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The Proposal for the Regulation of Cryptocurrencies in South Africa and the Possible Impact on the Financial Sector.

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The Proposal for the Regulation of Cryptocurrencies in South Africa and the Possible Impact on the Financial Sector.

By

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This dissertation submitted in partial fulfilment of the requirements for the degree of Master of Laws by Coursework and Research Report at the University of the Witwatersrand, Johannesburg

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Declaration

I, Kiara Bahadur, hereby declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree Master of Laws in Business and Commercial Law in the field of Banking at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Signed at Johannesburg on this 17th day of August 2022.



Kiara Bahadur

Abstract

The global pandemic engendered a shift in traditional banking activities, forcing the banking and finance sector to adapt, due to technological advances, in the past few years. The pandemic conditions accelerated the demand for a digital banking environment and e-commerce transactions. The white paper titled "Bitcoin: A peer-to-peer electronic cash system", authored by Satoshi Nakamoto around 2008, outlined the fundamental elements of Bitcoin. While describing the core elements of cryptocurrencies, it did not furnish a definition. The distinctive features of a centralised and decentralised exchange can discern what type of cryptocurrency individuals are dealing with. Once the type of cryptocurrency can be identified, the advantages and disadvantages can be evaluated. Advantages include the ease of entry, the increased efficiency of payments, anonymity, independence from third parties, and the lack of traceability. The disadvantages include untraceable transactions, anonymity, and increased speed of payment which can create an environment that is more conducive to being susceptible to illicit and illegal activities. Given the irreversibility of transactions and level of anonymity, holding wrongdoers accountable can be challenging. An assessment of the risks must be conducted, as not only is there a loss of direct contact with the client, but also a loss of a third intermediary which alters how the financial sector operates.

To mitigate risk for individuals, this dissertation will explore preventative measures such as regulatory suggestions and KYC mechanisms. It further aims to examine the regulation of cryptocurrencies within South Africa, accessing its potential impact on the financial sector and highlighting the gaps in the regulatory framework. This dissertation will further focus on the legislative instruments such as the Financial Intelligence Centre Act No.38 of 2001, the South African Reserve Bank Act 90 of 1989, and the Financial Markets Act 19 of 2012. Additional consideration will be given to the African Reserve Bank Position Paper on virtual currencies, along with the Position Papers on crypto assets published by the Intergovernmental Fintech Working Group in 2020 and 2021. In providing comparative insights, this dissertation explores the regulatory approaches of the United States and China to elucidate potential strategies for effective regulation in South Africa and identify areas of improvement. Furthermore, it will employ qualitative research methods to explore the possible impact on the financial and banking sector.

Abbreviations

CAR WG	Crypto Assets Regulatory Working Group
FIA	Financial Intelligence Centre Act
FIC	Financial Intelligence Centre
Fintech	Financial technology
ICO	Initial coin offerings
IFWG	Intergovernmental fintech working group
KYC	Know Your Customer
PBOC	Peoples Bank of China
SARB	South African Reserve Bank
SARS	South African Revenue Service
US	United States

Glossary Of Terms

Anonymity is defined as an entity that cannot be distinguished from any other entity.[1]

Block Chain can be referred to as a public ledger, where all committed transactions are stored in a chain of blocks.[2]

Cryptography is a method of protecting information and communication through the usage of codes.[3]

Fiat currency is backed by the central bank and its main purpose is of being a medium of exchange.[4]

Fintech refers to new technology which is used to improve different aspects of the banking and financial sectors.

Legal tender refers to banknotes and/or coins that may be legally offered in payment of an obligation and that a creditor may be obliged to accept as a medium of payment.[5]

Medium of exchange is referred to as an intermediary instrument which can be used to facilitate the sale, purchase, or trade of goods between different parties.[6]

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[1] Niluka Amarasinghe, Xavier Boyen, and Matthew McKague "A Survey of Anonymity of Cryptocurrencies" in *ACSW 2019: Proceedings of the Australasian Computer Science Week Multiconference* Association for Computing Machinery (ACM), United States of America 2.
[2] Zibin Zheng, Shaoan Xie, Hong-Ning Dai, Xiangping Chen, and Hauimin Wang "Blockchain challenges and opportunities: a survey" (2018) 14(4) *International Journal of Web and Grid Services 352.*
[3] Festus O Ukwueze "Cryptocurrency: towards regulating the unruly enigma of Fintech in Nigeria and South Africa" *(*2021) 4(4) *PER/PELJ* fn15.
[4] Dirk Baur, Adrian D. Lee and Kihoon Hong "Bitcoin: Currency or Investment?" (2015) *SSRN Electronic Journal* DOI:10.2139/ssrn.2561183.
[5] The South African Reserve Bank Act No.90 of 1989.
[6] Op cit note 4.

CHAPTER 1 INTRODUCTION

1.1 Background

In 2008, the world financial markets were hit by the worst economic disaster since the Great Depression of 1929. With the resulting high levels of unemployment, low interest rates, and low wages, many individuals started looking for new means of making money.[7] Cryptocurrencies emerged as a new and innovative means for individuals to use as a medium of exchange for goods and services.[8] The growth and popularity were largely due to the loss of confidence investors had in the financial sector.[9]

Cryptocurrencies are tokens issued as a medium of exchange for general or specific purposes.[10] In general, it is not considered a fiat currency because it is not backed by a sovereign state.[11] In South Africa ("SA"), cryptocurrencies are not regarded as legal tender, as they are not issued by the government.[12] Therefore, there is no obligation to accept cryptocurrencies as a means of payment.

Cryptocurrencies can be centralised or decentralised. Centralised exchange means that the cryptocurrency will maintain a structure similar to that of the traditional banking system.[13] A third-party intermediary will act as a custodian for cryptocurrencies.[14] A decentralised exchange will not require the need for this intermediary, as no third-party involvement is required.[15] There is no central server or primary computer, rather cryptocurrency is flittered through many computers.[16] Decentralised cryptocurrencies are free from national political control. Examples include Bitcoin

[7] Nicholas Oulton and Maria Sebastia-Barriel "Effects of financial crises on productivity, capital and employment" (2016) 63(1) *Review of Income and Wealth 1.*
[8] Xiao Fan Liu, Huan-Huan Ren, Si-hao Liu, and Xian-Jian Jiang "Characterizing key agents in the cryptocurrency economy through blockchain transaction analysis" (2021) 10(21) *EPJ Data Science.*
[9] Op cit note 3.
[10] Ingolf G. A. Pernice and Brett Scott "Cryptocurrency" (2021) 10(2) *Internet Policy Review* 1.
[11] Robert Kirkby "Cryptocurrencies and Digital Fiat currencies" (*2018) 51(4) Australian Economic Review.*
[12] NH Hamukuaya "The development of cryptocurrencies as a payment method in South Africa" (2021) 24(10) PER/PELJ.
[13] Angelo Aspris, Sean Foley, Kiri Svec and Leqi Wang "Decentralized exchanges: The wild west of cryptocurrency trading" (2021) 77(101845) International *Review of Financial Analysis.*
[14] Ibid.
[15] Op cit note 13 fn*3.*
[16] Izwan Amsyar, Ethan Christopher, Arusyi Dithi, Amar Najiv Khan and Sabda Maulana "The challenge of cryptocurrency in the era of the digital revolution: a review of systematic literature" (2020) 2(2) *Aptisi Transactions on Technopreneurship* 153.

Bancor, and Uniswap.[17] Bitcoin is known as an open source, which means no legal barriers are preventing other people from using it. [18]

Bitcoin was the first cryptocurrency to be created in 2008 by Satoshi Nakamoto.[19] Nakamoto's paper did not use the term cryptocurrency but rather referred to it as a peer-to-peer currency or a peer-to-peer version of electronic cash.[20]According to Nakamoto, a purely peer-to-peer version of electronic cash would open the door to payments being sent directly from one party to another without the use of a financial institution.[21] In SA, the most popular cryptocurrencies are Bitcoin, Ethereum, Solana and Dogecoin.[22]

El Salvador was the first country to introduce Bitcoin as their legal tender in 2021.[23] In 2022 the Central African Republic made Bitcoin their official legal tender.[24] The cryptocurrency adoption index published by Finder provides statistics on cryptocurrency ownership as of December 2021.[25] South Africa's overall cryptocurrency ownership percentage is 11.3 percent which outranks the United States ("US") at 10.5 percent. [26]

Most countries view cryptocurrencies with caution and limit their usage without outright banning them. For example, in 2021 Iran placed a short-term ban on Bitcoin mining.[27] In 2021 China and Turkey took it a step further by completely banning the usage of cryptocurrencies.[28] Several other

[17] Op cit note 8.
[18] National Treasury "User Alert Monitoring of Virtual currencies" 18 September 2014 available at: https://perma.cc/B3D8-NPYS, accessed 2 November 2022 2.
[19] Satoshi Nakamoto "Bitcoin: A peer-to-peer Electronic Cash System" 2008 available at https://bitcoin.org/bitcoin.pdf.
[20] Op cit note 10 1.2.
[21] Op cit note 19.
[22] Abtin Ijadi Maghsoodi "Cryptocurrency portfolio allocation using a novel hybrid and predictive big data decision support system" (2022) 115(102787) *Omega*.
[23] Sergio Gorjon "The role of crypto assets as legal tender: the example of El Salvador" (2021) *Banco de Espana* 35/21.
[24] Klemens Katterbauer, Syed Hassan, and Lurent Cleenewerck "The impact of the legalization of bitcoin in the Central African Republic – a legal analysis" (2020) 713 *Intergovernmental Research and Policy Journal 746.*
[25] Op cit note 22.
[26] Ibid.
[27] Chloe Orji "Bitcoin Ban: These are the countries where crypto is restricted or illegal" *Euronews* 27 April 2022, available at https://www.euronews.com/next/2022/04/27/bitcoin-ban-these-are-the-countries-where-crypto-is-restricted-or-illegal2, accessed on 3 July 2022.
[28] Ibid.

countries have banned the use of cryptocurrencies, including Indonesia in 2018 and Bolivia in 2014.[29]

Some countries have not adopted a straightforward approach to cryptocurrencies. Russia is an example of this as they are unsure whether to exploit the new technological opportunity or be wary of its use.[30] We can see from the above that different countries have taken different approaches to cryptocurrencies. At least 47 percent of South Africans view cryptocurrency as an advantageous investment option.[31] With the growing popularity of cryptocurrencies, consumers must be aware of the level of long-term, short-term, economic and security risks. Regulations should be created and implemented to protect individuals without stifling innovation and the growth of the industry.

1.2 Statement of Purpose

In South Africa, there is under-regulation of cryptocurrencies.[32] Consumers may be exposed to substantial risk and financial losses because of this regulation.[33] There is a need to fully explore the relationship between cryptocurrencies and its impact on the financial sector and various trading businesses. As a means of protecting individuals, this dissertation seeks to describe cryptocurrencies, the forms in which they can be found and identify the gaps in the existing regulatory framework. It is salient to examine other jurisdictions and the issues that have arisen due to the rise in the popularity of cryptocurrencies.

1.3 Research Rationale

This dissertation explores how cryptocurrencies are defined in South Africa, the implications of different legislative definitions, different types of cryptocurrencies, inadequacies of the existing regulatory framework in SA and their advantages and disadvantages. It is possible to prevent illicit

[29] Ibid.
[30] Anna Zharova and Ian Lloyd "An examination of the experience of cryptocurrency use in Russia, in search of better practice" (2018) 34 *Computer Law and Security review* 1300.
[31] Mark Bechard "Cryptocurrency ownership in Sa below global average" *Moonstone* 24 January 2022, available at https://www.moonstone.co.za/cryptocurrency-ownership-in-sa-below-global-average/, accessed on 2 November 2022.
[32] IFWG "Position Paper on Crypto Assets" Crypto Assets Regulatory Working Group 2021.
[33] Ibid.

and illegal activities through the creation of new regulations or the improvement of existing regulations.

1.4 Research Questions

1.4.1 What are the gaps in the regulatory framework of cryptocurrencies in South Africa?
1.4.2 How are cryptocurrencies defined and is there a universally accepted definition?
1.4.3 What are the risks associated with cryptocurrencies?
1.4.4 What lessons can be learned from other jurisdictions?

1.5 Research Methodology

This research will employ a qualitative research method comprising of desktop research to answer the research questions listed above. It will utilize primary resources such as international and national legislation, and case law. The main legislative instruments I will consider is the Financial Intelligence Centre Act No.38 of 2001, and the Financial Markets Act No.19 of 2012. Additional consideration will be given to the African Reserve Bank Position Paper on virtual currencies, along with the Positions Papers on crypto assets published by the Intergovernmental Fintech Working Group in 2020 and 2021. The secondary sources will include academic journals, government policy papers, white papers, books, and internet articles. In chapter 5.2, I have chosen the United States ("**US**") and China as the two comparative jurisdictions due to their regulatory contrasts. China highlights a stringent regulatory stance, whereas the US embodies a permissive attitude towards cryptocurrencies. Both countries offer distinct regulatory frameworks that can be compared to SA.

1.6 Limitations of Research

The development of cryptocurrencies is a relatively new area of technological advancement. In what is still considered an unexplored field, there is limited information available due to limited discussions, a lack of journals and regulations.

1.7 Chapter Outline

Chapter 1 is the introductory chapter. It provides a background to cryptocurrencies, a statement of purpose, the rationale for this research, research questions and research methodology. It also provides a brief discussion of the limitation of the research.

Chapter 2 explores how cryptocurrencies are defined in SA by different regulatory bodies. Various types of cryptocurrencies, as well as their advantages and disadvantages, will be discussed. Cryptocurrencies have had a profound impact on the banking and finance industries. It will examine this impact as well as other possible consequences that may arise.

Chapter 3 outlines the risks identified by the SARB and IFWG. It discusses the risk associated with anonymity, private keys, cyber security, and the definition of cryptocurrencies. It will further explore possible preventative measures and the acceptable level of protection. Among the topics covered are anonymity, legal tender declarations, and private keys' protection.

Chapter 4 provides an in-depth background into the history of regulation in SA. This chapter discusses the existing regulation in SA and seeks to identify the gaps in the regulatory framework.

Chapter 5 provides a comparative perspective to what regulations other jurisdictions have implemented in past years. A comparative analysis will be concluded with countries that have accepted cryptocurrencies and others that have banned them, with reference to the United States and China.

In the conclusion, Chapter 6 also provides recommendations on how cryptocurrency regulation should be established.

CHAPTER 2 CRYPTOCURRENCIES

2.1 Introduction

Cryptocurrency, virtual currency, and digital currency are terms that are used interchangeably.[34] Cryptocurrencies do not qualify as legal tender.[35] The view is that goods and services could be exchanged for crypto assets through a barter transaction.

Cryptocurrencies gained popularity since Nakamoto's white paper.[36] The following three salient characteristics were highlighted: independence from central authority, double spending protection, and the promise of anonymity.[37] The traditional banking system (centralised environment) is where users can rely on trusted third parties to process their transactions and attempt to preserve the privacy of related information.[38] Unlike traditional currencies, cryptocurrency does not require third-party intermediaries. The next characteristic is double spending which occurs when two payments are made with the same currency or funds with the purpose to deceive or misled the recipient of those funds.[39] Online payments are highly subjected to this type of risk. Cryptocurrencies' attractiveness grew as it was providing a different service from the traditional banking system. Bitcoin was the first cryptocurrencies with complete decentralised control.[40]

2.2 Definitions

There is no homogeneity worldwide concerning the definition of cryptocurrencies. Cryptocurrencies have been referred to by different terms such as digital tokens, digital assets and/or crypto assets. They are known to be assets of an intangible nature.[41]

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[34] Op cit note 3 at 5.
[35] Section 17 of the South African Reserve Bank Act No.90 of 1989.
[36] Op cit note 19.
[37] Ibid.
[38] Op cit note 1 at 2.
[39] Usman Ghohan "The double spending problem and cryptocurrencies" (2021) SSRN 3090174.
[40] Fatemeh Rezaeibagha and Yi Mu "Efficient Micropayment of Cryptocurrency from Blockchains" 2019 62(4) *The Computer Journal* 508.
[41] SARS "Media release to clarify its stance on the tax treatment of cryptocurrencies" 6 April 2018, available at: https://www.sars.gov.za/media-release/6-april-2018-sarss-stance-on-the-tax-treatment-of-cryptocurrencies/, accessed on 4th July 2022.

The SARB is the authority responsible for currency management in SA and retains the singular right to issue banknotes and coins in the country.[42] Banknotes and coins, Rands, are the approved legal tender which can be accepted as payment in fulfilment of debts and monetary obligations. It is imperative to note that, although cryptocurrencies can perform functions which can be like fiat currencies, financial products and commodities, they are not money. Hence the central banks' reluctance to use the term currency.

In 2014, the SARB defined virtual currency as a "digital representation of value that can be digitally traded and functions as a medium of exchange, a unit of account and/or a store of value but does not have legal tender status."[43] Later in 2014, a National Treasury alert stated that virtual currency is "a unit of account that is digitally or electronically created and stored."[44] Both the SARB and the National Treasury addressed that acceptance from both parties to use cryptocurrencies as a means of payment to purchase goods and services, can be concluded. This purchase can be done without using a government-backed currency.

The word cryptocurrency was replaced with the word "crypto asset" in 2021. This was done in line with the proposed adoption of a uniform definition of crypto assets within the South African regulatory framework, in particular the Income Tax Act No.58 of 1962.[45] The 2022 Budget Review defined cryptocurrency as "a digital medium of exchange that employs cryptography to secure its transactions, control the creation of additional units and verify the transfer of assets".[46] This definition can take a broader interpretation.

A Notice in 2020 invited submission to be made on the drafting of the declaration of crypto assets as a financial product in terms of the Financial Advisory and Intermediary Services Act No.37 of 2002 ("**FAIS**").[47] The proposed definition stated crypto assets are a means of "any digital representation of value that can be digitally traded, or transferred, and can be used for payment or

[42] Section 14 of the South African Reserve Bank Act No.90 of 1989.
[43] South African Reserve Bank "Position Paper on Virtual Currencies" (2014) File Ref. no: 18/5/2-2014 2.
[44] Op cit note 18.
[45] Explanatory Memorandum On The Taxation Laws Amendment Bill 2021 50.
[46] National Treasury "Budget Review" *National Treasury Republic of South Africa* (2022) ISBN: 978-0-621-49977-3.
[47] Olano Makhubela "Notice of publication – Draft declaration of crypto assets as a financial product" 2020 *Financial Sector Conduct Authority*.

investment purposes, but excluding digital representation of fiat currencies or securities that already fall within the definition of financial product."[48]

In 2021, the IFWG: CAR WG Position Paper expanded on the definition of crypto assets as "a digital representation of value that is not issued by a central bank, but is capable of being traded, transferred or stored electronically by natural and legal persons for the purpose of payment, investment and other forms of utility, applies cryptographic techniques and uses distributed ledger technology."[49] It has proved challenging to create a singular definition as cryptocurrencies have many different variants and characteristics. The lack of clarity creates an unstable environment where customers might not know what is required of them to be in line with the law. However, SA does not define cryptocurrencies as security.[50] The Income Tax Act No.58 of 1962 incorporated cryptocurrency within the scope of financial instruments outlined in section 1.[51] Simultaneously, the Value Added Tax Act No.98 of 1991 was modified to classify cryptocurrency transactions as financial services, consequently excluding them from value added tax.[52]

In October 2022 FAIS officially declared crypto asset as "a digital representation of value that (a) is not issued by a central bank, but is capable of being traded, transferred or stored electronically by natural and legal persons for the purpose of payment, investment and other forms of utility, (b) applies cryptographic techniques, and (c) uses distributed ledger technology".[53] This notice went further to declare crypto assets as a financial product under the FAIS Act. The FAIS act incorporated the cryptocurrency definition from the IFWG Position Paper of 2021. As demonstrated above, the scope of definitions has evolved and extended over time. The characterisation of a cryptocurrency can be refined based on the specific characteristic of that cryptocurrency; this is a topic that will be explored in the next section.

[48] Ibid.
[49] Op cite 32.
[50] Financial Markets Act No.19 of 2012.
[51] Namhla Vumazonke and Shaun Parsons "An analysis of South Africa's guidance on the income tax consequences of crypto assets" (2023) 26(1) *South African Journal of Economic and Management Sciences* 1-11.
[52] Ibid.
[53] General Notice 1350 GG 47334 of 19 October 2023.

2.3 Type of cryptocurrencies

There is a myriad of cryptocurrencies available, each with its own characteristics and rules. The continuous growth of cryptocurrencies has led to more than 10 000 unique types of crypto assets.[54] Cryptocurrencies have been created using blockchain and peer-to-peer review.[55] They are encrypted with cryptography. Cryptocurrencies can be stored in digital wallets which allow users to manage and trade their coins. Crypto assets can be purchased by crypto asset trading platform, vending machines for cryptocurrencies and /or bilaterally through agreement with other existing holders. A digital wallet is a means by which cryptocurrencies can be purchased. Different wallets allow individuals many options as to whether to keep a single type of cryptocurrency or keep different kinds.[56] The prices will vary depending on the website or which online community is selling them.[57]

The International Research Training Group 1792 identified seven broad classes: transaction mechanisms, distributed computation tokens, utility tokens, security tokens, fungible tokens, non-fungible tokens, and stablecoins.[58] These classifications are based on the unique attributes of each cryptocurrency. Notably, there can be a division between decentralised systems and centralised blockchain systems.[59] Decentralisation gives everyone control as compared to a centralised system where only two or more people will manage the cryptocurrency.[60] Bitcoin and Liberty Reserve are examples of decentralised cryptocurrencies. It is salient to note that the biggest difference is whether a third party is present. Companies can create centralised cryptocurrencies in which they are the owner. They are known for their ease of use, reliability, and greater security than decentralised currencies.[61] A digital currency with a more significant structure can be traded instead of fiat currency. Hence the popularity of a more centralised environment.

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[54] Op cit note 32 at 2.
[55] Op cit note 19.
[56] Monia Milutinović "Cryptocurrency" (2018) 64(1) *Scientific Review Article* 105 112.
[57] Ibid.
[58] Wolfgang Karl Hardle, Campbell R. Harvey and Raphael C. G. Reule "Understanding Cryptocurrencies," 2018-044 *IRTG 1792 Discussion Papers* 9.
[59] Op cit note 56.
[60] Op cit note 56.
[61] Andrea Barbon and Angelo Ranaldo "On the Quality of Cryptocurrency Markets: Centralized Versus Decentralized Exchanges" (2021) *arXiv preprint* arXiv:2112.07386.

However, a centralised exchange does allow market manipulation to take place as compared to a decentralised exchange where users are protected through the peer-to-peer exchange.[62] Consequently, a centralised exchange is more exposed as the organisation can be subjected to cyber-attacks.[63] Another salient distinction is that a centralised exchange does not provide the same level of anonymity as what a decentralised exchange offers. Companies who own cryptocurrencies can issue KYC forms, which can violate privacy rights if concluded incorrectly.[64] The voluntary decision of cryptocurrency owners to choose whether they want their identity to be revealed in a decentralised environment is one of the attractive features.[65] Binance and Huobi are examples of cryptocurrencies that are centralised.[66]

2.4 Advantages and Disadvantages

There are different types of cryptocurrencies which means the advantages and disadvantages will differ based on their different attributes and characteristics.

2.4.1 Advantages

There are no set requirements that members of the public need to meet before they can become involved in cryptocurrencies, as everyone is seen as an owner. This means that the limitations of traditional banking requirements, such as documentation, will not engender concern for individuals. Therefore, the barrier to entry into the cryptocurrency market is extremely low.[67] The creation of blockchain allows people accessing cryptocurrencies to have all their data in a database and stored.[68] This peer-to-peer network allows individuals to interact without third-party intermediaries interfering.

A common advantage when dealing with decentralised cryptocurrencies is that independence from central authorities can resolve the double spending problem. A record of all transactions is

[62] Zhixuan Zhou and Bohui Shen "Towards understanding the use of centralized exchanges for decentralized cryptocurrency" (2022) *arXiv preprint* arXiv:2204.08664.
[63] Ibid 6.
[64] Op cit note 56.
[65] Jan Lansky "Possible State Approaches to cryptocurrencies" (2018) 8(1) *Journal of Systems Integration* 19 22.
[66] Igor Makarov and Antoinette Schoar "Blockchain Analysis Of The Bitcoin Market" (2021) *National Bureau of Economic Research* No. w29396 14.
[67] Wei Zhang, Yi Li, Xiong and Pengfei Wang "Downside risk and the cross-section of cryptocurrency returns" (2021) 133 (106246) *Journal of Banking and Finance.*
[68] Op cit note 16 at 155.

recorded in the blockchain. The distributed ledger keeps a log of all transactions while still offering a level of privacy. Bitcoin allows for value to be held and exchanged in cryptocurrencies without having to publicly disclose your identity.[69] This is a personal voluntary choice. Even though parties cannot be linked to transactions, there is still information retention. Hereby cryptocurrencies have full retention of all transactions that have occurred, stored in the blockchain. This information cannot be altered.[70] Therefore, the same units of currency can be prevented from being spent twice as individuals can now see if a transaction has already occurred as the transactions are irreversible and cannot be modified. Double spending can now be solved through a peer-to-peer network, without a third party.[71]

As discussed above, fiat currencies and cryptocurrencies offer privacy in that an outsider cannot connect a transaction with an individual user.[72] Individuals can find this attractive as they can operate in an environment with high anonymity. Cryptocurrencies go further to develop principles of anonymity such as unlinkability, recipient anonymity, traceability, fungibility, confidentiality, and deniability.[73] Additionally, cryptocurrencies are seen as more secure and cost-efficient. Transaction costs in digital peer-to-peer transfer systems are almost nonexistent,[74] which makes it a cheaper alternative to other forms of currency or means of payment. Cryptocurrencies can also operate and be accessed at any time and on any day.

A comparison of cryptocurrency with fiat money can raise a myriad of advantages. International payments can be quicker than fiat currencies which can take days and occur delays. The principle of anonymity can also raise many disadvantages that will be discussed in the next section.

2.4.2 Disadvantages

There are countless different levels of anonymity and different principles based on the type of cryptocurrency. A disadvantage of anonymity occurs when cryptocurrencies do not meet what is considered the minimum accepted level of anonymity. When cryptocurrencies do not have this

[69] Claus Dierksmeier & Peter Seele "Cryptocurrencies and Business Ethics" (2018) 152(1) *Journal of Business Ethics* 2.
[70] Op cit note 65 at 27.
[71] Op cit note 66.
[72] Op cit note 1 at 3.
[73] Op cit note 1.
[74] Op cit note 69.

accepted level, there can be a violation of rights.[75] Additionally, due to the level of anonymity, it can be difficult to track a double spender. If an outsider managed to track the transaction history of person X and link it to the real-world identity, then such information is being abused and can lead to illicit and illegal activities. Consequences like violating the right to privacy under section 14 of the Constitution of the Republic of South Africa or selling information to other businesses to gain a competitive advantage or money laundering, can occur.[76] Cryptocurrencies seem to be making illicit deals more appealing.[77] This adds to the growing reluctance to cryptocurrencies.

The fact that there is no singular or universally accepted definition can lead members of the public to be confused in understanding what cryptocurrencies are and bring additional risk.[78] Not only is the under-regulations creating risk, but it creates an environment with no recourse for an aggrieved party. Consumers who might not always understand and lack guidance on how to create and/or use a digital wallet will not be able to seek legal protection if their money is taken.[79] The use of peer-to-peer transactions can, therefore, complicate the decentralised environment even further.

Cryptocurrencies do not possess long-term purchasing power as prices are known to be volatile. When prices rise and drop so quickly, individuals tend to engage in speculative behaviour, which is not encouraged by banks.[80] In some cases, their prices can be determined by the dynamics of demand and supply in the market. This will apply to cryptocurrencies like Bitcoin and Litecoin.[81]

In contrast, some digital currencies have their money attached to fiat currencies. This means that their movements will be affected by changes in the value of such currencies. An example is Tether. One of the greatest disadvantages is that transactions are irreversible. Cryptocurrency technology does not allow transactions to be reversed, even when there is a court order.[82] Individuals do not have the power to withdraw funds gained through criminal activities or legal means unless the

[75] Ibid.
[76] Section 14 of the Constitution of the Republic of South Africa 1996.
[77] Franklin Edwards, Kathleen Hanley, Robert Litan, and Roman Weil "Crypto assets require better regulation" (2019) 77(3) *Financial Analysts Journal* 5.
[78] Tadas Limba, Andrius Stankevičius, and Antanas Andrulevičius "Cryptocurrency as Disruptive Technology: Theoretical Insights" (2019) 6(4) *Entrepreneurship and Sustainability Issues* 2068.
[79] Op cit note 62.
[80] Op cit note 18.
[81] Op cit note 3 at 7.
[82] Jiajing Wu, Jieli Liu, Yijing, Zhao, Zibin Zheng "Analysis of cryptocurrency transactions from a network perspective: An overview" (2021) 190 (103139) *Journal of Network and Computer Applications*.

private key is given.[83] Authorities will find that gaining access to this private key is not an easy task. The National Treasury highlighted the fact that there is no investor protection or recourse available in this environment.[84]

2.5 Impact of Cryptocurrencies

Cryptocurrencies can operate as a multitude of functions such as a medium of exchange, commodity, capital asset, security and/or payment systems. Different functions will hold different tax implications.[85] Members of the public are placed in a situation where their tax obligations can be unknown and confusing.

In the traditional banking sector, banking institutions keep track of all transactions. In a crypto environment, the banks have no way to track the transactions, or the flow of money, as they are excluded as the third party.[86] The banking sector will thus be impacted as monetary and exchange rate policy can change. A practical example is Bitcoin. Bitcoin has five major effects on the banking and finance sectors: the power of the dark web, speculations, politicisation of money, apprehension among the central banks, and the emergence of the new market.[87] The dark web refers to instances where cryptocurrencies can be used to participate in cyber-crimes. The apprehension among central banks stems from the fact that cryptocurrencies are very unpredictable and decentralised in nature. Transactions are now completed at a quicker pace making it easier for parties to transact with one another. These factors open the door to money laundering. The under-regulation and gaps in the monitoring systems places the government and central banks at a disadvantage as they no longer have the same degree of control.[88] The prices are volatile and not stable, enabling market speculation.[89]

[83] Op cit note 65 at 25.
[84] Op cit note 18.
[85] Op cit note 3 at 8.
[86] Op cit note 56 at 111.
[87] Op cit note 56 at 111.
[88] J Goldsmith "The IMF must develop best practices before government-backed cryptocurrencies destabilized the international monetary system" (2019) 34 *Emory Int'l L. Rev 595.*
[89] Mahomed Omar "A synopsis of the regulatory working groups paper on crypto assets" (2020) 37 *Tax professional*.

2.6 Conclusion

Considering the above points, the traditional banking system can struggle to maintain a monetary system that runs efficiently when there is a fragmented monetary system. The demand for fiat currencies will fall or must compete against cryptocurrencies.[90] The monetary system can operate less efficiently and open the economy up to greater risks. Nakamoto's White Paper opened the door to the fact that traditional banking is not the only option. The next chapter will explore the risks pertaining to cryptocurrencies, and possible preventive measures that can be implemented to protect individuals, in greater detail.

CHAPTER 3 CRYPTOCURRENCY RISKS AND PREVENTATIVE MEASURES

3.1 Risks

Cryptocurrencies are not short of risks. Their decentralised exchange nature can place consumers in an environment of uncertainty. In 2014, the SARB highlighted the risks associated with using cryptocurrencies such as risks relating to payment systems and payment service providers, price stability, money laundering, the financing of terrorism, consumer risk, the circumvention of exchange control regulations, and financial instability.[91] The IFWG identified the risk of a parallel fragmented, non-sovereign monetary system being created in the country.[92]

An inherent risk lies in the absence of a universal definition of cryptocurrencies that covers every type of cryptocurrency. Definitions which attempt to take into consideration every characteristic become too broad and definitions that only include a few can be too narrow. Not only can this create an uncertain environment, but the implications of tax obligations will change depending on the definition of a cryptocurrency.[93] Undetected cross-border transactions which are illegitimate can increase the possibility of tax evasion, creating a risk for authority regulators.

[90] Op cit note 32 at 22.
[91] Op cit 43 at 10.
[92] Op cit note 32 at 22.
[93] Anonymous "SAR's stance on the tax treatment of cryptocurrencies" SARS 6 April 2018 available at https://www.sars.gov.za/media-release/6-april-2018-sarss-stance-on-the-tax-treatment-of-cryptocurrencies/, accessed on 2 November 2022.

There are also risks relating to anonymity. As direct personal identifiable information is excluded from the stored transactions, this can provide a form of anonymity to individuals. Some cryptocurrencies try to achieve full anonymity, not just pseudo-anonymity. Despite this, many cryptocurrencies do not exhibit an acceptable level of anonymity. An acceptable level of anonymity is when the desirable level of privacy is achieved. By removing the central trusted party, virtual currencies grant greater levels of privacy, for example Bitcoin,[94] as it reduces the level of exposure to unilateral institutional policy decisions due to its decentralised nature.[95] As not every cryptocurrency is decentralised, the lack of consistency leads to additional risk. The principle of anonymity can make it impossible to find the double spender.[96] Law enforcement may find this tricky, as holding the person responsible for illegal activities becomes impossible. This can be difficult for law enforcement to trace pseudo-anonymous transactions, especially when they are in another country.

Some owners have a private key which they can use to access their cryptocurrencies. Where a user and/or owner divulges his key to another person, it can place the owner in a position where they can lose control of their account. [97] In instances where the key is involuntarily divulged, due to cyber-attacks or hacking, there is no legislation to provide recourse. There is no single regulation in place when cryptocurrencies leave and change jurisdictions. Therefore, cyber security is a risk that individuals need to be aware of. Another risk is that individuals can still trade with other people in the country and in other countries where cryptocurrencies is not banned.

As the number of users and capital in the cryptocurrency market can be unlimited, this can increase the risk of low market capitalization, particularly when exchange rates of cryptocurrencies are pegged against fiat currencies.[98] Next we will discuss preventative measures individuals can employ to reduce some of these risks.

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[94] Op cit note 16 at 153.
[95] Amarasinghe, Niluka, Boyen, Xavier, & McKague, Matthew "A Survey of Anonymity of Cryptocurrencies" in *ACSW 2019: Proceedings of the Australasian Computer Science Week Multiconference.* Association for Computing Machinery (ACM), United States of America 3.
[96] Op cit note 40 at 507.
[97] Andrew Hinkes "Throw away the key or the key holder? Coercive contempt for lost or forgotten cryptocurrency private keys, or obstinate holders" (2019) 16(4) *Northwestern Journal of Technology and Intellectual Property 225.*
[98] Op cit note 65 at 24.

3.2 Preventative Measures

Several cryptocurrencies do not have the acceptable level of anonymity, and there is no universal solution to resolve this issue. A proposed preventative measure could be to ensure, before a cryptocurrency is introduced into the market, that it meets an acceptable level of anonymity. Anonymity can be addressed by making it easier to identify and trace individual transactions. A state could go further to block transactions from accounts that exhibit a higher level of anonymity,[99] which can make it difficult for authorities to track transactions that break the law. There would need to be cooperation between all countries, on an international level, to ensure there are no conflicting regulations, especially since cryptocurrencies are borderless.

The next preventative measure is related to the hardware Bitcoin wallet, which can be used to protect owners in possession of a private key.[100] However, it does not protect them after the fact. Regulation can provide cryptocurrency owners with recourse where their key has been involuntarily divulged. A possible solution to the pseudo-anonymous accounts and uncovering the identity, is to use AML and KYC mechanisms.[101] CASPs refer to crypto asset service providers. CASPs is a board range of entities that may include cryptocurrency exchanges, wallet providers, custodial services, crypto payment processors and crypto investment funds.[102] If South African law authorities license and regulate these entities, it will provide a greater level of certainty to protect individuals in the crypto space. The 2021 Position Paper highlighted that CASPS should be included as an accountable institution under Schedule 1 of the Financial Intelligence Centre Act No.38 of 2001 ("the **FIC Act**") to ensure that they adhere to legislative requirements, such as anti-money laundering and combating the financing of terrorism ("**AML/CFT**").[103] Some of their other proposals included conducting customer identification, due diligence and keeping records of clients.[104]

[99] Op cit note 65 at 28.
[100] Op cit note 65 at 28.
[101] Fedor Poskriakov, Maria Chiriaeva & Christophe Cavin Lenz and Staehelin "Cryptocurrency compliance and risks: A European KYC/AML perspective" in Josias Dewey (ed), *Blockchain and cryptocurrency regulation* 3 ed (2021) 113.
[102] Bains, Parma, Arif Ismail, Fabiana Melo, and Nobuyasu Sugimoto "Regulating the Crypto Ecosystem: The Case of Unbacked Crypto Assets" (2022) *FinTech Notes ISBN: 9798400221361.*
[103] Op cit note 89.
[104] Op cit note 32 at 3.

In 2019, the Financial Action Task Force ("**FATF**") introduced amendments to its recommendations to consider virtual assets and virtual asset service providers ("**VASPs**"). Recommendation 15 was amended to include the new definitions of these terms.[105] This was done to clarify how AML/CFT requirements should apply when dealing with virtual assets. FATF goes further to recommend that countries should take the appropriate steps to "manage and mitigate the proliferation financing risks that they can identify, that VASPs should be required to be licensed or registered, countries should ensure that VASPs are subjected to regulation and supervision to mitigate money laundering and terrorist financing and that a risk-based approach is applied to prevent money laundering and terrorist financing".[106]

3.3 Conclusion

Preventative measures must be used to lessen the risks that are presenting themselves. While some preventative measures have been proposed without implementation and regulation in place, mitigating the risks can be a challenge. The creation of a universal definition of cryptocurrencies can lay the foundation that states and regulators need to pass laws and legislation. The preventative measures implemented should be done in line with the international groups that SA is a part of BRICS ("Brazil, Russia, India, China") and SADC ("Southern African Development Community"), to ensure that there is no volitation of any provisions. An international cybersecurity standard for safeguarding crypto assets should be developed to keep information safe and accessible to all parties.[107]

Regulation can assist in decreasing the level of risk faced by governments, regulatory bodies, and consumers. Including Crypto Asset Service Providers ("CASPs") as an accountable institution under the FIC Act would address any gaps in the AML/CFT regime. The IFWG Position Paper suggests a range of different proposals for a regulatory framework that should be taken under consideration in developing the legislation. The FATF recommendations should also be considered in line with IWFG Positions Papers. These effective measures must consider centralised channels to control transactions and exchanges. The diverse nature of cryptocurrencies requires a diverse

[105] Financial Action Task Force "International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation" FAFT Recommendations (2023).
[106] Ibid.
[107] Op Cit note 32.

solution, without excessive protection. A balance needs to be drawn. The next chapter will explore the regulation that exists in SA and whether there are preventative measures in place.

CHAPTER 4 REGULATIONS OF CRYPTOCURRENCIES IN SOUTH AFRICA

4.1 History of regulation

There is no uniformity among countries when it comes to the regulation of cryptocurrencies. When cryptocurrencies were first introduced into South Africa they were viewed with skepticism and cautioned against by the banks, regularity authorities (SARB, Financial Services Board, SARS and FIC) and some members of the public.[108] The National Treasury released an alert in 2014 warning members of the public of the risk associated with virtual currencies.[109] Parties were under no obligation to accept cryptocurrencies as a means of payment unless expressly agreed upon.[110] The premise was that caution should be taken with cryptocurrencies. Later in 2014 the Financial Action Task Force ("**FATF**") highlighted that money laundering and terrorist financing can be associated with cryptocurrencies.[111]

Two years later in 2016, the IFWG was created to study the role of financial technology ("**Fintech**"), inclusive of cryptocurrencies, and how regulators could be more proactive in assessing risks and benefits in the South African financial market.[112] In 2018, the CAR WG group was formed. Their aim was to formulate a policy and take a stance on crypto assets, while ensuring that the financial markets retain their integrity, ensuring a maintained level of financial stability remained, protection for consumers and inhibiting illegitimate cross-border transactions.[113] A year later the FATF introduced certain amendments placings AML/CFT requirements on virtual assets and virtual asset service providers ("**VASPs**"). These measures were laid out in 3.2 above.

[108] Op cit note 32.
[109] Op cit note 18.
[110] The Financial Markets Act No.19 of 2012.
[111] Financial Action Task Force "Guidance for a risk-based approach" Virtual currencies (2023).
[112] Op cit note 3 at 18.
[113] IFWG "Position Paper on Crypto Assets" Crypto Assets Regulatory Working Group 2020 at 4.

The Intergovernmental Fintech Working Group ("**IFWG**") published Position Papers that had persuasive powers, addressing the proposed regulation of cryptocurrencies. The Position Paper of 2020 laid out that cryptocurrencies needed to be regulated for the protection of members and entities in society, while promoting responsible innovation.[114] The Paper highlighted risks that members of the public should be aware of, while the 2021 Position Paper went further to expand on recommendations, giving a total of 25 proposed ideas on how regulations should occur.[115] The three main areas were anti-money laundering and combating the financing of terrorism, cross-border financial flows, and the application of financial sector laws.[116] Some of these are currently addressed by South Africa's existing regulations, which will be discussed in the next section.

4.2 Existing regulation

The SARB states that a legal tender of payment of money is "a tender by the bank itself, of a note of the bank or of an outstanding note of another bank for which the bank has assumed liability in terms of section 15(3)(c) of the Currency and Banking Act or terms of any agreement entered into with another bank before or after the commencement of this Act".[117] Section 17(2) of the South African Reserve Bank Act No.90 of 1989 goes further to state that a tender by the bank itself must be an undefaced and/or unmutilated coin which is in lawful circulation in the Republic of South Africa.[118] Cryptocurrencies are not included in the definition of money. In 2017, a financial technology unit was created within the SARB, with a mandate of exploring the effects of Fintech innovation proactively.[119]

An important legal consideration pertaining to cryptocurrencies is tax obligations. SARS employs the provisions of the Income Tax Act No.80 of 1961 within the context of crypto assets. In April 2018, SARS confirmed that earnings derived from cryptocurrency are subject to income tax and capital gains tax. Moreover, SARS highlighted that companies that engaged in cryptocurrency development in SA would be prevented from claiming significant income tax incentives.[120]

[114] Op cit note 113.
[115] Op cit note 32 at 2.
[116] Op cit note 32 at 3.
[117] Section 17 of the South African Reserve Bank Act 90 of 1989.
[118] Section 17(2) of the South African Reserve Bank Act 90 of 1989.
[119] Op cit note **Error! Bookmark not defined.**.
[120] Rob Hare "Cryptocurrencies Taxing cryptocurrencies in South Africa" (2019) *Integritax SAICA*.

Further research and development allowances (R&D allowances) are used to encourage innovation. These R&D allowances are excluded when activities are carried out to create and/or develop a financial instrument. Although there was no explanation, cryptocurrencies were regarded as a financial instrument for tax purposes. Individuals could not claim the R&D allowances despite the development of crypto assets attracting high-level skills to SA and unlocking a new sector in which growth in the economy can be encouraged.[121] SARS held that cryptocurrency gains and/or losses must be declared as part of a members' taxable income.[122] Highlighting that all income received or accrued from a crypto transaction will be classified as revenue under gross income. In essence, crypto assets are capital gains. Taxpayers are permitted by SARS to claim crypto asset expenses if such expenses occur in the production of the taxpayer's income and for trade. Notably, the 2018 annual budget review made it clear that SARS will not require Value Added Tax registrations as a vendor concerning cryptocurrencies.[123]

As discussed above, the FAIS Act declared a crypto asset as a financial product which means that any person who provides advice and/or intermediary services concerning crypto assets must be authorised as a Financial Services Provider.[124] This means that individuals need to meet the requirements set out in the Act. This declaration contrasts one of the advantages of cryptocurrency - the decentralised exchange, where everyone has control. The FAIS Act requirements limit who can offer these services, essentially also limiting the amount of control that is executed. The Financial Sector Conduct Authority is also considering the possibility of a code of conduct.[125] It is unclear whether this code of conduct will be taken from existing legislation, or if a new framework will be developed. The IFWG Position Paper in June 2021 made a recommendation

[121] Ibid.
[122] Ibid.
[123] National Treasury "Budget Review " *National Treasury Republic of South Africa* (2018) ISBN: 978-0-621-46020-9.
[124] Financial Sector Conduct Authority "Publication of declaration of a crypto asset as a financial product and accompanying exemption notices" FSCA Communication 30 of 2022.
Anonymous "Publication of declaration of a crypto asset as a financial product and accompanying exemption notices" *Financial Sector Conduct Authority* (2022), available at https://www.fsca.co.za/Regulatory%20Frameworks/Temp/FSCA%20Communication%2030%20of%202022%20(FAIS).pdf, accessed on 2 November 2022.
[125] Anonymous "Draft declaration of crypto assets as a financial product" 2022, available at https://www.masthead.co.za/newsletter/draft-declaration-of-crypto-assets-as-a-financial-product/, accessed on 8 July 2022.

to include crypto asset service providers as accountable institutions which would require them to adhere to the Exchange Control Regulation Act of 1961.

In July 2022, the deputy governor, Kuben Naidoo, spoke during a webinar titled **"**The Future of Money, Banking and Crypto**",** organised by PSG Konsult, a financial services firm.[126] The webinar highlighted that the focus is to implement a regulatory framework that ensures anti-laundering legislation and that the laws of exchange control have been adhered to. Mr Naidoo states that the SARB and the Fintech working group are collaboratively engaging to mitigate the risks associated with cryptocurrencies. It is worth highlighting that cryptocurrencies are acknowledged as a technological advancement, yielding positive effects on payment systems. There are, however, still gaps present which will be discussed in the next section.

4.3 Gaps in the regulatory framework

The role of the rule of law is to provide adequate protection to members of society.[127] Regulation is to provide members with recourse if their rights are violated. The popularity of cryptocurrencies has grown at an exponential rate, as seen in Chapter 1.[128] The most common gaps in the regulatory framework are the lack of anti-money laundering regulation and the lack of homogeneity. The IFWG Position Paper highlighted 25 recommendations, which can be used to identify some gaps in the South African regulatory framework relating to CASPs, exchange controls, and remedial actions.

The first potential gap is that CASPs are not yet added to the list of accountable institutions in line with the FIC Act. This means that the rights and obligations imposed by the FIC Act are not available to these entities. There are no administrative penalties or remedial actions available to those entities that do not meet the requirements.[129] The second potential gap is that the Minister of

[126] YouTube "PSG Think big series 2022: Kuben Naidoo" 12 July 2022 available at, https://www.youtube.com/watch?v=ZPY88jc6fXc, accessed 25 July 2022.
[127] Michel Rosenfeld "The rule of law and the legitimacy of constitutional democracy" (2000) 74 *S. Cal. L. Rev.* 1307.
[128] See page 11.
[129] Op cit note 32 at 34.

Finance has yet to amend the Exchange Control Regulations to include crypto assets in the definition of "capital" for the purposes of exchange control.[130]

Parties of international contracts can have different definitions of cryptocurrencies. If there is no clear definition in the contract, it can create problems later. Similarly, parties who choose a legal system to govern their contract or when they exercise party autonomy, can exercise the risk of different countries' regulations conflicting. There is no process in place if one of the countries chosen has banned the use of cryptocurrencies and the other has not. The under-regulation depends on the level of uncertainty and creates a conflict of laws issues to exist in cross-border transactions.

If the new regulations deprive the consumers of most of the attractive attributes of cryptocurrencies, regulations could do the opposite and stifle growth. For example, the implementation of KYC rules can affect the decentralised nature and anonymity of cryptocurrencies.[131] Although anonymity is an advantage for users, regulations need to be put in place to ensure that it is not misused, and the right level of anonymity is achieved.

Due to the growth in cryptocurrencies, some individuals have given up their day-to-day jobs and are making a full-time living off cryptocurrencies.[132] Therefore, if regulations stifle the market, the economy can face higher unemployment rates. Developing a regulatory system that still allows legitimate business to thrive, while regulating the illegitimate business, is a challenge for regulatory bodies.[133] There needs to be a balance between protecting consumers and not stifling innovation.

4.4 Conclusion

In 2022, the SARB recognised that there is a need for regulation, with hopes that such regulation will be introduced in a phased manner to provide protection, and not diminish growth. The IFWG provided a roadmap for a framework for regulating cryptocurrencies.[134] Their recommendations

[130] Op cit note 32 at 37.
[131] Op cit note 101.
[132] Ahmet Burcin Yereli and Isil Fulya Orkunoglu-sahin "Cryptocurrencies and Taxation" (2018) In *Proceedings of the 5th International Annual Meeting of Sosyoekonomi Society*, vol. 25 219.
[133] Op cit note 3 at 8.
[134] South African Reserve Bank "Crypto assets to be brought into South African regulatory purview" *Crypto Assets Regulatory Working Group* [Press Release] 11 June 2021.

should be considered by regulatory bodies to close the above-mentioned gaps. The IFWG goes further to address questions asked by the public to provide clarity on their website. The question that is raised is whether SA has fallen behind in keeping up with the changing cryptocurrency environment. This will be answered in the next chapter with an examination into other jurisdictions.

CHAPTER 5 LESSONS FROM OTHER JURISDICTIONS

5.1 History

Countries like El Salvador and the Central African Republic have adopted cryptocurrencies as their legal tender, in contrast to India and China which have issued a complete ban. Some countries have allowed citizens to only engage with cryptocurrencies outside of their borders,[135] for example Qatar and Bahrain. Some countries have experienced the technology advancement more than others. It should be noted that the terminology for cryptocurrencies is different in each country. For example, Argentina, Thailand and Australia lean towards the term digital currency,[136] while Canada, China and Taiwan lean towards the term virtual commodity. Countries like Germany have resulted to the term crypto token.

5.2 Comparative jurisdiction

Considering the development of other BRICS members, such as China, can provide SA with insights into how to approach the cryptocurrency regulation in its own country. China holds the position of the world's second largest economic powerhouse, trailing behind the US, which claims the top spot in terms of GDP.[137] Given their prominent global roles, it is pertinent to analyse their respective regulatory frameworks for a comprehensive comparative study.

[135] John Riley "The current status of cryptocurrency regulation in China and Its effect around the world" *China and the WTO Review* (2021) 1 139.
[136] Op cit note 135 at 138.
[137] Ying Haung and Maximiliam Mayer "Digital currencies, monetary sovereignty, and U.S.–China power competition" (2022) 14(2) *Policy and Internet* 324–347.

The Silk Road is a name of a dark website which was launched in February 2011.[138] It was only accessible through an anonymising internet browser called the Onion Router ("Tor"). This website provided an anonymous payment scheme needed to conduct illicit deals through an underground internet hub for the sale of drugs and other contraband.[139] Even though the US government shut down the Silk Road website in 2013 and seized around $28 million in Bitcoin, a second Silk Road website came into existence. Liberty Reserve is a virtual currency which is frequently used to facilitate money laundering in the cyber space.[140] Liberty Reserve does not conduct verification of account registration for individuals. Individuals were charged with money laundering and operating an unlicensed money transmitting business.[141] It was said that around 55 million transactions were conducted through its system. It was shut down around May 2013.

The events of the Silk Road and Liberty Reserve criminal conventions and the evolving black markets, lead to the Financial Crimes Enforcement Network ("**FinCEN**") being the first agency to initiate regulations of cryptocurrencies in 2013.[142] The US has an accepted approach to cryptocurrencies, as they do not ban the use of initial coin offerings ("ICOS"). FinCEN stated that virtual currency refers to a medium of exchange which will operate like a currency but will not have all the attributes of real currency.[143] There was an enforcement of anti-money and counter-terrorist financing ("CTF") by the Bank Secrecy Act.[144] The US comprises of different states, meaning each state has different regulations and definitions. The lack of an overall framework has led to each state creating its own fragmented regulations for cryptocurrencies. For example, New York takes a stricter approach by implementing strict disclosure and consumer protection requirements,[145] such as comprehensive surveillance and record keeping for all virtual currency

[138] Jared A. Kleiman "Beyond the Silk Road: Unregulated Decentralized Virtual Currencies Continue to Endanger US National Security and Welfare." (2013) 4(1) *American University National Security Law Brief* 59-78.
[139] Nicholas Godlove "Regulatory Overview of Virtual Currency" (2014) 10(1) *Oklahoma Journal of Law and Technology* 15.
[140] Valeriia Dyntu and Oleh Dykyi "Cryptocurrency In The System Of Money Laundering" (2018) 4(5) *Baltic Journal of Economic Studies* 75-81.
[141] Ibid.
[142] Alvarez, Michelle. "A Comparative Analysis of Cryptocurrency Regulation in the United States, Nigeria, and China: The Potential Influence of Illicit Activities on Regulatory Evolution." (2018) 25(1) *ILSA Journal of International and Comparative Law* 43.
[143] United States Department of the Treasury "Request for administrative Ruling on the Application of FinCEN's Regulations to a Virtual Currency payment System" (2014) FIN-2014-R012.
[144] Op cit note 142 40.
[145] Op cit note 135 at 139.

transactions, for at least seven years,[146] while California only introduced its regulatory framework in 2022.[147]

The next comparative jurisdiction is China. China has taken a contrasting view from the US and SA. In 2013, the People's Bank of China ("PBOC"), banned financial institutions from engaging in Bitcoin-related businesses.[148] The head of PBOC stated that China was in no rush to develop a virtual currency. The focus remained on the research and testing stage. In 2017, the Chinese government banned cryptocurrency exchange and initial coin offerings.[149] Despite these strict regulations, the popularity of cryptocurrencies in China remained. China's goal was not to block the innovation of new technology but rather cryptocurrencies. In 2018, China attempted to shut down all domestic websites dealing with cryptocurrencies. When this failed, they resorted to banning all offshore cryptocurrency trading platforms.[150] The PBOC warned individuals and institutions that if they issue or sell tokens illegally, they will be required to pay a fine and face imprisonment.[151] One unique regulation that China has included in its regulatory framework is that cryptocurrency can be inherited. China's goal is to protect investors and reduce financial risk. This can be seen from when the Hangzhou internet court in 2019, upheld the ruling that the legality of Bitcoin ownership was protected under China's general civil law,[152] further recognising that the validity of cryptocurrency as a legal property, worthy of protection.[153] In this case, an ex-employee stole his company's private key and the court ordered the defendant to pay the plaintiff damages, and issued the defendant with a fine and a seven month prison sentence.[154]

A similarity between the US and China is the fact they both have case law regarding cryptocurrencies. Guidance on how to handle cryptocurrencies should be considered by South African regulators when implementing regulation. A comprehensive comparison of relevant issues between SA and the studied jurisdictions can be conducted to provide valuable lessons learned.

[146] New York Comp. Codes R. & Regs. Title 23 § 200.15(e)(1).
[147] Clothilde Hewlett "Department of Financial Protection and Innovation" California Regulatory Law Reporter (2022) 28(1).
[148] Op cit note 135 at 136.
[149]Op cit note 135 at 136.
[150] Op cit note 135 at 141.
[151] Ibid 142.
[152] Ibid.
[153] Op Cit note135
[154] Op cit note 135 at 144.

South Africa's working groups have identified many risks and issues relating to cryptocurrencies. For example, the buying and selling of crypto assets, payments using crypto assets, tax obligations, and capital being raised through ICO.[155] From the above, we can see how the US and China have handled cryptocurrencies. We can see that, although China introduced strict regulations, the popularity of cryptocurrencies did not decrease. China took a unique approach to rather create a regulatory framework before it considers making cryptocurrencies legal, while the US has developed a regulatory framework for cryptocurrencies allowing the buying and selling thereof. In comparison, SA already has cryptocurrencies introduced into the various markets. South Africa should consider the regulatory framework that the US has implemented, especially looking at how the US dealt with the events of Silk Road and Liberty Reserve as a guideline to what regulations should be implemented as a priority to avoid similar cases from occurring in South Africa.

The second comparison is that the US did not ban initial coin offerings, while China has. ICO are neither banned nor regulated in SA. The IFWG Position Paper of 2021 highlighted that ICOs pose a risk in facilitating AML/CFT, and that they are highly speculative investments.[156] When looking at the third comparison we can see that both the US and China acknowledged the impact of cryptocurrencies and the opportunities they can present to their countries. It should, however, be noted that China's ban on cryptocurrencies has not prevented illegal activity occurring, as discussed above. After the events of Silk Road and Liberty Reserve, the US focused on creating a regulatory framework. One might conclude that through FinCEN and AML/CFT provisions, the US is equipping its citizens with the regulation and knowledge of cryptocurrencies. South Africa, through working groups like the IFWG, have been seen taking this same approach by acknowledging that cryptocurrencies are beneficial to bringing financial innovation to the country.[157]

5.3 Conclusion

Most countries' concerns lay with consumer protection, tax evasion, money laundering and illicit activities. In China, cryptocurrencies continue to be heavily regulated and monitored. While the

[155] Op cit note 32.
[156] Ibid.
[157] Ibid 6.

US has a more accepting attitude towards cryptocurrencies, it has yet to implement a universal federal law to govern all its states, creating a rather fragmented system of regulation. SA, which only recently started implementing regulations, should take consideration of jurisdictions who have attempted to regulate cryptocurrencies to evaluate what laws work and how they could be developed. South Africa has not yet dealt with case law in comparison to the US and China.

In answering the question of whether SA has fallen behind in keeping up with the changing cryptocurrency environment, Mr Naidoo stated that South Africa is not behind in regulating cryptocurrencies but rather waiting and observing before making any decisions. Therefore, seemly taking a similar approach to China. In the next chapter we will discuss the findings of this dissertation and provide recommendations on how to proceed going forward.

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Summary of findings

The financial crisis is what most would look at as the starting point of the creation and growth of cryptocurrencies. Members of the public wanted a new means by which they could operate in the banking sector. The different classifications make it difficult to regulate every type of cryptocurrency, but avoiding regulation due to this factor creates a position of uncertainty. The definition recommendation by the IFWG and adopted by the FAIS Act can be seen as providing certainty. The myriad of advantages and disadvantages highlights that cryptocurrencies can either have a negative or positive impact on the banking sector, depending on how they are defined, implemented, and regulated.

Cryptocurrencies have been viewed as a threat to traditional payment systems and currencies, as they operate in a digital sphere as compared to most legal tenders who use paper currency. Cryptocurrencies can be seen as redesigning the payment system, as Fintech has reduced the use of cash.[158] We can see that there has been an effect on the finance and banking sector. The impact

[158] Agarwal, Sumit, Wenlan Qian, Yuan Ren, Hsin-Tien Tsai, and Bernard Yin Yeung "The real impact of FinTech: Evidence from mobile payment technology" (2020) *Available at SSRN 3556340.*

of the growth of cryptocurrencies is not limited exclusively to the banking and finance sector. New employment opportunities have been created in other industries. Wire transfers no longer take days to reflect, and payments can be concluded instantaneously.[159] This means payments for properties, legal fees, banking services, goods and services can be satisfied without delay.

While cryptocurrencies can be traded even if there is a country ban, it is unclear what the position is when one country has banned the use, and another has not. Will the citizen in the banned country be held liable? What are the consequences for the other party? In the absence of guidance on how to handle such matters, these questions remained unanswered. Although preventative measures have been considered, it is increasingly difficult to enforce as cryptocurrencies are borderless. General policy guidelines and regulations should be developed with a host of different countries, while still encouraging investors to develop and invest in the cryptocurrency market. The introduction of regulations can raise the question whether a systematic, phased introduction will engender confusion among members of the public.

As cryptocurrencies are taxed in SA, it is salient that individuals who are gaining profits are aware of their tax obligations. SARS has made it clear that there can be possible jail time if taxes are not paid. An advantageous regulatory framework should hope to reduce decentralisation and exert reasonable control over the systems.[160] When developing an advantageous regulatory framework, lessons can be learnt from other jurisdictions such as the US and China, with consideration of how their regulatory bodies implemented regulation. In some countries, such as Qatar and Bahrain, a stifling of innovation has occurred due to their over-regulation. Balancing regulation and innovation should be of the utmost importance. Recommendations of how SA can implement and regulate crypto assets will be discussed more in the next section.

6.2 Recommendations

The proposed amendments to the FIC Act have been open for public comment but are still pending implementation. The amendments need to be signed by the Minister of Finance and adherence to procedural formalities before being implemented. Identifying CASP as an accountable institution

[159] Op cit note 16.
[160] Op cit note 3 at 8.

under the FIC Act, would rectify gaps in the AML/CFT framework. The IFWG Position Paper offers crucial recommendations for a regulatory framework which should serve as a guideline. Structured regulation can encourage global entrepreneurs to invest their financial technology in SA. Regulatory bodies need to be aware that members of the public may be confused as to what cryptocurrencies are, the risks, the benefits and what protection they have available. SARB has attempted to educate the public and providing clarifications should continue. The SARB should expand its efforts to ensure comprehensive awareness among all communities, rather than solely within the industry.

IFWG defined crypto assets as "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 payment, investment and other forms of utility, and applies cryptography techniques in the underlying technology."[161] While the Income Tax Act No.58 of 1962 recognises "crypto asset" as a financial instrument, the Act does not provide a specific definition for this term. Formulating a comprehensive definition that includes all characteristics will be too broad, while a definition limited to a few characteristics remains exclusively narrow. Therefore, it is recommended that further clarification and definition of "crypto assets" be incorporated into the Act. For example, using the IFWG definition. As there is a myriad of cryptocurrencies, it is not simple to distinguish between the different types without extreme research. If cryptocurrencies were defined in each area they reside in, such as tax law or inheritance laws, it would be a step closer to gaining a greater regulatory framework. Regulatory bodies should remain in contact, combining their resources while ensuring none of the new laws conflict with one another. It is further recommended that national regulatory authorities establish links with international agencies to facilitate the exchange of information which can assist in tracking cross-border transactions.[162]

Without a global approach, a fragmented regulatory system is developed by each country. An outright ban is not efficient given the decentralised nature of cryptocurrencies, as the enforcement of the ban does not apply to other countries.[163] Individuals can still illegally engage in the cryptocurrency market without any protection awarded to them in a different country. A

[161] Op Cit note 113 at 9.
[162] Op cit note 3 at 26.
[163] Op cit note 65 at 22.

recommendation is to implement internet blockers which will block any cryptocurrency site.[164] This is not a full-proof plan as members of the public with the correct skills can still gain access.[165]

The SARB and SARS must take into consideration the attractiveness of cryptocurrencies, while implementing regulations ensure that they do not stifle innovation and growth of the industry before the country has seen its full potential. SA should consider other jurisdictions' methods of imploring the technology behind cryptocurrencies. For example, by following China's lead in using blockchain and cryptography to advance the current payment systems. It can encourage relationships between the banking sector institutions and crypto companies. If both parties work together, they can achieve a greater level of adaptation. Regulatory bodies need to monitor how the country and different sectors react to the implementation of the regulations and adjust accordingly. The question of whether the new regulations violate any rights need to be asked and assessed. It is salient that the individuals who oversee this framework have a deep understanding what cryptocurrencies are and how they operate. Understanding the different terms and structures can then open the correct doors to imposing regulations.

The adaptation of cryptocurrencies should be done with a centralised environment of control, to ensure that there are more resources available to understand cryptocurrencies, and not just marketing material that has a habit of highlighting only the positives with no consideration for negatives. Therefore, while SA has taken the initial steps towards regulating cryptocurrencies, there is still substantial progress needed to establish a comprehensive and effective regulatory framework.

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[164] Op cit note 89.
[165] Op cit note 65 at 25.

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