in Mexico virtual currencies are referred to as virtual assets. The chapter of the Act dealing with virtual assets defines them as “representations of value electronically registered and utilized by the public as a means of payment for all types of legal transactions, which may only be transferred electronically”.<sup>119</sup>

The Act<sup>120</sup> addresses the issue of money laundering by placing a duty on financial institutions that are involved in virtual assets to report certain deposits that might have been made by money launderers.<sup>121</sup> In terms of this Act, the central bank of Mexico is trusted with determining the type of virtual assets, including their characteristics and nature.<sup>122</sup> The purpose of this determination is to guide financial institutions on which virtual currencies they may be involved with and which not to be involved with. The central bank of Mexico further has the duty of authorising transactions done by these financial institutions dealing with virtual assets.<sup>123</sup>

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<sup>116</sup> 121.

<sup>117</sup> 16.

<sup>118</sup> This translate to “Law to Regulate Financial Technology Institutions” article 30-34, *Diario Oficial de la federacion* [DOF] March 9 (2018).

<sup>119</sup> Chapter 3.

<sup>120</sup> Federal law for the prevention and identification of transactions with resources of illicit origin article 17 *Diario Oficial de la federacion* [DOF] October 17 (2012).

<sup>121</sup> Article 30.

<sup>122</sup> Article 32.

<sup>123</sup> The Law Library of Congress *Regulation of cryptocurrency around the world* (2018) 16.

## 4.3 Examples of countries where virtual currencies have been prohibited

### 4.3.1 Introduction

One of the solutions to the challenges posed by virtual currencies is to prohibit people from using these virtual currencies. The problem with this approach is that users will still use certain cryptocurrencies without the knowledge of the authorities. Indeed, it is doubtful whether prohibiting the use of virtual currencies will be a better option than attempting to regulate it. In what follows I shall consider some of the countries that have prohibited the use of virtual currencies.

### 4.3.2 Egypt

One of the countries that has banned the use of virtual currencies is Egypt.<sup>124</sup> In Egypt the use of virtual currencies is regarded as *Haram*.<sup>125</sup> *Haram* means that it is prohibited under Islamic laws. The prohibition followed a warning issued by the central bank of Egypt in January 2018, which warned against the use of virtual currencies.<sup>126</sup> The prohibition came in the form of a religious decree issued by the primary Islamic legislature, the Dar al-Ifta.<sup>127</sup> In Egypt only notes issued by the central bank of Egypt can be used to effect payment.<sup>128</sup> The sole reason why virtual currencies are prohibited is the fear of the high-risk challenges associated with the use of virtual currencies.<sup>129</sup> According to the Dar al-Iftar, the use of virtual currencies is a threat to national security and the central financial systems, since this virtual currency can be used to finance terrorism or related activities.<sup>130</sup>

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<sup>124</sup> <http://www.dar-alifta.org/ar/ViewFatwa.aspx?sec=fatwa&ID=14139> (accessed 19 September 2018).

<sup>125</sup> Egypt's mufti says bitcoin forbidden in Islam accessed at <https://www.news24.com/Africa/News/egypts-mufti-says-bitcoin-forbidden-in-islam-20180104> (accessed 20 September 2018).

<sup>126</sup> The Central Bank of Egypt "A warning statement" (accessible at <https://perma.cc/3X6D-WFEG> ).

<sup>127</sup> Fatwas *Currency trading betquin and dealing* serial no: 4205 (28 December 2017) accessible at <http://www.dar-alifta.org/ar/ViewFatwa.aspx?sec=fatwa&ID=14139>.

<sup>128</sup> The Central Bank of Egypt "A warning statement" (accessible at <https://perma.cc/3X6D-WFEG> ).

<sup>129</sup> Fatwas *Currency trading betquin and dealing* serial no: 4205 (28 December 2017) accessible at <http://www.dar-alifta.org/ar/ViewFatwa.aspx?sec=fatwa&ID=14139>.

<sup>130</sup> Fatwas *Currency trading betquin and dealing* serial no: 4205 (28 December 2017) accessible at <http://www.dar-alifta.org/ar/ViewFatwa.aspx?sec=fatwa&ID=14139>.

### 4.3.3 Iran and Iraq

Iran has also formally banned the use of virtual currencies.<sup>131</sup> In a statement by the central bank of Iran, all financial institutions in Iran were officially prohibited from dealing with cryptocurrencies and related aspects.<sup>132</sup> The ban extended to the prohibition against exchanging virtual currencies for the actual currency of Iran. It is no surprise that Iran would ban virtual currencies, as it too is dominated by Islamic laws.

Another country in which virtual currencies are prohibited is Iraq. The central bank of Iraq stated that anyone who deals in virtual currencies shall be subjected to Iraq's anti-money laundering laws.<sup>133</sup> Hence, this suggests that whenever virtual currencies are used for any activity, it will be deemed as money laundering.

### 4.3.4 Lesotho

A neighbour of South Africa, Lesotho, has also issued what can be deemed as an implicit ban on the use of virtual currencies.<sup>134</sup> At first the central bank of Lesotho issued a warning statement in November 2017 to inform users of the risks associated with the use of virtual currencies.<sup>135</sup> In a follow-up statement, it was explicitly stated that virtual currencies do not qualify as legal tender in Lesotho and are also not considered foreign currency.<sup>136</sup> The follow-up statement further banned the promotion of investing in virtual currencies. The ban in Lesotho is sanctioned by informing users that, when they engage in virtual currency deals, they expose

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<sup>131</sup> <https://financialtribune.com/articles/business-and-markets/85114/iranian-financial-institutions-barred-from-using-crypto> (accessed 20 September 2018).

<sup>132</sup> <https://financialtribune.com/articles/business-and-markets/85114/iranian-financial-institutions-barred-from-using-crypto> (accessed 20 September 2018).

<sup>133</sup> <https://cbi.iq/news/view/512> (accessed 20 September 2018).

<sup>134</sup> The Central Bank of Lesotho Press Statement "The emerging and growing promotion of cryptocurrencies" Ref: 09112017/2 (accessible at <https://perma.cc/ZK6H-JZQ3>).

<sup>135</sup> The Central Bank of Lesotho Press Statement "The emerging and growing promotion of cryptocurrencies" Ref: 07022018/1 (accessible at [https://www.centralbank.org.ls/images/Public\\_Awareness/Press\\_Release/CRYPTOCURRENCY\\_1st\\_2018\\_PRESS\\_RELEASE\\_HALF\\_PG.pdf](https://www.centralbank.org.ls/images/Public_Awareness/Press_Release/CRYPTOCURRENCY_1st_2018_PRESS_RELEASE_HALF_PG.pdf)).

<sup>136</sup> The Central Bank of Lesotho Press Statement "The emerging and growing promotion of cryptocurrencies" Ref: 07022018/1 (accessible at [https://www.centralbank.org.ls/images/Public\\_Awareness/Press\\_Release/CRYPTOCURRENCY\\_1st\\_2018\\_PRESS\\_RELEASE\\_HALF\\_PG.pdf](https://www.centralbank.org.ls/images/Public_Awareness/Press_Release/CRYPTOCURRENCY_1st_2018_PRESS_RELEASE_HALF_PG.pdf)).

themselves to prosecution for the violation of anti-money laundering laws and taxation laws.<sup>137</sup>

#### **4.4 One example of a country where a national virtual currency is under consideration**

While some countries are banning or attempting to regulate virtual currencies, others appear to be adopting the “if you cannot beat them, join them” approach. At least one such example is Venezuela. At the end of 2017, a decree was issued in Venezuela which authorised the government of Venezuela to introduce their own cryptocurrency.<sup>138</sup> The government of Venezuela’s cryptocurrency is known as the Petro.<sup>139</sup> The Petro is backed by various commodities. These commodities include Gold, gas, diamond, and oil. For example, a single Petro is backed by a purchase-sale contract of a barrel of oil.<sup>140</sup> As a solution to the absence of regulation or an administrative body, the Venezuelan government through this decree also introduced a body called Superintendency of Venezuelan Crypto-Assets and Related Activities.<sup>141</sup>

In essence, the decree deals with most of the aspects regarding the Petro, such as its mining and issuing. In this sense the Petro is similar to Bitcoin in that it can also be mined. The Petro can also be exchanged for the normal traditional currency of Venezuela, the Bolivares. As is the case Bitcoin, the Petro is also held in a digital wallet, which in Venezuela is referred to as a virtual wallet. It is the responsibility of the holder of the virtual wallet to ensure the safe use and management of the virtual assets and to understand the risks associated with having such a wallet.

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<sup>137</sup> 30.

<sup>138</sup> Official Gazette 6346 of 8 December 2017 Decree No. 3.196 Which authorises the creation of the superintendence of cryptoactives and related Venezuelan activities. (Accessible at <http://gacetaoficial.tuabogado.com/gaceta-oficial/decada-2010/2017/gaceta-oficial-6346-del-8-diciembre-2017>).

<sup>139</sup> *What is Venezuela’s new petro cryptocurrency?* (<https://www.aljazeera.com/news/2018/02/venezuela-petro-cryptocurrency-180219065112440.html>) accessed 30 September 2018).

<sup>140</sup> *What is Venezuela’s new petro cryptocurrency?* (<https://www.aljazeera.com/news/2018/02/venezuela-petro-cryptocurrency-180219065112440.html>) accessed 30 September 2018).

<sup>141</sup> RE Lujan “Venezuela issues general legal framework on cryptoassets and the “petro” cryptocurrency” (2018) *Norton Rose Fulbright* 1.



When Venezuela appeared to have been making progress, the Venezuelan Congress, which is the National Assembly of Venezuela, postulated that the issuing of virtual currencies such as the Petro by the government is illegal.<sup>142</sup> The congress went on to find that the responsibility of issuing national currency rests solemnly on the central bank. The use of commodities as guarantees was rejected by this body because such commodities belong to the Republic of Venezuela.<sup>143</sup> It would appear that the government of Venezuela and the National assembly are at loggerheads, since the government disregarded what was said by the National Assembly by stating a period within which the Petro shall be regarded as legal tender in Venezuela.<sup>144</sup>

## 4.5 Conclusion

There may be various solutions to the challenges presented by virtual currencies. One of the solutions to these challenges is to prohibit persons from using these virtual currencies. In consideration of the South African situation, this solution does not seem to be suitable, since the South African police generally struggles to solve many of its criminal cases.<sup>145</sup> Moreover, none of the current possible solutions address the fact that we still cannot point out who exactly owns virtual currencies and who does not – which renders criminal prosecutions unrealistic. A better solution might be to follow the Japanese and South Korean examples to regulate the holding and trade of virtual currencies more specifically. An even more progressive move in future might be for South Africa to formally adopt its own virtual currency, but one would have to wait and see what happens globally in this respect.

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<sup>142</sup> The Law Library of Congress *Regulation of cryptocurrency around the world* (2018) 18.

<sup>143</sup> 18.

<sup>144</sup> 18.

<sup>145</sup> Crime stats show police struggling to close cases <https://www.news24.com/Analysis/crime-stats-show-police-struggling-to-close-cases-20171031> (accessed 25 September 2018).

# **Chapter 5:**

## **Conclusions and recommendations**

### **5.1 Introduction**

In this final chapter of the dissertation, I shall briefly sum up the conclusions reached in the previous chapters, thus emphasising the most important points. The chapter also makes some preliminary recommendations in response to the research conducted.

### **5.2 Conclusions according to chapters**

#### 5.2.1 Chapter 1

Chapter 1 introduced the study and provided a background discussion for the analysis that followed in the subsequent chapters.

#### 5.2.2 Chapter 2

The purpose of chapter 2 was mainly to give guidance as to what virtual currencies are in order to lay a firm foundation the understanding the challenges posed by such currencies. The discussion in chapter 2 was done on a South African level and then expanded an international understanding of virtual currencies. We therefore looked at the views by the SARB on what virtual currencies are in a South African context and the position thereof. The reason it is important to discuss virtual currencies on a global scale is that the challenges they present affect everyone and globalisation has made it easier to deal with certain problems. It is further important to look at international organisation's understanding of virtual currencies so that South Africa does not fail to meet the obligations that stems from being a member of such international organisation. Hence, we looked at one of the biggest international organisations that deals with money laundering and the financing of terrorist, the FATF. It should be noted that though we recognise the definitions and descriptions of authors and organisation, the descriptions that law enforcement agencies of South Africa give takes precedents since it is such agencies that have the necessary

capacity to enforce the law in South Africa. Chapter 2 after having looked at what virtual currencies lastly looked at some of the most famous examples of virtual currencies and how they work,

### 5.2.3 Chapter 3

Chapter 3 was the heart of this dissertation. The reason for this is that this dissertation focusses on some of the legal implications of virtual currencies. Hence, these implications were looked at in broader terms in this chapter. Chapter 3 highlighted some of the core issues posed by virtual currencies. This issues as discussed in this chapter include questions such as whether virtual currencies can/should be taxed and the possible use of virtual currencies for illegal activities such as money laundering and terrorism financing. Chapter 3 did not purport to answer all of these issues but simply pointed them out and called for further attention by lawmakers. It is notable that some strides were made in the context of tax collection in South Africa, while matters pertaining to money laundering and terrorism financing have enjoyed relatively less express development.

### 5.2.4 Chapter 4

Chapter 4 considered how certain other jurisdictions are approaching the issues surrounding virtual currencies. It also looked at some of the solutions that have been considered by other jurisdictions. Notably, while some jurisdictions have found innovative ways to regulate virtual currencies, some others have elected to prohibit them. The prospect also exists that jurisdictions may start developing their own official virtual currencies. It is submitted that South Africa should not prohibit virtual currencies but should consider regulating them more effectively. Eventually it may even become advisable for the country to develop its own national virtual currency, but this possibility is probably too remote to arrive at firm conclusions in that regard.

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