CRYPTOCURRENCIES EFFECTS ON MONETARY SOVEREIGNTY: ADVANCING A CASE FOR THEIR REGULATION.

A Research Paper Submitted in Partial Fulfilment of The Bachelor of Laws Degree, Strathmore University Law School.

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II. DECLARATION

I, Makena Cindy, do hereby declare that this research is my original work and that to the best of my knowledge and belief, it has not been previously, in its entirety or in part, been submitted to any other university for a degree or diploma. Other works cited or referred to are accordingly acknowledged.

Signed:………………………..............

Dated:………………………………….

This dissertation has been submitted for examination with my approval as University Supervisor.

Signed:………………………………......

MR. HARRISON MBORI

III. ACKNOWLEDGEMENT

I would like to thank God first. Then I would like to thank my mother for her support and for believing in me even when I did not. Finally, I would like to thank my supervisor, Harrison Mbori, for his assistance.

This dissertation is dedicated to my late cousin who has played a huge role in what I am today.

IV. ABSTRACT

Cryptocurrencies are a form of virtual currencies that are enabled by cryptography and is supported by a technology known as Blockchain. The first form of cryptocurrency, the Bitcoin was introduced in the year 2008 by the bitcoin 'white paper' by Satoshi Nakamoto. This type of currency gained popularity because it was not issued or regulated by an intermediary. All transactions were peer to peer. Also, the fact that the transactions are anonymous.

However, the reception of cryptocurrencies has been variant from jurisdiction to jurisdiction ranging from bans to tailoring the current laws to regulate these currencies like the United States America to issuing warnings against the use and trade of cryptocurrencies. For instance, the Central Bank of Kenya issued a warning stating that the customers of these virtual currencies should be aware of the fact that these currencies are not regulated, they are attractive to criminals who have the intention to use it for money laundering and they are volatile, in that their value often fluctuates. In addition to this, there is a risk on the monetary sovereignty especially with the rise of stablecoins such as Libra. This study shall therefore analyse the risks posed by Cryptocurrencies and suggest a legal framework for its regulation in Kenya.

V. LIST OF ABBREVIATIONS

AML – Anti- Money Laundering.

CBK – Central Bank of Kenya.

CFT – Combating Financial Terrorism

SEC – Securities Exchange Commission

CFTC- Commodities Futures Trade Commission

FinCEN- Financial Crime Enforcement Network

CMA- Capital Markets Authority

VI. LIST OF CASES

Lipisha Consortium Limited and Another v Safaricom Limited

Wiseman Talent Ventures v Capital Markets Authority (2019) eKLR.

Securities and Exchange Commission v Howey (1946), The Supreme Court of the United States.

In the Matter of Muchee Incorporated, (2017) Securities Exchange Commission.

Re Matter Coinflip Incorporated d/b/a Derivabit, (2015) Commodity Futures Trading Commission

The People v Western Express international, (2012) New York Supreme Court

United States of America (USA) V Ross William Ulbrict a/k/a Dread Pirates Roberts a/k/a Silk Road, (2014) United States District Court Southern District of New York.

1 CHAPTER ONE

1.1 Introduction

1.1.1 Background

Money has evolved a great deal from what it is known today. Before coins and notes were being used to purchase goods and services, people used to trade goods for goods (barter trade).[1] Traders exchanged goods for commodity money such as salt, cowry shells or cocoa.[2] Eventually, metals such as gold and silver as currency were popularised, which led to the emergence of coins, then notes and finally cheques.[3] The notes and coins are the forms of money that are accepted today. [4]Almost every country in the world develops and regulates its currency; this is known as monetary sovereignty.[5] They are known as legal tenders in that they can be given as a payment of debt incurred through the provision of services or goods, and the creditor is legally obliged to accept it.[6] The evolution of money has brought us to digital currencies, also known as cryptocurrencies.

Cryptocurrencies are a subset of Virtual Currencies.[7] Virtual Currencies are a digital representation of value (that is not necessarily attached to fiat currency) that is not issued by a central financial body, is used as a form of payment by natural and legal persons and can be stored, transferred and traded electronically.[8] Cryptocurrencies are peer-to-peer-based transactions, meaning the transactions do not go through intermediaries such as banks, and they are also privately distributed.[9] Some examples of cryptocurrencies are Bitcoin, Ethereum and Litecoin. Bitcoin's market cap is about 711.8 billion dollars (USD).[10]

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[1] Burn- Callander R, The History of Money: From Barter to Bitcoin, The Telegraph, 20 October 2014, -<https://www.telegraph.co.uk/finance/businessclub/money/11174013/The-history-of-money-from-barter-to-bitcoin.html>- on 18 March 2019.

[2] -https://www.bcb.gov.br/ingles/origevoli.asp- on 18 March 2019.

[3] -https://www.bcb.gov.br/ingles/origevoli.asp- on 18 March 2019.

[4]-https://www.bcb.gov.br/ingles/origevoli.asp- on 18 March 2019.

[5] Zimmerman C. D, The Concept of Monetary Sovereignty Revisited, 24(3), *The European Journal of International Law*, 2013, 798

[6]International Monetary Fund Discussion Note, Virtual Currencies and Beyond: Initial Considerations, January 2016,

[7]International Monetary Fund Discussion Note, Virtual Currencies and Beyond: Initial Considerations, January 2016,

[8]The European Banking Authority, Opinion on Virtual Currencies, 4 July 2014, para 19.

[9]Nakamoto S, *Bitcoin: A Peer-to-Peer Electronic Cash System*. -< https://bitcoin.org/bitcoin.pdf>- on 18 March 2019.

[10]-<https://coinmarketcap.com/>- on 18 March 2019.

1.1.2 Case study on Bitcoins

Bitcoin was introduced in 2009 by the White paper authored pseudonymously by Satoshi Nakamoto.[11] It was to be used as money for the exchange of goods and services without having an intermediary.[12] Bitcoin is often referred to as a hybrid of commodity money and fiat money.[13] In the bitcoin white paper by Satoshi Nakamoto, he writes that the Bitcoin transactions are peer-to-peer, and as such, it eliminates the need for an intermediary. Traders use various tools that help them determine the right cryptocurrencies to choose from at different times.[14]

As bitcoin accounts are anonymous, it may be easy to double-spend a single coin.[15] Double spending is when a transaction is copied or replicated by another user. To avoid double-spending, Bitcoin lists the transaction chain publicly.[16] The transactions on each coin are announced on the platform for all users to know so that they do not replicate it.[17] Anyone can buy bitcoins by using fiat currency, mining or selling something and accepting bitcoins in exchange for the good.[18]

The growth of cryptocurrencies has prompted different responses from various jurisdictions; some have approved the transactions involving cryptocurrencies while others have either prohibited their use or have placed some restrictions.[19] The widespread response is varied between governments issuing warnings against investing and trading in cryptocurrencies based on their shortcomings and risks of using existing laws to regulate these currencies to banning their use.[20] These warnings indicated the volatility, the unregulated nature of cryptocurrencies and the opportunity these virtual currencies create for money laundering and financial

[11] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 19 March 2019
[12] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 19 March 2019
[13] Hong K, Lee D and Baur D, Bitcoin: Medium of Exchange or Speculative Assets? *54 Journal of International Financial Market, Institutional and Money*, 2017, 1.
[14] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 19 March 2019
[15] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 19 March 2019
[16] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 19 March 2019
[17] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 19 March 2019
[18] -< https://www.bitcoin.com/get-started/how-to-buy-bitcoin/>- on 4 May 2021
[19] Chohan U, Assessing the Differences in Bitcoin & Other Cryptocurrency Legality across National Jurisdictions, *University of New South Wales*, 2017, 2.
[20] The Law Library of Congress, Regulation of cryptocurrencies around the world, 2018, 1.

terrorism.[21] Some countries regulate cryptocurrencies under their tax laws and securities law, and Anti- Money Laundering.[22]

The Kenyan government is one of the governments that issued warnings. The Central Bank of Kenya (CBK), the regulatory body that determines the sovereign currency of Kenya, on December 2015 advised the public not to engage in trading or transacting using cryptocurrencies such as Bitcoin because the CBK Act regulates domestic and international money transfer and so far, no financial institution was licensed to offer money remittance on cryptocurrencies.[23] In addition to these, the CBK public notice also cited a few risks associated with cryptocurrencies. The risks cited were; I) cryptocurrencies are anonymous and untraceable, making them prone to abuse by criminals who want to commit fraud or carry out money laundering,[24] ii) they are unregulated; hence consumers are trading in cryptocurrencies at their own risk as they remain unprotected[25] And iii) cryptocurrencies are volatile; therefore, the risk of loss is higher.[26] This, however, did not deter people from transacting and trading in cryptocurrencies such as bitcoin. In fact, a restaurant in Nyeri has begun accepting bitcoins as a mode of payment.[27] The jurisprudence in the Kenyan Courts in the case of *Lipisha Consortium Limited and Another v Safaricom Limited* highlighted the fact that the CBK does not regulate cryptocurrencies.[28]

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[21] The Law Library of Congress, Regulation of cryptocurrencies around the world, 2018, 1

[22]-https://www.canada.ca/en/revenue-agency/programs/about-canada-revenue-agency-cra/compliance/digital-currency.html- on 18 March 2019.

[23] [23]Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[24] [24]Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[25] [25]Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[26][26]Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[27]Ngunjiri J, Go Slow on Use of Digital Currencies, Experts Advise, The Business Daily. -< https://www.businessdailyafrica.com/corporate/tech/Go-slow-on-use-of-digital-currencies--experts-advise/4258474-4756786-lddj0r/index.html>- on 19 March 2019.

[28] Lipisha Consortium Limited & another v Safaricom Limited [2015] eKLR

1.2 PROBLEM STATEMENT

Cryptocurrencies have continued to gain popularity in the world. Kenya is yet to establish a legal framework regulating the activities and the transaction of these virtual currencies. This is because there are reservations, as highlighted in the public notice by the Central Bank of Kenya (CBK), on their legitimacy, volatility, the aspect of anonymity, and the lack of a regulator.[29] In addition to this, the risks imposed by cryptocurrencies and their characteristics are unique, therefore making it difficult for them to be regulated as traditional forms of money.[30] Furthermore, Kenyans have taken a keen interest in cryptocurrencies, resulting in the rise of the market in the country. This growth in interest, coupled with the risks it would cause, especially as it is borderless, may encourage criminal activity in the country, puts up a case for the regulation of cryptocurrencies. However, some countries have made steps to regulate these digital currencies using the existing legal framework despite its borderless nature to protect consumers, traders and the country's monetary policy.

1.2.1 Statement of Objectives

The objectives of this study are:

i) To highlight and discuss the risks associated with cryptocurrencies.

ii) This study seeks to highlight and explain the risks, which double up as the concern of why the Central Bank of Kenya is not keen on regulating it, associated with cryptocurrencies.

iii) This study will also discuss how monetary sovereignty may be put at risk if cryptocurrencies are not regulated.

iv) This study will then recommend a workable legal framework for the regulation of cryptocurrencies that will mitigate these risks.

1.2.2 Hypothesis

There is no legal framework for the regulation of Virtual Currencies in Kenya due to the risks these currencies face. A regulatory framework will prevent these risks from undermining the financial and economic sector of the country.

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[29] Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[30] Tu K. V., Meredith M. W., Rethinking Virtual Currency Regulation in the Bitcoin Age, 90 (271), *Washington Law Review*, 2015, 300.

1.2.3 Research Questions

This study will answer the following questions:

i) What are the risks these digital currencies pose, and how can they be mitigated?

ii) What would be the possible legal framework for regulation that would mitigate these risks?

1.2.4 Justification for Study

The history of money has brought us to the use of plastic money such as credit cards. With the rapid growth in technology, digital currencies were born. However, these cryptocurrencies presented several risks, like the increased likelihood of money laundering and loss of money due to their volatile nature. Having a legal framework for the regulation of these cryptocurrencies may increase innovation and awareness within the country. This will enable innovators and researchers to improve on the cryptocurrencies' models worldwide, reducing the risks and making it safe for transactions and investments. It will also protect the property of those who have already invested and traded in cryptocurrencies from the country's risks cited above. The regulatory framework will also eliminate the uncertainty surrounding cryptocurrencies. As a result, judges will look into law to make informed and influential decisions on cryptocurrencies.

Furthermore, having a regulatory framework increases research on how illegalities can arise from the trade and investments of these cryptocurrencies and how to punish these crimes effectively. In addition to this, cryptocurrencies will grow; thus, there will be a clearer distinction as to whether they are currencies or assets.

1.3 LITERATURE REVIEW

The Central Bank of Kenya stated one of the risks to be the fact that unregulated.[31] Digital currencies are decentralized and denationalized, meaning they are privately distributed and are not backed by any government.[32] They are decentralized in the sense that the transactions are

[31]Public Notice on Virtual Currencies Such as Bitcoin. -<https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[32]Plassaras N. A., Regulating Digital Currencies: Bringing Bitcoin Within the Reach of the IMF, 14 *Chicago Journal of International Law 1*, 2013, 377.

peer to peer and do not have to go through a licensed intermediary as traditional currencies do, therefore reducing the cost of transactions from one person to another.[33] In the Bitcoin White Paper, Satoshi indicated that these currencies run on a technology called blockchain.[34] A blockchain is a shared digital register of recorded data.[35] For cryptocurrencies, this is the transaction history for every cryptocurrency unit, which shows how ownership has changed over time.[36] The White paper added that the blockchain works by recording transactions in 'blocks', with new blocks added at the front of the chain.[37]Bitcoin uses a public-private key mode of encryption to record these transactions.[38] These are also known as digital signatures. The digital signatures consist of one of the parties (specifically the seller) using the previous transaction key and including the buyer's public key.[39] This transaction is usually encrypted to preserve the identities of the seller and the buyer. The only persons who may decrypt the details of the transactions are the buyer and seller by using the private key.[40] The public key is also anonymous.[41] In addition to this is the fact that the transactions are irreversible. This was Satoshi Nakamoto's (published under a pseudonym) focal point in the White Paper introducing Bitcoins to the world.[42]

The European Banking Authority discussed in its policy paper that cryptocurrencies might affect monetary policy.[43] This is because not only do cryptocurrencies are decentralized and are run on an algorithm. Therefore, they may not carry out the regulatory function as the central bank

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[33] Nakamoto S, Bitcoin: A Peer-to-Peer Electronic Cash System. -< https://bitcoin.org/bitcoin.pdf>- on 18 March 2019.

[34] Nakamoto S, Bitcoin: A Peer-to-Peer Electronic Cash System. -< https://bitcoin.org/bitcoin.pdf>- on 18 March 2019.

[35] Jairo S, Cryptocurrencies in Kenya, *Institute of Economic Affairs*, 2018, 1.

[36] Jairo S, Cryptocurrencies in Kenya, *Institute of Economic Affairs*, 2018, 1.

[37] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 18 March 2019.

[38] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 18 March 2019.

[39] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 18 March 2019.

[40] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 18 March 2019.

[41] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf- on 18 March 2019.

[42]Nakamoto S, Bitcoin: A Peer-to-Peer Electronic Cash System. -< https://bitcoin.org/bitcoin.pdf>- on 18 March 2019.

[43] Claeys G, Demertzis M and Efstathiou K, Cryptocurrencies and Monetary Policy, *Policy Department for Economic, Scientific and Quality of Life Policies*, European Union, 2018.

would.[44] Besides, cryptocurrencies are privately distributed, which means in cases where they are adopted as currency, they would pose a challenge for central banks, especially when trying to make the economy liquid during the recession.[45]

Another risk stated by the Central Bank of Kenya was the possible use of cryptocurrencies in criminal activities.[46] This is discussed in depth by Omri Marian in *'A Conceptual Framework for the Regulation of Cryptocurrencies*', where she identified various risks. Firstly, cryptocurrencies are pseudonymous, meaning that the identity of the trader is not easily identified.[47] The transactions are not regulated by central banks or governments; thus, they lack legal recourse. This makes it attractive to criminals who would want to use it for money laundering or financial fraud. The traders or miners can only be identified through tracking the transaction graph between owners of known wallet holders and the holders of unknown wallets. The process can be used to track if there is any illegal activity being aided by cryptocurrencies.[48] The other risk it poses is brought out by the fact cryptocurrencies are decentralized. Most of the regulations preventing criminal activity from taking place in a financial market are aided by the fact that there is an intermediary that supervises and controls the activities of these financial institutions. Cryptocurrency transactions do not go through an intermediary, making tracking any activity taking place onerous hence they become difficult to regulate.[49]

Dong He, in '*Monetary Policy in the Digital Age*', stated cryptocurrencies are sustained by the belief that people will find value in them.[50] Their market value is based on the fact that they can be exchanged for any currency and that they can be used as a form of payment.[51] The concept of currency is related to the sovereign's power to establish a legal framework for the issuance of

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[44] Claeys G et al., Cryptocurrencies and Monetary Policy, 2018.
[45] Claeys G, et al., Cryptocurrencies and Monetary Policy, 2018.
[46]Public Notice on Virtual Currencies Such as Bitcoin. -<https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.
[47] Marian O, A Conceptual Framework for the Regulation of Cryptocurrencies, *The University of Chicago Law Review*, 2015, 57.
[48]Marian O, A Conceptual Framework for the Regulation of Cryptocurrencies, 57.
[49] Marian O, A Conceptual Framework for the Regulation of Cryptocurrencies, 57.
[50]He D, Monetary Policy in the Digital Age, International Monetary Fund, June 2018. -<https://www.imf.org/external/pubs/ft/fandd/2018/06/central-bank-monetary-policy-and-cryptocurrencies/he.htm>- on 19 March 2019.
[51] He D, Monetary Policy in the Digital Age, International Monetary Fund, June 2018. -<https://www.imf.org/external/pubs/ft/fandd/2018/06/central-bank-monetary-policy-and-cryptocurrencies/he.htm>- on 19 March 2019.

banknotes and coins.[52] Currencies are prescribed by law. When they are prescribed by law, they can be used by a person to discharge debts, and the creditor is obliged under law to accept the money. However, a State's power to develop monetary policies ensures that as long as assets, including those created privately, are denominated in the sovereign's currency, they could be used as a medium of exchange.[53] Therefore, the acknowledgement of cryptocurrencies as a currency depends on the state. *Francois Gianviti* describes monetary sovereignty as the right of the state to issue currency, regulate its use within its territory and outside and evaluate and revalue its currency.[54] Monetary sovereignty also gives the states the right to determine their monetary policy, and this right is greatly undermined if the state uses a foreign currency.[55] Since cryptocurrencies are privately created and distributed, they are also borderless when used without any regulatory framework, undermining monetary sovereignty.

Another risk stated by the Central Bank of Kenya was the possible use of cryptocurrencies in criminal activities.[56] This is discussed in depth by Omri Marian in *'A Conceptual Framework for the Regulation of Cryptocurrencies*', where she identified various risks. Firstly, cryptocurrencies are pseudonymous, which means that the identity of the trader is not easily identified.[57] The transactions are not regulated by central banks or governments; thus, they lack legal recourse. This makes it attractive to criminals who would want to use it for money laundering or financial fraud. The traders or miners can only be identified through tracking the transaction graph between owners of known wallet holders and the holders of unknown wallets. The process can be used to track if there is any illegal activity being aided by cryptocurrencies.[58] The other risk it poses is brought out by the fact cryptocurrencies are decentralized. Most of the regulations preventing criminal activity from taking place in a financial market are aided by the fact that

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[52] Zimmerman C. D, The Concept of Monetary Sovereignty Revisited, 24(3), *The European Journal of International Law,* 2013, 798.

[53] International Monetary Fund Staff Discussion Note, Virtual Currencies and Beyond: Initial Considerations,16.

[54] Gianviti F., Current Legal Aspects of Monetary Sovereignty in International Monetary Fund (IMF) (ed*), Current Developments in Monetary and Financial Law*, 4ed, IMF, Washington D.C, 2004, 4, https://www.imf.org/external/pubs/nft/2006/cdmf/ch1law.pdf- on 29 January 2021.

[55] Gianviti F., Current Legal Aspects of Monetary Sovereignty in International Monetary Fund (IMF) (ed*), Current Developments in Monetary and Financial Law*, 4ed, IMF, Washington D.C, 2004, 4, - https://www.imf.org/external/pubs/nft/2006/cdmf/ch1law.pdf- on 29 January 2021.

[56]Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[57] Marian O, A Conceptual Framework for the Regulation of Cryptocurrencies, *The University of Chicago Law Review*, 2015, 57.

[58]Marian O, A Conceptual Framework for the Regulation of Cryptocurrencies, 57.

there is an intermediary that supervises and controls the activities of these financial institutions. Cryptocurrency transactions do not go through an intermediary, making tracking any activity taking place onerous hence they become difficult to regulate.[59]

According to the Central Bank of Kenya, another risk constituted by cryptocurrencies is that they are highly volatile.[60] Dong He explained that this is because their value is attached to the perception of its users; therefore, it fluctuates in value.[61] This fickle nature of cryptocurrencies makes more consumers shy away from investing or trading in these digital currencies, reducing the chances of being adopted as a currency. This is also aggravated by the fact that there is no monetary policy that regulates the value of cryptocurrencies.[62] The constant value fluctuations of the currency make many clients suffer losses, especially for new entrants in the market who invest large capital without adequate knowledge of the industry.

Samantha Douma suggested that, in light of this, as these cryptocurrencies gain popularity, governments should formulate ways of regulating them, mostly because they have many risks.[63] Governments have to develop legal frameworks for regulation because, by the growth of these cryptocurrencies, the chances increase, and they can quickly get out of hand and cause adverse effects on the traditional currencies and the economic stability of the foreign exchange.[64] Furthermore, unregulated money, whether real or virtual, remains a liability.[65] To avoid the adverse effects of the risks of these cryptocurrencies, a coherent legal framework should be established.

The book '*Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives* by Rosario Girasia gave an insight into how the United States of America's government has dealt with the regulation of cryptocurrencies. She stated that there is a commission charged with the regulation in the financial sector on the federal level of government,

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[59] Marian O, A Conceptual Framework for the Regulation of Cryptocurrencies, 57.
[60] Public Notice on Virtual Currencies Such as Bitcoin. -<https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.
[61]He D, Monetary Policy in the Digital Age, International Monetary Fund, June 2018. -<https://www.imf.org/external/pubs/ft/fandd/2018/06/central-bank-monetary-policy-and-cryptocurrencies/he.htm>- on 19 March 2019.
[62]European Central Bank, Virtual Currencies Schemes- a Further Analysis, European Central Bank, 2015, 23.
[63]Douma S, Bitcoins: The Pros and Cons of Regulation, Leiden University,2016, 30.
[64]Plassaras N, Regulating Digital Currencies: Bringing Bitcoin Within the Reach of the IMF, 380.
[65]Douma S, Bitcoins: The Pros and Cons of Regulation, *Leiden University*,2016, 28.

such as the Securities exchange commission, which defined cryptocurrencies as securities.[66] Therefore, persons, legal or natural, wishing to trade, exchange and store cryptocurrencies must be registered with the commission before announcing Initial coin offerings.[67] They must also register with the Financial Crimes Enforcement Network to comply with the anti-money laundering laws as well as the Know-your-customer rules.[68] They also have to register with the commodity trade and futures commission for consumer protection.[69] Other federal commissions such as the Internal Revenue services are involved.[70]

In Kenya, the Central Bank of Kenya released a public notice to caution the public against the use of cryptocurrencies as they have no legal backing, and there will be no legal recourse if persons suffer the loss of money or investment.[71] The *Ministry of Information Technology* advised that the government should implement a Digital Assets Framework for cryptocurrencies to ensure that there are guidelines to register companies and persons who wish to engage in cryptocurrency transactions.[72] The Digital Assets Framework could rely on the Capital Markets Authorities and may be regulated as securities.[73] So far, as stated in *Wiseman Talent Ventures v Capital Markets Authority*, there is no comprehensive legal framework to regulate these cryptocurrencies.[74] On the other hand, cryptocurrencies have gained a large market in Kenya, with bitcoin transactions totalling $1.5 Million (USD).[75]

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[66] Girasa R, Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives, 1 ed, Palgrave Macmillan, 2018, 57.
[67] Girasa R, Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives, 72.
[68] Girasa R, Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives, 72.
[69] Girasa R, Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives, 72.
[70] Girasa R, Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives, 72.
[71] Public Notice on Virtual Currencies Such as Bitcoin. - https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.
[72] Ministry of Information Technology, Emerging Digital Technologies for Kenya: Exploration and Analysis, 2019, 71.
[73] Ministry of Information Technology, Emerging Digital Technologies for Kenya: Exploration and Analysis, 2019, 71.
[74] Wiseman Talent Ventures v Capital Markets Authority (2019) eKLR.
[75] 4 popular Cryptocurrencies in Kenya -< https://citizentv.co.ke/news/4-popular-cryptocurrencies-in-kenya-11080780/>- on 5 May 2021.

1.4 **Definition of terms**

i. *Cryptocurrencies are digital representations of value that are constructed to be a peer-to-peer system without an intermediary like a central bank,* used as a medium of exchange, whose transactions are protected by encryption and can be converted to legal tender such as dollars. They are also known as virtual currencies.[76]

ii. *Bitcoin, Ethereum, and Litecoin*- these are examples of cryptocurrencies.[77]

iii. *Digital currencies*- these are currencies that exist only in the digital space and can only be accessed by using a computer or smartphones, for instance, cryptocurrencies.[78]

iv. *Blockchain Technologies*- this is a system of recording information.[79] It is used to record bitcoin transactions.[80]

v. *Seignorage*- this the difference made by the government from the issuing of currencies and the production of currencies.[81]

vi. *Fiat Currencies*- these are currencies that are supported by the law and have monetary value because the law has decreed it does.[82]

vii. *Sovereign currencies*- these are also known as legal tender.[83] These currencies are state-supported and can be used as a mode of payment within a given territory.[84]

1.5 **Chapter summary**

Chapter One is the introduction of the problem that is the subject of the study. It consists of the background, the problem statement, the hypothesis, the research questions, justification for the task, literature review, the scope and limitation of the study, the overall flow of the dissertation, the summary of the results and the dissertation, and the chapter summary.

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[76] Houben R and Snyers A, *Cryptocurrencies and Blockchain: Legal Context and Implications for Financial Crime Tax Evasion and Money Laundering,* European Parliament, 2018, 23.
[77] -<https://coinmarketcap.com/>- on 18 March 2019.
[78] -< https://www.investopedia.com/terms/d/digital-currency.asp#:~:text=Digital%20currencies%20are%20currencies%20that,cheapest%20method%20to%20trade%20currencies.>- on 4 May 2021
[79] -< https://www.fxcm.com/za/insights/the-most-popular-cryptocurrency-terms-and-phrases/>- on 4 May 2021.
[80] Nakamoto S, Bitcoin: A Peer-to-Peer Electronic Cash System. -< https://bitcoin.org/bitcoin.pdf>- on 18 March 2019.
[81]-https://www.investopedia.com/terms/s/seigniorage.asp- on 4 May 2021
[82] -< https://www.fxcm.com/za/insights/the-most-popular-cryptocurrency-terms-and-phrases/>- on 4 May 2021.
[83] -< https://sovereignmoney.site/what-is-sovereign-money>- on 4 May 2021
[84] -< https://sovereignmoney.site/what-is-sovereign-money>- on 4 May 2021

Chapter Two covers the Theoretical framework. The theories discussed in this chapter are the Pathetic Dot theory, the diffusion of innovation theory, the state theory of money and the social contract theory.

Chapter Three has an in-depth discussion of the risks posed by cryptocurrencies. This chapter will also cover comparisons with other jurisdictions such as the United States of America and South Africa.

Chapter Four discusses the effects of cryptocurrencies on monetary sovereignty.

Chapter Five contains the recommendations and the conclusion of the study.

2 CHAPTER TWO

2.1 THEORETICAL FRAMEWORK

This chapter will elaborate on the theoretical framework that supports the regulation of cryptocurrencies. It will cover the pathetic dot theory of regulation, the state theory of money and the social contract theory.

2.1.1 Pathetic Dot Theory of Regulation

Several theories demystify the forces behind most restrictions that limit people from doing some activities. The first theory is the pathetic dot theory, referred to as the New Chicago School theory.[85] The theory seeks to explain the main forces that regulate the lives of people in contemporary society. These forces are the law, the market, social norms, and technical infrastructure, also known as architecture.[86] For instance, the law threatens that people should suffer consequences when they fail to obey, while social norms are sets of standard behaviours that members of a particular are society are supposed to live by and uphold.[87] On the other hand, the markets control the prices for goods and services or behaviours through the concept of supply and demand.[88] Other actions are constrained by features of the world, such as geography, biology, and technology.[89]

The pathetic dot theory application shows that the four aspects that affect the behaviour of the pathetic dot may be used to create the best regulatory framework, especially in cyberspace.[90] Programmers develop computer language through the generation of codes. These codes, in turn, control what persons may or may not do on the application or website.[91] These codes usually come in the form of algorithms. An example of algorithms regulating behaviour is, for example, on YouTube. If a video is stated to have violated the copyright of another person's work, the video gets deleted from the website; therefore, content creators are keen to use non-copyrighted

[85] Lessig L, The New Chicago School, *27 Journal of Legal Studies 3*, 1998, 127.
[86] Lessig L, *Code is Law*, Basic Books, New York, 2006, 123.
[87] Murray A, 'Cyberspace Regulation' in Faur D. L. (ed), Handbook on the Politics of Regulation, 1ed, Edward Elgar Publishing Limited, Cheltenham, 2011, 272.
[88] Lessig L, *Code is Law*, Basic Books, New York, 2006
[89] Lessig L, *Code is Law*, Basic Books, New York, 2006
[90] Buterin V., Ethereum: A next-generation cryptocurrency and decentralized application platform, 2014, 56. - https://blockchainlab.com/pdf/Ethereum_white_paper-a_next_generation_smart_contract_and_decentralized_application_platform-vitalik-buterin.pdf- on 18 March 2019
[91] Tapscott, D, and Tapscott, A, *Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money*, Business, and the World, Penguin Random House (Portfolio), New York, 2016, 203.

music.[92] In the same manner, cryptocurrencies are decentralized; thus, they do not have an intermediary to crosscheck the transactions. However, through blockchain technology, the transactions are detailed, especially in Bitcoins, issues like double-spending are avoided.[93]

Lawrence Lessig in ‘Code is Law’ argues that in cyberspace, the source code written by programmers affects people's behaviour.[94] He stated that the architecture of the website or application regulated people’s behaviour.[95] Lessig further stated that cyberspace had widened the scope of how and where regulatory laws may be incorporated in day-to-day life.[96] In cyberspace code, what creates the software, is the regulator, and the same can be said in cryptocurrencies. In virtual currencies, the transactions are encrypted in that only the parties transacting can be aware of them.[97] Furthermore, they ensure that users are anonymous in the case of bitcoins, and only the public key and the private key may be used to record the transaction.[98]

On the other hand, the technology underpinning cryptocurrency provides potential opportunities that can be tapped and used as a basis for turning the law into code. The emerging technology can be used to revolutionize the way people interact while engaging in economic transactions. If the government and financial institutions such as the Central Bank of Kenya (CBK) can support the transposing of legal provisions into the digital space, they could pave the way for enacting more code-based rules. The laws will not need any enforcement from third parties such as the central banks but with instead be executed by the underlying blockchain network. Therefore, these codes will be enforced every time by the technology regardless of the involved parties' wishes.

In conclusion, cryptocurrencies should be regulated by the government. However, the legislators should consider the source code used to create these cryptocurrencies and embody public values. This would lead to a coherent regulatory framework for digital currencies.

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[92]-< https://www.youtube.com/howyoutubeworks/policies/copyright/>- on 30 December 2020.
[93] Nakamoto S, Bitcoin: A Peer-to-Peer Electronic Cash System. -< https://bitcoin.org/bitcoin.pdf>- on 18 March 2019
[94]Lessig L, *Code is Law*, Basic Books, New York, 2006,
[95] Lessig L, *Code is Law*, Basic Books, New York, 2006,
[96] Lessig L, *Code is Law*, Basic Books, New York, 2006,
[97] Plassaras N. A., Regulating Digital Currencies: Bringing Bitcoin Within the Reach of the IMF, 14 *Chicago Journal of International Law 1*, 2013, 377.
[98] Nakamoto S, Bitcoin: A Peer-to-Peer Electronic Cash System. -< https://bitcoin.org/bitcoin.pdf>- on 18 March 2019.

2.1.2 State Theory of Money

This is a theory proposed by George Knapp. He stated that money is a creature of law.[99] This means that money does not obtain its value from the gold or silver reserves but by being legal tender.[100] The theory states that the state dictates that the taxpayers and creditors should accept notes and coins to offset debts. Knapp breaks down this theory into three principles: the state makes the final decision on what should be accepted as payment, the state also has the freedom to determine the denomination in which the payment should be divided, and the state may also change the denominations.[101] This explains that if the state does not accept the notes or coins as payment of tax and debts, then the general public will not accept them as currency.[102] Therefore, money gets its value from the state. This currency is supposed to serve as a unit of account, medium of exchange and store of value.[103] This goes on to show that currencies that have been widely accepted, such as the Kenyan Shilling and the United States dollar, have received support from the government.[104]

On the other hand, cryptocurrencies are privately developed and were introduced to the public as a medium of exchange. However, it too volatile to be used as a store of value. In addition to this, cryptocurrencies are not recommended by the state as legal tender as the public notice by the CBK states, the citizens who subscribe to the use of cryptocurrencies will not be protected by the state and are engaging in it at their own risk.[105]

2.1.3 Social Contract Theory

The social contract theory states that the society, to avoid conflicts that may arise from being in a lawless state, gave up some personal freedoms in exchange for laws, rights and governance.[106] Therefore, there exists a contract between the government and the citizens. When it comes to money and monetary policy, the governmental body (central banks) is usually tasked with issuing currency and crafting monetary policy.[107] Also, the central banks are supposed to act as

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[99] Knapp G, *State Theory of Money*, Macmillan and Company Limited, London, 1924, 1
[100] Knapp G, *State Theory of Money*, 15.
[101] Knapp G, *State Theory of Money*, 15.
[102] Knapp G, *State Theory of Money*, 21.
[103] Knapp G, *State Theory of Money*, 15.
[104] Knapp G, *State Theory of Money*, 15.
[105] Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.
[106] Gauthier D, *Morals by Agreement*, Oxford University Press, London, 1986.
[107] Section 4A, Central Bank Act (*Chapter 491 of the Laws of Kenya*).

lenders of the last resort to salvage a country's economy should it go into recession.[108] Central banks also carry out checks and balances on behalf of the public to ensure that the sovereign currency is not used for criminal activities such as money laundering and financing terrorism.[109]

On the other hand, cryptocurrencies are decentralized. Therefore, in as much as the transactions are recorded on the blockchain, the algorithm may not carry out the moral value of currency regulation. For instance, the silk road incidence of 2011 where people sold drugs and other illegal goods and services in exchange for Bitcoins.[110] In view of this, cryptocurrencies need to be regulated to ensure the duty the state has to its citizens is fulfilled.

2.2 CONCLUSION

This chapter has analyzed various theories that support state regulation of cryptocurrencies. It has covered the pathetic dot theory of regulation, the state theory of money and the social contract theory. The following chapters shall critically analyze the regulation of cryptocurrencies through the eyes of the theoretical framework.

3 CHAPTER THREE:

3.1 REGULATION OF CRYPTOCURRENCIES

3.1.1 INTRODUCTION

As discussed in chapter one, cryptocurrencies are borderless by nature, volatile and encourage anonymity in transactions. For these reasons, cryptocurrencies are considered to be a risky investment. Another one of these risks is criminal activity promotion because of anonymity and economic instability because of price volatility. For these currencies to be regulated, these risks need to be addressed.

These currencies need regulating as, in as much as they have gained market without the government's support, the state's response determines the market decision. An article published by the Bank of International Settlements states that statements regarding the legal status of

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[108] Claeys G, Demertzis M and Efstathiou K, Cryptocurrencies and Monetary Policy, Policy Department for Economic, Scientific and Quality of Life Policies, European Union, 2018.
[109] Claeys G *et al.*, *Cryptocurrencies and Monetary Policy*, 28.
[110] Financial Action Task Force (FATF), *Virtual Currencies Key Definitions and Potential AML/CFT Risks*, June 2014, 11

cryptocurrencies have largely impacted the digital currencies market.[111] The study noted that to regulate cryptocurrencies properly then there has to be a clear classification of these currencies to determine the law that may be used.[112] In addition to this, the authorities must address the issues that arise from the global nature of cryptocurrencies.[113]

In this chapter, the study will break down and explain the various risks posed by cryptocurrencies. The risks to be discussed are issues pertaining to jurisdiction and criminal activities that may be encouraged by the anonymous/pseudonymous nature of cryptocurrencies. In addition to this, the chapter will also tackle the issue of classification and how the legal system can accommodate cryptocurrencies and intellectual property issues that may arise. Then the study shall delve into a comparative study between Kenya and the United States of America, and South Africa.

3.1.2 Jurisdiction

Jurisdiction is built on the foundation of boundaries.[114] Heavily linked with sovereignty, it provides states with the power to enforce the laws for their people to abide by.[115] On the other hand, this means that states may not interfere with the jurisdiction of another state. Jurisdiction may also refer to the right the court has to listen and judge a case. In cryptocurrency regulation, jurisdiction is important as it is up to a state to determine what these currencies may be used for, which financial instrument they fall under and if their use is banned or allowed in their country. A study conducted by Auer and Claessens stated that cryptocurrencies are reliant on governments and institutions such as the Central Banks to support their market.[116] This is because cryptocurrencies can be exchanged into fiat currencies which are then state-issued and backed.[117]Therefore, any state response regarding the legality of cryptocurrencies was met with a significant change in the market.[118] Due to the borderless nature of these currencies, countries cannot claim exclusive jurisdiction over them. Therefore, market activities can easily sip into

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[111] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, *Bank of International settlements Quarterly Review*, 23 September 2018, 62.
[112] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 63.
[113] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 63.
[114] Girasa R, *Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives*, 1 ed, Palgrave Macmillan, 2018, 57.
[115] Rynagaert C, *Jurisdiction in International Law*, 1ed, Oxford University Press, London, 2008.
[116] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 59.
[117] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 59.
[118] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 59.

other countries if the laws are rigid.[119] Therefore, there has to be an international agreement to aid the regulatory framework as national laws may not be that effective.[120] This notwithstanding, governments should find a way to regulate cryptocurrencies within their territories.

3.1.3 Illicit use of cryptocurrencies

In most cases, cryptocurrencies are anonymous or pseudonymous.[121] For instance, while registering for an account to trade bitcoins, one does not need to identify themselves.[122] There are also other digital currencies that provide more privacy which may seem appealing to criminals, such as Zcash and Blackcoin.[123] Especially Zcash, which offers a higher degree of privacy; the level of privacy offered makes it hard for law enforcement to trace it back to the user.[124] This has raised concerns, especially on the likelihood of cryptocurrencies encouraging illegal activities such as money laundering.[125] An example of the currencies' technology being used for criminal activities was terrorists (ISIS) receiving funding from their supporters via cryptocurrencies.[126]

Another example of this is the Silk Road Market incident of 2011.[127] The silk road marketplace was a website established by Ross William Ubricht where he sold narcotics such as psychedelic mushrooms and other illicit goods.[128] In their transactions, the buyers and sellers avoided interference from the government and used bitcoins as payment.[129] Another example is Western Express International, where a cybercrime group was involved in the theft of credit cards numbers and personal information attached to the credit cards and selling them in exchange for

[119] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 59.
[120] Morton T, The Future of Cryptocurrencies: An Unregulated instrument in an Increasingly Regulated Global Economy, *16 Loyola University Chicago International Law Review 1*, 131.
[121] Girasa R, *Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives*, 6.
[122] Nakamoto S., Bitcoin: A Peer- to- Peer Electronic Cash System, -https://bitcoin.org/bitcoin.pdf
[123] Vandezande N, Virtual Currencies: A legal Framework, 1 ed, Intersentia, London, 2018, 100.
[124] Vandezande N, Virtual Currencies: A legal Framework, 100.
[125] Girasa R, *Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives*, 6.
[126] Girasa R, *Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives*, 72.
[127] *United States of America (USA) V Ross William Ulbrict a/k/a Dread Pirates Roberts a/k/a Silk Road*, (2014) United States District Court Southern District of New York.
[128] *USA v Ross William Ulbrict a/k/a Dread Pirates Roberts a/k/a Silk Road*, (2014) United States District Court Southern District of New York.
[129] *USA v Ross William Ulbrict a/k/a Dread Pirates Roberts a/k/a Silk Road*, (2014) United States District Court Southern District of New York.

virtual currencies such as e-gold and Webmoney.[130] They used Western Express International to launder the money by exchanging virtual currencies into fiat money. They changed up to 35 million USD for this cybercrime group. This company also provided anonymity and ways to avoid reporting transactions involving large sums of money.[131]

The use of cryptocurrencies in illicit activities is aided by the fact that not only does it need any form of identification while registering an account but also that there is no central authority to check if the transaction is legitimate.

3.1.4 Classification of cryptocurrencies

In cryptocurrency regulation, there has been a lot of question as to whether these currencies amount to money or securities.[132] According to Jevons, money must fulfil four functions: it must serve as a unit of account, a store of value, the standard of value, and a medium of exchange.[133] For digital currencies, they fulfil some of the functions of money. They can serve as a medium of exchange, but they cannot be used as a unit of account or store and standard of value due to their volatile nature. Therefore, some states consider cryptocurrencies to be securities.[134]

3.1.5 Intellectual Property Issues that arise from Cryptocurrencies

Intellectual property rights exist in various forms such as copyrights, trademarks, patents and trade secrets. Patents are granted to a person or an institution if they have invented or have discovered the machine, useful process of manufacturing or have improved on earlier inventions or discoveries.[135] This last for 20 years where the patent is made available, and other people can improve on it.[136] In Cryptocurrencies, related technology such as blockchain may be used in record keeping, especially in governmental institutions, so intellectual property rights such as patents may be created for such technologies.[137] For example, Coinbase has been granted many

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[130] *The People v Western Express International*, (2012) New York Supreme Court.
[131] *The People v Western Express International*, (2012) New York Supreme Court.
[132] Vandezande N, *Virtual Currencies: A legal Framework*, 160.
[133] Jevons S, *Money and the Mechanism of Exchange*, 1ed, D. Appleton and Company, New York, 1896, 14-18.
[134] Vandezande N, *Virtual Currencies: A legal Framework*, 160.
[135] Section 21(1) and (2), *Industrial property Act* (Act no. 3 of 2001)
[136] Section 60, *Industrial Property Act* (Act No. 3 of 2001)
[137] Georges D A and Korenchan L J, The Patent Landscape of Cryptocurrency and Blockchain, 2018 -< https://www.mbhb.com/intelligence/snippets/the-patent-landscape-of-cryptocurrency-and-blockchain>- on 3 May 2021

patents for security systems for transactions and methods of analyzing blockchain transactions.[138] The issue that patent protection faces are enforceability and protection of open-sourced cryptocurrencies such as bitcoin and ripple.[139] These currencies may not get patented as their creators have used open-sourced software guidelines that the authorities may not accept as it is not novel.[140]

Trademarks protect the recognizable design or expression of a company that provides a specific good or service.[141] It lasts for about ten years, after which it may be renewed.[142] Cryptocurrencies can be protected under trademarks to avoid dilution of the brand; for instance, a digital currency company was trying to pass off 'Baitcoin' as 'Bitcoin',[143] as long as they are linked to a specific source and service.[144]

3.2 CRYPTOCURRENCIES REGULATION IN KENYA

In Kenya, there is no specific legislation to deal with the regulation of cryptocurrencies. In 2015, the Central Bank of Kenya (CBK), the government institution mandated to regulate and determine monetary policy, issued a warning to the public against trading in cryptocurrencies.[145] The public notice mentioned risks such as the volatility of these currencies. The anonymity that could provide an avenue for criminals to get away with crimes such as money laundering and the decentralized and unregulated nature of cryptocurrencies should caution those citizens who wish to engage in their transaction and trade.[146] In 2020, the CBK Bank supervision report stated that

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[138] Georges D A and Korenchan L J, The Patent Landscape of Cryptocurrency and Blockchain, 2018 -<https://www.mbhb.com/intelligence/snippets/the-patent-landscape-of-cryptocurrency-and-blockchain>- on 3 May 2021

[139] Georges D A and Korenchan L J, The Patent Landscape of Cryptocurrency and Blockchain, 2018 -<https://www.mbhb.com/intelligence/snippets/the-patent-landscape-of-cryptocurrency-and-blockchain>- on 3 May 2021

[140] Georges D A and Korenchan L J, The Patent Landscape of Cryptocurrency and Blockchain, 2018 -<https://www.mbhb.com/intelligence/snippets/the-patent-landscape-of-cryptocurrency-and-blockchain>- on 3 May 2021

[141] Section 2, *Trademarks Act* (Act No. 51 of 1955)

[142] Section 23 (1), *Trademarks Act* (Act No 51 of 1955)

[143] Trademark Protection for Blockchain and Cryptocurrency -< https://amlegals.com/trademark-protection-for-blockchain-and-cryptocurrency/>- on 4 May 2021

[144] Trademark Protection for Blockchain and Cryptocurrency -< https://amlegals.com/trademark-protection-for-blockchain-and-cryptocurrency/>- on 4 May 2021

[145] Public Notice on Virtual Currencies Such as Bitcoin. -<https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

[146] Public Notice on Virtual Currencies Such as Bitcoin. -<https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.

the CBK and other financial sector regulators would continue to increase awareness of the potential risks of cryptocurrencies to the public.[147] This did not deter Kenyans from using cryptocurrencies. As of 2021, a bitcoin Automated Teller Machine (ATM) has been placed in Nairobi.[148]

In the case *Lipisha Consortium Limited and Bitpesa Limited v Safaricom Limited*, the defendant had discontinued its services to the 1st petitioner because it was dealing with money remittance services without being registered by the CBK.[149] The petitioners applied for a conservatory order against the defendant.[150] The 1st petitioner and the 2nd petitioner had a contract as the 1st petitioner provided money transfer services, and one of its clients was the 2nd petitioner.[151] The 2nd petitioner was dealing with the exchange of Bitcoins to fiat money.[152] The 1st petitioner had not registered as a money remittance business; therefore, it was an illegality.[153] The defendant, on finding out this information, discontinued its services to the 1st petitioner.[154] The courts stated that since the first petitioner's services amounted to money remittance according to section 2 of the Money Remittance Regulations of 2013.[155] The courts also decided that the petitioners' case had not met the threshold required for a conservatory order as they had failed to prove that they had a prima facie case with a chance of winning and advised for arbitration.[156]

In early 2019, the task force established under the Ministry of Information Technology published suggestions on regulating cryptocurrencies under their report.[157] The main idea they presented was to form a Digital Assets Framework that would provide a set of rules for people who wish to engage in the transaction of cryptocurrencies.[158] The report further suggested that the regulatory

[147] Central Bank of Kenya, *Bank Supervision Annual Report*, 2020, 20.
[148] Does Kenya Have Bitcoin ATMs? How Do They Work?-< https://citizentv.co.ke/news/does-kenya-have-bitcoin-atms-how-do-they-work-10533916/>- on 4 May 2021
[149] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[150] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[151] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[152] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[153] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[154] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[155] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[156] *Lipisha Consortium Limited and another v Safaricom Limited* [2015] eKLR
[157] Ministry of Information Technology, Emerging Digital Technologies for Kenya: Exploration and Analysis, 2019, 71.
[158] Ministry of Information Technology, Emerging Digital Technologies for Kenya: Exploration and Analysis, 2019, 71.

framework established for the Capital Markets Authority (CMA) could be leveraged and used in the regulation of cryptocurrencies and their markets.[159]

The CMA in 2019 warned investors against participating in the initial coin offerings for virtual currencies as there is no legal recourse and they are not regulated.[160] The reason explained was that the cryptocurrency market was characterized by its volatility which could lead to investment loss.[161] Furthermore, according to ***Wiseman Talent Ventures case***, they applied the Howey test to determine that cryptocurrencies are to be treated as securities; thus, the Capital Markets Authority acted within their powers by discouraging investors from the Initial Coin offering by Wiseman Talent Ventures.[162] The court was of the opinion that businesses operating within the financial services industry should be regulated by the existing financial laws.[163]

In early 2020, a new financial law was enacted that stated that a digital tax of 1.5% will be charged on income received from the provision of digital services in Kenya.[164] This law also covers profit attained from cryptocurrency trading and mining.[165] However, despite not having a comprehensive legal framework for the regulation of Kenya has about 4 million users of cryptocurrencies and the 2nd largest market in Africa.

3.3 COMPARISON WITH OTHER JURISDICTION IN THE WORLD

This section of the study will discuss the regulatory framework in other jurisdictions compared to Kenya. The first country will be the United States of America. This is because it has one of the cryptocurrency biggest markets with about 27 million users.[166] In addition to this, despite not having a specific legal framework, they have tailored existing laws to regulate these

159 Ministry of Information Technology, Emerging Digital Technologies for Kenya: Exploration and Analysis, 2019, 71.
160 Capital Markets Authority Warn Against Kencoin Initial Coin Offering and Trading -< https://www.cma.or.ke/index.php?option=com_content&view=article&id=509:cma-warns-against-kenicoin-initial-coin-offering-and-trading&catid=12&Itemid=207>- on 2 May 2021.
161 Capital Markets Authority Warn Against Kencoin Initial Coin Offering and Trading -< https://www.cma.or.ke/index.php?option=com_content&view=article&id=509:cma-warns-against-kenicoin-initial-coin-offering-and-trading&catid=12&Itemid=207>- on 2 May 2021.
162 *Wiseman Talent Ventures v Capital Markets Authority* (2019) eKLR.
163 *Wiseman Talent Ventures v Capital Markets Authority* (2019) eKLR.
164 Section 12E, Finance Act (Act No.8 of 2020).
165 Ministry of Information Technology, Emerging Digital Technologies for Kenya: Exploration and Analysis, 2019, 71.
166 The United States Securities and Exchange Commission -< https://www.sec.gov/spotlight/cybersecurity>- on 2 May 2021

currencies.[167] The second country is South Africa because it has the 3rd largest market after Nigeria and Kenya. However, they have made a few steps in the regulation of cryptocurrencies instead of banning them.[168]

3.3.1 **Regulation in the United States of America**

In the United States of America, there are various federal government agencies that are tasked with the regulation of cryptocurrencies. These are The Securities Exchange Commission (SEC), the Commodity Futures Trading Commission (CFTC) and the Financial Crimes Enforcement Network (FinCEN).

The SEC, specifically its cyber-crime unit, which was created because of the online nature of cryptocurrencies, deals with the regulation of securities, their markets, brokers and traders.[169] In the case *SEC v Howey*, the courts defined securities as it's a common investment, it is sold with a view of profit-making, and it involves other people's efforts.[170] The regulation of cryptocurrencies falls under SEC because of the Initial Coin Offering (ICO) marketing by promoters of cryptocurrencies to the general public.[171] A good example of SEC doing this is in the case of *SEC v Munchee*, whereby the defendant, who was offering a restaurant review service, used ICOs for digital currencies to raise money to pay for adverts without registering with SEC.[172]

CFTC is mandated by the Commodity Exchange Act (CEA) to regulate all commodities and futures trading.[173] CFTC stated that cryptocurrencies are not a foreign currency but a commodity under the CEA.[174] The CEA defines a commodity as services and interests in which contracts are made for future delivery, whether presently or not.[175] The CFTC has a list of prohibitions concerning the trade of cryptocurrencies as a commodity. These are price manipulation, pre-arranged virtual currency swap, trading cryptocurrencies without registering with the

[167] Hughes DS, Cryptocurrency Regulations and Enforcement in the United States of America, *45 Western State Law Review 1*, 2017, 5.
[168] Crypto Assets Regulatory working group, Position Paper on Crypto Assets, 2019, 28.
[169] The United States Securities and Exchange Commission -< https://www.sec.gov/spotlight/cybersecurity>- on 2 May 2021.
[170] *Securities and Exchange Commission v Howey* (1946), The Supreme Court of the United States.
[171] Hughes DS, Cryptocurrency Regulations and Enforcement in the United States of America, 5.
[172] *In the Matter of Muchee Incorporated*, (2017) Securities Exchange Commission.
[173] -https://www.cftc.gov/About/AboutTheCommission- on 3 May 2021
[174] Commodity Futures Trading Commission, Retail Commodity Transactions Involving Certain Digital Assets, *85 Federal Register 122*, 2020.
[175] Section 1a (9), *Commodity Exchange Act* 545 49 USC.

commission and trading virtual currencies with persons who have not registered with the commission.[176] *In Re Matter Coinflip Incorporated d/b/a Derivabit*, CFTC charged Derivabit and its owners for operating an activity related to commodity options without being registered as a designated contract market by CFTC.[177] This action violated section 4c(b) and 5h(a)1 of the CEA Act, which prohibits a commodity transaction by bidding or offering if it is against what is recommended in law and if the entity in question is not registered, respectively.[178]

On the other hand, FinCEN is an administrative body commissioned to guide and rule on cases concerning the application of the Bank Secrecy Act (BSA).[179] FinCEN announced in 2013 that the BSA applies to the cryptocurrency market.[180] Therefore, crypto firms are encouraged to register as a money service business and comply with anti-money laundering laws, as well as know your customer laws.[181] This is to curb the criminal activity that may accompany cryptocurrency exchange and trade.[182]

Other governmental institutions involved in regulating these currencies are the Internal Revenue Services which imposes a self-employment tax on persons who mine, exchange and trade cryptocurrencies.[183] In addition to this, states have put in place laws to regulate the use of cryptocurrencies. For instance, in New York, citizens involved in buying and selling cryptocurrencies, carrying out a virtual currencies business and storing and holding digital currencies on behalf of others must register under BitLicense.[184] So far, three business out of 22

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[176] Commodity Futures Trading Commission, Retail Commodity Transactions Involving Certain Digital Assets, *85 Federal Register 122*, 2020.
[177] *Re Matter Coinflip Incorporated d/b/a Derivabit*, (2015) Commodity Futures Trading Commission.
[178] Section 4c(b) and 5h(a)1, *Commodity Exchange Act* 545 49 USC.
[179] Financial Crime Enforcement Network -< https://www.fincen.gov/what-we-do#:~:text=FinCEN's%20mission%20is%20to%20safeguard,strategic%20use%20of%20financial%20authorities.>- on 3 May 2021.
[180] Application of FinCEN's Regulations to Persons Administering, Exchanging or Using Virtual Currencies -< https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering>- on 3 May 2021
[181] Application of FinCEN's Regulations to Persons Administering, Exchanging or Using Virtual Currencies -< https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering>- on 3 May 2021
[182] Hughes D S, Cryptocurrency Regulations and Enforcement in the United States of America, 7.
[183] Girasa R, Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives, 72.
[184] Hughes D S, Cryptocurrency Regulations and Enforcement in the United States of America, 7.

applications have been authorized by Bitlicense to carry out virtual currency business in New York, that is, Coinbase, Ripple and Circle.[185]

In comparison to Kenya, the USA has attempted to use existing law to formulate the legal framework for the regulation of cryptocurrencies. Despite some steps being made within the Kenyan regulatory framework, it is not as substantial as the USA's steps. However, both countries would need a specific legal framework for cryptocurrencies.

3.3.2 Comparison to the Regulation in South Africa

In South Africa, there is no legal framework to regulate cryptocurrencies specifically.[186] Therefore, the country uses existing law to provide guidance.[187] In 2014, the South African Reserve Bank gave an official public warning against the use of cryptocurrencies.[188] It stated that cryptocurrencies are not legal tender, and they should not be used as a mode of payment.[189]

The parliament wants to amend its tax laws to include cryptocurrencies as one of the financial instruments and charge income tax on the trade of cryptocurrencies and charge Value Added Tax on cryptocurrencies.[190] However, the government put together a task force that came up with recommendations on handling cryptocurrencies' regulation. They suggested that the uses of cryptocurrencies should be analyzed and broken down into various uses.[191] They identified these uses as purchasing and buying, making payments, raising capital via Initial Coin Offerings, market support, funds, and derivatives.[192] The task force recommended that cryptocurrencies be regulated as a financial instrument and included in the Act's financial sector regulation. However, despite South Africa being amongst the largest cryptocurrency market in Africa, little progress has been made towards its regulation.

In summary, South Africa, like Kenya, has not done much in creating a legal framework for these currencies. However, from both countries, there has been an attempt in building a workable regulatory framework.

[185] Hughes D S, Cryptocurrency Regulations and Enforcement in the United States of America,7.
[186] Crypto Assets Regulatory working group, Position Paper on Crypto Assets, 2019, 28.
[187] Crypto Assets Regulatory working group, Position Paper on Crypto Assets, 2019, 28.
[188]South African Reserve Bank, Position Paper on Virtual Currencies, 2015, 4.
[189] South African Reserve Bank, Position Paper on Virtual Currencies, 2015, 4.
[190] Crypto Assets Regulatory working group, Position Paper on Crypto Assets, 2019, 28.
[191] Crypto Assets Regulatory working group, Position Paper on Crypto Assets, 2019, 28.
[192] Crypto Assets Regulatory working group, Position Paper on Crypto Assets, 2019, 28.

3.4 CONCLUSION

Cryptocurrencies have a lot of risks, but the technology behind them keeps on improving. This notwithstanding, Kenya has yet to establish a specific legal framework for its regulation. However, this is not to say that progress has not been made. The charging of digital tax on cryptocurrency activities is one of the many steps Kenya is yet to take. On the other hand, with technological innovation improving, there is a need for a sturdier and comprehensive legal framework.

4 CHAPTER FOUR

4.1 INTRODUCTION

In chapter three, this study has covered a few risks brought about by cryptocurrencies. In this chapter, the study will explain how cryptocurrencies may affect the monetary sovereignty of a country as Knapp stated in the State Theory of Money, Currency is a creature of law.[193]

4.2 CRYPTOCURRENCIES' EFFECTS ON MONETARY SOVEREIGNTY

Monetary sovereignty is the autonomy given to a state to create and regulate its monetary policy.[194] Control over the financial aspect of a given territory is a paramount aspect of sovereignty.[195] The International Court of Justice stated it in the *Serbian Loans Case* that a state has the right to determine and regulate its currency.[196] Within monetary sovereignty, there are three rights a state has: i) to develop and issue its currency within its territory, ii) the right to determine and change the value of that currency and iii) the right to regulate the use of that currency within its territory.[197] Monetary sovereignty usually ends where the other countries' monetary sovereignty begins.[198] In other words, a country is not permitted to interfere with another country's monetary sovereignty.[199]

The states' right to develop and issue their currency incorporates the state's decision on the name and physical features of their banknotes and coins.[200] The state usually delegates this right to the central bank or any other governmental agency.[201] For instance, in Kenya, the Central Bank Kenya (CBK) Act mandates the CBK to issue currency.[202] Under the right to determine and change the currency value entails revaluation and update of the currency value.[203] However, states are not allowed to determine the currency value against another currency.[204]The state may regulate the use of their currency and other currencies within their territories. They may also determine the scope of the legal tender; this means that the central bank may limit the amount of

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[193]Knapp G, State Theory of Money, 15.
[194] Gianviti F., Current Legal Aspects of Monetary Sovereignty in International Monetary Fund (IMF) (ed*), Current Developments in Monetary and Financial Law*, 4ed, IMF, Washington D.C, 2004, 4, -< https://www.imf.org/external/pubs/nft/2006/cdmf/ch1law.pdf>- on 7 December 2020.
[195] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 4.
[196] Serbian Loans Case, International Court of Justice
[197] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 4.
[198] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 4.
[199] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 4.
[200] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 5.
[201] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 6.
[202] Central Bank Act (*Chapter 491 of the Laws of Kenya*).
[203] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 6.
[204] Gianviti F, Current Legal Aspects of Monetary Sovereignty, 6.

money that should be transferred at a time. In turn, this complements national identity by the inclusion of symbols of national identity such as the silhouettes of former presidents or geographic attractions such as mountains and lakes and animals.

Monetary sovereignty by way of monetary policy puts the state in a position where it can salvage the country's economy should it go into recession.[205] This becomes evident when central banks are tasked to act as the lender of the last resort to ensure the liquidity of the economy.[206] This is further aided by ensuring the price stability of national currencies as well as having a public actor being the distributor of the currency.[207] National currencies have gained public trust hence why states are able to conduct monetary policy with them.[208]

Cryptocurrencies have not gained public trust as fiat currencies have. However, since the world is ever-changing, cryptocurrencies may gain traction and pose some challenges to the central banks by affecting their mandate to create monetary policy.[209] Moreover, cryptocurrencies are borderless, leading to a rigid global monetary policy that would be too accommodative because of the number of states subscribing to cryptocurrencies.[210]

Cryptocurrencies, as discussed in the previous chapters, are highly volatile. As opposed to fiat currency, cryptocurrencies have a smaller market share making their price fluctuate within a short period.[211] There are many people who use a central bank-issued fiat currency, which in turn stabilizes the price of such currencies.[212] This makes it easier for the government or the central bank to use fiat currency to conduct monetary policy.[213] Unlike the sovereign currencies (also known as legal tender),[214] virtual currencies are not stable. For instance, wages in labour are also determined by considering the value of standard currencies in the market.[215] Cryptocurrencies do

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[205] Claeys G, Demertzis M and Efstathiou K, *Cryptocurrencies and Monetary Policy*, Policy Department for Economic, Scientific and Quality of Life Policies, European Union, 2018.
[206] Claeys G *et al., Cryptocurrencies and Monetary Policy*, 28.
[207] Claeys G *et al., Cryptocurrencies and Monetary Policy*, 28.
[208] Claeys G *et al., Cryptocurrencies and Monetary Policy*, 28.
[209] Claeys G *et al., Cryptocurrencies and Monetary Policy*, 28.
[210]Claeys G *et al., Cryptocurrencies and Monetary Policy*, 28.
[211] Public Notice on Virtual Currencies Such as Bitcoin. -<https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.
[212]Claeys G *et al., Cryptocurrencies and Monetary Policy*, 30.
[213] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 32.
[214] Tomic N, Todorovic V and Cakajac B, The Potential Effects of Cryptocurrencies on Monetary Policy, *17 European Journal of Applied Economics 1*, 2020, 43.
[215] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 33.

not have a standard value that can be accepted as payment or can be used by businesses in setting prices to their wares.[216] This is usually achieved if the currency's price is not volatile and will not change over a long period.[217] Therefore, cryptocurrency has a long way to go in gaining enough traction to grapple with sovereign currencies.

Virtual currencies are also decentralized. This means that they are not issued by a state's government or central bank.[218] They are privately distributed, and the transactions are monitored by the use of an algorithm.[219] This could significantly limit the central banks' control over issues pertaining to money. It would limit the central banks' mandate to determine the interest rate and, during the time of crisis, the ability of the central bank to act as the lender of the last result.[220] Pistor, in the working paper titled '*From Territorial to Monetary sovereignty*, states that the biggest threat to monetary sovereignty comes from private money.[221] For cryptocurrencies, this refers to the fact that these currencies are decentralized, meaning they do not have a regulator. The cryptocurrencies' transactions are recorded on the blockchain, and it is autonomous.[222] Therefore, the algorithm carries out a quasi-regulatory function in that manner. However, it does not do a thorough job as a regulator like the CBK would do. Under the CBK Act, the Central Bank of Kenya is tasked with implementing policies that will promote regulation of the payment, clearing and settlement systems.[223] The regulatory power of Central Banks aids the state when it comes to ensuring the economy remains liquid and stable. Since cryptocurrencies are privately distributed, it would be difficult for them to carry out the lending function of central banks to keep the economy of a country liquid.[224]

Furthermore, the system may not efficiently carry out certain checks and balances as a regulatory body like the central bank would because it has no intermediary.[225] In a given state, the reason the Central Banks are given the mandate to carry out regulatory functions and design monetary

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[216]Claeys G *et al*., Cryptocurrencies and Monetary Policy, 34.
[217] Pistor K, From Territorial to Monetary sovereignty, 6.
[218]Public Notice on Virtual Currencies Such as Bitcoin. -<https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>- on 18 March 2019.
[219]Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 34.
[220] Tomic N *et al*., The Potential Effects of Cryptocurrencies on Monetary Policy, 43.
[221] Pistor K, From Territorial to Monetary sovereignty, 6.
[222] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 35.
[223] Section 4A, *Central Bank of Kenya Act* (Chapter 491 of the Laws of Kenya).
[224] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 35.
[225] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 35.

policy is because of the trust they have gained from their citizens. This is also known as the societal value of regulation.[226] This is gained by holding certain members of the society accountable if they use the sovereign currencies for fraudulent purposes.[227] For instance, money laundering and financing of wars or terrorism. Cryptocurrencies have been put on the spot multiple times for enabling money laundering and financing of terrorism. This is due to the anonymous nature of cryptocurrencies. In Chapter 1, the study discussed how while registering for a Bitcoin account, no identification is needed, and one may use a fake identity or may register for an account under an alias.[228] This provides a haven for persons who have mal intentions to conduct their criminal activities. A good example of this happening was the 2011 'Silk Road Market'.[229] The Silk Road was a website where persons could go and sell illegal goods and services such as drugs and computer hacking services.[230] The suppliers of these goods and services would only accept bitcoins as the mode of payment.[231] They would create a myriad of bitcoin accounts to transact with as the transactions would not be traced back to them.[232] Such actions sully the social contract that exists between the general public and the central banks. Consequently, this makes the adoption of cryptocurrencies as a legal tender impossible.

One of the major aspects of monetary policy is taxation. A lot of countries rely on taxation to formulate the countries budget.[233] The countries revenue is usually based on the sovereign currency of the country.[234] In cryptocurrencies, the fact that they are borderless and do not belong to a particular country comes into play, making it difficult for the government to formulate a comprehensive tax policy using virtual currencies.[235]

[226] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 35.
[227] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 35
[228] Dyntu V and Dykyi O, Cryptocurrency in the System of Money Laundering, 4 *Baltic Journal of Economic Studies* 5, 2018, 78.
[229] Financial Action Task Force (FATF), *Virtual Currencies Key Definitions and Potential AML/CFT Risks*, June 2014, 11.
[230] Financial Action Task Force (FATF), *Virtual Currencies Key Definitions and Potential AML/CFT Risks*, June 2014, 11.
[231]Financial Action Task Force (FATF), *Virtual Currencies Key Definitions and Potential AML/CFT Risks*, June 2014, 11.
[232] Financial Action Task Force (FATF), *Virtual Currencies Key Definitions and Potential AML/CFT Risks*, June 2014, 11.
[233] Gianviti F, *Current Legal Aspects of Monetary Sovereignty*, 4.
[234] Claeys G *et al*., *Cryptocurrencies and Monetary Policy*, 35.
[235] Dyntu V and Dykyi O, Cryptocurrency in the System of Money Laundering, 78.

4.3 CONCLUSION

In summary, monetary sovereignty is an important aspect of the organization of a country. It is important for a country to have its currency and also the ability to determine its monetary policy without interference from other nations. This also encourages trust from the public as people are held accountable by the regulatory framework established by the governmental bodies. In the case of cryptocurrencies, they are borderless and volatile. This means that states cannot create and implement effective monetary policy with these currencies. However, the market of these cryptocurrencies keeps expanding. The technology keeps on getting better; for instance, the development of other cryptocurrencies such as stable coins may pose a challenge to a country's monetary sovereignty. Therefore, nations should focus on creating a specific legal framework for these currencies.

5 CHAPTER 5

5.1 RECOMMENDATIONS AND CONCLUSION

5.1.1 Recommendations

From the previous chapters' discussion, cryptocurrencies may affect monetary sovereignty if it is not regulated. This is because states have in their rights to determine monetary policy by issuing, valuing, and regulating the use of that currency within its territorial boundaries.[236] These are the recommendations this study suggests:

i. A centralized cryptocurrency space will expedite government regulation.[237] Milton Friedman once stated that for a monetary framework to be stable, it is within the government's purview to establish a robust legal framework to aid the private market.[238] Cryptocurrencies represent the integration of the software industry and the economy. [239]They are bound to shake up the financial systems creatively.[240] They are also mined and owned privately without any influence from the government. This may affect the economy of a country as they are volatile. This study suggests that to avoid the effects of cryptocurrencies fall out, it is better if there is a regulatory framework established by legislation. Cryptocurrencies, in cyberspace where the territory is not determined through borders rather than by the reach of the internet. This means that a state cannot place a claim on cryptocurrencies. The only way to ensure that they do not affect monetary policy is by instituting proper regulatory measures. As discussed in Chapter Two, the theoretical framework, a state can use an architecture that props cryptocurrencies to regulate them.

ii. To follow up on the first recommendation, global co-operation should be considered as these currencies are found on the internet and as a result, they are borderless.[241] This means that the regulatory response of one jurisdiction could easily make the market activities seep into another countries' jurisdiction.[242] Therefore, international

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[236] Gianviti F, *Current Legal Aspects of Monetary Sovereignty*, 4.
[237] Yee A., *The regulation of cryptocurrencies: from disintermediation to reintermediation, Internet Review Policy*, 2015. -https://policyreview.info/articles/news/regulation-cryptocurrencies-disintermediation-reintermediation/350-
[238] Friedman M., *A Program For Monetary Stability*, 3 ed, Fordham University Press, New York, 1960.
[239] Yee A., *The regulation of cryptocurrencies: from disintermediation to reintermediation*. -<-https://policyreview.info/articles/news/regulation-cryptocurrencies-disintermediation-reintermediation/350-.
[240] Yee A., *The regulation of cryptocurrencies: from disintermediation to reintermediation*. -<-https://policyreview.info/articles/news/regulation-cryptocurrencies-disintermediation-reintermediation/350-.
[241] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 59
[242] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 59

treaties and conventions should provide guidance since these currencies do not have a nationality and are jurisdiction less.[243]

iii. The introduction of cryptocurrencies may transform monetary sovereignty. This has serious consequences on the government's ability to create its monetary policy.[244] States, to avoid this, may create their digital currencies for their citizens to use. These currencies are also known as Central Bank Digital Currencies (CBDC).[245] This way, the Central Bank promotes innovation in the private sector without veering too far away from the social concept of money.[246] CBDCs are digital currencies issued by the Central Banks. This is a better option than encouraging the adoption of cryptocurrencies as they are now.[247] This is because cryptocurrencies are privately owned, interfering with the government's ability to determine monetary policy.[248]

5.1.2 CONCLUSION

In conclusion, this study has covered how cryptocurrencies can affect monetary sovereignty. Since they exist on international platforms, it may be difficult to enforce the countries' cryptocurrency legislations put in place. However, countries may regulate the use of cryptocurrencies as it is well within their rights regarding monetary sovereignty. Besides, the states should define, under the regulatory laws, whether cryptocurrencies may be used as legal tender within their territory or not. The government may also decide to introduce their cryptocurrency that is backed by the central bank. These currencies are known as Central Bank Digital Currencies. In the author's opinion concerning cryptocurrencies, it is a step towards the right direction regarding money creation and use.

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[243] Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, 59

[244] Pistor K, *From Territorial to Monetary sovereignty*, The Centre for Law and Economic Studies Columbia University School of Law, Working Paper Number 519, 2017. - https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3282&context=faculty_scholarship-

[245]

[246] Carstens A., *Digital Currencies and the Future of the Monetary System*, Bank for International Systems, 2021. - https://www.bis.org/speeches/sp210127.pdf-

[247] Ward O. and Rochemont S., *Understanding Central Bank Digital Currencies, Institutes and Faculty of Actuaries*, 2019, 5.

[248] Ward O. and Rochemont S., *Understanding Central Bank Digital Currencies, Institutes and Faculty of Actuaries*, 2019, 5.

6 BIBLIOGRAPHY

6.1 Cases

Lipisha Consortium Limited & another v Safaricom Limited [2015] eKLR

Wiseman Talent Ventures v Capital Markets Authority (2019) eKLR.

Securities and Exchange Commission v Howey (1946), The Supreme Court of the United States.

In the Matter of Muchee Incorporated, (2017) Securities Exchange Commission.

Re Matter Coinflip Incorporated d/b/a Derivabit, (2015) Commodity Futures Trading Commission

The People v Western Express international, (2012) New York Supreme Court

United States of America (USA) V Ross William Ulbrict a/k/a Dread Pirates Roberts a/k/a Silk Road, (2014) United States District Court Southern District of New York.

6.2 Books

Friedman M., *A program For Monetary Stability*, 3 ed, Fordham University Press, New York, 1960.

Gauthier D, *Morals by Agreement*, Oxford University Press, London, 1986.

Girasa R, *Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives*, 1 ed, Palgrave Macmillan, 2018.

Knapp G, *State Theory of Money*, Macmillan and Company Limited, London, 1924.

Lessig L, *Code is Law*, Basic Books, New York, 2006, 123

Tapscott, D, and Tapscott, A, *Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money*, Business, and the World, Penguin Random House (Portfolio), New York, 2016, 203.

Vandezande N, Virtual Currencies: A legal Framework, 1 ed, Intersentia, London, 2018.

6.3 Chapter in books

Gianviti F., Current Legal Aspects of Monetary Sovereignty in International Monetary Fund (IMF) (ed), *Current Developments in Monetary and Financial Law*, 4ed, IMF, Washington D.C, 2004, 4, -<https://www.imf.org/external/pubs/nft/2006/cdmf/ch1law.pdf>- on 7 December 2020.

Murray A, 'Cyberspace Regulation' in Faur D. L. (ed), Handbook on the Politics of Regulation, 1ed, Edward Elgar publishing Limited, Cheltenham, 2011, 272.

6.4 Journal Articles

Buterin V., Ethereum: A next-generation cryptocurrency and decentralized application platform, 2014

Chohan U, Assessing the Differences in Bitcoin & Other Cryptocurrency Legality across National Jurisdictions, *University of New South Wales*, 2017.

Douma S, Bitcoins: The Pros and Cons of Regulation, *Leiden University*,2016.

Dyntu V and Dykyi O, Cryptocurrency in the System of Money Laundering, 4 *Baltic Journal of Economic Studies* 5, 2018.

Hughes D S, Cryptocurrency Regulations and Enforcement in the United States of America, *45 Western State Law Review 1*, 2017

Lessig L, The New Chicago School, *27 Journal of Legal Studies 3*, 1998, 127.

Morton T, The Future of Cryptocurrencies: An Unregulated instrument in an Increasingly Regulated Global Economy, *16 Loyola University Chicago International Law Review 1*.

Marian O, A Conceptual Framework for the Regulation of Cryptocurrencies, *The University of Chicago Law Review*, 2015.

Nakamoto S, Bitcoin: A Peer to Peer Electronic Cash System, 2008.

Plassaras N. A., Regulating Digital Currencies: Bringing Bitcoin Within the Reach of the IMF, 14(1), *Chicago Journal of International Law*, 2013.

Tomic N, Todorovic V and Cakajac B, The Potential Effects of Cryptocurrencies on Monetary Policy, *17 European Journal of Applied Economics 1*, 2020.

Tu K. V., Meredith M. W., Rethinking Virtual Currency Regulation in the Bitcoin Age, 90 (271), *Washington Law Review*, 2015.

Ward O. and Rochemont S., Understanding Central Bank Digital Currencies, Institutes and Faculty of Actuaries, 2019

Zimmerman C. D, The Concept of Monetary Sovereignty Revisited, 24(3), *The European Journal of International Law*, 2013.

6.5 Institutional articles

Auer R, Claessens S, Regulating Cryptocurrencies: assessing Market Reactions, *Bank of International settlements Quarterly Review*, 23 September 2018.

Carstens A., *Digital Currencies and the Future of the Monetary System*, Bank for International Systems, 2021. - https://www.bis.org/speeches/sp210127.pdf-

Central Bank of Kenya, *Bank Supervision Annual Report*, 2020.

Claeys G, Demertzis M and Efstathiou K, Cryptocurrencies and Monetary Policy, Policy Department for Economic, Scientific and Quality of Life Policies, European Union, 2018.

Crypto Assets Regulatory working group, Position Paper on Crypto Assets, 2019.

Financial Action Task Force (FATF), *Virtual Currencies Key Definitions and Potential AML/CFT Risks*, June 2014.

The European Banking Authority, Opinion on Virtual Currencies, 2014.

European Central Bank, Virtual Currencies Schemes- a Further Analysis, European Central Bank, 2015.

Financial Action Task Force, Virtual Currencies -Key Definitions and Potential Anti- Money Laundering (AML) and Combating Financial Terrorism (CFT), 2014.

International Monetary Fund Discussion Note, Virtual Currencies and Beyond: Initial Considerations, January 2016.

Ministry of Information Technology, Emerging Digital Technologies for Kenya: Exploration and Analysis, 2019.

South African Reserve Bank, Position Paper on Virtual Currencies, 2015.

The Law Library of Congress, Regulation of cryptocurrencies around the world, 2018.

6.6 Internet Sources

Application of FinCEN's Regulations to Persons Administering, Exchanging or Using Virtual Currencies -< https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering>-

Burn- Callander R, The History of Money: From Barter to Bitcoin, The Telegraph, 20 October 2014, -<https://www.telegraph.co.uk/finance/businessclub/money/11174013/The-history-of-money-from-barter-to-bitcoin.html-

Capital Markets Authority Warn Against Kencoin Initial Coin Offering and Trading -< https://www.cma.or.ke/index.php?option=com_content&view=article&id=509:cma-warns-against-kenicoin-initial-coin-offering-and-trading&catid=12&Itemid=207>-

Does Kenya Have Bitcoin ATMs? How Do They Work?-< https://citizentv.co.ke/news/does-kenya-have-bitcoin-atms-how-do-they-work-10533916/>-

Financial Crime Enforcement Network -< https://www.fincen.gov/what-we-do#:~:text=FinCEN's%20mission%20is%20to%20safeguard,strategic%20use%20of%20financial%20authorities.>-

Georges D A and Korenchan L J, The Patent Landscape of Cryptocurrency and Blockchain, 2018 -< https://www.mbhb.com/intelligence/snippets/the-patent-landscape-of-cryptocurrency-and-blockchain>-

He D, Monetary Policy in the Digital Age, International Monetary Fund, June 2018. -< https://www.imf.org/external/pubs/ft/fandd/2018/06/central-bank-monetary-policy-and-cryptocurrencies/he.htm>-

Ngunjiri J, Go Slow on Use of Digital Currencies, Experts Advise, The Business Daily. -< https://www.businessdailyafrica.com/corporate/tech/Go-slow-on-use-of-digital-currencies--experts-advise/4258474-4756786-lddj0r/index.html>-

Public Notice on Virtual Currencies Such as Bitcoin. -< https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf>-

Trademark Protection for Blockchain and Cryptocurrency -< https://amlegals.com/trademark-protection-for-blockchain-and-cryptocurrency/>-

United States Securities and Exchange Commission -< https://www.sec.gov/spotlight/cybersecurity>-

Yee A., *The regulation of cryptocurrencies: from disintermediation to reintermediation*. -<- https://policyreview.info/articles/news/regulation-cryptocurrencies-disintermediation-reintermediation/350

https://www.bcb.gov.br/ingles/origevoli.asp-

https://www.sport-histoire.fr/en/Geography/Currencies_countries_of_the_world.php-

https://coinmarketcap.com/>-

https://www.youtube.com/howyoutubeworks/policies/copyright/>-

6.7 Working Papers

Pistor K, *From Territorial to Monetary sovereignty*, The Centre for Law and Economic Studies Columbia University School of Law, Working Paper Number 519, 2017. - https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3282&context=faculty_scholarship-