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***The composition of virtual currencies and
the prospects of a comprehensive regulatory
framework***

by

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Declaration

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Summary

There are still many uncertainties with regard to whether virtual currencies will eventually replace fiat money or whether these two institutions will be functioning in tandem. Virtual currencies are still without legal tender status, but it is established that virtual currency can be utilised as a medium of exchange in circumstances where parties permit for its use. Moreover, this novel technological phenomenon engenders a myriad of risks and legal implications that are not comprehensively dealt with by regulators either locally or internationally. This dissertation investigates the risks associated with virtual currencies, the regulatory approaches taken by different jurisdictions as well as the prospects for virtual currency to function as a medium of exchange.

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Table of contents

Declaration	i
Summary	ii
Acknowledgements	iii
Table of contents	iv
Chapter 1: Introduction	1
1.1 Purpose and background of the study	1
1.2 Overview of substantive chapters.....	2
Chapter 2: Virtual currency: Money or not?	3
2.1 Introduction.....	3
2.2 Money.....	3
2.2.1 Functions and characteristics of money	5
2.2.1.1 Medium of exchange	6
2.2.1.2 Money as a store of value.....	6
2.2.1.3 Money as unit of account.....	7
2.2.1.4 Characteristics.....	7
2.3 Virtual currency.....	8
2.3.1 Centralised and decentralised virtual currency.....	9
2.3.2 Convertible and non-convertible virtual currency	9
2.3.3 Defining virtual currency.....	10
2.3.4 Where does virtual currency get its value from?	12
2.3.5 Virtual currency and the three functions of money	13
2.3.5.1 Store of value	13
2.3.5.2 Medium of exchange	14
2.3.5.3 Unit of account.....	15
2.4 Conclusion.....	15
Chapter 3: Risks inherent to virtual currency and the need for regulation	17
3.1 Introduction.....	17
3.2 Purpose of regulation	17
3.3 Associated risks.....	18

3.3.1	Intergovernmental Fintech Working Group (South Africa).....	19
3.3.1.1	Use cases identified by the IFWG	19
3.3.1.2	Generic risks of virtual currencies.....	21
3.3.1.3	Specific risks per use case as identified by the IFWG	22
(i)	First use case	22
(ii)	Second use case.....	23
(iii)	Third use case.....	25
(iv)	Fourth use case.....	26
(v)	Fifth use case	26
3.3.2	Risks identified by international bodies	26
3.3.2.1	Risks to financial integrity	27
3.3.2.2	Monetary policy and financial stability	29
3.3.2.3	Consumer protection	31
3.4	Conclusion.....	31
Chapter 4: Current regulatory developments.....		33
4.1	Introduction.....	33
4.2	South Africa	33
4.2.1	Amendment to the Financial Intelligence Centre Act (FIC Act)	35
4.2.2	Amendments to the Value Added Tax Act 89 of 1991 and Income Tax Act 58 of 1962	37
4.3	Foreign jurisdictions.....	38
4.3.1	Canada	38
4.3.2	South Korea	40
4.3.2.1	Prior to amendments to the Act on Reporting and Use of Specific Financial Transaction Information (RUSFTI)....	41
4.3.2.2	Passing of Amendment bill on Act on Reporting and Use of Specific Financial Transaction Information.....	43
4.4	Conclusion.....	46
Chapter 5: Conclusion.....		47
5.1	Introduction.....	47
5.2	Summary of findings.....	47
5.2.1	Chapter 2	47
5.2.2	Chapter 3	48

5.2.3 Chapter 4	48
5.3 Recommendations.....	49
Bibliography	50
Literature.....	50
Legislation.....	51
Foreign legislation.....	51
Internet sources	51
Discussion notes and working papers.....	52
International instruments.....	53
Radio interviews.....	53

Chapter 1:

Introduction

1.1 Purpose and background of the study

Virtual currency (Bitcoin) was created with the intention to facilitate cryptographic peer-to-peer transactions between two willing participants in the absence of a third party financial institution,¹ hence an alternative means of payment accompanied with its own payment system and unit of account.² Virtual currencies are not the only digitisation of payment developments devised under the auspices of the internet,³ but the prevalence of this novel phenomenon evinced an international retinue from amateurs to technology enthusiasts, academics as well as financial professionals.⁴ The reason why virtual currencies are so lucrative can be ascribed to its functionality, anonymity and the decentralised technology on which it operates.⁵ Due to these attributes, it is apparent that virtual currencies show preference over fiat money in order to conduct illegal objectives such as money laundering and terrorist financing.⁶ These objectives are mainly rooted in the anonymity and global nature they provide.⁷

The aim of this dissertation is to present an illustration of what virtual currency is in comparison to fiat money, the associated inherent risks as well as the current regulatory developments in three jurisdictions in order to give an idea how different countries approach the regulation of virtual currencies. A scintilla of the regulatory developments that will be discussed can most likely be regarded as regulatory responses taken *in lieu* of a formal regulatory framework introduced. This stems from the presumption that current developments taken by different jurisdictions are bound to change and adapt over time as countries gradually develop a better comprehension of virtual currencies and its integration in the greater scheme of things.

¹ S Nakamoto "Bitcoin: A peer-to-peer electronic cash system" 2008 1.

² C Lagarde "Central banking and fintech: A brave new world" 2017 4-8 5.

³ W Spruyt "An assessment of the emergent functions of virtual currencies" (2018) *TSAR* 707-725 708.

⁴ W Spruyt "An assessment of the emergent functions of virtual currencies" (2018) *TSAR* 707-725 707.

⁵ W Spruyt "An assessment of the emergent functions of virtual currencies" (2018) *TSAR* 707-725 707.

⁶ W Srokosz T Kopyscianski "Legal and economic analysis of the cryptocurrencies impact on the financial system stability" (2015) *Journal of Teaching and Education* 619-627 622.

⁷ W Srokosz T Kopyscianski "Legal and economic analysis of the cryptocurrencies impact on the financial system stability" (2015) *Journal of Teaching and Education* 619-627 622.

1.2 Overview of substantive chapters

This dissertation comprises of three substantive chapters. Chapter 2 entails a comprehensive discussion on what money is as well as the difference between fiat money (legal tender) and virtual currency. Moreover, it is specifically considered whether virtual currencies can fulfil the three main functions of money. Chapter 3 deals with the risks pertaining to virtual currencies, with an emphasis on the anonymity dilemma. Lastly, Chapter 4 constitutes the comparative chapter where regulatory developments in South Africa, South Korea and Canada are discussed. An ancillary aim of this chapter illustrates that there is not a “one size fits all” approach when it comes to regulating virtual currencies. However, there appears to be some glimmer of uniformity amongst jurisdictions.

Chapter 2:

Virtual currency: Money or not?

2.1 Introduction

It is safe to say that virtual currency remains an anomaly in the context of whether it should be regulated and how. Although much has been written on this topic and a clear understanding of the intrinsic dynamics pertaining to virtual currencies has been established, the approaches taken in different jurisdictions all over the world show that there is no uniform international approach on the classification and regulation of virtual assets.

The primary purpose of this chapter is to get a comprehensive understanding of the concept of virtual currencies in comparison to money (legal tender). Consequently, it is important to draw distinctions between the different characteristics and functions of each by dissecting them with the aim of adequately categorising virtual currencies. The outcome of this analysis will attempt to observe the prospects of virtual currencies in order to establish whether or not it can potentially function as money.

2.2 Money

Money is a puzzling concept. It operates as a medium of exchange to facilitate trade, but do we really know what it is? Yang⁸ defines money as a:

“medium of exchange – the set of assets in an economy that people regularly exchange for goods and services from others.”⁹

Sprouting from this definition, Yang observes that money must signify an asset owned by its holder and that different forms of assets are converted to this specific asset (money) before it can be exchanged for different goods or services, therefore implying that assets are converted into a set of assets that are commonly accepted in

⁸ BZ Yang “What is (not) money? Medium of exchange ≠ means of payment” (2007) 51 *The American Economist* 101-104 101.

⁹ BZ Yang “What is (not) money? Medium of exchange ≠ means of payment” (2007) 51 *The American Economist* 101-104 101.

transactions.¹⁰ Thus, this alludes to an asset (which is not money) being converted to an asset (money) that is generally accepted in transactions. In essence, fiat money operates as the norm for medium of exchange.

It is clear that money as we know it today has no intrinsic value. It does not present intrinsic value in the same fashion as a gold coin and neither does money have an underlying corporeal asset determining its value. Therefore, the concept of money is abstract in so far as where money derives its value from. Historically money's value was intrinsic in the commodity itself (such as a metal coin or cattle). Money was a representation of some tangible object of value¹¹ because there was a willingness by a society to accept it due to the intrinsic value attached to it.¹² This means that money in the form of a gold coin had value purely because gold's value as a commodity was intrinsic.¹³ Alternatively, money's value used to emanate from representing some sort of tangible value-backed asset instead of the coin itself (such as the gold standard that was abolished in the early 1970s). What makes money such an abstract concept in the modern day is that money comprises neither one of the above.¹⁴

Untethered from an underlying asset such as gold, money gets its value from being issued by authorities and generally accepted by society as money. The reason why money functions as fiat money comprising of any value is owed to the fact that we are required by the authorities (that is, the law) to recognise it as money and therefore preserve the belief that money has use and value,¹⁵ despite the absence of any tangible substance. Money's value can be deduced to the presumption that the entity issuing money guarantees its validity based on its legitimate authority to do so – in other words, the state.¹⁶ In South Africa, the South African Reserve Bank (SARB) is mandated with governing and protecting the value of currency.¹⁷ Section 14 of the

¹⁰ BZ Yang "What is (not) money? Medium of exchange ≠ means of payment" (2007) 51 *The American Economist* 101-104 101.

¹¹ JJ Chung "Money as Simulacrum: The Legal Nature and Reality of Money" (2009) 5 *Hastings Business Law Journal* 109-168 120.

¹² JJ Chung "Money as Simulacrum: The Legal Nature and Reality of Money" (2009) 5 *Hastings Business Law Journal* 109-168 145.

¹³ M Mellor "What is money?" in M Mellor *The future of money* 8-30 10.

¹⁴ JJ Chung "Money as Simulacrum: The Legal Nature and Reality of Money" (2009) 5 *Hastings Business Law Journal* 109-168 120.

¹⁵ JJ Chung "Money as Simulacrum: The Legal Nature and Reality of Money" (2009) 5 *Hastings Business Law Journal* 109-168 159.

¹⁶ J Gronow "What is money?" *Deciphering Markets and Money* Helsinki University Press (2020) ch 3 51-67 55.

¹⁷ S 3 of the South African Reserve Bank Act 90 of 1989 (the SARB Act).

SARB Act provides that the SARB has the sole right to issue banknotes and coins in the Republic, while section 17 of the SARB Act deals with what is considered to be legal tender.

Moreover, Chung indicates that the concept of money is abstract and this abstraction is supported “by two other abstractions, law and faith”.¹⁸ Accordingly, the abstract value structure of money is engendered in a society to trust that money will maintain its value and be honoured in trade.¹⁹ The idea of trust elongates to signify that people place their trust in the organisations, authorities and role players in an economy which create and circulate money.²⁰ It is entrenched on the reality that money as legal tender finds its value by the mere fact that money issued by a state will be accepted as the money in payment of taxes and that this form of money should also be honoured by everyone in a society as a form of payment for goods or debts.²¹ Once again it reaffirms the fact that money is based on belief in so far as the holder of money and the person who will accept it as payment both maintain the belief that money subsists of value.²² As expressed by Chung:²³

“Money is now a pure abstraction with its own self-referential value and reality, whose creation is no longer constrained by a reference to anything else.”

2.2.1 Functions and characteristics of money

Modern day economists have identified that money comprises of a number of key functions. Money functions as (i) a medium of exchange to facilitate trade, (ii) a unit of account (a measure of value) and (iii) a store of value. In what follows, I will provide a brief overview of these functions, since I will discuss them again further below in this chapter.

¹⁸ JJ Chung “Money as Simulacrum: The Legal Nature and Reality of Money” (2009) 5 Hastings Business Law Journal 109-168 159.

¹⁹ M Mellor “What is Money?” *The Future of Money* Pluto Press (2010) ch 1 8-30 11.

²⁰ M Mellor “What is Money?” *The Future of Money* Pluto Press (2010) ch 1 8-30 11.

²¹ M Mellor “What is Money?” *The Future of Money* Pluto Press (2010) ch 1 8-30 17.

²² M Mellor “What is Money?” *The Future of Money* Pluto Press (2010) ch 1 8-30 24.

²³ JJ Chung “Money as Simulacrum: The Legal Nature and Reality of Money” (2009) 5 Hastings Business Law Journal 109-168 149.

2.2.1.1 Medium of exchange

Centuries ago people used cattle, fresh produce or any item of value within their respective communities as a form of exchange in the form of barter. However, bartering commodities came with impediments of efficiency, such as portability as well as the double-coincidence of wants between parties. This meant that if person A wanted to trade his cow for vegetables, he had to find someone who wants a cow and is willing to exchange vegetables in return. Money as a medium of exchange enabled society to break free from the chains of this double-coincidence of wants predicament.²⁴

The function of money as a medium of exchange entails that money as a social institution functions as an intermediary between a buyer and a seller.²⁵ Yang refers to medium of exchange as “the set of assets in an economy that people regularly exchange for goods and services”.²⁶ Moreover, the protruding component for money to function as a medium of exchange indicates that it has to be widely accepted as a method of payment within a society²⁷ (in other words fiat money issued by a state or authority). As noted by Gronow ²⁸ “money is a technical instrument, which makes the economic transactions more fluent and efficient, as if oiling them”.

2.2.1.2 Money as a store of value

Store of value purports that money has the ability to retain value over time – meaning that money has (or should maintain) the inherent ability to store or retain its economic value.²⁹ There should be no need to spend it within a given time for fear of it losing value rapidly over time. A good example of this was the hyperinflation that occurred during the Weimar Republic in post-World War I Germany, where US \$1 equalled one trillion German Marks. The effect was that when people got paid, they spent their

²⁴ R A Jones “The Origin and Development of Media of Exchange” (1976) 84 *Journal of Political Economy* 757-776 757.

²⁵ <https://opentextbc.ca/principlesofeconomics/chapter/27-1-defining-money-by-its-functions/> (accessed on 5 May 2020).

²⁶ B Z Yang “What is (Not) Money? Medium of Exchange ≠ Means of Payment” (2007) 51 *The American Economist* 101-104 102.

²⁷ <https://opentextbc.ca/principlesofeconomics/chapter/27-1-defining-money-by-its-functions/> (accessed on 5 May 2020).

²⁸ J Gronow “What is money?” *Deciphering Markets and Money* Helsinki University Press (2020) ch 3 51-67 53.

²⁹ A Aziz “Cryptocurrency: Evolution & Legal Dimension” (2019) 18 *International Journal of Business, Economics and Law* 31-33 32.

money as quickly as possible in order to prevent it from depreciating even further.³⁰ Therefore, certainty that money will keep its value over time is a crucial aspect to this function.³¹

2.2.1.3 Money as unit of account

Unit of account entails that money is used as a measurement of value against goods, services and debts.³² Its function is to numerically compare prices of goods to a unit of currency.³³ Ultimately it is safe to assume that an important quality to function as a unit of account would refer to a currency having intrinsic stability and the ability to provide a measurement to record and compare value.

2.2.1.4 Characteristics

As mentioned above, money's value attribution is abstract in the sense of how value is determined. Additionally, interlocking with its key function as a medium of exchange, money is the commodity that is exchangeable with any and all other commodities.³⁴ This ubiquitous element of money relates to certain unique characteristics enabling money to enjoy unrestricted utility. It goes without saying that, for money to be useful as money, it should not only have value but a need for money to be portable, divisible and durable.³⁵ These properties ensure efficiency in different transactions.³⁶

Durability is self-explanatory, primarily implying that money must be durable and have some sort of physical longevity, the ability to be reused multiple times or some form of sustainability to facilitate exchanges in the future.³⁷

Secondly, divisibility suggests that money must be easily divisible into smaller quantities, meaning that the smaller components when put together will equal the

³⁰ JJ Chung "Money as Simulacrum: The Legal Nature and Reality of Money" (2009) 5 Hastings Business Law Journal 109-168 154.

³¹ <https://2012books.lardbucket.org/books/an-introduction-to-business-v2.0/s17-01-the-functions-of-money.html> (accessed 5 may 2020).

³² <https://opentextbc.ca/principlesofeconomics/chapter/27-1-defining-money-by-its-functions/> (accessed 5 may 2020).

³³ A Aziz "Cryptocurrency: Evolution & Legal Dimension" (2019) 18 International Journal of Business, Economics and Law 31-33 32.

³⁴ J Gronow "What is money?" *Deciphering Markets and Money* Helsinki University Press (2020) ch 3 51-67 59.

³⁵ M Mellor "What is Money?" *The Future of Money* Pluto Press (2010) ch 1 8-30 8.

³⁶ <https://www.investopedia.com/terms/m/money.asp> (accessed 5 may 2020).

³⁷ <https://www.investopedia.com/terms/m/money.asp> (accessed 5 may 2020).

original value – in other words, ten R1 coins equals to the total value of a R10 note.³⁸ Therefore, if something costs R7 you do not have to tear a third off your R10. Instead, you can pay with seven R1 coins or receive three R1 coins as change when paying with a R10 note. Lastly, portability implies that money must be convenient and easy to carry, transport or transfer.³⁹

2.3 Virtual currency

It is arguably important to draw a distinction between the definition of virtual currency and what virtual currency is, in order to give a proper understanding of the former. For purposes of this chapter, I will refer to any type of virtual asset, digital money, crypto currency and Bitcoin as the most archetypal term, “virtual currency”.

First and foremost it is important to understand that virtual currencies are decentralised digital representations of value that can be traded, stored and transferred electronically.⁴⁰ Virtual currencies operate on a math-based peer-to-peer payment system and its decentralised nature warrants the transfer of virtual currencies between two parties without the involvement of an intermediate third party (usually a bank or any financial intermediary).⁴¹ According to Mandjee, it is an “internet-wide payment system that does not rely on a central authority to secure and control its money supply”.⁴² Thus, the “internet-wide payment system” refers to the technology on which transactions take place, namely blockchain technology, which is a public ledger system consisting of a network of autonomous computers that verify and control the reliability of the transactions with cryptographic functions.⁴³

Apart from its fundamental characteristics, virtual currencies are further subdivided into different classifications. The Financial Action Task Force (FATF)

³⁸ <https://study.com/academy/lesson/money-as-a-unit-of-account-definition-function-example.html> (accessed 5 may 2020).

³⁹ https://www.econlib.org/library/YPDBooks/Jevons/jvnMME.html?chapter_num=6#book-reader (accessed 5 may 2020) & <https://www.investopedia.com/terms/m/money.asp> (accessed 5 may 2020).

⁴⁰ J Lee A Long M Mcrae J Steiner & S Gosnell Handler “Bitcoin Basics: a Primer on Virtual Currencies (2015) 15 Business Law Journal 21-48 22.

⁴¹ J Lee A Long M Mcrae J Steiner & S Gosnell Handler “Bitcoin Basics: a Primer on Virtual Currencies (2015) 15 Business Law Journal 21-48 22.

⁴² T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 161.

⁴³ O S Bolotaeva A A Stepanova & S S Alekseeva “The Legal Nature of Crypto Currencies” International Science and Technology Conference (2019) 1-5 1.

classifies virtual currencies as either centralised or non-centralised (decentralised) and convertible or non-convertible.⁴⁴

2.3.1 Centralised and decentralised virtual currency

In the case of centralised virtual currency (CVCs) there is an administrative authority who issues and determines the rules, conditions and terms of use of the virtual currency.⁴⁵ Examples include WebMoney, E-gold and World of Warcraft gold. The latter will be discussed in more detail below.

Decentralised virtual currencies (DVCs) are what we know as conventional virtual currencies, such as Bitcoin, Litecoin and Ripple.⁴⁶ DVCs have no central administrating monetary authority such as a bank monitoring transactions and having regulatory oversight.⁴⁷ DVCs are traded peer-to-peer between users relying on cryptographic functions to protect economic transfers.⁴⁸

2.3.2 Convertible and non-convertible virtual currency

Convertible virtual currency is only convertible depending on the willingness of offer and acceptance by private participants. However, convertibility means that the virtual currency derives its value from real currency and could thus be exchanged back-and-forth for real currency.⁴⁹ The most common example would be Bitcoin purchased with actual fiat money and exchanged back for real money using a crypto exchange at a later stage.

Non-convertible virtual currencies (NCVCs) are those that are used within and limited to the confines of a virtual realm or world. By definition, all NCVCs are centralised currencies.⁵⁰ The non-convertible nature of this currency is based on the rules and regulations prohibiting the exchange for fiat currency.⁵¹ An example of non-convertible virtual currency would be World of Warcraft (WoW) gold. To me this is an interesting phenomenon because it is a perfect simulation of what happens in the real world can comparably take place in a virtual fantasy world. The same way in which we

⁴⁴ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 4.

⁴⁵ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 5.

⁴⁶ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 5.

⁴⁷ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 5.

⁴⁸ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 5.

⁴⁹ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 4.

⁵⁰ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 5.

⁵¹ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 4.

use actual currency to buy cars, clothes and other luxury items, WoW gold can be used to purchase items in World of Warcraft. In World of Warcraft, you play as a virtual character with progression based on a questing system. When you successfully complete a quest or kill monsters, you are rewarded with in-game currency, hence WoW gold. With WoW gold, players can purchase exotic items such as mounts that are used to traverse the Warcraft universe or even opulent armour and weapons to make their character stronger. Although it might sound superficial, WoW gold is not easy to come by and takes a substantial amount of time and effort to accumulate. The reason why WoW gold is such an interesting phenomenon is because, based on its in-game value pertaining to the difficulties obtaining it, players are often willing to purchase WoW gold in exchange for actual fiat currency from so-called “gold farmers” who spend their time accumulating in-game gold and selling it to players who do not want to or who do not have the time to accumulate the gold themselves.⁵² The non-convertible nature of this currency comes into the fray, for example, where Blizzard Entertainment stated in its terms of use that exchanging in-game gold for actual currency is prohibited.⁵³

2.3.3 Defining virtual currency

There are a myriad of classifications and definitions adopted for virtual currencies by different jurisdictions all over the world. However, irrespective of the differences in terminology, these classifications are homogeneous and interchangeable in regards to the technology used by this phenomenon.⁵⁴ Lee et al⁵⁵ remark that virtual currencies operate decentralised from any central authority with no legal tender status and that the issuing of virtual currency takes place through a collective distributed network.⁵⁶

In South Africa, the Intergovernmental Fintech Working Group (IFWG) defines a crypto asset (or virtual currency) as:

⁵² For a more in-depth discussion, see T Debeauvais, B A Nardi, C V Lopes, N Yee & N Ducheneaut “10,000 Gold for 20 Dollars: An exploratory study of World of Warcraft gold buyers” Palo Alto Research Center.

⁵³ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 5.

⁵⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 8.

⁵⁵ J Lee A Long M Mcrae J Steiner & S Gosnell Handler “Bitcoin Basics: a Primer on Virtual Currencies (2015) 15 Business Law Journal 21-48 22.

⁵⁶ J Lee A Long M Mcrae J Steiner & S Gosnell Handler “Bitcoin Basics: a Primer on Virtual Currencies (2015) 15 Business Law Journal 21-48 22.

“A crypto asset is a digital representation of value that is not issued by a central bank, but is traded, transferred and stored electronically by natural and legal persons for the purpose of payment, investment and other forms of utility, and applies cryptography techniques in the underlying technology.”⁵⁷

Accordingly, the use of the term “crypto assets” as opposed to “crypto currencies” in the South African context mainly ascribes to crypto assets being a broader term that encapsulates all the functions relating to traditional currencies, securities and commodities.⁵⁸

The Financial Action Task Force (FATF) in their 2014 position paper defines virtual currency as:

“a digital representation of value that can be digitally traded and functions as (1) a medium of exchange; and/or (2) unit of account; and/or (3) a store of value, but does not have legal tender status in any jurisdiction.”⁵⁹

Lastly, the European Banking Authority (EBA) defines virtual currency as:

“a digital representation of value that is neither issued by a central bank or public authority nor necessarily attached to a fiat currency, but is used by natural or legal persons as a means of exchange and can be transferred, stored or traded electronically.”⁶⁰

In view of the above definitions, it is eminent that there is a comparatively universal consensus on virtual currency being a digital representation of value used as a means of exchange devoid of legal tender status. The next questions that arise are: (i) where does virtual currency get its value from and (ii) if, according to the definitions, it functions as a medium of exchange, does it fulfil the three main functions of money and can potentially be considered to function as money?

⁵⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁵⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 8.

⁵⁹ FATF Report Virtual Currencies Key Definitions and Potential AML/CFT Risks June 2014 4.

⁶⁰ European Banking Authority Opinion of ‘virtual currencies’ 4 July 2014 11.

2.3.4 Where does virtual currency get its value from?

Similar to fiat money, a virtual currency has no intrinsic value and its value is ultimately based on its acceptance as a currency by economic participants.⁶¹ Therefore, market participants agree that virtual currency has meaning and to what extent it has meaning.⁶² One of these ways in which people agree on the value relates to the dynamics of the public ledger, which is an integral part of virtual currencies.⁶³

Virtual currency derives its value similar to the acquisition of a seat on a stock exchange.⁶⁴ In order to understand this comparison, it is important to elucidate on the functionality and operation of virtual currency. As stated above, virtual currency operates on a public ledger, which is the blockchain technology that records all the transactions. It is called a blockchain because transactions are broken into blocks, and therefore multiple transactions would essentially create a “blockchain”.⁶⁵ New blocks are created through “mining”, which also incorporates the recent transactions by individuals.⁶⁶ People or entities can buy into the public ledger (blockchain) using fiat money or even by selling products or services in exchange for virtual currency (a spot in the ledger).⁶⁷ The “spot” in the ledger that was acquired can then be traded or sold to someone with the need to buy into the ledger, so in essence it is the slot in the ledger that is exchanged as opposed to actual virtual coins.⁶⁸ Consequently, the value of virtual currency pertaining to this scenario is dependent on the current volume and velocity of payments through the ledger in addition to speculation and prospective use of the payment system.⁶⁹

There are a number of other factors also contributing to the value given to virtual currencies. Virtual currency is considered by some to be a commodity with real value which is based on the production costs incurred in the form of electricity, computer

⁶¹ D Yermack “Is Bitcoin a real currency? An economic appraisal” (2013) National Bureau of Economic Appraisal Working Paper 19747 1-22 9.

⁶² R Ali J Barrdear R Clews & J Southgate “The economics of digital currencies” (2014) 276-286 278.

⁶³ R Ali J Barrdear R Clews & J Southgate “The economics of digital currencies” (2014) 276-286 278.

⁶⁴ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 162.

⁶⁵ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 161.

⁶⁶ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 162.

⁶⁷ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 162.

⁶⁸ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 162.

⁶⁹ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 162.

power and ultimately the computer (or hardware) itself.⁷⁰ Furthermore, virtual currency derives its value from being proficient in the key traits pertaining to money.

First of all, virtual currency is scarce in the sense that there consists only a finite supply of tokens that will ever be in circulation. Secondly, they are divisible up to eight decimal points and accounts for a much larger divisibility pool than traditional currency. Thirdly, the decentralised blockchain platform of the digital ledger enables reliable transactions to take place without participants having to put trust in other parties for the effective operation of the system. Fourthly, transportability of virtual currencies, when transferring between virtual wallets, happens almost instantaneously with almost no transaction cost. Fifthly, when it comes to durability, virtual currencies cannot be damaged in the same way as physical money. Virtual currency can be “lost”, however, when someone loses their cryptographic key rendering it unusable or dormant on the records of the blockchain, but that currency will not be destroyed. Lastly, virtual currency is extremely difficult to counterfeit due to the decentralised blockchain system on which it operates.⁷¹

There are other factors engendered in virtual currency’s value, such as the lack of strict regulation, the anonymity attached to transactions and its reputation of being regarded as a form of investment by many. It is important to note that these factors do not contribute to virtual currency’s value in the same sense as other “money characteristics”, such as being durable, divisible or those intrinsic attributes that give the idea of money its value.

2.3.5 Virtual currency and the three functions of money

2.3.5.1 Store of value

As mentioned above, store of value refers to money having the ability and certainty to retain its economic value over time. If we take the scenario where someone gets paid a salary today, the idea behind store of value relates to that salary still maintaining the same economic value in the two weeks span after it was paid to the person. It implies the expectation⁷² that economic value attached to money will endure over time.

⁷⁰ O S Bolotaeva, A A Stepanova & S S Alekseeva “The Legal Nature of Crypto Currencies” International Science and Technology Conference (2019) 1-5 3.

⁷¹ <https://www.investopedia.com/ask/answers/100314/why-do-bitcoins-have-value.asp> (accessed 11 May 2020).

⁷² D Yermack “Is Bitcoin a real currency? An economic appraisal” (2013) National Bureau of Economic Appraisal Working Paper 19747 1-22 14.

Based on the exceptionally high volatility of virtual currency when compared to other currencies, Yermack has found that the volatility associated with virtual currency renders it inadequate to function as a store of value.⁷³

2.3.5.2 Medium of exchange

It is important to draw the distinction between means of payment and medium of exchange concerning what category virtual currency might fall under. According to Yang, medium of exchange equals the assets in an economy that are regularly exchanged for goods or services, whereas means of payment exhibits the facilitation of delivery of money between parties.⁷⁴ Moreover, means of exchange can be seen as money because they convey assets digitally (in the case of e-money)⁷⁵ as opposed to virtual currency not conveying value but being the asset of value itself. Medium of exchange refers to “what” is paid⁷⁶ and it could be illustrated in the following manner: Medium of exchange refers to the institution that is used when you want to buy something, thus meaning that if you want to exchange X for Y, it must first be exchanged into a medium of exchange (money) which is commonly accepted in transactions.⁷⁷ Assets are converted into money, money is then used to buy goods from the seller and the seller exchanges the goods and services for money. In this regard, I am of the view that virtual currency can function as a means of exchange, since money or commodities can be exchanged for virtual currency and then virtual currency can be used as a form of payment. In this case, money is just the asset that is converted to virtual currency. Merchants who accept virtual currency as payment are becoming more prevalent⁷⁸ and the fact that one can pay for goods or services with virtual currency evinces the reality of virtual currency fulfilling the function of medium of exchange.

⁷³ D Yermack “Is Bitcoin a real currency? An economic appraisal” (2013) National Bureau of Economic Appraisal Working Paper 19747 1-22 14, 15, 16.

⁷⁴ B Z Yang “What is (Not) Money? Medium of Exchange ≠ Means of Payment” (2007) 51 The American Economist 101-104 103.

⁷⁵ B Z Yang “What is (Not) Money? Medium of Exchange ≠ Means of Payment” (2007) 51 The American Economist 101-104 103.

⁷⁶ B Z Yang “What is (Not) Money? Medium of Exchange ≠ Means of Payment” (2007) 51 The American Economist 101-104 101.

⁷⁷ B Z Yang “What is (Not) Money? Medium of Exchange ≠ Means of Payment” (2007) 51 The American Economist 101-104 102.

⁷⁸ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 169.

2.3.5.3 Unit of account

Mandjee argues that virtual currency can be a unit of account by reference to the ability of virtual currency's value to be determined in relation to the value of other goods.⁷⁹ Theoretically, even though virtual currency is more volatile, it still functions as a unit of account. Regardless of a good being priced in a different unit of account, virtual currency will have an indicative value of that specific currency.⁸⁰ However, the volatile nature of virtual currency comes with the setback where prices of goods will never be certain – for example, a vendor selling coats who accept virtual currency, might sell a R5 000 coat for 0.0006 Bitcoin today but tomorrow R5 000 equates to 0.0014 Bitcoin. In contrast, Yermack remarks that the daily “exchange rates” of virtual currency fail to correlate with widely used currencies; and additionally the amount of decimal places that is required to price consumer goods will be too perplexing for retail market participants.⁸¹ From a practical point of view, I would agree with Yermack that due to the volatility of virtual currency, regular recalculation of prices would end up being too costly to vendors and confusing to consumers.⁸² As I have mentioned previously in this chapter, a fundamental aspect for money to function as a unit of account involves “intrinsic stability and the ability to provide as a measurement to record and compare value”. Accordingly, the uncertain market value of virtual currency has the effect that it fails to establish a valid or practical reference point for setting consumer prices⁸³ and therefore not adequately satisfying the intrinsic stability in order to properly function as a unit of account.

2.4 Conclusion

It is evident that both money and virtual currencies are congruous when it comes down to indistinguishable peculiarities emanating from both these economic institutions. There exists a supposition that virtual currencies assuage the three main functions of money. However, it appears that irrespective of fulfilling those functions, there remains

⁷⁹ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 171.

⁸⁰ T Mandjee “Bitcoin, its Legal Classification and its Regulatory Framework” (2015) 15 Journal of Business & Securities Law 158-218 171.

⁸¹ D Yermack “Is Bitcoin a real currency? An economic appraisal” (2013) National Bureau of Economic Appraisal Working Paper 19747 1-22 15.

⁸² D Yermack “Is Bitcoin a real currency? An economic appraisal” (2013) National Bureau of Economic Appraisal Working Paper 19747 1-22 11.

⁸³ D Yermack “Is Bitcoin a real currency? An economic appraisal” (2013) National Bureau of Economic Appraisal Working Paper 19747 1-22 12.

a further barometer within these functions that needs to be mustered in order for it to effectually function as money. In my view, virtual currencies can function as money and tends to lean more towards what money actually is as opposed to what it is not. However, it would be unwise to ignore the reality that there are certain aspects that hinder the practicality of virtual currency to function as money.

For now, the only difference between money and virtual currency is that fiat money is widely accepted by all whereas virtual currency still has some restrictions attached to its functions. It would appear that virtual currency as a medium of exchange takes us back to a double coincidence of wants, since virtual currencies are not legal tender and when one wants to use virtual currency as a form of payment, one first has to find someone who is willing to accept virtual currency as a form of payment for goods or services. Therefore, I am of the view that virtual currencies are not devoid of functionality but merely lacks the practicality that is required to function proficiently as money. This problem stems from a practical reality relating to virtual currencies as opposed to a legal or technical one. It can be expected that this practical conundrum might systematically dissipate where future developments enable virtual currencies to stabilise, for example where central banks start issuing their own virtual currencies.

Chapter 3:

Risks inherent to virtual currency and the need for regulation

3.1 Introduction

New technological innovations in the financial sphere bring forth new regulatory challenges relating to financial stability as well as consumer and criminal related risks, especially where these innovations emerge in a system devoid of effective regulation.⁸⁴ It is evident that the innovation of virtual currency is a bag of inducement for unscrupulous users who utilise this technology for numerous illicit activities. Although virtual currencies have their benefits and legitimate uses where they can be utilised for investments, to facilitate micro payments and remittances internationally,⁸⁵ this chapter will focus on the imminent risks pertaining to virtual currencies. Indeed, due the nature and features attributed to virtual currencies – such as decentralisation, anonymity along with the fact that they are difficult to trace – this technology gives rise to a number of money laundering and terrorist financing risks.⁸⁶

The purpose of this chapter is to elucidate the risks pertaining to virtual currencies as identified by different international standard setting bodies, financial workgroups as well as local and international monetary authorities. I will also discuss the particular “use cases” identified by the Intergovernmental Fintech Working Group (IFWG) in the South African context. Furthermore, I will focus on anonymity as impetus behind the desirability for criminal activities such as terrorist financing and money laundering. This will form the basis for why some sort of regulation is necessary.

3.2 Purpose of regulation

It is important to note that where technological innovations have a significant impact on the financial sector, it is paramount for financial regulation to adapt to modern

⁸⁴ International Monetary Fund staff discussion note “Virtual currencies and beyond: Initial considerations” January 2016 24.

⁸⁵ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin “Cryptocurrency compliance and risks: A European KYC/AML perspective” (2019) GLI 165.

⁸⁶ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin “Cryptocurrency compliance and risks: A European KYC/AML perspective” (2019) GLI 165.

developments in order to remain effective.⁸⁷ The purpose of financial regulation is to address the imperfections, weaknesses and vulnerabilities in the financial system that might pose a threat to financial stability, market efficiency and ultimately to prevent or mitigate consumer risk.⁸⁸ The International Monetary Fund (IMF) states that financial regulation ought to impose incentives on financial institutions to take into account systemic risk as well as affording financial consumers protection where the acquisition of information proves to be financially or physically burdensome.⁸⁹

Moreover, regulation is required to be flexible and apt, especially on the periphery where regulated and unregulated areas congregate in order to ultimately contain systemic risks as well as sustain the integrity of financial regulation.⁹⁰ In the current technological climate, there is a lack of a comprehensive regulatory framework specifically in regards to virtual currencies. Poskriakov et al are of the view that regulators are acknowledging the reality that virtual currencies represent the future for payment systems but that this decentralised currency could constitute an effective tool allowing sanction-evaders, terrorist financiers and criminals to transfer and store illicit funds beneath the radar of law enforcement and therefore giving rise to new money laundering and terrorist financing risks.⁹¹

3.3 Associated risks

The risks discussed in this section are not exclusive to a specific jurisdiction, since it is evident that the operation of virtual currencies is borderless and find application on an international scale – thus the risks associated are also universal. Moreover, I will discuss the risks identified by different standard setting bodies and Fintech working groups in different jurisdictions.

⁸⁷ International Monetary Fund staff discussion note “Fintech and financial services: Initial considerations” June 2017 14.

⁸⁸ International Monetary Fund staff discussion note “Fintech and financial services: Initial considerations” June 2017 14.

⁸⁹ International Monetary Fund staff discussion note “Fintech and financial services: Initial considerations” June 2017 14.

⁹⁰ International Monetary Fund staff discussion note “Fintech and financial services: Initial considerations” June 2017 14.

⁹¹ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin “Cryptocurrency compliance and risks: A European KYC/AML perspective” (2019) GLI 163.

3.3.1 Intergovernmental Fintech Working Group (South Africa)

The IFWG Crypto Assets Regulatory Working Group highlighted specific use cases for virtual currencies. It is noteworthy to briefly delve into these use cases relating to “crypto asset service providers” (CASPs) since they form an integral part in order to understand policy considerations and the role players pertaining to virtual currency activities.⁹² The IFWG identifies generic risks that are associated with virtual currencies as well as more “serious risks”. These serious risks correlate with the use cases identified by the IFWG.

3.3.1.1 Use cases identified by the IFWG

The first use case identified by the IFWG relates to the purchasing or selling of crypto assets.⁹³ It is common practice that virtual currencies are purchased for numerous different reasons such as to be used as a potential medium of exchange, trading, investment or the fact that virtual currencies may provide a person access to certain specific products, utilities or services.⁹⁴ It is trite that virtual currencies can be purchased (or acquired) through either direct (a) peer-to-peer transactions with other virtual currency wallet holders, (b) a virtual currency exchange, or (c) virtual currency vending machines (also referred to as Bitcoin ATMs).⁹⁵ Furthermore, this use case identifies the CASP role players facilitating the overall trade of virtual currencies.⁹⁶ CASPs are entities that provide services relating to the purchasing, selling or transfer of virtual currencies.⁹⁷ In addition, these entities also facilitate the trading, conversion and exchange of virtual currencies to fiat currency and vice versa, as well as the trading, conversion and exchange of virtual currencies to other virtual currencies.⁹⁸

The second use case relates to the use of virtual currencies for the payment for goods and services.⁹⁹ This use case purports directly with the initial purpose and idea of virtual currency envisioned by Satoshi Nakamoto. In the 2008 white paper issued by Nakamoto, it is stated that:

⁹² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁹³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁹⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁹⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁹⁶ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁹⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁹⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

⁹⁹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

“A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution.”¹⁰⁰

Virtual currency was founded on the need for an electronic payment system that allows for two willing parties to transact directly and independently without the need of a financial third party.¹⁰¹ Consequently, in this use case, virtual currencies are used to purchase or sell goods and services between willing transacting parties, therefore rendering the utilisation thereof as a medium of exchange and store of value.¹⁰² Since virtual currencies are used as a medium of exchange, it automatically entails the movement of funds (considering that a virtual currency is tied to a fiat currency equivalent) between parties. Therefore, virtual currencies pose a challenge regarding how the movement of funds gets processed and additionally how the store of value is displaced.¹⁰³ The IFWG expresses that the lack of a regulatory framework entails that the acceptance of virtual currencies as a form of payment for goods and services lies solely on the discretion of willing merchants.¹⁰⁴

The third use case involves initial coin offerings (ICOs). ICOs are commonly used as a means of raising capital by generating tokens.¹⁰⁵ In essence, the process relating to ICOs usually involves a company that requires funds from investors in order to facilitate the financing of a business endeavour. It is usually the case where the company exchanges their own digital tokens in exchange for other established tokens such as Bitcoins. In exchange for the finance by the investor, the company will issue the investor with a coin (token) that reserves for that investor a right to receive a future value.¹⁰⁶

The fourth use case is the identification of CASPs that use virtual currency as investment funds and derivatives where virtual currency is used as the underlying asset in different investment funds.¹⁰⁷ However, under the current South African regulatory framework, having virtual currency (crypto asset) as an underlying asset is

¹⁰⁰ S Nakamoto “Bitcoin: A peer-to-peer electronic cash system” 2008 1.

¹⁰¹ S Nakamoto “Bitcoin: A peer-to-peer electronic cash system” 2008 1.

¹⁰² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 11.

¹⁰³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 11.

¹⁰⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 11.

¹⁰⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 12.

¹⁰⁶ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 12.

¹⁰⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 14.

prohibited under the Collective Investment Schemes Control Act 45 of 2002 and the Financial Markets Act 19 of 2012, since the definition of ‘securities’ does not provide for virtual currencies (crypto assets).¹⁰⁸ In terms of derivatives, it is submitted that virtual currencies (crypto assets) can be used as the underlying asset.¹⁰⁹

The fifth use case identifies CASPs in relation to any market support or ancillary services in activities related to virtual currencies. The virtual currency market support services basically concern activities such as custodianship of virtual currencies or virtual wallets.¹¹⁰ This finds relevance in the case where users prefer not to have their wallet installed on an electronic device but rather have their virtual wallet web-based and managed by a third party custodian.¹¹¹

3.3.1.2 Generic risks of virtual currencies

Virtual currencies pose a risk of a parallel, fragmented, non-sovereign money system.¹¹² In the existing financial system where central banks are responsible for the supply of money, efficiency and safety of the monetary system, virtual currencies might have the effect that a parallel fragmented monetary system might erupt when a significant increase in the demand for virtual currencies becomes a reality.¹¹³ This particular risk is dependent on the balance between the increase in demand for virtual currencies and the decrease in demand for fiat currency, ultimately hampering a central bank’s role in ensuring an effective monetary system.¹¹⁴ The result would entail that the role of a central bank would be replaced by private entities who do not share harmonised objectives.¹¹⁵

Due to a lack of proper regulation in regard to virtual currencies, it is conspicuous that risks relating to consumer protection and market efficiency and integrity will be prevalent. In my view, the IFWG is correct when it states that these risks are an immediate concern. The reason for this is due to the fact that it is relatively easy to misuse or exploit the system in order to commit illicit acts such as money laundering, terrorist financing, circumventing exchange controls and tax evasion.¹¹⁶

¹⁰⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 14.

¹⁰⁹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 14.

¹¹⁰ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 14.

¹¹¹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 14.

¹¹² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 15.

¹¹³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

¹¹⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

¹¹⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

¹¹⁶ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

3.3.1.3 Specific risks per use case as identified by the IFWG

(i) First use case

Under the first use case relating to the purchase and selling of virtual currencies lies the risk of money laundering and terrorist financing.¹¹⁷ As was mentioned above, at present there is no regulatory framework that requires CASPs to identify persons buying or selling virtual currencies.¹¹⁸ The effect of this is that it would be exceptionally difficult to identify or trace specific transactions where a person commits any form of illicit activity.¹¹⁹ It is worth taking cognisance of the fact that section 20 of the Financial Intelligence Centre Act 38 of 2001 imposes a reporting duty on CASPs by placing an obligation on CASPs to report unusual or suspicious transactions, but there is still a lack of requirements on CASPs to identify their customers.¹²⁰ The end result is that suspicious transactions remain anonymous.

The second risk under this use case pertains to an exchange control risk where virtual currencies are used as a vehicle to circumvent the exchange control laws due to the lack of regulatory and reporting requirements.¹²¹ In my view, this is a particularly big concern for both monetary and regulatory authorities, since the utilisation of virtual currencies are borderless. It infringes on the principle of having a transparent financial system where the flow of funds and capital can be properly monitored.¹²² According to an IMF discussion note, this is also one of the main factors why virtual currencies are so sought after because the speed of the transaction along with anonymity make these practices auspicious and easy.¹²³ Accordingly, this also enables consumers to conduct prohibited capital transfers or foreign exchange transactions over the internet with ease.¹²⁴

The third risk under this use case relates to market conduct risk. This risk is more consumer centric in the sense that where there is a lack of sufficient regulation of CASPs, consumers do not enjoy sufficient protection or legal redress.¹²⁵ Consumers

¹¹⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

¹¹⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

¹¹⁹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

¹²⁰ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 16.

¹²¹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹²² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹²³ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 31.

¹²⁴ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 31.

¹²⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

may also be susceptible to market manipulation due to misinformation.¹²⁶ Having no regulatory oversight to ensure fairness and transparency over fees, charges and prices of purchasing or selling virtual currencies, can lead to significant exploitation of vulnerable consumers who are manipulated into the purchasing of virtual currencies.¹²⁷

The fourth risk under this use case relates to cybersecurity and operational risk.¹²⁸ This risk is rather self-explanatory, since it is common knowledge that the fundamental operation of virtual currencies is electronic and is thus susceptible to online cyberattacks. The lack of regulation in this case entails that there is no set security standard to which CASPs have to adhere in order to ensure that their systems are adequately protected against potential cyberattacks.¹²⁹

(ii) Second use case

The second use case identified by the IFWG relates to the use of virtual currencies to purchase goods and services.¹³⁰ The first risk associated with this category concerns the fact that virtual currencies, as a means of payment, may incur the risk of creating a parallel, unregulated and fragmented payment system.¹³¹ For most people, the thought of virtual currencies as an alternative means of payment is quite ideal and if conducted with good intentions, not harmful. However, the dynamics of the financial system dictate otherwise. The effect of accepting virtual currencies as an alternative means of payment creates a system where additional stores of value are introduced and accepted.¹³² This process could mean that a shift away from traditional bank deposits will occur (since virtual currencies are decentralised), thus rendering banks incapable of being a financial intermediary, which is an integral part of achieving and maintaining financial stability.¹³³ Consequently, we will have virtual currency wallet holders who perform the same functions as a bank by reserving deposits of different stores of value of non-central bank issued money that can be utilised as a means of payment.¹³⁴ This entire dynamic purports the possibility that virtual currency

¹²⁶ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹²⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹²⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹²⁹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹³⁰ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹³¹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 17.

¹³² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

¹³³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

¹³⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

participants could just transfer their funds to a virtual wallet in order to conduct a transaction and thus circumvent any regulatory requirements that would normally apply to the transfer of funds or transactions of fiat currency.¹³⁵ The question that comes to mind is whether a regulatory framework parallel to the regulatory framework pertaining to fiat currency can be implemented considering that virtual currencies could lead to the creation of a parallel system? The emphasis is on a *parallel* framework, which implies similarity. In other words, if there is a potential for virtual currency wallet holders to perform the same functions as banks, the current regulatory framework could simply be extended to cover those entities under the same auspices as banks.

Poskriakov expresses the view that the current regulatory frameworks and regulatory approaches are specifically attuned for an intermediated, centralised financial system.¹³⁶ Consequently, transposing existing regulatory dynamics to virtual currencies will be futile due to the fact that virtual currency ecosystems inherently function by different rules and principles.¹³⁷

The second risk associated with this category concerns a risk to the efficiency of the national payment system.¹³⁸ Although this risk relates to the risk discussed above, it should be noted that an additional factor of the emergence of a parallel payment system can invoke the reality of closed-loop payment systems exclusive to a specific virtual currency.¹³⁹ The downside would mean the existence of competing payment schemes that will undermine the efficiency of the national payment system.¹⁴⁰ In essence, there will be a myriad of closed-loop payment systems functioning independently of the national payment system in their own respective domains without any definitive clearing and settlement rules, which in turn will ultimately lead to a bunch of payment systems rendering the national payment system redundant and inefficient.¹⁴¹ To put it in a different perspective, the national payment system is a lens in your spectacles, while each closed-loop payment system is a blemish on your lens. If you have two or three blemishes on your lens, you can still see through it, but if there

¹³⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

¹³⁶ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 173.

¹³⁷ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 173.

¹³⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

¹³⁹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

¹⁴⁰ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

¹⁴¹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 18.

are too many blemishes on your lens, it will render your lens ineffectual, since you cannot see through it anymore.

(iii) Third use case

The third use case in this category deals with virtual currencies as initial coin offerings. The risks associated with ICOs pertain to the fact that ICOs are speculative investments and investors put themselves at risk due to the limited exit opportunities that these ICOs might present.¹⁴² As mentioned previously, virtual currencies are extremely susceptible to volatility and uncertainty, and therefore, where investors do invest in an ICO, they run the risk of potential loss.¹⁴³ Accordingly, it should also be taken into consideration that the coins or tokens issued might be neither exchangeable to fiat currencies nor tradeable on virtual currency trading platforms.¹⁴⁴ This could mean that investors might have a worthless coin or token at the end of the day. Additionally, the lack of regulatory frameworks and ICOs being susceptible to fraudulent activity is another risk that comes to life under this category.¹⁴⁵

Due to ICOs not always having a legal classification, their regulatory status will often depend on the specific circumstances under which the ICO is issued, thus leaving the ICO outside any regulatory sphere.¹⁴⁶ Investors face the problem where they are not afforded any legal protection or redress where an ICO falls outside any regulatory scope.¹⁴⁷ To no surprise, ICOs can also be used for illicit and fraudulent activities, since there has been cases identified where the purpose was to launder money.¹⁴⁸ For example, criminals can utilise ICOs for conversion purposes where they convert the virtual currency proceeds into other virtual currencies or fiat currencies under the guise of legitimacy for the source of the funds.¹⁴⁹ Cybersecurity risk is also present where virtual currencies are used to raise capital in ICOs.¹⁵⁰ The lack of proper regulatory controls that would require ICOs to maintain a certain standard of cybersecurity could pose a dire risk to investors where the funds can potentially be

¹⁴² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 19.

¹⁴³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 19.

¹⁴⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 19.

¹⁴⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 19.

¹⁴⁶ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 19.

¹⁴⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 19.

¹⁴⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 19.

¹⁴⁹ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 165.

¹⁵⁰ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 20.

stolen by cyber hackers.¹⁵¹ The nature of the blockchain does not allow for these funds to be reversed and therefore, the investors can lose their funds without any recourse.¹⁵²

(iv) Fourth use case

The fourth use case pertains to virtual currency funds and derivatives. Currently, in South Africa, the absence of a dedicated legal framework for virtual currencies renders virtual currency not being classified in any asset class.¹⁵³ This means that within the existing regulatory framework, virtual currencies (virtual assets) are prohibited as an underlying asset for investment purposes.¹⁵⁴ Virtual currencies cannot be seen as a reliable store of value due to its extremely volatile nature and therefore it also feeds into the fact that volatility poses a risk for investment purposes.¹⁵⁵

(v) Fifth use case

The last use case pertains to the virtual currency market support services.¹⁵⁶ The main factor that is present here relates to cybersecurity risk. The risk of cyberattacks and hacking of virtual wallets is much more prevalent where CASPs do not safeguard the virtual currencies in their custody.¹⁵⁷ Therefore, it is recommended that CASPs or wallet custodians follow international standards when safeguarding virtual currencies against potential cyberattacks.¹⁵⁸

3.3.2 Risks identified by international bodies

The previous section discussed the risks with reference to the South African context as identified by the IFWG. This section will elucidate the risks accounted for by international bodies. However, it should be noted that there will be an extent of overlap with what was discussed in the previous section. According to an IMF discussion note,

¹⁵¹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 20.

¹⁵² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 20.

¹⁵³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 20.

¹⁵⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 20.

¹⁵⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 20.

¹⁵⁶ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 21.

¹⁵⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 21.

¹⁵⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 21.

the immediate concerns pertains to financial integrity.¹⁵⁹ Therefore, the risks regarding financial integrity will be the main focus of this section.

3.3.2.1 Risks to financial integrity

It was reported in 2019 that three to four per cent of criminal proceeds in Europe alone were laundered using virtual currencies and this amount is expected to increase analogous with the rate at which virtual currencies become more popular.¹⁶⁰

It is by design that anonymity or pseudonymity is inherent to virtual currencies due to the fact that there is no financial or regulatory intermediary dedicated to mitigating money laundering or terrorist financing risks.¹⁶¹ It has become apparent that anonymity is the root of all evil – in my view, it is the *magnum opus* of virtual currencies.

The anonymity attached to virtual currency transactions forms the basis of concealment for sanctioned origin of funds. It allows for a significant limitation on traceability when money laundering and terrorist financing is committed.¹⁶² The reason for this is that virtual currencies are traded over the internet and it usually happens where the individuals involved are anonymous.¹⁶³ To give an example: virtual currencies, such as Bitcoin, do not require individual identification or verification linked to an individual's Bitcoin account.¹⁶⁴ The effect is that transactions occur without having a real world identity associated with it and therefore provide anonymity that is not enjoyed with conventional payment systems.¹⁶⁵

The hurdle regulators are currently facing is the fact that the operation of virtual currencies function cross-border untethered from a centralised authority.¹⁶⁶ Thus, the borderless nature of virtual currencies feeds into the increased risk of money laundering and terrorist financing.¹⁶⁷ Borderless virtual currency transactions is a jurisdictional nightmare, since the transaction history and records are often held by

¹⁵⁹ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 24.

¹⁶⁰ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 163.

¹⁶¹ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 166.

¹⁶² International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 27.

¹⁶³ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 9.

¹⁶⁴ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 9.

¹⁶⁵ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 9.

¹⁶⁶ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 165.

¹⁶⁷ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 9.

different entities in different jurisdictions, which in essence poses an arduous task for regulators to acquire these records.¹⁶⁸ A good example of how virtual currencies were used to launder money is that of Liberty Reserve, which is considered the “largest online money-laundering case in history”.¹⁶⁹ Liberty Reserve was based in Costa Rica and was a money transmitting business with the sole purpose of avoiding regulatory barriers and helping criminals to launder illicit proceeds by enabling them to conduct their transactions anonymously and making their transactions untraceable.¹⁷⁰ The grim reality of any contemptible entity such as Liberty Reserve is that they facilitate laundering of proceeds obtained through credit card, identity and investment fraud, child pornography, computer hacking and narcotics trafficking.¹⁷¹ In the case of Liberty Reserve, users were required to create an identity, but the identity was never verified and thus people just made fake identities without any repercussions.¹⁷² Accordingly, where a regulatory framework is introduced, it should not only contain provisions that require basic identifying information but also stipulate that the identities of users must be verified and validated. Although it is important to note that Liberty Reserve was an illegal money transmitting vehicle from the outset, they probably would not have complied with regulations in the first place. In order to effectively utilise the illicit services Liberty Reserve rendered, it was required that users’ transactions be facilitated through unlicensed third party exchangers who operated in jurisdictions with questionable anti-money laundering regulations.¹⁷³

A further criminal enterprise relating to virtual currency is the infamous Silk Road. Silk Road was an online darknet market¹⁷⁴ that facilitated the anonymous purchase and sale of illegal goods and services.¹⁷⁵ The first step of enabling its anonymity was the operation on the anonymity Tor-network¹⁷⁶ and additionally the exclusive use of Bitcoins as a means of payment, which further elevated the concealment of users’ identities.¹⁷⁷ What appeared to be an added layer of anonymity could be attributed to

¹⁶⁸ FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 10.

¹⁶⁹ FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 10.

¹⁷⁰ FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 10.

¹⁷¹ FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 10.

¹⁷² FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 10.

¹⁷³ FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 10.

¹⁷⁴ <https://www.investopedia.com/terms/d/darknet-market-cryptomarket.asp> (accessed 06-08-2020).

¹⁷⁵ FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 11.

¹⁷⁶ Tor network provides for anonymous online activity and conceals user identities <https://www.torproject.org/about/history/> (accessed 06-08-2020).

¹⁷⁷ FATF “Virtual currencies key definitions and potential AML/CFT risks” June 2014 11.

the fact that users were able to utilise an infinite amount of Bitcoin addresses and therefore use a different Bitcoin address for each illegal transaction, ultimately making transactions even more untraceable and obscure.¹⁷⁸ Silk Road operated its own internal payment system to which users needed an account to be part of this payment system in order to conduct transactions on the website.¹⁷⁹ Since Silk Road operated exclusively with Bitcoins, the payment process entailed that users have a Silk Road address or virtual wallet associated with their Silk Road account, and Bitcoin payments were made through a Bitcoin exchanger to a user's Silk Road account.¹⁸⁰ Additionally, when a user conducted a purchase on the marketplace, Silk Road added a third layer of anonymity by transferring a user's Bitcoins into an account that was maintained by Silk Road (it functioned as a filter) and consequently after the transaction was completed, Silk Road would transfer the purchaser's Bitcoins to the intended recipient's Bitcoin address.¹⁸¹ These transactions were also subject to being facilitated through "tumblers" (an anonymity-enhancement mechanism) that basically made it impossible to link payments made with the outgoing Bitcoins from Silk Road.¹⁸² It is worth noting that these anonymity-enhancement technologies enhance the anonymity as well as limit the traceability of transactions on virtual currency networks.¹⁸³ This mixing technology is called "washers" or "tumblers", which essentially obfuscates the paper trail of individual transactions. However, on the plus side, it is detectable in the transaction trail whether mixing has occurred on the particular digital ledger.¹⁸⁴

3.3.2.2 *Monetary policy and financial stability*

One of the implications of virtual currencies is that it imputes a new method of transferring money (or value) through decentralised peer-to-peer internet protocols.¹⁸⁵ Parallel virtual monetary systems consist of the potential to lessen the effectiveness of monetary policy. For example, it can have the effect that governmental capital

¹⁷⁸ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 11.

¹⁷⁹ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 11.

¹⁸⁰ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 11.

¹⁸¹ FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 11.

¹⁸² FATF "Virtual currencies key definitions and potential AML/CFT risks" June 2014 11.

¹⁸³ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 166.

¹⁸⁴ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 166.

¹⁸⁵ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 163.

control mechanisms are circumvented.¹⁸⁶ The impact of virtual currencies on monetary policy will depend on how prevalent the use of virtual currencies become in the future. At present, virtual currencies do not pose any significant threat to monetary policy.¹⁸⁷

According to the IMF, virtual currencies do not pose a systemic risk at present due to the small scale represented in the broader financial system.¹⁸⁸ Even with the bankruptcy of Mt. Gox, which was the main Bitcoin exchange platform, it only posed disruptions to the virtual currency market and not to the broader financial system.¹⁸⁹ Consequently, the financial risk is currently limited to individuals who are virtual currency holders.¹⁹⁰ Regulators will need to monitor the developments of virtual currencies closely in the sense where virtual currency intermediaries start to replicate the functions of banks and therefore being subject to the same regulations pertaining to banks as well as whether these virtual currency intermediaries, where they perform deposit taking services, should also be protected by deposit insurance schemes.¹⁹¹ Furthermore, the cross-border nature of virtual currencies will eventually demand that an international regulatory oversight authority be established for purposes of overseeing the virtual currency markets utilising blockchain technology.¹⁹²

It is argued by Poskriakov et al that virtual currencies do not pose a risk to financial stability, since it is not a viable unit of account due to its inherent high volatility.¹⁹³ Additionally, as noted by Hofert, the threat to financial stability only comes into being where the utilisation of virtual currencies in the real economy becomes more prevalent and a lack of structural developments dedicated to making virtual currencies more stable are not developed.¹⁹⁴

¹⁸⁶ Hofert E “Regulating virtual currencies” 2019 IMFS Working Paper Series 11.

¹⁸⁷ International Monetary Fund staff discussion note “Virtual currencies and beyond: Initial considerations” January 2016 33.

¹⁸⁸ International Monetary Fund staff discussion note “Virtual currencies and beyond: Initial considerations” January 2016 31.

¹⁸⁹ International Monetary Fund staff discussion note “Virtual currencies and beyond: Initial considerations” January 2016 32.

¹⁹⁰ International Monetary Fund staff discussion note “Virtual currencies and beyond: Initial considerations” January 2016 32.

¹⁹¹ International Monetary Fund staff discussion note “Virtual currencies and beyond: Initial considerations” January 2016 33.

¹⁹² International Monetary Fund staff discussion note “Virtual currencies and beyond: Initial considerations” January 2016 33.

¹⁹³ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin “Cryptocurrency compliance and risks: A European KYC/AML perspective” (2019) GLI 171.

¹⁹⁴ Hofert E “Regulating virtual currencies” 2019 IMFS Working Paper Series 12.

3.3.2.3 Consumer protection

A lack of regulation and transparency renders consumers vulnerable to risks.¹⁹⁵ Consumers who rely on virtual currency intermediaries, such as wallet holders, payment processors and exchange platforms, are particularly at risk due to the unregulated waters in which these virtual currency service providers operate.¹⁹⁶ In essence, the lack of proper regulatory frameworks and safeguards can make consumers prone to scams that attempt to steal their virtual currencies.¹⁹⁷ Consumers are also at risk due to no legal redress available to them should an error occur during a transaction.¹⁹⁸ Usually, in such a case, the consumer bears the risk of failure of the transaction as opposed to the traditional centralised payment system where the central authority would bear the risk.¹⁹⁹

3.4 Conclusion

The anonymity attached to virtual currencies opens a Pandora's box of risks. There is a need for regulation that will focus on limiting the degree of anonymity that enables the exploitation of these risks. It is clear that money laundering and terrorist financing risks are exacerbated in the unregulated virtual currency markets²⁰⁰ and the severe degree of anonymity afforded to users makes it even more desirable. Where all the necessary virtual currency service providers (such as CASPs) are not included in the proper regulatory scope, it will cause more loopholes for criminal actors to achieve their mischievous activities, which pose a risk to financial integrity.²⁰¹

In my view, there is a dire need for regulation to mitigate and ultimately prevent the malicious use of virtual currencies. However, it is also important to maintain a balance whereby a regulatory response does not stifle the innovation of this technology where it has legitimate benefits.

¹⁹⁵ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 28.

¹⁹⁶ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 28.

¹⁹⁷ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 28.

¹⁹⁸ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 28.

¹⁹⁹ International Monetary Fund staff discussion note "Virtual currencies and beyond: Initial considerations" January 2016 28.

²⁰⁰ Poskriakov F Chiriaeva M Cavin C Lenz & Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" (2019) GLI 166.

²⁰¹ European Parliament "Crypto-assets – Key developments, regulatory concerns and responses" April 2020 51.

In my view, if virtual currencies were put into a regulatory framework where the level of anonymity is significantly decreased, it will still not hamper the legitimate benefits of the technology. Not having anonymity attached to virtual currency will not hamper the low cost and speed of transactions. It will not disable the fact that transactions can be facilitated cross-border. The only effect is that it will take away the veil of protection afforded to criminals when they conduct illicit activities.

Chapter 4:

Current regulatory developments

4.1 Introduction

Virtual currency regulation is still in its infancy as authorities around the world are still searching for ways to congruously regulate this phenomenon. In the past few years, numerous different developments have been adopted, some more comprehensive than others. This chapter will delve into the regulatory developments undertaken by three different jurisdictions, namely South Africa, Canada and South Korea. The purpose is to investigate the different approaches taken by these jurisdictions as well as how they go about regulating virtual currencies.

4.2 South Africa

One of the first efforts addressing virtual currencies in South Africa was the SARB Position Paper on Virtual Currencies published in 2014. The position paper outlined the SARB's position on virtual currencies in accordance with the SARB's mandate and responsibilities.²⁰² The position paper placed emphasis on decentralised convertible virtual currencies, since they pose greater regulatory risks.²⁰³ These risks, which were highlighted in the previous chapter, include money laundering, terrorist financing and the potential to cause disruptions to the overall financial system.²⁰⁴ Consequently, it was also pointed out that the lack of a regulatory framework exacerbates the reality of risks.²⁰⁵ It was concluded in the Position Paper that the SARB does not regulate or oversee the virtual currency landscape and that virtual currency activities are conducted at the sole risk of the user without any recourse to the SARB.²⁰⁶

In the South African context, regulatory authorities use the term “crypto assets”, since it aligns with the regulatory approach regarding virtual currencies.²⁰⁷ The approach taken by regulatory authorities is a functional approach that is based on the economic activities that are being performed as opposed to a more generic “all-

²⁰² South African Reserve Bank position paper on virtual currencies 2014 2.

²⁰³ South African Reserve Bank position paper on virtual currencies 2014 3.

²⁰⁴ South African Reserve Bank position paper on virtual currencies 2014 5.

²⁰⁵ South African Reserve Bank position paper on virtual currencies 2014 6.

²⁰⁶ South African Reserve Bank position paper on virtual currencies 2014 12.

²⁰⁷ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 8.

encompassing” classification of virtual currencies.²⁰⁸ Thus, it is aligned with the specific functions pertaining to virtual currencies, since there is some functional overlap between virtual currencies and traditional currencies, commodities and other financial products.²⁰⁹ The definition for virtual currencies (crypto assets) adopted by regulatory authorities, through the IFWG, is as follows:

“A crypto asset is a digital representation of value that is not issued by a central bank, but is traded, transferred and stored electronically by natural and legal persons for the purpose of payment, investment and other forms of utility, and applies cryptography techniques in the underlying technology.”²¹⁰

The definition and specific nomenclature of “crypto assets” encompasses a broader term to include all the different types of virtual currency classifications²¹¹ as well as stablecoins and global stablecoins.²¹² In short, there are three classifications. The first classification is “exchange payment tokens”, which are designed to be utilised as a means of exchange or even for investment purposes.²¹³ The second classification is a “security token”, which represents rights relating to ownership, repayment of a sum of money or entitlement to a share in future profits.²¹⁴ The third classification is a “utility token”, which can be utilised to access a specific service or product that is provided for through a DLT platform.²¹⁵

Initially, in 2019, the IFWG Crypto Asset Regulatory Working Group (CARWG) proposed that a crypto asset regulatory framework should be developed in three phases.²¹⁶ Phase one would entail the registration process for crypto asset service providers (the so-called CASPs).²¹⁷ Phase two would consist of reviewing existing regulatory frameworks, including the possibility of amendments to introduce new

²⁰⁸ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 8.

²⁰⁹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 8.

²¹⁰ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

²¹¹ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 8.

²¹² IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

²¹³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

²¹⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

²¹⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 9.

²¹⁶ IFWG Crypto Assets Regulatory Working Group: Consultation paper on policy proposals for crypto assets 2019 25.

²¹⁷ IFWG Crypto Assets Regulatory Working Group: Consultation paper on policy proposals for crypto assets 2019 25.

regulatory requirements.²¹⁸ Essentially, in phase two, authorities would determine the suitability of the current regulatory framework for the incorporation of crypto asset activities.²¹⁹ Should it be the case that amendments to the existing regulatory framework are futile, the suggestion is that new regulations can be drafted.²²⁰ Phase three entails the assessment of the regulatory framework implemented²²¹ in order to determine the effectiveness thereof and whether the regulatory actions satisfied the intended objectives.²²² The 2020 IFWG CARWG consultation paper makes no specific reference to the three-phased approach, but it can be assumed that this approach is still relevant, since it is recommended that a phased approach be adopted in South Africa.

The 2020 IFWG CARWG consultation paper offers numerous recommendations in regard to the regulation of virtual currencies (crypto assets). However, this chapter will not discuss these recommendations, since the focus of this chapter is on the current regulatory developments already set in motion. It is important to note that the baseline of crypto asset regulation will be based on the recommendation that a regulatory approach taken by South Africa should be a unified regulatory approach that is risk-based, resilient and adaptive, technology-neutral, principles-based and being adopted in phases.²²³ It should also be noted that crypto assets remain without legal tender status in South Africa.²²⁴

4.2.1 Amendment to the Financial Intelligence Centre Act (FIC Act)

The Financial Intelligence Centre has reviewed Schedules 1, 2 and 3 of the FIC Act in order to align it with the international standards of the FATF.²²⁵ The impetus behind the proposed amendment of the Schedules to the FIC Act is to include additional

²¹⁸ IFWG Crypto Assets Regulatory Working Group: Consultation paper on policy proposals for crypto assets 2019 25.

²¹⁹ IFWG Crypto Assets Regulatory Working Group: Consultation paper on policy proposals for crypto assets 2019 26.

²²⁰ IFWG Crypto Assets Regulatory Working Group: Consultation paper on policy proposals for crypto assets 2019 26.

²²¹ IFWG Crypto Assets Regulatory Working Group: Consultation paper on policy proposals for crypto assets 2019 25.

²²² IFWG Crypto Assets Regulatory Working Group: Consultation paper on policy proposals for crypto assets 2019 26.

²²³ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 22 – 23.

²²⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 26.

²²⁵ Financial Intelligence Centre: Consultation paper on the amendments to Schedule 1, Schedule 2 and Schedule 3 of the Financial Intelligence Centre Act 38 of 2001 3.

institutions within its scope of application²²⁶ and ultimately bring South Africa's regulatory framework regarding money laundering and terrorist financing in line with the FATF international standards.²²⁷ Schedule 1 of the FIC Act deals with the list of accountable institutions that are required to comply with the provisions of the FIC Act.²²⁸ Accountable institutions under the FIC Act are required to (i) register with the Financial Intelligence Centre, (ii) conduct customer due diligence, (iii) keep records of client information and transactions and (iv) develop, document, maintain and implement a Risk Management and Compliance Programme (RMCP).²²⁹ Schedule 1 of the FIC Act will be amended to include Crypto Asset Service Providers (CASPs), since crypto assets can be used for money laundering and terrorist financing activities and therefore create risks purporting to such activities.²³⁰ As was emphasised in the previous chapter, the anonymity inherent to the use of virtual currencies cultivates numerous risks. Therefore, the risks posed by anonymity must be addressed in light of the reality that crypto asset exchanges may permit anonymous transfers where users are not adequately identified.²³¹

The first regulatory development regarding virtual currencies (crypto assets) relates to the insertion of CASPs into Schedule 1. The proposed amendment reads as follows:

“A person who carries on the business of one or more of the following activities or operations for or on behalf of a client:

- (a) Exchanging a crypto asset for a fiat currency or vice versa;
- (b) exchanging one form of crypto asset for another;
- (c) conducting a transaction that moves a crypto asset from one crypto asset address or account to another;

²²⁶ Financial Intelligence Centre: Consultation paper on the amendments to Schedule 1, Schedule 2 and Schedule 3 of the Financial Intelligence Centre Act 38 of 2001 3.

²²⁷ Financial Intelligence Centre: Consultation paper on the amendments to Schedule 1, Schedule 2 and Schedule 3 of the Financial Intelligence Centre Act 38 of 2001 4.

²²⁸ Financial Intelligence Centre: Consultation paper on the amendments to Schedule 1, Schedule 2 and Schedule 3 of the Financial Intelligence Centre Act 38 of 2001 5.

²²⁹ Financial Intelligence Centre: Consultation paper on the amendments to Schedule 1, Schedule 2 and Schedule 3 of the Financial Intelligence Centre Act 38 of 2001 5.

²³⁰ Financial Intelligence Centre: Consultation paper on the amendments to Schedule 1, Schedule 2 and Schedule 3 of the Financial Intelligence Centre Act 38 of 2001 16.

²³¹ Financial Intelligence Centre: Consultation paper on the amendments to Schedule 1, Schedule 2 and Schedule 3 of the Financial Intelligence Centre Act 38 of 2001 16.

- (d) safekeeping or administration of a crypto asset or an instrument enabling control over a crypto asset, and
- (e) participation in and provision of financial services related to an issuer's offer or sale of a crypto asset,

where 'crypto asset' means a digital representation of perceived value that can be traded or transferred electronically within a community of users of the internet who consider it as a medium of exchange, unit of account or store of value and use it for payment or investment purposes, but does not include a digital representation of a fiat currency or a security as defined in the Financial Markets Act, 2012 (Act 19 of 2012).²³²

The amendment thus intends to include CASPs as accountable institutions under the FIC Act for purposes of AML compliance obligations. A potential problem that might come to light with regard to the reporting requirements under the FIC Act relates to the definition of "cash" under the Act. The definition does not make provision for the inclusion of crypto assets. This might have the effect that, where transactions occur in cryptocurrencies, those transactions will not be reported in terms of the FIC Act.²³³

4.2.2 Amendments to the Value Added Tax Act 89 of 1991 and Income Tax Act 58 of 1962

The CARWG recommended that a uniform definition for "crypto assets" (as opposed to cryptocurrency) be adopted within the taxation regulatory landscape.²³⁴ On the bright side, the CARWG acknowledges that the current tax structure (within the Income Tax Act and Value Added Tax Act) is sufficient for purposes of crypto assets.²³⁵

Accordingly, the Taxation Laws Amendment Bill²³⁶ (TLAB) was introduced and amended section 2 of the VAT Act. Section 2, which deals with "Financial Services", was amended by the insertion of paragraph (o). Section 2, with the insertion of the amendments, reads as follows:

²³² National Treasury Proposed amendments to schedules to Financial Intelligence Centre Act, 2001 (*Government Gazette* 43447 of 19 June 2020).

²³³ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 436.

²³⁴ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 27.

²³⁵ IFWG Crypto Assets Regulatory Working Group: Position paper on crypto assets April 2020 27.

²³⁶ B32-2018.

“2(1) For the purposes of this Act, the following activities shall be deemed to be financial services:

(o) the issue, acquisition, collection, buying or selling or transfer of ownership of any cryptocurrency:

Provided that the activities contemplated in paragraphs (a), (b), (c), (d), (f) and (o) shall not be deemed to be financial services to the extent that the consideration payable in respect thereof is any fee, commission, merchant’s discount or similar charge, excluding any discount cost.”²³⁷

Furthermore, the Income Tax Act was amended by the inclusion of “any cryptocurrency” under the definition of “financial instrument”.²³⁸ Section 20A was also amended to include “the acquisition or disposal of any cryptocurrency”. The implication of this amendment is that losses incurred from dealings relating to crypto assets are ring-fenced to be used only against income earned from the crypto asset trade and, therefore, will prohibit virtual currency dealers from offsetting losses against any other trades.²³⁹

The taxation framework makes provision for crypto assets, but as was noted by the CARWG, there is a need for a uniform definition of crypto assets and thus, the word “cryptocurrencies” in the relevant taxation legislation should preferably be changed to “crypto assets”.

4.3 Foreign jurisdictions

4.3.1 Canada

Canada has a blended approach to regulating virtual currencies, where authorities acknowledge the need to protect the public from the risks associated with virtual currencies, but at the same time encourage the emergence of a new technology.²⁴⁰ In my view, a balanced approach is the most reasonable stance to take when it comes to the regulation of virtual currencies. It goes without saying that regulating virtual currencies is not simple. On the one hand, regulators need to refrain from regulating

²³⁷ S 2 of the Value Added Tax Act 89 of 1991.

²³⁸ Definition of ‘Financial instrument’ S 1 Interpretation of the Income Tax Act 58 of 1962.

²³⁹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 434.

²⁴⁰ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 243.

virtual currencies too harshly, thus rendering them redundant. On the other hand, a lack of adequate regulation might permit the manifestation of illegal activities. Essentially, the only logical outcome to such a conundrum would be to see whether the opportunities outweigh the challenges.

It is important to note that, in Canada, virtual currencies have no legal tender status and for taxation purposes, virtual currencies are treated as commodities, not money.²⁴¹ Section 8 of the Canadian Royal Currency Act²⁴² states that legal tender is notes issued by the Bank of Canada under the authority of the Bank of Canada Act²⁴³ and coins issued by the Royal Canadian Mint under the authority of the Royal Canadian Mint Act.²⁴⁴

In terms of taxation, Canadian regulatory authorities do not deem virtual currency as a currency for income tax purposes. Instead, they classify it as a commodity, which essentially entails that fluctuation of the value of virtual currencies is determined by external factors such as supply and demand and investor sentiment.²⁴⁵ It follows that virtual currencies are deemed to be a virtual simulacrum of commodities such as precious metals.²⁴⁶

Accordingly, symmetrical implications relating to commodities are ascribed to virtual currencies when it comes to acquiring and transacting in virtual currencies.²⁴⁷ In the acquisition of virtual currencies, in order to determine whether a tax liability transpires, the Canadian authorities review it on a case-by-case basis to determine the purpose, manner and circumstances under which virtual currencies are acquired.²⁴⁸ Furthermore, the related value of virtual currency for taxation purposes will be determined by the actual fiat currency paid for the acquisition of virtual currencies.²⁴⁹ Where the virtual currency is paid for using a foreign fiat currency, the applicable value will be determined by the conversion of the foreign fiat currency into Canadian dollar.²⁵⁰

²⁴¹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 243.

²⁴² R.S.C 1985 c. C-52.

²⁴³ S 7.1 of the Royal Currency Act.

²⁴⁴ S 7(1) of the Royal Currency Act.

²⁴⁵ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 247.

²⁴⁶ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 247.

²⁴⁷ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 247.

²⁴⁸ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 247.

²⁴⁹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 247.

²⁵⁰ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 247.

Considering the fact that virtual currencies are seen as commodities for taxation purposes, where virtual currencies are utilised to facilitate business transactions, it will be regarded as a barter transaction and subject to Canada's barter transaction tax rules.²⁵¹ In the case where virtual currencies are exchanged for other virtual currencies, it will fall under the auspices of trading one commodity for another commodity and will thus also be deemed as a barter transaction for taxation purposes.²⁵² Additionally, the use of virtual currencies to pay for goods and services are also considered as barter transactions.²⁵³

In terms of regulation pertaining to anti-money laundering, Canada passed Bill C-31 in 2014.²⁵⁴ Bill C-31 amended Canada's Proceeds of Crime (Money Laundering) and Terrorist Financing Act to make provision for the inclusion of virtual currencies.²⁵⁵ The implication of the amendment is that it classifies entities who conduct business in virtual currencies as "money service businesses" (MSBs).²⁵⁶ MSBs are the equivalent of accountable institutions under the South African regulatory landscape. Considering that entities dealing in virtual currencies are classified as MSBs, they are subject to requirements such as record keeping, reporting of suspicious transactions, identification and verification procedures.²⁵⁷

4.3.2 South Korea

A myriad developments have happened quite recently in South Korea regarding the regulation of virtual currencies. Therefore, this section will focus on how South Korea sought to regulate virtual currencies in the absence of a coherent legal framework as well as after the introduction of a legal framework. The developments discussed below are not exhaustive, but are those most relevant for purposes of this discussion. It should be noted that virtual currencies are legal in South Korea but have no legal tender status.²⁵⁸

²⁵¹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 248.

²⁵² Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 248.

²⁵³ The Law Library of Congress: Regulation of cryptocurrency around the world June 2018 11.

²⁵⁴ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 250.

²⁵⁵ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 250.

²⁵⁶ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 250.

²⁵⁷ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 250.

²⁵⁸ [https://complyadvantage.com/knowledgebase/crypto-regulations/cryptocurrency-regulations-south-korea/#:~:text=Cryptocurrency%20exchange%20regulations%20in%20South,Financial%20Supervisory%20Service%20\(FSS\).&text=In%202018%2C%20the%20Financial%20Services,accounts%20held%20by%20crypto%20exchanges.](https://complyadvantage.com/knowledgebase/crypto-regulations/cryptocurrency-regulations-south-korea/#:~:text=Cryptocurrency%20exchange%20regulations%20in%20South,Financial%20Supervisory%20Service%20(FSS).&text=In%202018%2C%20the%20Financial%20Services,accounts%20held%20by%20crypto%20exchanges.) (accessed 24-08-2020).

4.3.2.1 Prior to amendments to the Act on Reporting and Use of Specific Financial Transaction Information (RUSFTI)

Before the amendments of the RUSFTI, South Korea did not have a coherent approach to the classification of virtual currencies under the South Korean regulatory framework.²⁵⁹ Instead of defining virtual currencies, the Korean Financial Supervisory Service (FSS) took the opposite approach in a 2017 press release, stating what virtual currencies are not classified as.²⁶⁰ From a financial regulatory perspective, the FSS stated that virtual currencies were not considered to be legal tender, electronic money, electronic means of payment, or financial investment instruments.²⁶¹ The stance taken by the FSS was in the negative, hence there still remained a *lacuna* in regards to the classification of virtual currencies in South Korea.²⁶²

Before a coherent legal classification was established, the Supreme Court of South Korea found that virtual currencies can be confiscated as criminal proceeds, thus engendering the reality that virtual currencies are recognised as property.²⁶³ Nevertheless, there was still obscurity regarding the legal issues pertaining to virtual currencies and how they should be treated under South Korean law, which was due to the lack of coherent legislation providing clarity on its classification.²⁶⁴

It was expected from the outset that South Korean authorities would transpose existing laws and regulations to accommodate virtual currencies.²⁶⁵ South Korea also held the position that virtual currencies were not considered a financial instrument (or financial investment product) and therefore financial institutions who were registered under the Korean Financial Services and Capital Markets Act (FSCA) were prohibited from investing in virtual currencies.²⁶⁶

The Korean Financial Services Commission (FSC), which is a central governmental body responsible for financial supervision and financial policy in South Korea,²⁶⁷ banned the borrowing and purchase of funds or virtual currencies from virtual currency exchanges.²⁶⁸ It was held by the FSC that such practices were in

²⁵⁹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

²⁶⁰ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

²⁶¹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

²⁶² Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

²⁶³ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

²⁶⁴ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

²⁶⁵ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 368.

²⁶⁶ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 370.

²⁶⁷ <http://meng.fsc.go.kr/?c=about> (accessed 24-08-2020).

²⁶⁸ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

contravention of South Korean credit and lending laws – ultimately ordering financial institutions to cease transactions related to these practices.²⁶⁹ The FSC also prohibited any type of ICOs but failed to provide any legal ground for such prohibition.²⁷⁰ An interesting development introduced by the FSC relates to the identification policy regarding accounts held with virtual currency exchanges.²⁷¹ The FSC introduced a “Real Name Verification System” (RNVS), which has the effect that existing anonymous account holders are prohibited from making any deposits and are only allowed to withdraw money.²⁷² Furthermore, opening a virtual currency account will be subject to the user providing identification first.²⁷³ This development essentially links virtual currency accounts to the actual identities of users, therefore eliminating the potential risks associated with anonymity.

Until recently, prior to the amendment bill, virtual currency exchanges did not fall under the ambit of South Korea’s anti-money laundering laws, such as the Act on Reporting and Use of Certain Financial Transaction Information.²⁷⁴ Prior to the passing of the amendment bill, authorities established anti-money laundering guidelines (AML guidelines). Financial institutions that were linked to virtual currency exchanges served as a regulatory channel through which anti-money laundering obligations were enforced.²⁷⁵ Accordingly, where a financial institution conducted business with entities dealing in virtual currencies, the former was required to comply with the AML guidelines for virtual currencies issued by the Korean Financial Intelligence Unit (FIU).²⁷⁶ The requirements of the AML guidelines for financial institutions fall within the following three categories: (i) real name verification for the withdrawal of fiat currency from virtual currency exchanges and the deposit of fiat currency to virtual currency exchanges; (ii) customer due diligence; and (iii) reporting of suspicious transactions.²⁷⁷

The first requirement involved that any transaction with a virtual currency exchange will only be allowed where the user’s bank account is verified under the RNVS by the applicable financial institution.²⁷⁸ The second requirement requires

²⁶⁹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 367.

²⁷⁰ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 368.

²⁷¹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 368.

²⁷² Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 368.

²⁷³ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 368.

²⁷⁴ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 369.

²⁷⁵ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 369.

²⁷⁶ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 369.

²⁷⁷ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 369.

²⁷⁸ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 369.

financial institutions to conduct CDD in order to determine whether the user is a virtual currency exchange.²⁷⁹ Furthermore, additional information had to be obtained for verification purposes under the AML guidelines. The additional information serves to determine whether the virtual currency exchange effectually ensures the identity of its users and maintain a separate transaction record for each user as well as ensure that the virtual currency exchange is in compliance with policies relating to virtual currencies.²⁸⁰ The last requirement is self-explanatory to an extent, as this involves the obligation to report suspicious transactions. In addition to the reporting obligation on financial institutions, it was also required that financial institutions appoint a specific person dedicated to the monitoring of suspicious virtual currency transactions.²⁸¹

4.3.2.2 *Passing of Amendment bill on Act on Reporting and Use of Specific Financial Transaction Information*

In March 2020 an amendment bill to the Act on Reporting and Use of Specific Financial Transaction Information was passed, which provides a regulatory framework for virtual currencies and virtual currency service providers.²⁸² Under this bill, virtual currencies are classified as digital assets (virtual assets).²⁸³ This bill specifically focuses on AML obligations relating to virtual currency service providers as well as virtual currency exchanges.²⁸⁴ The amendment is aimed at complying with the FATF standards on anti-money laundering.²⁸⁵ Although there are numerous other bills relating to virtual currency, this amendment bill resonates most with the FATF virtual currency standards.²⁸⁶ The bill embodies the requirements set out in the AML guidelines that were published by the Korean authorities. Under the bill, any virtual currency related business or dealings are required to comply with reporting and registration duties.²⁸⁷

²⁷⁹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 370.

²⁸⁰ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 370.

²⁸¹ Global Legal Insights: Blockchain and cryptocurrency regulation first edition 2019 370.

²⁸² <https://news.bitcoin.com/south-korea-bill-cryptocurrency/> (accessed 24-08-2020).

²⁸³ <https://news.bitcoin.com/south-korean-committee-passes-bill-enforcing-fatf-crypto-rules/> (accessed 24-08-2020).

²⁸⁴ <https://news.bitcoin.com/south-korea-bill-cryptocurrency/> (accessed 24-08-2020).

²⁸⁵ <https://news.bitcoin.com/south-korea-bill-cryptocurrency/> (accessed 24-08-2020).

²⁸⁶ <https://news.bitcoin.com/south-korean-committee-passes-bill-enforcing-fatf-crypto-rules/> (accessed 24-08-2020).

²⁸⁷ <https://news.bitcoin.com/south-korean-committee-passes-bill-enforcing-fatf-crypto-rules/> (accessed 24-08-2020).

This moves away from the previous position whereby virtual currency exchanges were solely regulated indirectly through financial institutions.²⁸⁸

Accordingly, the amendment bill also addresses the lack of a coherent legal classification of virtual currencies by adopting comprehensive definitions for “virtual assets” and “virtual asset businesses”. These terms were defined in broad terms that allow them to encapsulate future developments that may give rise to the expansion of new and innovative forms of both virtual assets and virtual currencies.²⁸⁹

A virtual asset business is comprehensively defined as “any operation that is engaged in: (1) buying or selling virtual assets; (2) trading one virtual asset with another; (3) transferring virtual assets; (4) storing or managing virtual assets; (5) agency / brokerage / intermediary services for any of the abovementioned; or (6) any other transaction highly likely to be used in money laundering or terrorism financing.”²⁹⁰ Importantly, this definition includes token issuers, wallet services and virtual currency exchanges.²⁹¹

Furthermore, not only is the term “virtual assets” in line with the definition adopted by the FATF, but the South Korean approach on the definition allows for the definition to encompass any virtual currencies regardless of whether or not they operate on blockchain technology.²⁹²

In my view, this is a particularly important approach considering the rapid technological developments taking place in the modern age. By limiting regulations to a specific technology might cause problems where other technologies and innovations emerge. To give an example, IOTA is a technology that does not operate on a blockchain.²⁹³ IOTA operates on “Tangle”, which is the mechanism used for data generation and value exchange. It is built for the “Internet of Everything” which is a network that facilitates the exchange of data between humans and machines.²⁹⁴ IOTA

²⁸⁸ <https://news.bitcoin.com/south-korean-committee-passes-bill-enforcing-fatf-crypto-rules/> (accessed 24-08-2020).

²⁸⁹ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

²⁹⁰ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

²⁹¹ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

²⁹² <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

²⁹³ <https://www.iota.org/get-started/what-is-iota> (accessed 24-08-2020).

²⁹⁴ <https://www.iota.org/get-started/what-is-iota> (accessed 24-08-2020).

is also a distributed ledger like Bitcoin but it operates on different technology.²⁹⁵ The discussion of IOTA goes beyond the scope of this chapter, but the point is that regulatory authorities should take cognisance of the existence of other technologies pertaining to virtual currencies that are emerging rapidly. Having regulations that are designed to make provision for new developments is paramount in the modern technological age.

The implications of the amendments entail that virtual asset businesses are required to register with Korea's Financial Intelligence Unit (FIU). In addition to the registration requirement that needs to be complied with, virtual asset businesses should also prove that they have an adequate "information security management system" in place and that banking is done under a real-name basis.²⁹⁶ Virtual asset businesses must also comply with AML/KYC requirements along with reporting and record keeping of transactions.²⁹⁷

Where banks and financial institutions conduct business with virtual asset businesses, the amendments grant banks and financial institutions the power to impose their own AML/KYC requirements on virtual asset businesses.²⁹⁸ In the case where a bank or financial institution finds that a virtual asset business does not comply with the respective AML/KYC requirements, they may refuse to open or maintain an account held by the virtual asset business.²⁹⁹ An additional layer of duties is imposed on financial institutions to the extent that they must conduct their own KYC on the virtual asset business.³⁰⁰ Essentially, financial institutions are required to ensure that a virtual asset business is banking under its real name as well as monitor the conduct of the virtual asset business in order to determine the related risk of money laundering and terrorist financing associated with the virtual asset business.³⁰¹

²⁹⁵ <https://www.investopedia.com/terms/t/tangle-cryptocurrency.asp> (accessed 24-08-2020).

²⁹⁶ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

²⁹⁷ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

²⁹⁸ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

²⁹⁹ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

³⁰⁰ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

³⁰¹ <https://www.vantageasia.com/comparison-developments-cryptocurrency-regulation/> (accessed 24-08-2020).

In my view, a real name linked to a bank account is a simple, yet effective development to combat the anonymous use and trading of virtual currencies. Additionally, the dual-layer approach regulating virtual asset businesses through the legal framework as well as financial institutions might seem a bit over the top, but it will be interesting to witness how it will play out in the future and how virtual currency participants respond to such robust regulation.

4.4 Conclusion

Although the different jurisdictions discussed above might have a different classification on virtual currencies, in terms anti-money laundering and terrorist financing, there appears to be some congruity. It is evident that countries are attempting to develop regulatory frameworks that comply with the FATF standards. Although each country faces its own distinct challenges in regulating virtual currencies, there is a glimmer of hope for a uniform global approach in regard to regulating virtual currencies.

The proactive approach taken by South Korea and South Africa of having a “technology neutral” classification for virtual currencies is definitely a step in the right direction when we get to that point where new technological innovations make their debut in the financial scene. An important take from Canada is the need to strike a balance between not regulating virtual currencies to the point where it will stifle the innovation and functionality of this technology. In my view, striking this balance is the biggest challenge facing any regulators at this stage.

As time passes, regulators will need to actively monitor the developments of virtual currencies and the technology they operate on, especially from a regulatory lens. In my view, it is paramount to keep abreast of the latest trends as well as have an active approach to analyse and implement new ideas to accommodate and mitigate risks associated with the rapid technological developments taking place in our modern age.

Chapter 5:

Conclusion

5.1 Introduction

This chapter will provide a brief summary of the key points discussed in each substantive chapter followed by recommendations relating to an approach that should be considered by regulatory authorities when they implement a regulatory framework for virtual currencies.

5.2 Summary of findings

5.2.1 Chapter 2

In Chapter 2 the purpose was to draw a comparison between virtual currency and fiat money in order to acquire a better understanding of virtual currencies in relation to its functionality to operate as a medium of exchange. The research showed that virtual currency fulfils the three functions of money albeit not perfectly.

Although some authors agree that virtual currency fulfils the three functions of money and others like Yermack showed strong opposition, essentially in order to fulfil the three functions of money there is also a deeper intrinsic requirement attached to these functions, namely practicality. It came to light that the encumbrance relating to virtual currency as a medium of exchange does not necessarily sprout from a legal or technical problem but rather practicality. Future developments might possibly eliminate the hurdle of “practical reality”, which will give way to a new dawn where virtual currencies can effectively function as a medium of exchange. It can be illustrated in the following manner: Virtual currency can be seen as a car consisting of a frame, with four wheels, functional steering and a motor engine but no body work such as doors and a roof. Technically it is a car for purposes of a motor propelled construct that can get you from point A to B, but it is not in driving condition that is deemed legal or ideal. As soon as the car gets body work done, windows added and lights installed and it has passed all the safety requirements, then it will be deemed a car for leisure and travel purposes. In this case, virtual currency is a car without body work and fiat currency is a fully manufactured roadworthy vehicle.

The protruding element necessitates that, for something to function as a medium of exchange, it has to be widely accepted as a method of payment within a society. It

is presumed that virtual currencies will be formally accepted as a medium of exchange once some sort of stabilisation occurs when governments or central banks start issuing their own virtual currencies.

5.2.2 Chapter 3

Chapter 3 addressed the risks associated with virtual currencies and why adequate regulation is paramount. Due to the fact that virtual currencies pose numerous kinds of risks to the national payment system as well as consumers, the chapter stressed the need for regulation. In this chapter it was noted that transposing the current regulatory frameworks to accommodate virtual currencies might not be the ideal approach, since current regulatory frameworks are designed specifically for a centralised financial system. Therefore, a sounder approach would be to develop a regulatory framework that is specifically designed for virtual currencies that encourages its legitimate uses and benefits while dismantling the attributes that may give rise to illegal activities.

It was established that the anonymity attached to virtual currencies constitutes the most problematic source warranting illegal activities. Where anonymity is the key ingredient that gives virtual currency value, then virtual currency in itself sheds a questionable light on the motives of its users. The legitimate uses and advantages should be the reason why this technology is endorsed rather than a questionable attribute such as anonymity.

5.2.3 Chapter 4

Chapter 4 was the comparative chapter that highlighted the current developments that are set in motion both locally and internationally. The main emphasis of the developments discussed were concomitant to the approaches taken by different jurisdictions. In the findings it is apparent that a uniform approach is making headway, whereby jurisdictions assimilate to the FATF standards in regards to the registration and reporting duties of CASPs and virtual currency exchanges.

Consequently, the aim was also to shed light on the distinct approaches taken by different countries in order to regulate virtual currencies in their own respective jurisdictions. Canada transposed virtual currency into their existing regulatory framework by classifying it as a commodity and regulating virtual currencies in the same manner and outcome as if it were an actual commodity. In terms of South Africa

and South Korea, the main novelty was that these two jurisdictions based their regulatory approach on the basis of having an all-encompassing definition for virtual currencies. This definition is not technology central and is focused on the functions that the technology performs.

5.3 Recommendations

The most effective way to combat money laundering and terrorist financing is to embrace a uniform global approach. The effect of a uniform global approach is that it will prevent criminals from exploiting jurisdictions with weak regulatory controls. My recommendation is that regulators need to actively pursue a regulatory approach that promotes a balance between stimulating innovation and not stifling it. However, certain drastic infringing measures must be put into place in order to prevent the illegal utilisation of virtual currencies, such as having a rigorous framework that eliminates the anonymity factor associated with virtual currencies. Lastly, it is important that regulatory approaches adopted must be flexible and proactive in order to make provision where new technologies enter the fray.

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