

**THE MODEL OF REGULATION FOR VIRTUAL CURRENCIES IN KENYA**

**SUBMITTED BY: MUNYUA ANNE MURUGI**

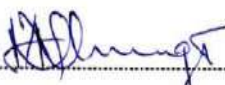
**STUDENT REG. NO.: G62/14199/2018**

**A thesis submitted in partial fulfillment of the requirements for the award of Master's**

**Degree in law**

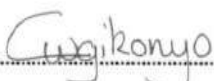
### DECLARATION

I, ANNE MURUGI MUNYUA, declare that this thesis is my original work and that it has not been submitted for examination for the award of a Degree at any other University.

SIGNED:   
ANNE MURUGI MUNYUA  
(G62/14199/2018)

DATE: 07/10/2021

This thesis has been submitted for examination with my approval as university supervisor.

SIGNED:   
DR. CONSTANCE GIKONYO

DATE: 09/11/2020

This thesis has been submitted for examination with my approval as a university assistant supervisor.



SIGNED: .....  
MS. JANE MURUNGI

DATE: 11.10.2021

## **ACKNOWLEDGEMENT**

I am grateful for several people who made immense contribution towards the accomplishment of this research paper.

I give special appreciation to my supervisor, Dr. Constance Gikonyo, whose insight, brilliance and guidance navigated me through this research. My special gratitude also goes to Madam Jane Murungi – my assistant supervisor, for her invaluable and resourceful support, direction and encouragement.

I would also want to thank my family for their support through the years of my study. Their investment in my wellbeing ensured that I could accomplish my academic obligations.

## **DEDICATION**

In the loving memory of Margaret Waithera. Mum, you always taught us to be strong and of good courage (Joshua 1:9).

## **ABSTRACT**

This study examines Kenya's style of regulating virtual currencies and their attendant transactions. It proposes that the adoption of regulative and legislative precepts will be ultimately beneficial for Kenya's fiscal market. The study explores the legal features and taxonomical approaches to classifying virtual currencies. It undertakes a benchmarking approach by exploring styles of regulating virtual currencies by other States noting challenges to be learned from and positive regulative highlights to be emulated by Kenya. This study proposes that stifling the growth of virtual currency use in Kenya is not beneficial to its economy and will only make virtual currencies attractive to criminal schemers and masterminds. The study provides reasons why Kenya should dedicate its resources to research and comprehend virtual currency transactions to come up with regulatory measures that will strengthen and improve the economic status of its economy. The study suggests that Kenya should recognize virtual currencies as mediums of payment for purposes of regulation. The study also points out the fact that virtual currency businesses and transactions could be a source of revenue for the country to tap into. It further suggests that proactively regulating virtual currencies by enacting new laws or amending existing laws will make the currency attractive to law-abiding citizens who wish to transact in virtual currency.

## TABLE OF CONTENTS

COVER PAGE.....	i
DECLARATION .....	<b>Error! Bookmark not defined.</b>
ACKNOWLEDGEMENT .....	iii
DEDICATION .....	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vi
LIST OF ABBREVIATIONS .....	ix
STATUTES AND REGULATIONS.....	xi
CASE LAW .....	xii
DEFINITION OF TERMS .....	xiii
CHAPTER ONE - INTRODUCTION AND BACKGROUND .....	1
1.1. Introduction .....	1
1.2. Background of the Study .....	1
1.3. Statement of the Problem .....	6
1.4. Justification of the Study .....	7
1.5. Research Objectives .....	8
1.6. Research Questions .....	9
1.7. Hypothesis .....	9
1.8. Literature Review.....	9
1.9. Theoretical Framework .....	15
1.9.1. Introduction.....	15
1.9.2. The Public Interest Theory of Regulation.....	15
1.9.3. The Economic Theory of Regulation .....	17
1.10. Research Methodology .....	18
1.11. Chapter Breakdown.....	19
1.11.1. Chapter One – Introduction and Background .....	19
1.11.2. Chapter Two – Legal Features and Taxonomy of Virtual Currencies .....	19
1.11.3. Chapter Three – Analysis of Kenya’s Regulatory Atmosphere .....	19
1.11.4. Chapter Four – Analysis of the Regulatory Approaches of Virtual Currencies in Africa and Around the World.....	20
1.11.5. Chapter Five – Recommendations and Conclusions .....	20

CHAPTER TWO – LEGAL FEATURES AND TAXONOMY OF VIRTUAL CURRENCIES .....	21
2.1. Introduction .....	21
2.2. A Chronology of Currencies .....	22
2.3. Types of Virtual Currency Schemes .....	24
2.4. Classification of Virtual Currencies .....	26
2.4.1. General Classification of Virtual Currencies under Common Law .....	27
2.4.2. Classification under Administration and Permission Issues .....	30
2.4.3. Classification based on Virtual Currencies’ Attributes .....	31
2.5. Conclusion .....	36
CHAPTER THREE – ANALYSIS OF KENYA’S REGULATORY ATMOSPHERE .....	38
3.1. Introduction .....	38
3.2. Kenya’s current regulatory approach .....	38
3.3. Discussion of the regulative framework of payment systems in Kenya .....	42
3.3.1. Constitution, 2010 .....	43
3.3.2. Central Bank of Kenya Act, Cap. 491. ....	44
3.3.3. The National Payment System Act, 2011 .....	49
3.3.4. Banking Act, Cap. 488.....	50
3.3.5. Capital Markets Act, Cap. 485 A .....	52
3.3.6. Central Depositories Act, No. 4 of 2000.....	55
3.3.7. Proceeds of Crime and Anti-Money Laundering Act, 2009 .....	57
3.3.8. Prevention of Terrorism Act, 2012.....	58
3.3.9. Computer Misuse and Cybercrimes Act, No. 5 of 2018.....	59
3.4. Conclusion .....	60
CHAPTER FOUR – ANALYSIS OF THE REGULATORY APPROACHES OF VIRTUAL CURRENCIES IN AFRICA AND AROUND THE WORLD .....	62
4.1. Introduction .....	62
4.2. A Discussion of the Existing Regulatory Styles in the World .....	62
4.2.1. Licensing style .....	63
4.2.2. Restrictive style .....	64
4.2.3. Permissive or guidance style .....	65
4.2.4. Hybrid (Licensing or permissive) style .....	65
4.3. Examination of the regulatory methodologies adopted by Egypt and South Africa .....	66

4.3.1.	Introduction.....	66
4.3.2.	Egypt.....	67
4.3.3.	South Africa .....	70
4.4.	Analysis of regulatory approaches implemented by the State of New York in the USA and South Korea.....	74
4.4.1.	Introduction.....	74
4.4.2.	State of New York (USA).....	75
4.4.3.	South Korea .....	78
4.5.	Gaps identified in the case study.....	82
4.6.	Conclusion.....	82
CHAPTER FIVE - RECOMMENDATIONS AND CONCLUSIONS .....		82
5.1.	Introduction .....	82
5.2.	Key findings of the research .....	83
5.3.	Importance of the findings.....	84
5.4.	Recommendations .....	85
5.4.1.	Research and definition of terms .....	85
5.4.2.	Recognition of virtual currency as currency for purposes of facilitating payment .....	87
5.4.3.	Recognition of virtual currency as property for purposes of facilitating investments.....	88
5.4.4.	Consumer protection .....	89
5.4.5.	Taxation .....	91
5.4.6.	Licensing and keeping of virtual currency business data .....	93
5.5.	Conclusion.....	96
BIBLIOGRAPHY .....		xvi



## LIST OF ABBREVIATIONS

- AI – Artificial intelligence
- AML – Anti-Money Laundering
- AMLD5 – (European Union) Fifth Anti-Money Laundering Directive
- ATM – Automated Teller Machines
- BCSandT – (Texan) Bitcoin Savings and Trust
- CA – Competition Authority of Kenya
- CASPs – Crypto Assets Service Providers
- CBDC – Central Backed Digital Currencies
- CBE – Central Bank of Egypt
- CBK – Central Bank of Kenya
- CFT – Combating the Financing of Terrorism
- CMA – Central Markets Authority
- COVID-2019 – Corona Virus Disease, 2019
- CPU – Computer Processing Unit
- DLT – Distributed ledger technology
- DoJ – (United States) Department of Justice
- EBA – European Banking Authority
- EU – European Union
- FAIS – (South African) Financial Advisory and Intermediary Services
- FATCA – Foreign Account Tax Compliance Act, 2010
- FATF – Financial Action Task Force
- FinCEN – (United States Department of Treasury's) Financial Criminal Enforcement Network
- Fintech – Financial technology
- FSCA – (South African) Financial Sector Conduct Authority
- FSS – (South Korean) Financial Supervisory Services
- ICOs – Initial Coin Offers
- ICT – Information, Communications and Technology
- IFWG – (South African) Intergovernmental Fintech Working Group

IP – Internet protocol

IRS – (United States) Internal Revenue Service

KES – Kenya Shillings

KRA – Kenya Revenue Authority

KYC – Know-Your-Client

NCCCC – National Computer and Cybercrimes Co-ordination Committee

NLC –National Land Commission

NYDFS – New York Department of Financial Services

P2P – Peer-to-peer

PGN – policy guidance note

SAR – Suspicious Activity Reports

SARS – South African Revenue Service

SARB – South African Reserve Bank

SEC – (United States) Security and Exchange Commission

TCS – (Kenya) Treasury Cabinet Secretary

TOR – The Onion Router

UAE – United Arab Emirates

USA – United States of America

USD – United States Dollar

VAT – Value Added Tax

## STATUTES AND REGULATIONS

### Kenyan statutes and regulations

1. Access to Information Act, No. 31 of 2016
2. Banking Act, Cap. 488
3. Capital Markets Act, Cap. 485 A
4. Central Bank of Kenya Act, Cap. 491
5. Central Depositories Act, No. 4 of 2000
6. Competition Act, No. 9 of 2010
7. Computer Misuse and Cybercrimes Act, No. 5 of 2018
8. Constitution of Kenya, 2010
9. Draft Central Bank of Kenya Act (Money Remittance) Regulations, 2013
10. Draft Central Bank of Kenya Act (e-Money) Regulations, 2013
11. Draft Regulatory Sandbox Policy Guidance Note, 2018
12. Income Tax Act, Cap. 470 (amendment Act No. 2 of 2020)
13. Kenya Revenue Authority Act, Cap. 469
14. National Payment System Act, 2011
15. Prevention of Terrorism Act, 2012
16. Proceeds of crime and Anti-Money Laundering Act, 2009
17. Proceeds of Crime and Anti-Money Laundering Regulations, 2013
18. Value Added Tax Act, Cap. 476

### Foreign statutes and regulations

19. Foreign Account Tax Compliance Act (FATCA)
20. US Internal Revenue Service Notice No. 2014-21, 2014-16 I.R.B. 938
21. Japan Virtual Currency Act, 2017
22. New York Virtual Currency Regulations (BitLicense Regulations), 2015
23. South African Financial Advisory and Intermediary Services Act, 2020
24. South Korean Reporting and Use of Specific Financial Information Act, 2020
25. United Nations Charter, 1945
26. United States Securities Exchange Act, 1934

## CASE LAW

### Kenyan Case Law

1. *Lipisha Consortium Ltd. and BitPesa Ltd. v. Safaricom Ltd.* [2015] eKLR
2. *Wiseman Talent Ventures v. Capital Markets Authority (CMA)*, [2019] (Commercial and Tax Civ. Suit) eKLR

### Foreign Case Law

3. *Camdex International Ltd. v Bank of Zambia*, [1997] CLC 714
4. *McCamant v. McCamant*, Tex.Civ.App., 187 S.W. 1096, 1099
5. *National Provincial Bank v Ainsworth*, [1965] 1 AC 1175
6. *Securities and Exchange Commission (SEC) v. Shavers*, No. 4:13-CV-416, 2014 U.S. Dist. LEXIS 110018 (E.D. Tex. Aug. 6, 2014).
7. *United States v. Budovsky*, 13cr318 (DLC), 2015 U.S. Dist. LEXIS 127717 (S.D.N.Y. Sept. 23, 2015)

## DEFINITION OF TERMS

1. **Altcoins** are alternative virtual currencies to the pioneer virtual currency – Bitcoin. Altcoins are, like Bitcoins, developed on the digital ledger technology (DLT) network. Examples of altcoins are Ethereum, Ripple, and Dash.
2. **A wallet** is a virtual currency invention or software for the amassing, collection, and storage of virtual currencies for and on behalf of virtual currency users. It somewhat mirrors the banking institutions' role of accepting from members of the public fiat money on deposit-basis to be repaid to the members of the public on demand, as per a banking agreement, or as otherwise provided for by law. A wallet contains a user's secret code/pin required for transacting virtual currencies on the DLT. Wallets can be stored online or offline.
3. **A wallet provider** is an entity or person who offers the services of a wallet.
4. **Centralized virtual currencies** are virtual currencies that have an administrator. An administrator is responsible for circulating virtual currencies, controlling the underlying system, establishing rules of use of the currency, maintaining a centralized digital ledger, and recalling the currency from rotation. An example is the Linden Dollar.
5. **Convertible virtual currencies** have a corresponding value in traditional currency and can be swapped back and forth for fiat or traditional currency. Examples of convertible virtual currencies are Bitcoin and Ethereum. Convertible virtual currencies exchangeability could be floating (contingent on market forces' supply and demand for virtual currencies) or pegged (value contingent on a real-world fiat currency such as the United States Dollar or valuable elements such as gold).
6. **Cryptocurrency** is a type of virtual currency that is created or generated through cryptography, cryptic or identity-concealing codes.
7. **Cryptography** is the use of an encryption code by programmers to secure transactions on the DLT network. Cryptography could also mask computer users' internet protocol (IP) addresses to allow them to transact in virtual currencies on stealth mode.

8. **Decentralized virtual currencies** are virtual currencies that are produced or generated by an online source code and have no administrator, such as Bitcoin and Ethereum.
9. **Digital currency** means the electronic depiction of either virtual currency (non-traditional currency) or e-money (electronic depiction of traditional currency).
10. **Digital Ledger Technology (DLT)** is a technology for keeping, tracing, and handling information. It is a digital record of transactions. Each record of the transaction is stored in a block of data that is securely linked to other blocks containing previous and subsequent transactions forming a chain of data blocks (block-chain). DLT is the technology that underlies the operability of virtual currencies.
11. **Disintermediation** in the context of this research means the removal of a payment intermediary in financial transactions. Virtual currencies' prominence grew over time due to this invaluable quality of eliminating the need for an intermediary in a financial transaction. This in turn has the effect of reducing the transaction cost, in terms of time and money, for virtual currency transactions, making virtual currencies a more attractive option than fiat currencies for some internet enthusiasts.
12. **Electronic money (or e-money)** is a representation of conventional (fiat) currency with lawful tender status. Electronic money does not alter but maintains the unit of account of money in an electronic format.
13. **Initial Coin Offers (or Initial Coin Offerings)** is a means where virtual currency investment businesses raise funds for their novel businesses through selling virtual currency assets for other currencies, fiat or virtual currency, for a profit. This finance strategy is usually utilized by virtual currency businesses to announce their presence in the market as viable businesses. An Initial Coin Offer (ICO) is different from an Initial Public Offering (IPO) of shares in a company due to the difference of the purchasable assets and different legislative frameworks governing IPOs.
14. **Fiat currency** refers to central-backed traditional currency which possesses an (issuing) State's legal tender status. Fiat currencies should be differentiated from currencies that have the backing of physical commodities (such as gold coins).
15. **Fintech** are diverse financial products fashioned through the use of technology and software development.

16. **Non-convertible virtual currencies** are virtual currencies that are confined to a specific virtual world or territory, such as a gaming experience. An example of a non-convertible virtual currency is World of Warcraft Gold.
17. **Regulatory sandbox** is a custom-made experimental regulative atmosphere for monitoring how Fintech products would fare in a real-life market situation (or at a commercial scale) before being actually allowed to operate in real-world circumstances.
18. **Smart contracts** are self-executing computerized transactions that are carried out by a computer program under the terms and conditions set by a pre-coded contract. The execution of such smart contracts is made possible by the DLT network.
19. **The Onion Router (TOR)** is free stealth-mode open-source-code software that masks a personal computer's IP address and usage to escape oversight of web surveillance or internet traffic analysts and ensure total anonymity. Websites promoting criminal activities have been known to utilize this ingenious software to have their activities continue unperturbed and to outmaneuver State regulatory authorities.
20. **Virtual currencies** (also referred to in this study as cryptocurrencies or crypto assets) are digital assets developed on the DLT network. Virtual currencies may be developed through cryptographic means or on an open-code (unmasked source code). Some virtual currencies are redeemable or exchangeable for value.
21. **Virtual currency businesses** are enterprises that receive virtual currencies to transmit them; maintain custodial possession of virtual currencies for third parties; buy or sell virtual currencies for gain; conduct virtual assets interchange services; or deal in, manage or distribute virtual currency assets – for profit.
22. **Virtual currency exchanges** are businesses that enable in-world consumption of virtual currencies. Such businesses facilitate the exchange of convertible virtual currencies to other virtual currencies or to fiat currencies.

## CHAPTER ONE - INTRODUCTION AND BACKGROUND

### 1.1. Introduction

This chapter will provide an introductory perspective on the framework of virtual currencies. Part 1.2. of the chapter will briefly outline the background of the study and provide general insight on what virtual currencies are, how they function, and why they need to be regulated. Part 1.3. of the chapter will discuss the problem which this study aims to resolve while part 1.4. will offer a justification for the research paper. Parts 1.5., 1.6. and 1.7. will discuss the objectives, questions, and hypothesis of the study, respectively. Part 1.8. will cover a discussion of the literature review of this study whereas the theoretical framework of this study will be identified and discussed under part 1.9. The methodology of this study will be covered under part 1.10. The chapter will then culminate in an overview of the chapter breakdowns of this study under part 1.11.

### 1.2. Background of the Study

Contemporarily, virtual currency schemes have multiplied and flourished, becoming recognized world over, as currency. Advocacy for virtual currencies has been advanced due to their benefit of anonymity, speed, convenience, and their ability to remove the need for payment intermediaries in financial transactions (disintermediation). Conversely, antagonists assert that the secrecy of virtual currency transactions predispose them to criminal undertakings such as terrorism financing and laundering of currency. They also argue underlying systems of virtual currencies could be unstable and susceptible to online threats and attacks.

There is no singular internationally settled upon definition for virtual currencies. This is because virtual currencies are varied and possess different operational qualities hence no one definition could encapsulate their description. However, virtual currencies share some qualities such as their underlying operating networks and operable mechanisms. Based on such shared qualities, some definitions of virtual currencies have been suggested.

An opinion rendered on virtual currencies by the European Banking Authority (EBA) defined virtual assets as valuable computerized representations that are not developed or issued by any state authorities.<sup>1</sup> It further noted that virtual currencies can be transmitted, deposited, or traded by electronic means. The EBA's definition of virtual currency is broad and it classifies virtual currencies and tokens, simply as crypto-assets. The 5<sup>th</sup> Anti-Money Laundering Directive

---

<sup>1</sup> See European Banking Authority, EBA Opinion on 'virtual currencies' (EBA/Op/2014/08, 2014) p. 11.



(AMLD5) report indicated that virtual currencies operate as currency but do not obtain the legal tender status of conventional money.<sup>2</sup> Recital 10 of the AMLD5 states that virtual currencies are not currencies in electronic format.<sup>3</sup> Additionally, the Financial Action Task Force (FATF) opined that virtual currencies satisfy their monetary attribute only through the consensus of agreement that it is money by a community or group of users.<sup>4</sup>

Virtual currencies are issued only in electronic format and should be distinguished from fiat (conventional) money. Also, virtual currencies are different from electronic money (e-money) because e-money is a representation of conventional currency with lawful tender status. E-money does not alter but maintains the unit of account of traditional money in an electronic format. Virtual assets are not government-issued although this is soon going to change due to efforts by some States to come up with State-backed virtual currencies christened Central Bank Digital Currencies (CBDCs). Virtual currencies can be transferred from peer-to-peer (P2P) without involving trusted third-party intermediaries (disintermediation). Another critical feature of virtual currencies is their underlying technology, blockchain technology, also known as the distributed ledger technology (DLT).

The DLT is a publicly distributed ledger accessible by anyone choosing or permitted to access it.<sup>5</sup> Every participant in a chain of the transaction between P2P members has a copy of the distributed ledger and has a vital responsibility of maintaining it through various means approved by different virtual currencies.<sup>6</sup> These DLT ledgers can be likened to spreadsheets with the key exception that these ledgers do not exist in any one particular place or server, but are distributed to various computing networks utilized by P2P members around the world. In summary, the DLT network is a secure system as long as honest codes jointly command more computer processing unit (CPU) strength than any coordinated attacking group of computer hackers.<sup>7</sup>

---

<sup>2</sup> See The Fifth Anti-Money Laundering Directive of the European Parliament and the Council, (DIRECTIVE (EU) 2018/843, 2018)

<sup>3</sup> See *ibid.*

<sup>4</sup> See Željka Rostaš Blažeković and Mislav Vukina, *Virtual currencies - EU legal overview* (European Union, 2019).

<sup>5</sup> See Alan Cohn, Travis West, and Chelsea Parker, 'Smart After All: Blockchain, Smart Contracts, Parametric Insurance, and Smart Energy Grids' (2017) 1 *GEO. L. TECH. REV.* 273.

<sup>6</sup> See *ibid.*

<sup>7</sup> See *ibid.*

Beneficial as well as harmful effects have come into play with the entry into the market of cryptocurrencies. Virtual assets can be utilized in transactions based mostly on their decentralized, flexible, transparent, fast, and low-cost attributes. These qualities missing in fiat currency have made virtual currencies popular especially among proponents of the Austrian School of Economics.<sup>8</sup> Such heterodox proponents agree with Hayek's point of view as delivered in his book, "Denationalization of Money" (1976), where he argued against the government's monopoly of monetary supply and advocated for the establishment of competitively issued private money.

On the other hand, virtual currencies have been identified for their potential to be used as investment assets due to their volatility (rises and falls) in value. For example, due to a multiplicity of market factors, the value of Bitcoin was very erratic between October 2013 and August 2021 ranging between lows of 196.02 United States Dollar (USD) per Bitcoin to 47,144.84 USD per Bitcoin.<sup>9</sup> It has also been suggested that apart from the market forces, legal indecisiveness and lack of regulation make virtual assets volatile as it combines fear and lack of trust in the currency.<sup>10</sup>

Virtual currencies' ability to be utilized as investment assets has occasioned Ponzi schemes. Ponzi schemes are fashioned to defraud investors of their hard-earned money by false promises of massive returns upon investing in certain virtual currencies fronted by schemers. In the United States of America (USA) case of *Securities and Exchange Commission (SEC) v. Shavers*,<sup>11</sup> the court held that the virtual currency interests were securities according to the Securities Exchange Act, 1934. In that case, the SEC charged an individual in Texas for instigating a virtual currency Ponzi scheme through a company known as the Bitcoin Savings and Trust (BCS&T). Shavers had offered investors weekly returns for saving with his company. As a result, he amassed thousands of bitcoins which he utilized for personal benefits and neglected to invest the customers' savings. Contrary to what he had represented to the public, he used new bitcoin

---

<sup>8</sup> See Witold Srokosz and Tomasz Kopyscianski, 'Legal and Economic Analysis of the Cryptocurrencies Impact on the Financial System Stability' (2015) JTE 04 619 at p. 623. See also F. Hayek, 'Denationalisation of Money' (3rd ed., The Institute for Economic Affairs, 1990) p. p. 124–126.

<sup>9</sup> See Raynor de Best, 'Bitcoin (BTC) price history up until August 16, 2021' (STATISTA, Aug 16, 2021).

<sup>10</sup> See Witold Srokosz and Tomasz Kopyscianski (n 8) p. 623.

<sup>11</sup> See SEC v. Shavers, No. 4:13-CV-416, 2013 WL 4028182, (E.D. Tex. Aug. 6, 2013).

savings from his customers to offset mature deposits.<sup>12</sup> When this Ponzi scheme was discovered, he pleaded guilty to securities fraud in 2015 and was imprisoned and ordered to make restitution payments.<sup>13</sup>

The prominence of Bitcoins in the market coupled with the fact that its code is free for all to use and replicate has led to other alternative coins (altcoins) which have come in to fill the gaps not filled by Bitcoin or to correct any major system flaws in the pioneering technology.<sup>14</sup> Due to these altcoins, the issue of hoarding of virtual currencies has been resolved and the design of major inventions such as smart contracts has been conjured.<sup>15</sup>

This study advocates for the legal regulation of virtual currencies due to the above stated potentially harmful, beneficial, and dynamic attributes of virtual currencies. Studies seem to suggest that virtual currencies are in demand in the Kenyan market.<sup>16</sup> Consequently, the public interest demands that virtual currencies, being potentially utilized by unsophisticated Kenyans, be regulated.

BitPesa was the first Kenyan virtual currency business service. It was designed to specifically assist diaspora Kenyans to send remittances back home (Kenya). This service could convert the Bitcoins sent to Kenyans through its platform to Kenya Shillings for onward transmission to its recipients through a mobile money transfer service (M-Pesa).<sup>17</sup> Kipochi was also unveiled and its operations would be conducted in collaboration with M-Pesa to facilitate Bitcoin transactions in Kenya.<sup>18</sup> Kipochi transmissions would be made possible through an electronic wallet (e-wallet)

---

<sup>12</sup> See Press Release 16-200, Dep't of Justice, 'Texas Man Sentenced for Operating Bitcoin Ponzi Scheme' (July 21, 2016).

<sup>13</sup> *ibid.*

<sup>14</sup> Matthias Tarasiewicz and Andrew Newman, "Cryptocurrencies as Distributed Community Experiments" [2015] Handbook of Digital Cryptocurrency.

<sup>15</sup> Joseph Bonneau *et al.*, "SOK: Research Perspectives and Challenges for Bitcoin and Cryptocurrencies" [2015] IEEE Symposium on Security and Privacy.

<sup>16</sup> See Mary-Ann Russon, 'Crypto-currencies gaining popularity in Kenya' (BBC News, 22 February 2019) <<https://www.bbc.com/news/business-47307575>> accessed on 29 April 2020.

<sup>17</sup> See Xin Li and Chong Alex Wang, "the Technology and Economic Determinants of Cryptocurrency Exchange Rates: The Case of Bitcoin" (2017) 95 DSS.

<sup>18</sup> See Braendgaard P., "Kipochi Launches First Bitcoin Wallet in Africa with M-PESA integration" (July 2013).

service, a digital storage device for virtual currencies that contains an assortment of users' public and private keys, addresses of users of the service, and a record of transactions made.<sup>19</sup>

As can be observed, both inventions heavily relied on M-Pesa, Kenya's prevalent mobile money transfer, financing, and micro-financing service provider. The Kipochi service would allow Kenyan M-Pesa users to trade and receive remittances in Bitcoin using the expansive M-Pesa network.<sup>20</sup> However, Kipochi decided to secure its partnership with Kopo Kopo instead of M-Pesa. Kopo Kopo would then integrate its network with M-Pesa through a partnership. Safaricom required that Kopo Kopo end its relationship with Kipochi to continue partnering with it and hence Kipochi was shut down.<sup>21</sup> The fate of BitPesa was also sealed when Safaricom Ltd. suspended BitPesa's operation on the M-Pesa network in November 2015 thereby putting BitPesa out of business in Kenya.<sup>22</sup> However, BitPesa continues to expand its business in the rest of Africa including Uganda, Morocco, and South Africa.<sup>23</sup>

Initially, Kenya's monetary regulative agencies' reaction to virtual currencies was to issue caveats to caution the public to desist from utilizing virtual currencies. The Central Bank of Kenya (CBK) is the solitary State entity with the prerogative to control, produce and administer currencies or comparable assets in Kenya.<sup>24</sup> The CBK has not issued any regulations or guidelines relating to the use of virtual assets in Kenya. However, it issued a warning to all financial institutions in 2015 to cease using virtual currencies due to the lack of regulative provisions and their volatility.<sup>25</sup>

The Central Markets Authority (CMA), on the other hand, followed suit and issued caveat against virtual currency businesses that were offering initial coin offers (ICOs).<sup>26</sup> However, in

---

<sup>19</sup> See Rebecca J. Simmons, "The Regulation of Virtual Currencies: Presentation at the Flagship Seminar on Law and Financial Stability Hosted by the International Monetary Fund" (Session 2, Sullivan and Cromwell LLP., 2018) p. 11. See also The Common Wealth Working Group on Virtual Currencies, *Regulatory Guidance on Virtual Currencies* (Working Group Report, 2019) p. 7.

<sup>20</sup> See Joseph Young, 'Former Kipochi CTO Explains Controversial M-Pesa Deal' (*NewsBTC* 11 January 2016).

<sup>21</sup> *ibid.*

<sup>22</sup> See *Lipisha Consortium Ltd. and Another v. Safaricom Ltd.* [2015] eKLR.

<sup>23</sup> See Tom Jackson, 'BitPesa Plotting Continued African Expansion' (*Disrupt Africa* 26 March 2018).

<sup>24</sup> See Sections 4 and 4A of the CBK Act.

<sup>25</sup> See CBKs Banking Circular No. 14 of 2015.

<sup>26</sup> See opening remarks by the AMERC Chair, Mr. Paul Muthaura, MBS, at the 42<sup>nd</sup> Africa/Middle-East Regional Committee (AMERC) meeting, Jumeirah Messilah Beach Hotel and SPA, Kuwait, 22<sup>nd</sup> January 2019. See also See

March 2019, CMA permitted the use of the draft Regulatory Sandbox Policy Guidance Note (PGN).<sup>27</sup> The Sandbox PGN was to provide a regulative arena for Fintech businesses operating in Kenya in a controlled setting with set restrictions and timelines.<sup>28</sup> Apart from this permissive experimental regulative policy formulated by the CMA, there have been minimal contributions by other State agencies to regulate virtual currencies. Even though some legislation could be construed to encapsulate virtual currencies, it is not certain that virtual currencies would be properly pigeonholed into those regulations to accurately coexist with other monetary assets in Kenya.

This study advocates for the regulation or reform of legislation to accommodate and regulate virtual currencies. Such regulation would result in financial inclusion, consumer safety, proper governance, spurring of e-commerce, international trade, and incorporation of the useful inventions developed globally, within the Kenyan Fintech atmosphere.

### **1.3. Statement of the Problem**

Virtual currencies are not properly regulated in Kenya. This is so even though they have the potential to be used for nefarious reasons such as cyber laundering, online fraud, internet (unregulated) gambling, virtual drug market transactions, tax evasion, and terrorism.<sup>29</sup> Similarly, virtual currencies are bound to be used by an unsophisticated group of users, who need consumer protection from fraudulent and other financial criminal schemes.<sup>30</sup>

The ongoing persistent use of virtual currencies in Kenya without effective legislative framework means that the Kenyan consumer is exposed to various financial hazards. It also means that due to the lack of a legislative framework for virtual currency regulation, any potential terrorism,

---

Digital Economy Kit, *Kenya: A regulatory sandbox for the financial sector* (Case Study 9, November 2019) p. 1. See also CMA Press Release, *CMA warns against Kenicoin's initial coin offering and trading* (January 2019).

<sup>27</sup> See Digital Economy Kit, *Kenya: A regulatory sandbox for the financial sector* (Case Study 9, November 2019) p. 2.

<sup>28</sup> See Guidelines 2, 3, and 4 of the Draft Regulatory Sandbox Policy Guidance Note, 2018.

<sup>29</sup> See Deborah S. Thoren-Peden, JiJi Park, Amy L. Pierce, and Elsa S. Broecker, 'Financial Crimes Enforcement Network Issues Guidance on Virtual Currency' (2013) 130 *Banking L.J.* 579; Hak J. Kim, 'Virtual Currency Is Becoming Reality: Is It Opportunity or Disaster' (2016) 16 *JIBL* 75; and Meghan E. Griffiths, 'Virtual Currency Businesses: An Analysis of the Evolving Regulatory Landscape' (2015) 16 *TTA L.J.* 303.

<sup>30</sup> See Ethan D. Jeans, 'Funny Money or the Fall of Fiat: Bitcoin and Forward-Facing Virtual Currency Regulation' *Colo. Tech. L.J.* Vol. 13 (1) 99.

money laundering, unregulated gambling, and tax evasion, among other crimes, may go unpunished.

Consequently, the problem this study seeks to address is the potential risk that the Kenyan market is exposed to due to the lack of a proper legal framework regulating virtual currencies. This study, therefore, proposes that Kenya should embark on formulating a legal framework for virtual currencies to lead to a safer and financially prudent economic atmosphere.

#### 1.4. Justification of the Study

The CBK has issued caveat to Kenyans<sup>31</sup> as well as Kenyan banks against using virtual currencies in Kenya.<sup>32</sup> However, their use by Kenyans remains unabated.<sup>33</sup> The approach of running down the use of virtual currencies has been unsuccessfully used in other jurisdictions such as India<sup>34</sup> and China.<sup>35</sup> In those countries, the approach of running down the use of virtual currencies made an otherwise potentially cooperative and useful industry become secretive and antiestablishment. Virtual currencies are still in use in those jurisdictions but by a majority of the public who have reprehensible intentions.<sup>36</sup>

Criminalizing or prohibiting virtual currency cannot stop the use of virtual currencies. It will only drive it underground.<sup>37</sup> This study suggests that the best option for Kenya is not to run the virtual currency industry underground. Instead, it should regulate the industry and ensure that any negative effects are checked by the law. This can be achieved by the government working together with the virtual currency protagonists and businesses, to ensure an outcome that is all-encompassing and fruitful in nature, captured in a legislative framework.

---

<sup>31</sup> See Central Bank of Kenya, *Caution to the Public on Virtual Currencies such as Bitcoin* (December 2015) <[https://www.centralbank.go.ke/images/docs/media/Public\\_Notice\\_on\\_virtual\\_currencies\\_such\\_as\\_Bitcoin.pdf/](https://www.centralbank.go.ke/images/docs/media/Public_Notice_on_virtual_currencies_such_as_Bitcoin.pdf/)>. Accessed on 17 May 2020.

<sup>32</sup> See Iyke Aru, 'Kenya's Central Bank Warns Against Cryptocurrency' (CCN, April 14, 2018) <[www.ccn.com%2Fkenyan-apex-bank-warns-citizens-against-the-use-of-cryptocurrencies%2Fandusg=AOvVaw07Ut2asHSFUQhp-faPBO7t/](http://www.ccn.com%2Fkenyan-apex-bank-warns-citizens-against-the-use-of-cryptocurrencies%2Fandusg=AOvVaw07Ut2asHSFUQhp-faPBO7t/)> accessed on 29 April 2020.

<sup>33</sup> See Mary-Ann Russon, 'Crypto-currencies gaining popularity in Kenya' (BBC News, 22 February 2019) <<https://www.bbc.com/news/business-47307575/>> accessed on 29 April 2020.

<sup>34</sup> See Ethan D. Jeans (n 30) 99.

<sup>35</sup> See *ibid* p.p. 125-126.

<sup>36</sup> See *ibid*.

<sup>37</sup> See Jerry Brito and Andrea Castillo, *Bitcoin: A Primer for Policy Makers* (Mercatus Center, GMU 2013) 25.

The Constitution guarantees the right to protection of property and protects the Kenyan consumers under Articles 40 and 46 of the Constitution, respectively. The CBK should therefore strive at issuing regulations that guarantee the right of citizens to information that will enable them to actualize the full advantages of their goods and services as well as safeguard their pecuniary ventures. The CBK enjoys the monopoly of monetary regulation. Section 4 of the CBK Act sets out the principle objects of CBK to include formulation and implementation of monetary policy.

It may be argued that the CBK has dispensed with its prerogative by issuing caution on the use of virtual currencies in Kenya. However, this study urges that such a restrictive regulative approach is not enough to regulate virtual currencies and protect the safety and economic interests of citizens. This study will determine whether CBKs reaction to virtual currencies has provided an efficient and effective market for virtual currency users in Kenya in line with its objectives. It will further interrogate whether the relevant authorities, such as the CMA, the KRA, and the National Treasury, have offered any legal direction relating to the novice currency.

The study will provide reasons why Kenya should direct its focus to further learn about virtual currency. It will assist policy and lawmakers to formulate proper legislative decrees. It will also be instrumental for scholars, regulators, lawyers, and law teachers, who are interested in learning about virtual currencies.

Finally, this study will make a case for the permitted use of virtual currencies in an environment where there is a proper and efficient legislative framework for virtual currencies.

### **1.5. Research Objectives**

The objectives of this study are to—

- (a) define, classify and outline the legal features of virtual currencies;
- (b) examine whether the regulatory measures already undertaken in Kenya are effective and adequate for the safety of the Kenyan citizens concerning use and trade in virtual currencies; and
- (c) compare and contrast Kenya's regulatory situation with other countries, identify regulatory gaps and propose recommendations relating to the regulation of virtual currencies.

## 1.6. Research Questions

There is a need to better understand virtual currencies' underlying features, attributes, and functional modules. This understanding will shed light on virtual currencies' inherent risks and benefits, legal status, and avenues for regulation. To encapsulate all that, the following primary research question needs to be posed:

Should Kenya formulate legislative framework for virtual currency transactions?

The following sub-questions will then arise from the above primary question—

- (a) How are virtual currencies defined and legally classified?
- (b) Are the regulatory measures being undertaken in Kenya effective and adequate for the safety of the Kenyan users and traders of virtual currencies?
- (c) What possible implementable recommendations can Kenya incorporate from lessons learned on the regulation of virtual currencies by other countries?

## 1.7. Hypothesis

The first hypothesis of this study is that understanding the legal features and taxonomy of virtual currencies will pave the way to proper regulation of virtual currencies in Kenya. The second hypothesis is that the current regulatory measures undertaken by Kenya's monetary regulators on the regulation of virtual currencies are insufficient.

## 1.8. Literature Review

Literature review indicates that regulation of virtual currency is an ongoing issue in the world majorly because virtual currencies can be used for illegal purposes.<sup>38</sup> However, it should be noted that currencies of whatever kind, virtual or traditional, are neutral in their utility. In reality, traditional currencies are prone to be utilized to conduct illegal activities as much as virtual currencies.<sup>39</sup>

Some scholars argue that regulation of virtual currencies should be aimed at protecting the typical 'unsophisticated' and less savvy consumers<sup>40</sup> of virtual currencies.<sup>41</sup> Protection of

---

<sup>38</sup> See Patrick Kirby, 'Virtually Possible: How to Strengthen Bitcoin Regulation within the Current Regulatory Framework' (2014) 93 NCLR 189 at p. 220.

<sup>39</sup> See *ibid* p. 240.

<sup>40</sup> See Ethan D. Jeans (n 30) p. 99.



consumers of money is an issue that is justifiably within the public's interest. Therefore, regulation of currencies is the government's prerogative<sup>42</sup> through their respective regulatory agencies.

Technology often precedes regulation. Ordinarily, there should be light regulation of the technology sector and hefty regulation of the pecuniary segment.<sup>43</sup> Most Countries' regulation is aimed at tapping into the extra revenue obtainable from the use of virtual currencies.<sup>44</sup> Therefore, some scholars have cautioned that tax policy, being critical legal frameworks that affect businesses, should be handled delicately to cushion start-up and small and microeconomic virtual currency businesses.<sup>45</sup> Further, some studies have shown that due to the cross-border aspects of virtual currencies, it is important for States to define the roles of regulators and target assets subject to regulation to protect consumers.<sup>46</sup>

Most studies have determined that regulators should work within the existing statutory frameworks<sup>47</sup> as opposed to enacting new legislation.<sup>48</sup> Utilizing existing legislation will build trust between the regulatory bodies and virtual currency businesses.<sup>49</sup> It will also minimize the possibility of conflicting legal frameworks within a particular jurisdiction. It is noteworthy that some studies have indicated that there is no escaping the formulation of new legislation.<sup>50</sup>

An international cooperative approach to the regulation of virtual currency has also been urged.<sup>51</sup> This will ensure that there is uniform regulation of virtual currencies across various countries and

---

<sup>41</sup> See Kevin V. Tu and Michael W. Meredith, 'Rethinking Virtual Currency Regulation in the Bitcoin Age' (2015) 90 WLR 271 at p. 307.

<sup>42</sup> See Meghan E. Griffiths (n 29) 303.

<sup>43</sup> See *ibid* p. 331.

<sup>44</sup> *ibid* p. 279. See also Jonathan Lane, 'Bitcoin, Silk Road, and the Need for a New Approach to Virtual Currency Regulation' (2014) 8 CLR 511 p. p. 512-513.

<sup>45</sup> See Zachary B. Johnson, 'I Got 988 Problems but Bitcoin Ain't One: The Current Problems Presented by the Internal Revenue Service's Guidance on Virtual Currency' (2016) 47 UMLR 633 at p.p. 636-637.

<sup>46</sup> See opening remarks by the AMERC Chair (n 26). See also Digital Economy Kit (n 26) 1.

<sup>47</sup> See Meghan E. Griffiths (n 29) 303.

<sup>48</sup> See Jonathan Lane (n 44) 512-513. See also Zachary B. Johnson (n 45) 664-665 and the EUROPEAN CENTRAL BANK's '*Virtual Currency Scheme*' (European Central Bank, 2012).

<sup>49</sup> See Matthew E. Gladden, 'Cryptocurrency with a Conscience: Using Artificial Intelligence to Develop Money that Advances Human Ethical Values' (2015) 18 (4) G. U. 85 at p.p. 95-96.

<sup>50</sup> See Ministry of Information, Communications and Technology, *Emerging Digital Technologies for Kenya: Exploration and Analysis* (July 2019) p. 6.

<sup>51</sup> Pflaum I. and Hateley E., 'A Bit of a Problem: National and Extraterritorial Regulation of Virtual Currency in the Age of Financial Disintermediation' (2014) 45 GJIL 1169 at p. p. 1195-1196.

regions.<sup>52</sup> This will be an ideal situation since uniform regulation will bring about a uniform definition of terms and regulatory approaches.<sup>53</sup> When supervisory entities, law courts, and parliaments act independently in providing legal direction, the result is a conflicted regulatory system of supervision.<sup>54</sup> Therefore, a uniform set of regulative provisions fronted by a group of States on virtual currencies is a desirable long-term output. Also, studies indicate that State agencies and regulatory authorities which work together come up with more consistent and congruent legal frameworks.<sup>55</sup>

From literature review conducted, it is apparent that States have adopted differing responses towards the regulation of virtual currencies. These approaches have been adopted based on varied rationales. The first category of responses is an accommodating approach where states are accepting of the use of virtual currency and have in place measures for their regulation.<sup>56</sup> This category of countries recognizes virtual currency as alternative money that should be regulated<sup>57</sup> to ensure consumer fraud protection, enforce taxation, and prevent cyber-crime.<sup>58</sup> The rationale for regulation by these countries is aimed at criminal deterrence,<sup>59</sup> protection of the consumers<sup>60</sup> and embracing an added revenue scheme.<sup>61</sup> This category of countries is invested in developing new regulatory provisions or extending their current laws to fit the purpose of regulation of virtual currencies. Currently, countries that regulate virtual currencies despite the global Corona

---

<sup>52</sup> See Anisha Reddy, 'Coinsensus: The Need for Uniform National Virtual Currency Regulations' (2018) 123 Dickinson L. Rev. 251; Hak J. Kim (n 29) 75; and Pflaum I. and Hateley E. (n 51) 1195-1196.

<sup>53</sup> See Samuel Njoroge Njeri, 'Smart Contracts: Blockchain Technology is About to Disrupt Commercial Law' (2019) The Advocate 23.

<sup>54</sup> See Kevin V. Tu and Michael W. Meredith (n 41) 271.

<sup>55</sup> See Ministry of Information, Communications, and Technology (n 50) p. p. 6 and 7.

<sup>56</sup> See *ibid.* See also Gregory V. Ficcaglia, 'Heads or Tails: How Europe Will Become the Global Hub for Bitcoin Business If the United States Does Not Reexamine Its Current Regulation of Virtual Currency' (2017) 40 STLR 103.

<sup>57</sup> See Kevin V. Tu and Michael W. Meredith (n 41) p. p. 301, 303-304.

<sup>58</sup> See Ethan D. Jeans (n 30) p. p. 102, 127.

<sup>59</sup> See Anisha Reddy (n 52) 251; Elizabeth M. Valeriane, 'IRS, Will You Spare Some Change: Defining Virtual Currency for the FATCA' (2016) 50 Val. U. L. Rev. 863; Hak J. Kim (n 29) 75; Pflaum I. and Hateley E., (n 51) 1169; and Jonathan B. Turpin, 'Bitcoin: The Economic Case for a Global, Virtual Currency Operating in an Unexplored Legal Framework' (2014) 21 Ind. J. Global Legal Stud. 335 at p. 335.

<sup>60</sup> See Susan A. Berson, 'Virtual Money: Some basic rules for using Bitcoin' (2013) 99 A.B.A. J. 32 and Matthew E. Gladden (n 49) 85.

<sup>61</sup> See Kevin V. Tu and Michael W. Meredith (n 41) 271 and Meghan E. Griffiths (n 29) 303.

Virus (COVID - 19) pandemic include Japan, Malaysia, Singapore, China, Spain, some States of the United States of America, and South Korea.<sup>62</sup>

These categories of countries accommodate virtual currency money service businesses and provide that they must comply with certain basic statutory provisions.<sup>63</sup> These countries may even go ahead and issue licensing requirements from their financial service regulators. The licensing process is usually subject to a set of conditions such as assurance of assets of potential clients, commitment to keep adequate records of clients, and properly filled application forms. This model of regulation by such States can be said to be the licensing model.<sup>64</sup> The licensing model of regulation is composed of countries that advocate for actual licensing or keeping of a register of virtual currency business.<sup>65</sup>

The second category of countries is only interested in regulation of virtual currency for one sole purpose - tax regulation.<sup>66</sup> Beyond regulatory provisions relating to tax, these countries have no other policy codes for virtual currencies. For example, the UK has no notable regulation for virtual currencies. However, UKs Revenue and Customs department directed that value added tax (VAT) be imposed on Bitcoin proceeds.<sup>67</sup> Similarly, Norway, Spain, and Finland imposed capital property tax on Bitcoins.<sup>68</sup> Additionally, Slovenia and Israel consider Bitcoin revenues under the income tax regime.<sup>69</sup> This group of States usually allows virtual currency businesses to run under a given set of guidelines issued by the relevant State regulators. The condition here is that if such virtual currency businesses do not comply with the given set of guidelines issued,

---

<sup>62</sup> See Kevin Helms, 'Regulatory Roundup: 10 Countries Actively Regulating Cryptocurrency Despite Global Crisis' (*Bitcoin.com*, April 6, 2020).

<sup>63</sup> See Deborah Thoren-Peden, et al (n 29) 579; See Sanford J. Boxerman and Michelle Feit Schwerin, 'Its Bark is Worse than Its Bit(e): Regulatory and Criminal Law Implications of Virtual Currency' (2017) 31 *Crim. Just.* 10 at p. 15; and Susan A. Berson (n 60) 32.

<sup>64</sup> See The Common Wealth Working Group on Virtual Currencies (n 19) paras. 52-60.

<sup>65</sup> See *ibid.*

<sup>66</sup> See Kevin V. Tu and Michael W. Meredith (n 41) 271 and Meghan E. Griffiths (n 29) 302.

<sup>67</sup> *ibid.*

<sup>68</sup> *ibid.*

<sup>69</sup> *ibid.*

then they would be ineligible to conduct business in the said countries.<sup>70</sup> This category of States can be said to be utilizing the permissive or guidance model of regulation.<sup>71</sup>

The third group of countries allows the use of virtual currencies in their territories albeit through the issuance of prohibitions, warnings, caveats, or other limitations on their use.<sup>72</sup> This category of countries takes up a stance that seems to be antagonistic or unreceptive, to persistent advancement and consumption of virtual currencies within their countries.

This approach has been argued to be unproductive and counteractive. For example, in 2009, the Chinese government outlawed gold farming. Gold farming allows players to produce money within online games. This money is then sold to other players in exchange for government issued currencies. In China's case, the game currency was being exchanged for the Yuan. The Chinese government feared that this practice sustained by convertible virtual currencies, would devalue the Yuan. It therefore issued a *de facto* regulation criminalizing its use. China spent a lot of money to stop that practice but it is still predominant in China to-date.<sup>73</sup> At the time, projected annual revenue on taxes from gold farming was in billions of dollars.<sup>74</sup> By driving the emerging virtual currency underground, China lost out on obtaining probable net profits in earnings and instead recorded a loss factored in as expenses utilized in enforcing the regulation.<sup>75</sup> This could be the reason for China's recent change of heart and promulgation of a plan to invent a CBDC to stay competitive in the international economic market.<sup>76</sup>

Characteristics of this group of States include the issuance of advisories and caveats often by their central banks cautioning the public from the use of virtual currencies as was issued by CBK. It may also take the form of outright bans of some activities by virtual currency businesses in their territories. This type of regulation is usually referred to as the restrictive model of regulation.<sup>77</sup>

---

<sup>70</sup> See The Common Wealth Working Group on Virtual Currencies (n 19) paras. 64-66.

<sup>71</sup> *ibid.*

<sup>72</sup> See Kevin V. Tu and Michael W. Meredith (n 41) 302-303.

<sup>73</sup> See Ethan D. Jeans (n 30) 123.

<sup>74</sup> *ibid.*

<sup>75</sup> See *ibid* p.p. 125-126.

<sup>76</sup> See Kevin Helms (n 62).

<sup>77</sup> See The Common Wealth Working Group on Virtual Currencies (n 19) paras. 61-63.

The fourth category of countries has not spent any effort towards the regulation of virtual currency.<sup>78</sup> Admittedly, most countries fall in this category. They include Argentina, Australia, Belgium, Poland, Russia and Taiwan.<sup>79</sup> These States have adopted a 'bide one's time' approach. In any case, innovation often precedes regulation. These countries can very well catch up with current trends of regulating virtual currencies with time.

What is missing from the past studies is a comprehensive and structured approach in managing conflicting interests between the needs of the market (demand for virtual currencies) and provision of monetary policy. Issuance of monetary policy will ensure that the consumers of virtual currencies are satisfied and are getting the most out of every transaction. Much as virtual currencies can be utilized by traditional businesses such as agri-business ventures, they are particularly attractive to diaspora enthusiasts sending remittances back home. This is because virtual currency platforms have cut out intermediary institutions from cross-border transactions, thereby making those transactions swift and less costly.<sup>80</sup> In Kenya, diaspora remittance exceeds proceeds from both tourism and agriculture including proceeds from tea and coffee.<sup>81</sup> The World Bank approximated that by 2014, developing States would receive approximately billions of dollars in remittances and that this figure would increase by 2020.<sup>82</sup> This goes to show that Kenya could gain from permitting but regulating the use of virtual currencies and assets because it is very attractive to diaspora citizens who send remittances back home. Further, studies indicate that regulated issuance of initial coin offers through proposed digital asset frameworks has the potential to revolutionize the Small and Medium Enterprises<sup>83</sup> and alleviate poverty.<sup>84</sup> Also, the advance in the use of artificial intelligence has been projected to positively impact

---

<sup>78</sup> See Kevin V. Tu and Michael W. Meredith (n 41) and Meghan E. Griffiths (n 29) 301-302.

<sup>79</sup> *ibid.*

<sup>80</sup> See Pflaum I. and Hateley E. (n 51) 1188.

<sup>81</sup> See Suleiman Shahbal, 'Africans to blame for Chinese mistreatment' *The Standard* (Kenya, 28 April 2020) Opinion 15.

<sup>82</sup> See <http://www.worldbank.org/en/news/feature/2013/10/02/Migrants-fromdeveloping-countries-to-send-home-414-billion-in-earnings-in-2013/> accessed on 11 November 2020.

<sup>83</sup> See Ministry of Information, Communications, and Technology (n 50) 7.

<sup>84</sup> *ibid* 15.

Kenya's Big Four Agenda<sup>85</sup> and to help reduce the Country's public debt through digital asset frameworks.<sup>86</sup>

Most research relating to virtual currency in the past has been biased in favor of legal and political arguments, without specifically looking into the perspective of legal-economy aspect.<sup>87</sup> Further, available local literature on virtual currencies is limited and those that are available contain ICT information as opposed to legal information. Therefore, this study is a contribution to knowledge in the regulation of virtual currencies in Kenya.

Notably, the government should involve virtual currency businesses in formulating regulations to ensure a safer market. There should be in place a strong, certain, and reliable monetary policy and legislative framework to govern the virtual currency industry. This will ensure that government regulators take up stronger and sterner enforcement action on non-compliant virtual currency exchanges and businesses and ensure that the consumer is protected.

## **1.9. Theoretical Framework**

### **1.9.1. Introduction**

Social theorists have pondered upon the *raison d'etre* for government intervention in financial market matters. Issues concerning taxation, revenue-raising, expenditure of public resources, protection of financial products and consumers have been argued to warrant government intervention. It is based on this backdrop that this study is premised on various theories which are as follows:

### **1.9.2. The Public Interest Theory of Regulation**

This theory crystallized from the 19<sup>th</sup> through to the 20<sup>th</sup> Century.<sup>88</sup> At the time, there was the notion that governments had the duty to intervene and regulate the forces of a free market to

---

<sup>85</sup> *ibid* 7.

<sup>86</sup> *Ibid* 15.

<sup>87</sup> See Witold Srokosz and Tomasz Kopyscianski (n 8) 619. See also David M. Trubek and Marc Galanter, 'Scholars in Self-Estrangement: Some Reflections on the Crisis in Law and Development Studies in the United States' (1974) *Wis. L. Rev.* 1062 at p. p. 1100-1101.

<sup>88</sup> Richard A. Posner, *Theories of Economic Regulation* (NBER 1974) 2.

protect the public interest. This was majorly due to the assumption that financial markets are delicate and can function recklessly (or disproportionately) if they were not monitored.<sup>89</sup>

This theory maintains that regulatory agencies carry out genuine (*bona fide*) public service.<sup>90</sup> The theory further holds that regulation results from the public's requirement for rectification of nonfunctional and disproportionate market activities.<sup>91</sup>

Whereas the origin of this theory is not particularly known, its concepts are similar to the works of Arthur Cecil Pigou.<sup>92</sup> Pigou's theory related to the examination of externalities and welfare economics.<sup>93</sup> Through it, regulation is believed to wholesomely benefit the society as opposed to specifically skewed interests.<sup>94</sup> The regulatory agencies are presumed to protect the interests of the whole society and not secluded intents.<sup>95</sup>

This theory prevailed up to the 1960s when critiques launched credible attacks on the established theory.<sup>96</sup> Critics of this theory contradicted the honest intents of benevolent regulators by offering counter theories such as the public choice theory, which proposes that regulators do have vested personal interests.<sup>97</sup>

This study aligns with this theory of regulation because it urges that due to public interest, virtual currencies, being potentially utilized by unsophisticated and vulnerable Kenyans, should be efficiently regulated. In other words, it is in the public's interest that unsophisticated Kenyan consumers of virtual currencies are protected by the law from fraudulent and other financial crimes related consequences.

---

<sup>89</sup> *ibid.*

<sup>90</sup> Hantke-Domas, Michael, "The Public Interest Theory of Regulation: Non-Existence or Misinterpretation?" (2003) *European Journal of Law and Economics* 15 (2) 165–194.

<sup>91</sup> See Richard A. Posner (n 88) p. 5.

<sup>92</sup> Pigou A. C., *The Economics of Welfare* (Macmillan and Co.1932).

<sup>93</sup> *ibid.*

<sup>94</sup> Deegan C. J., *Financial Accounting Theory* (McGraw-Hill Education 2011).

<sup>95</sup> Richard A. Posner (n 88) 335-358.

<sup>96</sup> *ibid* 10.

<sup>97</sup> *ibid.*

### 1.9.3. The Economic Theory of Regulation

This theory holds that regulation came about due to the forces of demand and supply.<sup>98</sup> Outcomes that cannot be explained through means of demand and supply are counted as evidence against this theory.<sup>99</sup> George Stigler was the leading proponent of this theory.<sup>100</sup>

This theory admits that cartels determine the demand and supply of goods as well as the unit prices of items and the cost of doing business.<sup>101</sup> In this way, this theory advances the proposal that governments should regulate the economy by studying the different groupings of cartels. This will assist the government to anticipate different reactions to legislation by different groupings of cartels. For example, a polarized and well-organized industry, such as the workers association, cannot be easily coerced into a legislative atmosphere as would an amorphous industry.<sup>102</sup> While the government may use coercive and retributive measures to regulate some industries, it has to use democratic and diplomatic means to regulate other (more organized and politically astute) industries.<sup>103</sup>

This theory declares that the government's prerogative to proscribe or coerce, or to contribute or take, does have a toll on industries within the market.<sup>104</sup> This theory, therefore, demonstrates that different industries obtain benefits or burdens due to their constitutive strength. It further illustrates that different forms of negotiation with industries by the State are pursued in policy formulation. Lastly, it exemplifies that there are different effects on the allocation of resources brought about by government regulation.<sup>105</sup>

This study agrees with this regulative theory. It points to the fact that the virtual currency interest groups have not yet formed a formidable 'cartel' to influence the government to regulate the industry. This means that any negotiation of a regulative understanding would not be centrally

---

<sup>98</sup> *ibid* 15.

<sup>99</sup> *ibid*.

<sup>100</sup> See Johan den Hertog, *Review of Economic Theories of Regulation* (Utrecht School of Economics Utrecht University December 2010) 22.

<sup>101</sup> *ibid* 18.

<sup>102</sup> See *ibid* p.p. 18-26.

<sup>103</sup> *ibid*.

<sup>104</sup> See George J. Stigler, 'The Bell Journal of Economics and Management Science' (1971) 2 (1) Rand Corporation, pp. 3-21.

<sup>105</sup> See *ibid* 3.



dictated by the virtual currency interest groups. Also, virtual currency interest groups would have to work harder to have their interests captured by government regulatory machinery.

This study is also indicative of the government's powerful position when it comes to regulating virtual currencies. This is because virtual currencies' interest groups are not such a coercive grouping or cartel, yet. This study therefore proposes that the government should take up this advantage of the fact that it can use forcible means to regulate virtual currency businesses while they are still small cartels.

### **1.10. Research Methodology**

This study is dedicated to obtain information that will give insight into the research as well as answer the above stated research questions. The research method to be employed in this study is doctrinal legal research: 'Black Letter Law'. Partially, this is because of the Corona Virus Disease 2019 (COVID-19) pandemic which has forced most researchers to work remotely.<sup>106</sup>

This study will gather and analyze information from primary sources such as statutes and case law. It will also utilize data from secondary sources such as textbooks, legal history, the political philosophy of law, periodicals, newspapers, journals, and commentaries.

Since the issue of virtual currencies is fairly new in Kenya, much of the information in the research will be informed by foreign jurisdictions. In this way, this research will employ a process of case studies of other jurisdictions to learn from them. This method of research will entail a comparison of Kenya and other countries' means of regulating virtual assets. This will include the review of foreign case law and legislative provisions. This does not mean that the Kenyan experiences relating to the use of virtual currency will not be explored. This study will also delve into the regulatory provisions currently in Kenya with a view of determining whether they could properly regulate virtual assets.

The black letter law methodology of study will involve an analysis of the legal propositions or legal concepts which form the main basis of this study. This method of study shall assist me to

---

<sup>106</sup> See Rebecca A. Clay, 'Conducting research during the COVID-19 pandemic: Advice from psychological researchers on protecting participants, animals and research plans' (American Psychological Association, 19 March 2020) <<https://www.apa.org/news/apa/2020/03/conducting-research-covid-19/>> accessed 24 July 2020.

synthesize various rules, principles, norms, interpretive guidelines, and values. This will assist me to capture the research objectives relevant to this study's proposition.<sup>107</sup>

The purpose of utilizing this research method is to contribute knowledge in the legal spectrum on virtual assets.<sup>108</sup> This will be achieved through gathering relevant information, detecting specific legal concerns, searching for the law, and getting at a cautious deduction relating to the study.<sup>109</sup>

## **1.11. Chapter Breakdown**

### **1.11.1. Chapter One – Introduction and Background**

This chapter will provide an introduction and give a contextual understanding of virtual currencies. It will begin by providing a brief background that will enable the reader to understand what virtual currencies are, how they function, and why they need to be regulated. It will also identify the methodology that the research will use. It will also identify specific theoretical frameworks that apply to the study. This chapter will then give an account of this research's problem statement and illustrate the purpose of the study noting its main objectives.

### **1.11.2. Chapter Two – Legal Features and Taxonomy of Virtual Currencies**

This chapter will provide a legal basis for the classification of virtual currencies. It will further introduce the reader to the different types and functional attributes of virtual currencies. It will particularly focus on the legal aspects of virtual currencies under the Common Law perspective and provide the basis for regulative regimes of virtual currencies.

### **1.11.3. Chapter Three – Analysis of Kenya's Regulatory Atmosphere**

This chapter will analyze the regulatory atmosphere of virtual currencies in Kenya. It will further identify and analyze the relevant national laws and legal regulations of alternative payment schemes aimed at considering whether they are capable of regulating virtual currencies as they are. It will further make recommendations as to whether some legislation should be amended to accommodate virtual currency transactions. It will also, with reasons and where necessary, advocate for the formulation of new legislation to regulate virtual currencies. It will similarly capture the challenges that the Kenyan legislator grapples with concerning the regulation of

---

<sup>107</sup>See Vijay M. Gawas, 'Doctrinal legal research method a guiding principle in reforming the law and legal system towards the research development' (2017) 3 (5) IJL p. p. 128-131.

<sup>108</sup>Amrit Kharel, 'Doctrinal Legal Research' (2018) at p. p. 6 - 8.

<sup>109</sup> See *ibid* 10.

virtual currencies. This chapter will finally provide reasons why regulation of virtual currencies is imperative and advocate for new legislation to be enacted, where necessary, to regulate this novice innovative product.

#### **1.11.4. Chapter Four – Analysis of the Regulatory Approaches of Virtual Currencies in Africa and Around the World**

This chapter will emphasize and adapt a benchmarking approach towards the regulation of virtual currencies. This will be achieved by examining and analyzing foreign jurisdictions in Africa and around the world and drawing lessons from them, to comprehend how they addressed their challenges through regulation. This chapter will further examine foreign legislation or regulative texts from those countries to determine whether they are effective and adequate. It will further discuss identifiable instances where Kenya would benefit from regulating virtual currencies.

#### **1.11.5. Chapter Five – Recommendations and Conclusions**

This will be the final chapter which will contain the conclusions made from the findings obtained in the previous chapters. This chapter will propose recommendations that will provide solutions to the research problems.

## CHAPTER TWO – LEGAL FEATURES AND TAXONOMY OF VIRTUAL CURRENCIES

### 2.1. Introduction

Chapter 1 introduced and gave us context to the understanding of virtual currencies. It discussed a brief background that enables us to appreciate what virtual currencies are, how they function, and why they need to be regulated. It also identified the methodology of this study and pinpointed specific theoretical frameworks that apply to this study. The chapter also gave an account of this study's problem statement and outlined the reasons and objectives for conducting this study.

This chapter, on the other hand, will first and foremost discuss the various types of virtual currency schemes. It will then expound upon the history, chronology, and evolution of currency from the commodity currency to the digital currency whereas highlighting the legal features of each of the currencies discussed. It will further introduce the reader to the entry into the market of virtual currencies and briefly state the reasons why it flourished as an alternative currency.

This chapter will then culminate into the classification of virtual currencies under common law. Classification is essential since it assists in the regulation of virtual currencies. This is particularly true for classification of virtual currencies that are similar to other monetary assets already being legally regulated. This chapter will therefore emphasize the classification of virtual currencies in terms of their economic function that would necessitate fiscal regulation.

This chapter is structured into five major parts. Part 2.1. introduces the chapter by generally summarizing its contents and outlining its basic approaches. Part 2.2. deliberates on the sequence and history of currency from the days of the gold-backed currency to the era of digital currency or e-money, which ultimately paved way to the innovation of virtual currencies in the 1990s. Part 2.3. discusses the various types of virtual currency mechanisms and their various remarkable attributes. Part 2.4. elaborates the various approaches of classifying virtual currencies. It further alludes to the regulatory aspects that are employable by virtue of the classification assigned to different virtual currencies. This part urges that virtual currencies be classified as perceived under the Common Law, pursuant to administration and permission aspects and lastly, according to their shared analogous attributes. Part 2.5. briefly concludes the chapter.

## 2.2. A Chronology of Currencies

Internationally, there is no consensus as to what currency is. From an economic point of view, currency, or simply, money, is something that the public admits to be a valuable item capable of being exchanged. Money is also considered to be a quantity of worth, or an article that is used to effect payment.<sup>1</sup> Most legal theories emphasize currency's function as a sovereign asset that possesses legal tender status.<sup>2</sup>

Coins were the initial form of currency assets and are still in use today.<sup>3</sup> Banknotes, usually issued by central banks are the other form of corporeal money. Initially, banknotes operated as promissory notes but contemporarily, the promise is chiefly figurative. Functionally, they are purely fiat money.<sup>4</sup>

Intangible currency has been on the rise in the market economy. For example, a study of the British economy conducted in 2011 indicated that the use of tangible currency was at an all-time low.<sup>5</sup> This situation has been compounded by the COVID-19 where the conduct of transactions vide tangible currency has been strongly discouraged in favor of e-money or digital currency. Initially, the digital currency was not regarded as currency. Bank balances or customer bank deposits legally consist of the customer's prerogative to put into effect a chose in action.<sup>6</sup> This prerogative entitles the customer to make withdrawals from the bank, issue instructions relating to the said funds, and so on, based on their agency relationship arrangement.<sup>7</sup> Therefore, under law, the transferability of the customer's bank balance can be viewed as a medium of exchange.<sup>8</sup> Rights relating to tangible assets are governed in law through *in rem* rights. An *in rem* right holder has a right to claim infringement of their property rights as against a person, certain persons, or a thing.<sup>9</sup> For example, an owner of a motor vehicle has proprietary rights over the

---

<sup>1</sup> See Henry Campbell Black, *Black's Law Dictionary* (4<sup>th</sup> ed., West Publishing Company 1968) 1157.

<sup>2</sup> See Joanna Perkins and Jennifer Enwezor, 'The legal aspect of virtual currencies' [2016] BJIBFL 569 at p. 570. See also Levy Yeyati Eduardo and Sturzenegger Federico, *Monetary and Exchange Rate Policies*, (Handbook of Development Economics, 2010) p. p. 4215–4281.

<sup>3</sup> See D. L. K. Chuen and Robert Deng, *Handbook of Blockchain, Digital Finance, and Inclusion* (2018) Vol. 1, at p. 226.

<sup>4</sup> See *ibid.*

<sup>5</sup> See Burda Michael and Wypolz Charles, *Macroeconomics: a European Text* (6th ed., Oxford University Press, 2013).

<sup>6</sup> See D. L. K. Chuen and Robert Deng (n 3) 227.

<sup>7</sup> *ibid.*

<sup>8</sup> *ibid.*

<sup>9</sup> See Henry Campbell Black (n 1) 1487.

motor vehicle as against any other person in the world. Conversely, rights relating to intangible assets are governed in law through *in personam* rights. An *in personam* right holder can claim infringement of their proprietary rights against a specific entity or individual.<sup>10</sup> For instance, in the case of a bank balance, the customer's right to action would be against the bank.

The term 'digital currency' refers to electronic records or representations of bank balances held by a person in a particular financial institution.<sup>11</sup> In the legal sense, digital money does not exist.<sup>12</sup> This is because there is a colossal gap between the legal rights of a bank account holder (right *in personam*) vis-à-vis the record kept by the bank of the said rights.<sup>13</sup> The court in *Armstrong DLW GmbH v Winnington Network Ltd.*,<sup>14</sup> agrees with this position. In that case, European Union (EU) carbon credits, technically referred to as EU allowances, were held to be intangible property "recorded in electronic registries" existing in electrical format.<sup>15</sup>

With the advancement of technology, banks allowed holders to view their financial statuses digitally over the Internet. Automated financial ledgers reflecting bank balances in banking databases represent records of rights and not proprietary rights.<sup>16</sup> Digital currencies, therefore, are not currency in automated formats but representations of bank balances chronicled digitally by a financial institution's records. Legally, digital currency entitles its owners to an *in personam* right meaning that they can sue the banking institution based on the fact that the digital currency represents a *chose in action* stored electronically.<sup>17</sup>

The entry into the market of virtual currencies was conceptualized thanks to the flourishing of digital currencies in the late 1990s.<sup>18</sup> However, those virtual currencies had a fundamental problem; they were files supposedly representing a monetary value, but could be copied and sent to more than one person, thereby not properly serving as financial assets. That problem was popularly known as the double-spending. This problem subsisted until 2009 when Satoshi

---

<sup>10</sup> See *ibid.*

<sup>11</sup> See D. L. K. Chuen and Robert Deng (n 3) 229.

<sup>12</sup> *ibid.*

<sup>13</sup> *ibid.*

<sup>14</sup> [2012] EWHC 10 (Ch).

<sup>15</sup> See Low Kelvin F.K. and Lin Jolene, *Carbon credits as EU like it: property, immunity, tragic Comedy?* (JEL 2015) 27.

<sup>16</sup> *ibid.*

<sup>17</sup> See D. L. K. Chuen and Robert Deng (n 3) 233.

<sup>18</sup> See Deborah S. Thoren-Peden, JiJi Park, Amy L. Pierce, and Elsa S. Broeker, 'Financial Crimes Enforcement Network Issues Guidance on Virtual Currency' (2013) 130 *Banking L.J.* 579 at p.p. 433-435.

Nakamoto, a mysterious but gifted cryptographer, designed Bitcoin and effectively solved virtual currencies' double spending problem with the help of cryptographic proof of work system.<sup>19</sup> Bitcoin's success was made possible by its core technology, the blockchain. Thereafter, numerous altcoins and online innovative technologies have been developed based on blockchain technology such as Ethereum, Litecoin, and Dogecoin, to name a few.

### **2.3. Types of Virtual Currency Schemes**

Part 2.2. discussed the chronology of the different types of virtual currencies. It discussed currency like coins, notes, representations of balances in bank accounts (what is commonly referred to as digital currency), and finally, as virtual currencies. Discussion of the chronology of currency to date will allow this study to delve into the topic of types of virtual currency schemes under this Part. This part will allow the reader to be able to determine different types of virtual currencies schemes based on their underlying operational mechanisms. An understanding of how to determine different virtual currency schemes will be particularly useful to policymakers because they provide a backdrop for the proper regulation of virtual currencies.

Virtual currencies contrast in how they operate. Some operate cryptographically, by use of identity concealing software, such as the onion router (TOR), hence their designation "cryptocurrency". The most reputable and dominant virtual currency, Bitcoin, operates on cryptic software. Bitcoins are produced by a proof-of-work algorithm<sup>20</sup> where pools of a community of peers<sup>21</sup> contribute their CPU power to the system in a process called "mining".<sup>22</sup> A predetermined number of Bitcoins can be "mined" and this is instrumental in setting the market value of Bitcoins.<sup>23</sup> The scheme runs on the blockchain platform maintained by a DLT which creates a decentralized system.<sup>24</sup>

---

<sup>19</sup> *ibid.*

<sup>20</sup> See Financial Markets Law Committee, *Taxonomical Approaches to Crypto assets: Response to European Commission Consultation—Part I* (FMLC, 2020) p. 8.

<sup>21</sup> See Alan Cohn, Travis West, and Chelsea Parker, 'Smart After All: Blockchain, Smart Contracts, Parametric Insurance, and Smart Energy Grids' (2017) 1 GEO. L. TECH. REV. 273 at p.p. 277-280.

<sup>22</sup> See Joanna Perkins and Jennifer Enwezor (n 2).

<sup>23</sup> See *ibid.*

<sup>24</sup> *ibid.*

Bitcoin's code is an open-source code, accessible by all that are willing to view, replicate and utilize it.<sup>25</sup> Due to this, numerous altcoins have been developed based on the blockchain technology such as Ethereum, Litecoin and Dogecoin. A blockchain, is a sequence of transactional entries authenticated on an open online ledger existing on a DLT platform.<sup>26</sup> In simpler terms, a blockchain is an online distributed ledger replicated in various computers across the world. Each transaction made constitutes a block. Each block of transaction is linked to other blocks of transactions thereby forming a chain of blocks. Before a block is admitted into a blockchain, it must be verified by all the computers in a P2P network as authentic. This is what is said to be the immutable quality of a blockchain because in order for one to orchestrate a fraud, they must hack (compromise) all the P2P computers on the blockchain, simultaneously.<sup>27</sup>

By market capitalization, Ethereum is second to only to Bitcoin.<sup>28</sup> Ethereum's transactions are effected in a currency called Ether.<sup>29</sup> Ethereum also operates on a blockchain protocol that enables users to execute smart contracts.<sup>30</sup> As the name suggests, smart contracts are legal contracts that have an automated-executing command carried out by a computer program under the terms and conditions set out under a pre-coded contract or agreement within an operating system.<sup>31</sup>

The Linden Dollar – another virtual currency – does not run on a cryptic code.<sup>32</sup> Its transactional operational base is centralized owing to its communal catalogue.<sup>33</sup> The technology facilitates the

---

<sup>25</sup> See Samantha J. Syska, 'Eight-Years-Young: How the New York BitLicense Stifles Bitcoin Innovation and Expansion with Its Premature Attempt to Regulate the Virtual Currency Industry' (2017) 17 J. High Tech. L. 313 at p. p. 323-324.

<sup>26</sup> See Financial Markets Law Committee (n 20) 8.

<sup>27</sup> See Samuel Njoroge Njeri, 'Smart Contracts: Blockchain Technology is About to Disrupt Commercial Law' (2019) The Advocate 23.

<sup>28</sup> *ibid.*

<sup>29</sup> See Anisha Reddy, 'Coinsensus: The Need for Uniform National Virtual Currency Regulations' (2018) 123 Dickinson L. Rev. 251 p. 259. See also Sanford J. Boxerman and Michelle Feit Schwerin, 'Its Bark is Worse than Its Bit(e): Regulatory and Criminal Law Implications of Virtual Currency' (2017) 31 Crim. Just. 10 at p. p. 10-11. Also, see Alan Cohn *et al* (n 21) p. p. 275-299.

<sup>30</sup> See Alyssa Hertig, How Do Ethereum Smart Contracts Work? COINDESK <<http://bit.ly/2pSci7B/>> (Sept. 8, 2018) cited in p. 259.

<sup>31</sup> *ibid* p.p. 259-262. See also Njeri (n 27) 23.

<sup>32</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 569.

<sup>33</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 569.



transmission of various types of currencies such as fiat currency, reward tokens, and other virtual currencies.<sup>34</sup>

Virtual currencies can be transmitted from one person to another. For this reason, they are categorized into three. First category is the closed schemes, where they are restricted only to a particular purpose, environment or setting.<sup>35</sup> Second category is the unidirectional schemes, which can be acquired with government-issued monies, but cannot be sold in exchange for government-issued currency.<sup>36</sup> The third category is the bidirectional schemes, which operates just like government-issued currencies and can be transacted in any transactional course.<sup>37</sup>

A user cannot exchange Bitcoins with real world currencies on its operating software and hence Bitcoin is viewed to be operationally closed.<sup>38</sup> Interestingly, it is also viewed as a practically open currency because Bitcoins can be purchased or traded on some virtual currency software in exchange for real-world currencies.<sup>39</sup> Ripple's operating software allows for direct exchange of currencies, including fiat currencies, and is thus considered bidirectional.<sup>40</sup>

Some virtual currencies are pinned to real-world currencies. Virtual currencies that have perfect peg(s) to real-world currencies are more or less likely to be regarded as e-money for regulation purposes.<sup>41</sup> This category of virtual currencies can be argued to already have a legal regulatory system in existence as will be further elaborated under part 3.2.2.2. of chapter 3. This is because such virtual currencies are viewed to be in the form of electronic representation, such as bank balances representing real (conventional) money.<sup>42</sup>

## 2.4. Classification of Virtual Currencies

Whereas part 2.3. discussed the different types of virtual currency schemes, this part will delve into the legal classification of virtual currencies. For legal regulation to be carried out, virtual

---

<sup>34</sup>See Sanford J. Boxerman and Michelle Feit Schwerin (n 29) 19.

<sup>35</sup> See Jonathan B. Turpin, 'Bitcoin: The Economic Case for a Global, Virtual Currency Operating in an Unexplored Legal Framework' (2014) 21 Ind. J. Global Legal Stud. 335 at p. 363.

<sup>36</sup> *ibid.*

<sup>37</sup> *ibid.*

<sup>38</sup>See Joanna Perkins and Jennifer Enwezor (n 2) 569.

<sup>39</sup> See *ibid.*

<sup>40</sup> *ibid.*

<sup>41</sup> See *ibid* p. 569.

<sup>42</sup> See *ibid* p. 569.

currencies have to be classified based on their common characteristics. This part will shed light on the qualities which would lead to a classification of virtual currencies. Classification of virtual currencies is essential as it will ultimately prescribe the regulative field for virtual currencies. It will further reveal the subjects/parties to whom the legislative texts target to regulate. Classification will lastly ensure that the correct regulatory authority is identified for purposes of implementation of the regulative precepts developed by the legislature.

The following are the various categories of classification of virtual currencies discussed under this part:

#### **2.4.1. General Classification of Virtual Currencies under Common Law**

A primary question relating to the regulation of virtual currencies is how to classify them under common law. In other words, should virtual currencies be regarded as property or personal rights?

The legal distinctiveness of property is well laid down in *National Provincial Bank v Ainsworth*.<sup>43</sup> In that case, Lord Wilberforce reasoned as follows:

“... before a right or an interest can be admitted into the category of property, or of a right affecting property, it must be definable, identifiable by third parties, capable in its nature of assumption by third parties and have some degree of permanence or stability.”<sup>44</sup>

Legally, virtual currencies possess economic value and are transferable in trade, and can be categorized as property at common law.<sup>45</sup> In Common law, property may be either real or personal.<sup>46</sup> Real, also known as corporeal property refers to something that can be seen or handled physically.<sup>47</sup> Conversely, incorporeal property cannot be visualized or touched.<sup>48</sup> Therefore, corporeal property can be disregarded for the purposes of this research. This is because even though many virtual currencies may have a physical coin form, the coins exist

---

<sup>43</sup> [1965] 1 AC 1175.

<sup>44</sup> *ibid* at p.p. 1247–8.

<sup>45</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 569.

<sup>46</sup> See D. L. K. Chuen and Robert Deng (n 3) 233.

<sup>47</sup> Henry Campbell Black (n 1) 412.

<sup>48</sup> *ibid*.

primarily as collectors' items.<sup>49</sup> In actuality, virtual currency transactions take place at the digital level and their output is intangible.

Personal property, on the other hand, means anything is subject to ownership, other than real estate.<sup>50</sup> The term generally applies to personal possessions or movable property, as contrasted with immovable property, such as land or houses. Personal property is divisible into two parts. Firstly, corporeal personal property, including movable and tangible things, such as furniture, animals, etc.<sup>51</sup> and secondly, incorporeal personal property, consisting of rights such as copyrights, stocks and patents.<sup>52</sup>

At Common Law, personal property can either be “in action” or “in possession”, hence, “choses in action” or “choses in possession”. A holder of incorporeal personal property can claim chose in action for the property he/she cannot exercise possession over.<sup>53</sup> However, a holder of corporeal personal property may claim a chose in possession, for property which she/he can exercise possession.<sup>54</sup> In essence, those two types of personal properties can be viewed as tangible and intangible property. Virtual currency – being “virtual” – can be regarded as personal intangible property whereas fiat currency, being tangible, can be regarded as personal tangible property.<sup>55</sup>

Virtual currencies, due to their intangible nature, are viewed as choses in action. However, some characteristics portrayed by some virtual currencies, such as Bitcoin, could lead one to conclude that virtual currencies can be classified under the choses in possession category as well. This is because Bitcoins can be transmitted, amassed, and in some cases, lost, which is an attribute of personal tangible property.<sup>56</sup> Also, the transfer of Bitcoins into a wallet connotes the transfer of ownership of those virtual coins from a person A to B, again, a quality of choses in possession.<sup>57</sup>

---

<sup>49</sup> See Abigail J. Farmer and Cory Elizabeth Tyszka, ‘Currency Estate Planning, Bit by Bit’ (2014) 40 ACTEC L.J. 249 at p. 251.

<sup>50</sup> Henry Campbell Black (n 1) 1382.

<sup>51</sup> Henry Campbell Black (n 1) 1382.

<sup>52</sup> Henry Campbell Black (n 1) 1382.

<sup>53</sup> See Henry Campbell Black (n 1) 305.

<sup>54</sup> See Henry Campbell Black (n 1) 305.

<sup>55</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

<sup>56</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

<sup>57</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

It is due to those peculiar characteristics of virtual currencies that it has been suggested that virtual currencies should be classified as hybrid.<sup>58</sup> This is because they possess qualities of both choses in possession as well as choses in action.<sup>59</sup> There is an emerging category of property under common law that possess those two characteristics<sup>60</sup> referred to as “documentary intangibles”. Documentary intangibles include promissory notes, negotiable instruments, and bills of lading.<sup>61</sup>

When it comes to negotiable instruments such as promissory notes, the debt is a chose in action, but the note itself is a chose in possession.<sup>62</sup> These two features of negotiable instruments cannot be separated and when the physical negotiable instrument is transferred, the debt is also transferred.<sup>63</sup> Documentary intangibles are capable of being purchased. If a purchaser buys a documentary intangible in good faith, for value, and without notice of a defect in title, he/she acquires a good title even though the seller may have had a bad, defective, or no title at all. This quality of property is referred to as “negotiability”.<sup>64</sup>

One of the most basic principles of common law on property is the *nemo dat quod non habet* rule meaning that a person cannot bestow a superior title to property than she/he possesses. However, as has been elaborated above, this principle does not always hold, especially when it comes to documentary intangible property, negotiable documents/instruments, and money. This was established in the case of *McCamant v. McCamant*<sup>65</sup> where the court held that a genuine holder for value of a documentary intangible property, in their ordinary course of business, had an irrefutable title over it.

Government-issued currencies; notes and coins, cannot be recovered from a party who has attained their ownership genuinely. Proprietorship of such currency permeates onto the recipient upon delivery. Due to this, government-issued currencies are referred to as “negotiable

---

<sup>58</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

<sup>59</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

<sup>60</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

<sup>61</sup> *ibid.* See also D. L. K. Chuen and Robert Deng (n 3) 226.

<sup>62</sup> Henry Campbell Black (n 1) 946.

<sup>63</sup> Henry Campbell Black (n 1) 946.

<sup>64</sup> Henry Campbell Black (n 1) 946.

<sup>65</sup> Tex.Civ.App., 187 S.W. 1096, 1099.

chattels”.<sup>66</sup> Consequently, it is, therefore, safe to argue that virtual currencies are negotiable property due to their hybrid nature.<sup>67</sup>

Practically, this classification of virtual currencies is helpful to admit virtual currencies into a category of property known as personal intangible/incorporeal property. Such classification will further determine the rights that accrue to virtual currency owners under common law. Classification under this header will also underlie the regulations of the use, enjoyment, and transfer of virtual currencies and determine the enforceable rights accruing to owners of virtual currencies under common law. Also, such classification will assist an aggrieved person to determine whom to sue in case their property rights have been breached or infringed upon.

#### **2.4.2. Classification under Administration and Permission Issues**

Section 2.4.1. focused on the general classification of virtual currencies under common law, without specifically narrowing down to classification in law based on their specific attributes. It also disclosed that virtual currencies are viewed as personal intangible/incorporeal property under common law. Section 2.4.1. further discussed that incorporeal and corporeal property accrue different property rights under common law and that one ought to understand virtual currency properly to understand the rights that accrue to it as property. This section on the other hand will discuss the classification of virtual currencies based on their administrative and permission attributes.

Due to the lack of a central administrator in the case of decentralized virtual currencies<sup>68</sup> decentralized systems cannot accrue *in personam* rights.<sup>69</sup> Therefore, virtual currencies that are decentralized and permission-less cannot be said to attract *in personam* rights because there is no central administrator (*res*) against whom such a right can be exercised.<sup>70</sup> This, therefore, means that should a virtual currency holder claim any legal protection under such a category of virtual currencies, it would fall in the realm of a *chose in action*.<sup>71</sup>

---

<sup>66</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

<sup>67</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 570.

<sup>68</sup> See *ibid* 234. See also Pflaum I. and Hateley E., ‘A Bit of a Problem: National and Extraterritorial Regulation of Virtual Currency in the Age of Financial Disintermediation’ (2014) 45 GJIL 1169 at p. 1195-1196.

<sup>69</sup> See D. L. K. Chuen and Robert Deng (n 3) 233.

<sup>70</sup> *ibid*.

<sup>71</sup> *ibid*. See also Joanna Perkins and Jennifer Enwezor (n 2) 570.

On the other hand, for centralized and permissioned virtual currencies, a right *in personam* could be claimed. This is because the holder of a virtual currency's right to action would be against a definite central administrator. Virtual currency values on online ledgers in a centralized system represent records of rights and not rights themselves. These rights entitle holders of such virtual currencies to an *in personam* claim against the central issuer or administrator based on the fact that it is a *chose in action* that is stored on a public online ledger. For example, if an owner of the Liberty Dollar, a virtual currency with a centralized repository were to have a property-related claim in court, they would sue the central administrator of the Liberty Dollar claiming breach of contract or infringement of property rights related to its use.

Therefore, such forms of novel currencies must be examined separately from earlier forms of currencies. This is because whether or not they are decentralized and permission-less as opposed to centralized and permissioned, determines what rights accrue to holders of those virtual currencies in the eyes of the law. Further, such classification will be instrumental in pointing one out to the relevant regulative authorities. Such classification lastly assists one to know whom to sue in case their ownership rights have been infringed.

### **2.4.3. Classification based on Virtual Currencies' Attributes**

Parts 2.4.1. and 2.4.2. discusses how virtual currencies ought to be viewed under the lenses of a common law practitioner and the legal classification of virtual currencies based on their administration and permission attributes, respectively. It has been observed that classification under both lenses accrues differentiated property rights to a virtual currency holder. This part will examine the last limb of classification of this study based on virtual currencies functional, production, custody and transfer, and relationship with fiat currency and the issuer.

#### **2.4.3.1. Function**

Classification of virtual currencies based on functional attributes would be a great approach for regulative authorities to regulate virtual currencies. The three most pronounced functional attributes of virtual currencies are; (1) their use to effect payments or as mediums of exchange; (2) their use to obtain profit as investments; and (3) as an item to transfer value within a specified

community of users.<sup>72</sup> Some virtual currencies have crossbreed functionalities and possess more than one of the three mentioned functional attributes.<sup>73</sup>

Practically, classification under this part will assist regulators to target different virtual currencies for regulation based on their functional attributes. For example, for the payment attribute, State regulators concerned with money remittances, such as the CBK, will be responsible for their regulation. In the case of investments, regulators responsible for regulating markets investments, such as the CMA, will be the key regulators for such virtual currency services. Virtual currencies with crossbreed functionalities, such as foreign exchange and trade-in investments, will potentially be governed under more than one regulative regime and by more than one regulator such as the CMA and the CBK.<sup>74</sup> Classification relating to functional attributes of virtual currencies will also ensure that virtual currency owners and traders discern which regulative ambit they fall in. For example, virtual currency transmission businesses will know where to write their applications for purposes of licensing and auditing in accordance with the respective functions that their services portend to the Kenyan market.

The following section will focus on classification based on the production or creation of virtual currencies.

#### **2.4.3.2. Means of Creation**

All virtual currencies exist on the DLT platform. For this reason, each transaction that takes place on the DLT network is approved and authenticated by a chain of a community of computers known as nodes on the P2P network building a formidable and immutable chain of trustworthy transactions. For each transaction to be approved, all the nodes in the chain of the transaction have to agree and reach a consensus. This is the means of production of most virtual currencies although with different concepts and mechanisms.

For the case of Bitcoin and Ethereum, the means of production of Bitcoins and Ether, respectively, is through mining. Mining is conducted through a Proof of Work system where each node has to decipher difficult mathematical questions thereby producing new transactional

---

<sup>72</sup> See Financial Markets Law Committee (n 20) paragraphs 2.4 – 2.6.

<sup>73</sup> See Financial Markets Law Committee (n 20) paragraphs 2.4 – 2.6.

<sup>74</sup> See Financial Markets Law Committee (n 20) paragraphs 2.4 – 2.6.

nodes on the DLT network.<sup>75</sup> Another system utilized by a virtual currency dubbed ‘Nemcoin’ or XEM and transacted on the NEM platform, is minting.<sup>76</sup> In this case, a limited number of stakeholders were evenly issued with the original XEMs and form the basis of transactions in the NEM network through a process known as Proof of Importance.<sup>77</sup> In yet another process known as forging, a node responsible for validating transactions through a process known as the Proof of Stake mechanism<sup>78</sup> is used.

The benefits of understanding classification through lenses of how virtual currencies are created are so that regulators can understand what rewards accrue or are awarded to miners of Ether, for example. Economically speaking, miners make profits through the mining process and therefore, the authority responsible for taxation matters (such as the KRA) should take particular interest in the production process of virtual currencies because it generates profit, income, or rewards, which are taxable. Also, means of production leads to the transmission of virtual assets from one person to another. This would be of particular interest to the State entities responsible for regulating money remittances, such as the CBK, to ensure that businesses that facilitate such streams of virtual currency services are governed and controlled under the CBK Act.<sup>79</sup> Further, the profits gained on the DLT network can be utilized to invest. In such a case, the CMA would be keen on regulating the investor because their activities fall under the domain of capital markets regulation. Some companies have dedicated their machinery to conduct the production of virtual currencies and consume a lot of energy in the process. This would be of particular interest to climate change enthusiasts and regulators who would want to provide supervision to these groups of industries.<sup>80</sup>

The following part embarks on a conversation of virtual currencies’ attribute of custody and transferability and what regulatory interests it attracts due to those attributes.

---

<sup>75</sup> See *ibid* paragraph 2.8.

<sup>76</sup> See *ibid* paragraph 2.9.

<sup>77</sup> See *ibid* paragraph 2.9.

<sup>78</sup> See *ibid* paragraph 2.8.

<sup>79</sup> See *ibid* paragraph 2.10.

<sup>80</sup> See FiNews Asia, ‘Takeaways From This Year’s Singapore Fintech Festival’ (18 November 2019).



#### **2.4.3.3. *Methods of Holding and Transfer***

As has earlier been discussed, within the purview of property law, virtual currencies present different implications when it comes to the concepts of transfer, custody, and ownership. Virtual currencies do not take physical form and when they do, it is not for financial consequential purposes.<sup>81</sup> Virtual assets exist as electronic signatures or entries on the DLT network. For a transfer to occur, the owner of a virtual currency needs to consent by providing a private key, only known to the owner, authenticating the transfer.<sup>82</sup>

Realistically, this distinction of qualities of virtual currencies would be of concern to regulators for purposes of anti-money laundering (AML) and know-your-client (KYC) requirements. For example, for virtual wallets, the virtual wallet providers facilitate transactions between various virtual currency users. It would therefore be prudent for such virtual wallet providers to be obligated to file Suspicious Activity Reports (SARs) with the CBK, CMA, Financial Reporting, and the Counter-Terrorism Centers. Such reports and information will be used by the relevant authorities to effectively monitor illegal activities surrounding virtual currency transactions and address them adequately.

The ensuing part will delve into understanding the quality of virtual currencies by examining their relationship with fiat currency. An understanding of the relationship of virtual currencies with fiat currencies may direct a person to determine the regulative prescription of various virtual currencies being utilized in a country.

#### **2.4.3.4. *Relationship with Sovereign Currency***

Virtual currencies that mirror real-world currencies, such as the US Dollar have been proposed to be governed under e-money regulations.<sup>83</sup> Some virtual currencies, such as Linden Dollars,<sup>84</sup> can be bidirectional and exchanged for currencies including sovereign and even exchanged for some virtual currencies.<sup>85</sup> Other virtual currencies, such as Nintendo Points,<sup>86</sup> are unidirectional, and

---

<sup>81</sup> See Abigail J. Farmer and Cory Elizabeth Tyszka (n 49) p. 251.

<sup>82</sup> Financial Markets Law Committee (n 20) para 2.12.

<sup>83</sup> See Joanna Perkins and Jennifer Enwezor (n 2) 569.

<sup>84</sup> See Financial Markets Law Committee (n 20) para 2.16.

<sup>85</sup> See Jonathan B. Turpin (n 35) 363.

<sup>86</sup> See Financial Markets Law Committee (n 20) para 2.16.

can be exchanged with fiat monies, but cannot be sold in exchange for fiat currency.<sup>87</sup> World of Warcraft Gold currencies,<sup>88</sup> can only be utilized within the gaming experience.<sup>89</sup> Some virtual currencies, such as Bitcoins, are technically closed but practically open.<sup>90</sup> Bitcoins are acceptable only by merchants who chose to recognize them and can be exchanged on certain platforms for real-world money.<sup>91</sup> The reason they are termed as technically closed is that Bitcoin cannot be exchanged for real-world money on the Bitcoin platform. Some virtual currencies such as Ripple and Facebook's Libra (still under development), will be pegged to various world currencies and therefore convertible to various other currencies.<sup>92</sup>

Realistically, the exchangeability or non-exchangeability of currencies is an important concept for regulators. Such information would be of importance to the AML and CFT regulators, and other financial criminal schemes regulators as well as regulators controlling transmission of currency such as the CBK.

The subsequent part will explore the relationship of virtual currencies with their specific issuers to determine what legal regulation they would attract.

#### **2.4.3.5. Relationship with Issuer**

Under this part, the issue of centralized and permissioned or decentralized and permission-less virtual currencies would also have to be considered (see part 2.4.2.). This is because for the latter case, there would be no issuer in the traditional sense as in the former. These considerations alter the form of ownership rights where in the case of centralized and permissioned, the owner would possess an *in personam* right against the issuer.<sup>93</sup> In such a case, the issuer would be the central producer and distributor of the virtual currency.

In the case of decentralized and permission-less virtual currencies, an owner of a virtual currency would be at a loss as to whom to sue as there is no central producer and distributor<sup>94</sup> of the virtual currencies in question. Such an owner would possess a right to claim for a *chose in action*

---

<sup>87</sup> See Jonathan B. Turpin (n 35) 363.

<sup>88</sup> See Financial Markets Law Committee (n 20) para 2.16.

<sup>89</sup> See Jonathan B. Turpin (n 35) 363.

<sup>90</sup> See Financial Markets Law Committee (n 20) para 2.16.

<sup>91</sup> *ibid.*

<sup>92</sup> *ibid* paragraph 2.17.

<sup>93</sup> *ibid* paragraph 2.24.

<sup>94</sup> *ibid* paragraph 2.24.

which would be a right determined not on their claim for possession, but based on a legal right of action for the representation of the value of their personal incorporeal property.

Pragmatically, regulators concerned with business registration, and savings and deposits, would be interested in regulating virtual currencies that portray attributes as enunciated under this part. Classification due to the relationship with the issuer of a virtual currency determines what rights accrue to holders of those virtual currencies in the eyes of the law. Also, such classification will be helpful to point out to relevant regulative authorities which issuers of virtual currencies fall under their regulative supervisory powers.

## **2.5. Conclusion**

This chapter was focused on understanding what virtual currencies are by discussing the historical chronology of the evolution of currencies as well as the different types of virtual currencies in existence under sections 2.2. and 2.3., respectively. Having understood what virtual currencies are, this chapter delved into the topic of how virtual currencies are viewed under common law and the rights a holder or owner of virtual currencies would possess.

It also highlighted the different aspects of virtual currencies that determine different property rights for the virtual currency holders. In this regard, this chapter explored the classification of virtual currencies under common law generally, under their administration and permission rights and based on their qualities and characteristics.

In simple terms, virtual currencies possess different aspects about them in the way that they are created, possessed, operated, and stored. These different aspects of virtual currencies determine how the law will treat that virtual currency holder and also what legal regulator would be interested in the consumption activities of the virtual currency holder. Take for example the issue of custody of a virtual currency. If a virtual currency is held for and on behalf of a virtual currency owner by an e-wallet, it will mean that that owner acquires an *in personam* right against the wallet provider. If we consider another quality of virtual currencies such as its administrator, then that virtual currency holder will be legally treated differently based on the fact that their virtual currency is either decentralized or centralized. For example, an owner of a decentralized virtual currency will acquire a *chose in action* right while an owner of a centralized virtual currency acquires an *in personam* right.

Regulators should therefore take a keen interest in studying and understanding the various classifications of virtual currencies. A multiplicity of factors should be borne in mind by

regulators so as to regulate persons who hold, distribute, keep custody and own virtual currencies. This study holds firmly that focusing on one particular form of classification will not yield a good and dynamic regulatory framework. However, the conceptualization of a multifaceted approach and understanding of the qualities and types of virtual currencies will.

## CHAPTER THREE – ANALYSIS OF KENYA’S REGULATORY ATMOSPHERE

### 3.1. Introduction

The previous chapter attempted to provide an in-depth understanding of what virtual currencies are. It further discussed how the law perceives virtual currencies based on their unique and differentiated qualities and attributes. It also briefly looked into the kind of regulatory entities that would be interested in regulating virtual currencies based on the above-mentioned aspects. Having understood what virtual currencies are and how the law perceives them for purposes of regulation, this chapter will explore an analysis of the regulatory excerpts in Kenya that could be associated with virtual currencies.

Part 3.2. will discuss Kenya’s regulatory approaches thus far implemented by its regulatory agencies. Part 3.3. will analyze the legal framework of Kenya that could be construed to relate to virtual currencies and part 3.4. will conclude the chapter.

### 3.2. Kenya’s current regulatory approach

Kenya does not have adequate formal regulatory framework, guidelines, codes of conduct or legal arrangements for virtual currency users and businesses.

The ICT Cabinet Secretary, Joe Mucheru, on 28 February 2018, constituted an 11 member task force on Blockchain and Artificial Intelligence through gazette notice 2095 of 2018. This task force was to explore the benefits of the use of DLT and artificial intelligence (AI) for technological development in Kenya. The task force explored various fields where blockchain technology can be utilized,<sup>1</sup> addressed the beneficial attributes of the blockchain technology for Kenya and made the recommendation that virtual currencies should be regulated.<sup>2</sup> Further, the task force recommended that use of the blockchain technology and AI would assist in the process of diminishing the national debt through innovative means for raising funds through the novice currency. It further advocated for blockchain technology and AI utility to eradicate corruption,

---

<sup>1</sup> See Carolyne Tanui, ‘The Kenya Blockchain Task force Concludes its Report’ (*The Kenyan Wall Street*, 24 August 2018) <[www.kenyanwallstreet.com/the-kenya-blockchain-task force-concludes-report-on-blockchain-technology/](http://www.kenyanwallstreet.com/the-kenya-blockchain-task-force-concludes-report-on-blockchain-technology/)> accessed on 24 August 2020.

<sup>2</sup> See Daniel Mpala, Kenya Task force calls for State to Regulate AI and Blockchain (*Ventureburn* 2 August 2019).

strengthen democracy, promote free and fair elections, enhance financial inclusivity, reduce transaction costs, and improve public service delivery among other stellar contributions.<sup>3</sup>

Various institutions in Kenya have shown keen interest in utilizing the blockchain network to offer better services to ‘Wanjiku’. An example is the National Land Commission (NLC) which has indicated that it will use the blockchain network to discontinue any fraudulent land registration schemes and ensure proper land records are kept.<sup>4</sup> This was also recommended by the task force report on Electronic Land Transactions, Registration, Conveyancing, and Other Related Activities appointed on 13th July 2018 vide Gazette Notice No. 7859.<sup>5</sup> A private blockchain company known as TMT Global Coin is projected to improve and advocate for transparency in the imports and exports business.<sup>6</sup>

The CMA issued public caution against the issuance of initial coin offers (ICOs) by any virtual currency businesses.<sup>7</sup> Further, the CBK issued a warning against banking institutions and money transfers from transacting in any virtual currencies.<sup>8</sup> CBK also made a public statement to Kenyans informing them that the currencies are not legal tender and that no consumer of the said currency would be legally protected if the currency goes belly up.<sup>9</sup> The choice to issue restrictions through issuance of caveats, such as the ones issued by the CBK and CMA, has been said to be a model of regulation known as the restrictive model of regulation.<sup>10</sup>

On a positive note, the Kenyan judiciary has provided insightful assistance and guidance on the regulation of virtual currencies. For example, a 2015 judicial pronouncement gave direction that

---

<sup>3</sup> See Ministry of Information, Communications, and Technology, *Emerging Digital Technologies for Kenya: Exploration and Analysis* (July 2019) p. p. 15 – 21.

<sup>4</sup> See Stolp J., Perumall A., and Selfe E., *Blockchain and Cryptocurrency in Africa* (Baker McKenzie, 2018).

<sup>5</sup> See Ministry of Information, Communications, and Technology (n 3) 105.

<sup>6</sup> See Stolp J., Perumall A. and Selfe E. (n 4).

<sup>7</sup> Hansen J. D., Howland S. and Conley W., ‘Digital Currencies: International Actions and Regulations’ (*Perkinscoie*, April 2020) <[www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html](http://www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html)> accessed on 24 August 2020.

<sup>8</sup> See Iyke Aru, ‘Kenya’s Central Bank Warns Against Cryptocurrency’ (CCN, April 14 2018) <[www.ccn.com%2Fkenyan-apex-bank-warns-citizens-against-the-use-of-cryptocurrencies%2Fandusg=AOvVaw07Ut2asHSFUQhp-faPBO7t/](http://www.ccn.com%2Fkenyan-apex-bank-warns-citizens-against-the-use-of-cryptocurrencies%2Fandusg=AOvVaw07Ut2asHSFUQhp-faPBO7t/)> accessed on 29 April 2020.

<sup>9</sup> See Central Bank of Kenya, *Caution to the Public on Virtual Currencies such as Bitcoin* (December 2015) <[https://www.centralbank.go.ke/images/docs/media/Public\\_Note\\_on\\_virtual\\_currencies\\_such\\_as\\_Bitcoin.pdf/](https://www.centralbank.go.ke/images/docs/media/Public_Note_on_virtual_currencies_such_as_Bitcoin.pdf/)> accessed on 29 April 2020.

<sup>10</sup> See The Common Wealth Working Group on Virtual Currencies, *Regulatory Guidance on Virtual Currencies* (Working Group Report, 2019) at p. p. 15, 17-18.

virtual currencies should be recognized as money/currency. The court in *Lipisha Consortium Ltd. and BitPesa Ltd. v. Safaricom Ltd.*<sup>11</sup> (the Lipisha Judgment), J. L. Onguto, J., held that Bitcoin represented monetary value. The court further held that Safaricom Ltd. had the right to suspend the services of Lipisha Consortium Ltd. and BitPesa Ltd. as they had dealt in monetary transmission services using Bitcoin without first obtaining approval of the CBK. This judgment is an emerging jurisprudence where the courts despite the lack of any legislative context in Kenya recognize virtual currencies as money whose regime deserves regulation. That court further proposed that virtual currency businesses should obtain approval of the CBK before engaging in any transmission services within Kenya.

In another case, *Wiseman Talent Ventures v. CMA*,<sup>12</sup> the court held that the balance of convenience tilts in favour of protecting the public. The court gave CMA the opportunity to conduct proper investigations, set proper disclosure requirements for the petitioner to comply with, and proffer proper regulation. The court further directed the CMA to conduct research and inquiry into the applicant to determine whether or not they can conduct business in Kenya. This ruling aligns with this study's theoretic framework, the public interest theory of regulation, which provides that public interest demands that virtual currencies, being potentially utilized by simple and susceptible Kenyans, should be efficiently regulated.

In 2019, the CMA, influenced by world trends on the setting up of regulatory sandboxes, launched its regulatory sandbox. The sandbox regulations were aimed at helping CMA manage and evaluate emergent perils brought about by novice financial products.<sup>13</sup> Sandbox experiments essentially allow for competition, growth, and innovation to subsist in a jurisdiction while allowing the regulator to keep a watchful eye on the innovative product or service. The sandbox concept derives from software development projects which usually allow for some time to assess their products in a controlled setting before the product is entirely released for public consumption.<sup>14</sup> Thus the Regulatory Sandbox Policy Guidance Note was ratified by the CMA in March 2019 as a trial process where CMA was to design and commission the sandbox

---

<sup>11</sup> Constitutional and Human Rights Division Petition [2015] eKLR.

<sup>12</sup> Commercial and Tax Civ. Suit [2019] eKLR.

<sup>13</sup> See Digital Economy Kit, *Kenya: A regulatory sandbox for the financial sector* (Case Study 9, November 2019) p. 1.

<sup>14</sup> See *ibid.*

regulations.<sup>15</sup> The sandbox regulations allow the CMA to receive applications from companies incorporated in Kenya or from companies licensed by foreign regulatory companies that are recognized by CMA, to test products and services that are fully operable.<sup>16</sup> A company applies to operate under the sandbox regulations for a period of one year under terms determined for it by the CMA<sup>17</sup> such as real-time surveillance assessments and data security vigilance.<sup>18</sup> So far, CMA has admitted three companies into its regulatory sandbox.<sup>19</sup> Upon exit from the sandbox, the CMA would license such a company to operate in Kenya subject to existing regulations or newly formulated regulations.<sup>20</sup> The CMA can also deny a company license to operate in Kenya.<sup>21</sup> This approach by the CMA can be argued to be a regulation approach that is both permissive and licensing style.

On the market front, Kenya is said to be among the few countries in the world that have a significantly high per capita holding of Bitcoin.<sup>22</sup> It is therefore paramount that the CBK, the CMA, and other regulatory bodies formulate regulative directives in line with the market's demand for supply of virtual currencies to protect the economic interests of the public.

In July 2018, Parliament noted that the use of virtual currency was rising in Kenya, but that it was not being regulated.<sup>23</sup> Consequently, the Treasury Cabinet Secretary, Henry Rotich (as he then was), was tasked to provide direction as to whether virtual currencies should be regulated.<sup>24</sup> The Finance and National Planning Committee questioned the decision of the National Treasury and CBK allowing unregulated transactions in cryptocurrencies without requirements for licensing or taxation. The chairperson of the Committee, Joseph Limo, stated, "we are surprised to hear that even the CBK is not aware that there is a lounge at Kenyatta University, an ATM in

---

<sup>15</sup> *ibid.*

<sup>16</sup> See *ibid* p. 2.

<sup>17</sup> *ibid.*

<sup>18</sup> Capital Markets Authority, *Launch Infographic* (March 2019) p. 4.

<sup>19</sup> See Digital Economy Kit (n 13) p. 2.

<sup>20</sup> See Digital Economy Kit (n 13) p. 2.

<sup>21</sup> See PGN 28 of the Draft Regulatory Sandbox Policy Guidance Note, 2018.

<sup>22</sup> See Kenyan Wall Street, 'Kenya Among the few Countries in the World with Highest per capita Holding of Bitcoin-citi' (*The Kenyan Wall Street*, 8 October 2019).

<sup>23</sup> Kevin Helms, 'Kenya has Two Weeks to Decide Whether to Regulate Cryptocurrencies' (*Bitcoin.com*, 5 July 2018).

<sup>24</sup> *ibid.*



town, and a hotel in Nyeri which trade in Bitcoins.<sup>25</sup> There is a bigger problem in Kenya since people are trading in billions in virtual space yet the Treasury has not licensed and taxed it like trade in M-Pesa and bank transactions”.<sup>26</sup> This matter is yet to be addressed by the National Treasury to date and has not since been exhaustively discussed by the National Assembly.

Undeniably, virtual currencies have significant inherent risks occasioned by their anonymous nature and lack of a centralized intermediary in some digital currencies. These attributes of virtual currencies pose a great danger to consumers such as instigation of fraudulent schemes by crafty individuals. Regulation will ensure that there is certainty in the market. It will designate permissible directives relating to virtual currencies within the Republic. This could be done through the creation of sound regulatory standards and practices through formulating a code of conduct for the industry players. It would also attract businesses involved in virtual currencies and in turn increase the taxable base for the country. Regulation will also ensure that consumers are protected and that the market is protected from any financial instability. The following part will provide an examination of the legislative provisions in Kenya that can be associated with virtual currencies.

### **3.3. Discussion of the regulative framework of payment systems in Kenya**

In this part, this study will identify and analyze the different legislative texts in Kenya that could be construed to relate to the regulation of alternative payment schemes and thus capable of regulating virtual currencies. This part will suggest amendable provisions for certain legislation to accommodate virtual currency transactions. It will give pointers for areas where the law in Kenya is utterly lacking and thus needs the enactment of new legislation to regulate virtual currencies.

Any proper analysis of the law ought to commence from the ultimate and supreme law of the land. In this case, this study will commence with a discourse of provisions in the Constitution of Kenya that could be construed to give basis for the regulation of virtual currency transactions as provided in this succeeding part.

---

<sup>25</sup> Kevin Helms, ‘Kenya has Two Weeks to Decide Whether to Regulate Cryptocurrencies’ (*Bitcoin.com*, 5 July 2018) <[www.news.bitcoin.com/kenya-crypto-regulation/](http://www.news.bitcoin.com/kenya-crypto-regulation/)> accessed on 24 August 2020.

<sup>26</sup> *ibid.*

### 3.3.1. Constitution, 2010

The Kenyan Constitution<sup>27</sup> is the *grund norm* and superlative rule of the land from which all legislative provisions in Kenya gain their legitimacy. The Constitution safeguards proprietary rights of any description under Article 40 (1). That article prohibits the State or any other person from arbitrarily depriving persons of their rights to property or interests in property of any description. Article 40 further proscribes that the State or any other person may not be deprived of the enjoyment of any property rights except for instances permitted by law. Article 40 (5) imputes on the State the responsibility of maintaining, supporting, and safeguarding intellectual property rights of the People of Kenya.

Intellectual property rights are established by persons who produce intangible creations of the human intellect. As such, the creation of virtual currencies through the various techniques namely; proof of importance, proof of stake, or proof of work, could be viewed as the creation of intellectual property rights protected by law under the Industrial Property Act.<sup>28</sup>

Article 46 of the Constitution further guarantees and protects consumers' economic interests.<sup>29</sup> It also requires that the Kenyan consumer be adequately informed of this right to gain full benefits from goods and services related to virtual currencies.<sup>30</sup>

Chapter 12 of the Constitution makes provision for prudent use of public resources in the country. As the chapter concludes, it establishes the CBK as an independent entity and provides that it shall be responsible for devising fiscal policy, printing, or coining currency, among other responsibilities.<sup>31</sup> The CBK Act constitutes more detail about the composition, powers, functions, and operations of the CBK.<sup>32</sup> The following is a discussion of the Central Bank of Kenya Act, Cap. 491.

---

<sup>27</sup> Constitution of Kenya, 2010.

<sup>28</sup> Act No. 3 of 2001 of the laws of Kenya.

<sup>29</sup> See Article 46 (1) (c) of the Constitution.

<sup>30</sup> See Article 46 (1) (b) of the Constitution.

<sup>31</sup> See Article 231 (1), (2), and (3) of the Constitution.

<sup>32</sup> See Article 231 (5) of the Constitution.

### 3.3.2. Central Bank of Kenya Act, Cap. 491.

The CBK is established under the CBK Act<sup>33</sup> as a corporate body with a common seal and whose succession is in perpetuity. CBK has the power to buy and sell property, to enter into contracts, and to institute proceedings or be sued in its name.<sup>34</sup> The CBK may formulate rules of conduct or procedure for its proper management.<sup>35</sup> The CBK enjoys all the prerogatives of a central bank and even though it exercises banking and corporate functions, CBK is not regulated under the Banking or the Companies Acts.<sup>36</sup>

The principal object of the CBK is to devise and execute fiscal policy to achieve and maintain fiscal stability.<sup>37</sup> The CBK can set price stability levels in consultation with the Cabinet Secretary for finance. The CBK is also tasked to provide a biannual monetary statement policy by section 4B of the CBK Act.

The unit of currency of Kenya is the Kenya shilling as prescribed under Part V of the CBK Act.<sup>38</sup> The CBK has the sole right to issue currencies that possess legal tender status in Kenya.<sup>39</sup> Virtual currencies, through usage, experience, and practice, have often been classified as currency. This was established by the USA case of *SEC v. Shavers*,<sup>40</sup> in which the District Court of Texas defined Bitcoin as a currency so that the SEC may investigate fraudulent activity in Texas. In the same way, the Court adjudging at the Lipisha judgment case<sup>41</sup> held that Bitcoin represented monetary value in Kenya in the context of a national payment system. It is therefore paramount that the CBK rethinks its position on virtual currencies to provide direction for virtual currency businesses which facilitate their use through transmitting digital payments.<sup>42</sup>

Regulation of foreign exchange dealings is greatly canvassed in part VIA of the CBK Act. Some foreign currencies are used as a medium of exchange in different jurisdictions from where they

---

<sup>33</sup> See S. 3 (1) of the CBK Act.

<sup>34</sup> See S. 3 (2) of the CBK Act.

<sup>35</sup> See S. 3 (4) of the CBK Act.

<sup>36</sup> See S. 3 (3) as read with (5) of the CBK Act.

<sup>37</sup> See S. 4 of the CBK Act.

<sup>38</sup> See S. 19 (1) of the CBK Act.

<sup>39</sup> See S. 22 (1) of the CBK Act.

<sup>40</sup> *SEC v. Shavers*, No. 4:13-CV-416, 2014 U.S. Dist. LEXIS 110018 (E.D. Tex. Aug. 6, 2014).

<sup>41</sup> See Lipisha Judgment (n 11).

<sup>42</sup> See Gregory V. Ficaglia, 'Heads or Tails: How Europe Will Become the Global Hub for Bitcoin Business If the United States Does Not Reexamine Its Current Regulation of Virtual Currency' (2017) 40 STLR 103 at p. 105.

were issued<sup>43</sup> even though such currencies do not possess legal tender status in those other States.<sup>44</sup> Correspondingly, virtual currencies could be viewed to functionally operate as foreign currencies and arguments have been made that they should be treated by the law as such.<sup>45</sup> Under the common law, foreign money is legally regarded as “money”. This was well established by the Court in *Camdex International Ltd. v Bank of Zambia*,<sup>46</sup> where it was held that foreign currency could be used as a means of payment and is under law recognized as a medium of exchange.

However, this particular regulative leaning may not work for Kenya. Section 2 of the CBK Act<sup>47</sup> defines foreign currency as “banknotes or coins which are or have at any time been legal tender in any territory outside Kenya”. This means that for any currency, virtual or not, to be treated as foreign currency, it must have first been “legal tender in any territory outside Kenya”. Therefore, virtual currency can only be viewed as foreign currency under the laws of Kenya, if they first obtained legal tender status in other jurisdictions. Therefore, the emergence of central-backed digital currencies (CBDCs) may be recognized under the laws of Kenya as foreign currencies due to the fact they are State-backed and thereby obtain the tag ‘legal tender’ in the originating States.

That notwithstanding, this study urges that the CBK reviews its regulations to recognize some virtual currencies as money for purposes of regulation, even though they do not possess legal tender status in other parts of the world. Such a provision would subject virtual currencies to regulation as foreign currency under the CBK Act.

A transaction of foreign exchange is prohibited except through permitted dealers.<sup>48</sup> Permitted dealers are licensed under the CBK Act subject to provisions stated under that part VIA. As a condition of their licensing, the permitted dealers are required to keep accurate books of accounts or other records, as may be specified, to be inspected from time to time. These dealers are also required to sustain such reserves of foreign currency resources or obligations as the CBK may direct. They are also required to adhere to regulations relating to establishing, maintaining, and

---

<sup>43</sup> See Zachary B. Johnson, ‘I Got 988 Problems but Bitcoin Ain’t One: The Current Problems Presented by the Internal Revenue Service’s Guidance on Virtual Currency’ (2016) 47 UMLR 633 at p. 638.

<sup>44</sup> See *ibid* 639.

<sup>45</sup> *ibid*.

<sup>46</sup> [1997] CLC 714.

<sup>47</sup> Cap. 491 of the Laws of Kenya.

<sup>48</sup> See section 33A (1) of the CBK Act.

operating accounts related to foreign currency. Finally, they must adhere to such managerial improvement measures to the CBKs satisfaction<sup>49</sup> as per the CBK (Foreign Exchange Business) Regulations, 2007.

The CBK is granted power by the CBK Act to formulate regulations. Select draft regulations that may be related to virtual currencies are worth mentioning and are discoursed below.

### ***3.2.2.1. Draft CBK Act (Money Remittance) Regulations, Legal Notice No. 66 of 2013***

These draft regulations were formulated under sections 2, 33B, and 57 of the CBK Act. They are an important discourse within the context of transmission of currency, which is an aspect that is attributed to virtual currency exchange businesses. This discourse further exemplifies the discussion relating to the classification of virtual currencies concerning their payment or transmutable function under chapter 2.

The purposes<sup>50</sup> of the draft regulations are to regulate and supervise licensing of money remittance businesses in Kenya. The regulations also encourage the facilitation of foreign exchange transfers through formal funds transfer systems that are time efficient and reliable. Lastly, it places a requirement for such businesses to observe anti-money laundering (AML) practices and to combat finance of terrorism (CFT).

Rule 5 of these draft regulations defines money remittance providers as persons who wish to transact the business of money remittance in Kenya. It further provides that such a business must have the approval of the CBK, have a minimum capital of Kenya Shillings twenty million (KES. 20, 000, 000/=) before the commencement of operations, and have a fixed physical address. Money remittance providers may apply for and be granted a license under rule 6. Further, owners of money remittance services are to be vetted by the CBK for purposes of certifying that they are fit to conduct transmission services in Kenya.<sup>51</sup> Further, the CBK may disqualify approved shareholders, directors, or senior officers of money remittance providers who fail the vetting process or who do not adhere to CBK rules.<sup>52</sup>

Authorized business transactions are set out to be made in a currency agreed upon by the parties to the transaction.<sup>53</sup> A currency transmission must amongst other conditions ascertain that there

---

<sup>49</sup> See section 33E of the CBK Act.

<sup>50</sup> See Rule 2 of the CBK Act (Money Remittance) Regulations.

<sup>51</sup> See *ibid* rule 9.

<sup>52</sup> See *ibid* rule 10.

<sup>53</sup> See *ibid* rule 11 (1) and (2).

are measures to mitigate risks associated with the transmission business, CBK can access its records for inspection whenever necessary and that it adheres to AML/CFT measures.<sup>54</sup> Rule 16 provides that foreign exchange money remittance providers shall operate through commercial banks, with documentation and advisories of the same made to the CBK. Within six (6) months of operation, money remittance providers are required to constitute a customer care and dispute resolution mechanism in line with the KYC requirements.<sup>55</sup> A currency remittance provider may be suspended or forbidden from conducting business if they flout the provisions of CBK rules under rule 28.

The above requirements would be obligatory to businesses whose classification is arched out due to their functional attribute of acting as a transmission instrument outlined under part 2.4.3.1. of this study. The fact that these regulations are still in draft form is a positive factor since they can feature more provisions relating to virtual currencies. As the document undergoes further deliberative and participative consultation, it can only be hoped that virtual currency businesses are envisioned under regulations such as these.

### ***3.2.2.2. Draft CBK Act (e-Money) Regulations, 2013***

These draft regulations are a significant conversation for virtual currencies that are a perfect peg and represent conventional currencies with lawful tender status in other jurisdictions. These virtual currencies do not alter but maintain the unit of account of money which they represent in a virtual format and have through practice been viewed as e-money.<sup>56</sup> These draft regulations would be instrumental in governing virtual currencies classified under the header of means of production under part 2.4.3.2. and the relationship with sovereign currency under part 2.4.3.4. This can be demonstrated by CBDCs which are central-backed virtual currencies, predominantly developed to be issued by various States' central banks. These CBDCs will be virtual currencies representing the real value of the issuing country's fiat currency thus having the tag 'legal tender'. For this purpose, such CBDCs can be argued to be e-money. Also, virtual currencies that mirror real-world currencies, such as the US Dollar have been argued to be governed under e-money regulations.<sup>57</sup> Virtual currencies classified under administration and permission issues

---

<sup>54</sup> *ibid* rule 11 (5) (a) – (q).

<sup>55</sup> *ibid* rule 24.

<sup>56</sup> See Joanna Perkins and Jennifer Enwezor, 'The legal aspect of virtual currencies' [2016] BJIBFL 569.

<sup>57</sup> See Joanna Perkins and Jennifer Enwezor (n 56) 569.

under part 2.4.2. would also fall under these regulations. Determination of central administrators of virtual currencies, such as the US Dollar, would be important so that the CBK would be able to determine the subject to whom its guidelines would have a mandatory effect on.

These draft regulations were formulated under sections 57 (1) and 4A of the CBK Act which requires the CBK to ensure efficient defrayal and payment systems. It was also formulated under Section 31 of the National Payment System Act which empowers the Cabinet Secretary to regulate Kenya's payment systems.

These draft regulation's objectives are to authorize and prescribe the conduct of e-money businesses. Its other objective is to appoint agents to conduct e-money services and to register them. Its final objective is to formulate policy to protect e-money clients' interests. The application of these regulations targets e-money issuers not licensed as financial institutions under the Banking Act of Kenya.<sup>58</sup>

Rule 4 defines e-money as monetary value represented electronically and acknowledged as a means of payment. This acceptability of an item as currency is the very same concept that causes virtual currencies to be accepted as means of exchange.<sup>59</sup> Therefore, this aspect of acceptance by a certain group or community, or environment has been argued to work for virtual currencies and justify their use as means of payment amongst members of the society.<sup>60</sup> In this regard, this definition could be regarded as rife with current times and in keeping with the Fintech payment innovations of today's world.

Businesses that transact e-money may apply for and be registered to operate under rule 5. The draft regulations further provide that such applicants must have among other requirements, minimum capital of Kenya shillings sixty million (KES. 60, 000, 000/=), must only engage in e-money transmission business and that they should have appropriate and tested technology systems.<sup>61</sup> Rule 9 further puts a duty on the e-money agents to keep a record of their clients in compliance with the KYC requirements. There are also provisions relating to consumer

---

<sup>58</sup> Cap. 488 of the laws of Kenya.

<sup>59</sup> See Gary E. Kalbaugh, 'Virtual Currency, Not a Currency' (2016) 16 J. Int'l Bus. and L. 26.

<sup>60</sup> Matthew Kien-Meng Ly, 'Coining Bitcoin's "Legal-Bits": Examining the Regulatory Framework for Bitcoin and Virtual Currencies' (2014) HJoLandT Vol. 27, No. 2 587.

<sup>61</sup> See rule 5 (a) – (j) of the CBK Act (e-Money) Regulations, 2013.

protection and the establishment of consumer redress' measures under rule 12 as well as requirements for reporting to the CBK under rule 13.

Whereas these regulations are well thought out, there needs to be further input to include particular mention of virtual currencies that can be classified as e-money. Further, there needs to be additional input in the said regulations concerning AML/CFT measures to be compliant with the requirements of FATF.<sup>62</sup> Luckily, these regulations are in draft form and it is likely that with a considered and public participative process, its provisions are going to be enriched and made more responsive to current economic times.

The CBK has far-reaching responsibilities and prerogatives provided for under other legislation that should be read and construed in conjunction with the CBK Act. The following parts will discuss the said legislation in detail.

### **3.3.3. The National Payment System Act, 2011**

The National Payment System Act<sup>63</sup> is legislation under the CBK Act and is focused on providing control and oversight of payment systems and service providers in Kenya. A payment system under the Act is defined as an apparatus that enables payments to be executed between a payer and a payee. Virtual currencies' functional attribute to facilitate payment enunciated under part 2.4.3.1. comes to mind. A payment system is defined to mean a facilitator of circulation of currency.<sup>64</sup> This definition would particularly relate to classification of virtual currencies based on their methods of holding and transfer as discussed under part 2.4.3.3.

Sections 3 and 6 of the Act state that the CBK may approve the use of a payment system that does not pose an economic risk to the public. This approval is aimed at protecting the public's interest and ensuring that the system is reliable. The Act further states that the designation must cite the payment system being designated and state the terms and conditions for which it operates.<sup>65</sup> It further states that the CBK may revoke its designation with reason at any time.<sup>66</sup> The Act provides that once approved such payment systems shall be regulated by CBK.<sup>67</sup>

---

<sup>62</sup> See The Common Wealth Working Group on Virtual Currencies (n 10) paragraph 65.

<sup>63</sup> Act No. 39 of 2011 of the laws of Kenya.

<sup>64</sup> See section 2 of the National Payment System Act, 2011.

<sup>65</sup> See S. 3 (3) National Payment System Act.

<sup>66</sup> See S. 3 (4) National Payment System Act.

<sup>67</sup> *ibid* S. 7 (2).



The importance of this piece of legislation is to regulate the transmission of traditional or fiat money from one person to another. It is also a regulative instrument for the CBK which allows the CBK to exercise oversight of the circulation of currency in the country in a manner that does not disrupt the economy.<sup>68</sup>

A skim through the provisions of the Act further reveals that there is no anticipation for the payment system that facilitates virtual currency transactions. This law ought to be amended to make provisions relating to payment systems that facilitate transactions of virtual currencies which are already up and running in Kenya.<sup>69</sup>

The following section will discuss the Banking Act of Kenya. It will provide insight into why this legislation is important in the context of virtual currency businesses that take deposits through services such as e-wallet services. It will outline the benefits of subjecting such businesses under the watchful eyes of the CBK and finally advocate for the amendment of laws to regulate such novice virtual currency businesses.

### **3.3.4. Banking Act, Cap. 488**

The Banking Act<sup>70</sup> is a crucial subject in this discourse relating to the regulation of virtual currency. This is because, within the concept and working mechanism of the DLT, most virtual currency platforms play a depository function as elaborately discussed under part 2.4.3.1. of chapter 2. Perhaps this, not just the mere fact that virtual currencies effect payments, should be of particular concern to the banking regulatory authorities as the issue of deposit-taking of financial assets has been the preserve of banks.<sup>71</sup> This novice Fintech product – virtual currency, has caused a major shake-up to the issue of whether the monopolized deposit taking of financial assets by banks is justified and sustainable. It is therefore paramount that banking laws should apply to virtual currencies' deposit-taking businesses such as e-wallet providers. These laws would predominantly set the prescribed thresholds that virtual currency deposit-taking entities should comply with. Contravention of such laws should attract punishment. An example of a

---

<sup>68</sup> *ibid* S. 12.

<sup>69</sup> See Kenyan Wall Street, 'Kenya Among the few Countries in the World with Highest per capita Holding of Bitcoin-citi' (*The Kenyan Wall Street*, 8 October 2019).

<sup>70</sup> Cap. 488 of the laws of Kenya.

<sup>71</sup> See Witold Srokosz and Tomasz Kopyscianski, 'Legal and Economic Analysis of the Cryptocurrencies Impact on the Financial System Stability' (2015) JTE 04(02) 619 at p. 621.

pioneer State in this area is Germany which through its Federal Financial Supervisory Authority (BaFin), subjects certain virtual currency businesses to regulation under their Banking Act.<sup>72</sup>

Section 2 of the Act defines banks as businesses that hold money of their clients on deposit or current accounts, for loans, investment, or other purposes. A further description of financial business under the said section translates to the acceptance by a community of money depositors for their money to be held until such times they demand repayment or upon the lapse of an agreed period. It is therefore clear to see that the action of deposit-taking of financial assets is critical to the banking business. The Act restricts entities that purport to carry on banking business and demands that it may only be done upon obtaining the consent of the CBK.<sup>73</sup> Further, the Act provides that investment and microfinance banks should obtain their consent to operate under the Capital Markets Act and Microfinance Act, 2006, respectively.<sup>74</sup> For a person to be deemed fit to run a banking business the CBK must vet their proficiency and ethical aptitude. It will also scrutinize the capacity of the entity's wealth configuration and income projections before issuing a banking license.<sup>75</sup> Further, an institution cannot be licensed to run banking business unless it possesses a proscribed least assets status under the 2<sup>nd</sup> Schedule of the Act.<sup>76</sup> The CBK is also empowered to revoke licenses for various reasons listed under the Banking Act.<sup>77</sup>

Financial institutions are required to collect and maintain their client's information under Part VI of the Act. The CBK may at any time require banking institutions to provide it with information relating to an inquiry it is making.<sup>78</sup> The CBK may also inspect and control banking institutions pursuant to powers provided to it under Part VII. This may include vetting of banking officials,<sup>79</sup> examination and control of banking groups,<sup>80</sup> and advising and directing banking institutions.<sup>81</sup>

---

<sup>72</sup> See Gregory V. Ficcaglia (n 42) p. 126.

<sup>73</sup> See S. 3 and 4 of the Banking Act.

<sup>74</sup> See *ibid* S. 3.

<sup>75</sup> See *ibid* S. 4.

<sup>76</sup> See *ibid* S. 7.

<sup>77</sup> See *ibid* S. 6.

<sup>78</sup> See *ibid* S. 28 (1) as read with section 30.

<sup>79</sup> See *ibid* S. 32A.

<sup>80</sup> See *ibid* S. 32B.

<sup>81</sup> See *ibid* S. 33.

Virtual currency businesses that play roles that would strictly speaking be construed to amount to banking business should be subjected to banking regulations. This would ensure that the novice businesses are inspected and controlled by the CBK, the CMA, and the Cabinet Secretary responsible for financial matters. Such activities would lead to entry into the Kenyan market of legitimate and legally constituted virtual currency businesses which will, in turn, lead to consumer protection.

Having discussed provisions relating to banking regulations, the following section analyzes legislation that focuses on licensing and regulation of investment banks and entities in Kenya.

### **3.3.5. Capital Markets Act, Cap. 485 A**

The Capital Markets Authority (CMA) is established under the Capital Markets Act<sup>82</sup> to sustain, control, and enhance capital market businesses in Kenya.<sup>83</sup> Amongst the critical objectives of the CMA is to safeguard the interests of investors and establish a public fund to protect investor's interests.<sup>84</sup> The law further defines electronic commerce to mean the circulation of capital assets and services, between parties, in electronic format without the need for physical presence.<sup>85</sup> This facilitation of electronic commerce under section 11 can be argued to encapsulate virtual currency transactions in the capital market of Kenya. This is because virtual currencies are conducted in electronic format and do not necessitate parties to be physically present for transactions to be effected. Further, the attribute taken up by virtual currencies enabling them to provide the function of an investment product as explained under part 2.4.3.1. buttresses further, the need for virtual currencies to be regulated under the provisions of this legal establishment.

The Act grants extensive powers to CMA to regulate the capital market, issue sanctions to errant businesses, and provide regulation for the industry.<sup>86</sup> This would explain why the CMA issued public caution against the issuance of initial coin offers (ICOs) by virtual currency businesses.<sup>87</sup> However, as has been earlier explained, this approach for prohibiting activities is not ideal and

---

<sup>82</sup> Cap. 485 A of the laws of Kenya.

<sup>83</sup> See long title of Cap. 485 A.

<sup>84</sup> *ibid* S. 11 (1).

<sup>85</sup> *ibid* S. 11 (2).

<sup>86</sup> *ibid* section 11 (3).

<sup>87</sup> Hansen J. D., Howland S., and Conley W., 'Digital Currencies: International Actions and Regulations' (*Perkinscoie, April 2020*) <[www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html](http://www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html)> accessed on 24 August 2020. See also, section 12A of the Capital Markets Act.

CMA sought to do better in making regulations that regard ICOs or investments in virtual currencies. This was in line with the *Wiseman Talent Ventures* judgment,<sup>88</sup> where the court held that CMA should conduct proper investigations, set proper disclosure requirements for businesses to comply with, and offer proper regulation concerning investments of virtual currencies. CMA complied with that prudent judgment through the implementation of the following draft regulation.

### **3.3.5.1. Draft Regulatory Sandbox Policy Guidance Note, 2018**

CMA endorsed the Regulatory Sandbox Policy Guidance Note (PGN) in March 2019<sup>89</sup> pursuant to Sections 11 and 12A of the Capital Markets Act. The PGN made an invitation to the public for Fintech companies to apply to be admitted into the regulatory sandbox. The sandbox regulations were tailored to allow Fintech companies with functional products and services to operate under a CMA-controlled regulatory atmosphere for an assessment period to test the viability of those products or services. The PGN<sup>90</sup> allows for the promotion of innovation as well as fostering fiscal steadiness and investor safety for novice Fintech products that are not currently being regulated under any existing regulations.

For a company to qualify to participate in the sandbox, it ought to make an application to CMA for Kenya shillings ten thousand (KES. 10, 000/=) in the form set out under Schedule A of the PGN.<sup>91</sup> The application is supposed to be accompanied by certified copies of the company's registration documents, a schedule of directors and shareholders, resumes for key directors, and a summary of the Fintech business model. The summary information should include sturdy comments confirming that the applicant's Fintech business is mature and well established to handle a commercial setting. The applicant ought to also establish that they have in place mechanisms to protect the public from fraudulent schemes. In line with this, the applicant ought to incorporate in its business an insurance policy scheme to compensate its clientele in cases of financial loss. The application should also feature a projection of future strategies for the business beyond the sandbox test period.

---

<sup>88</sup> Commercial and Tax Civ. Suit [2019] eKLR.

<sup>89</sup> See Capital Markets Authority (n 18) p. 1.

<sup>90</sup> See Draft Regulatory Sandbox Policy Guidance Note, 2018.

<sup>91</sup> See *ibid* guideline 9.

CMA shall peruse the application and give a rejoinder of its decision to the applicant within fourteen to twenty-five days and may approve the application, seek further clarification of the application from the applicant or reject the application, with reason.<sup>92</sup>

Once an application is approved, the sandbox participant shall in writing submit to a test plan.<sup>93</sup> The participant shall provide in the test plan information relating to the businesses' objectives, test methodologies, hypotheses, test period (of twelve months)<sup>94</sup> and reporting requirements, among other test subjects.<sup>95</sup> During the test period, the participant shall make progress reports to CMA indicating any achievements or breakthroughs attained in the market. The reports should also state any challenges or risks encountered and how they have been resolved as well as any mechanisms the business put in place to ensure customer satisfaction.<sup>96</sup>

A final report shall be submitted to CMA thirty days before the expiry of the test period.<sup>97</sup> The final report<sup>98</sup> shall include key outcomes achieved by the sandbox experiment and a description of any suspicious or risk incidents, and how the incidents were addressed. The final report shall also state, for failed experiments, any challenges the participant encountered and the teachings they obtained from such failures. For prosperous experiments, the participant shall state its plan for transiting beyond the sandbox test period and what solutions the participant will offer to the Kenyan public at a commercial scale.

The PGN provides that the participant shall make certain that it ensures that it incorporates measures to protect its clientele from any financial loss and that it has in place measures to address customer complaints<sup>99</sup> beyond the sandbox period. CMA shall supervise and inspect the participant's records to ensure consumer protection and to point out any further steps that the participant ought to incorporate to ensure suitable consumer safety.<sup>100</sup>

---

<sup>92</sup> See *ibid* guidelines 10, 11 and 12.

<sup>93</sup> See *ibid* guideline 13.

<sup>94</sup> See *ibid* guideline 15.

<sup>95</sup> See *ibid* guideline 14.

<sup>96</sup> See *ibid* guideline 16 (a) to (d).

<sup>97</sup> See *ibid* guideline 19.

<sup>98</sup> See *ibid* guideline 19 (a) to (d).

<sup>99</sup> See *ibid* guideline 21.

<sup>100</sup> See *ibid* guideline 23.

Upon the expiry of the test period, CMA shall grant the participant a license upon satisfaction that they satisfy the required threshold to operate at a commercial level.<sup>101</sup> Such a licensee shall operate in Kenya under existing regulatory or legislative provisions formulated by CMA. The licensee can also be permitted to operate in Kenya after acquiescing to terms laid out in a letter of no objection by CMA.<sup>102</sup> CMA may also grant a license to a participant to operate at a commercial scale subject to their compliance to newly formulated regulations developed from lessons learned from the sandbox experiment.<sup>103</sup> CMA can also decline to grant a license to a participant, with reason.<sup>104</sup>

Following the launch of the PGN, CMA announced that three companies had applied to be test subjects of the sandbox.<sup>105</sup> Following the launch of the sandbox experiments, CMA stated that the test experiments would be an opportune moment for it to gain information, empirical data, and resolutions that would improve the capital market Fintech products and services.<sup>106</sup> The sandbox investigations are an audacious and progressive step in handling the novice Fintech product and will surely assist CMA to better understand and regulate Fintech products and services that are projected for use in futures trading.

The ensuing discussion relates to legislation for investment businesses in Kenya and is aimed at protecting individual investors under the Capital Markets Act.

### **3.3.6. Central Depositories Act, No. 4 of 2000**

The Central Depositories Act<sup>107</sup> makes provision relating to trade in securities deposited in Kenya. The aspect about virtual currencies that encourages investment is the volatility in their price indexes due to its attribute relating to holding and transfer as pronounced under part 2.4.3.3. This has invited a lot of speculative interests in virtual currencies from consumers around the world. In Kenya, models of an investment module formed for the specific purpose of trade in virtual currencies for investment was the business operating in the style of ‘Wiseman

---

<sup>101</sup> See *ibid* guideline 28 (a).

<sup>102</sup> See *ibid* guideline 28 (b).

<sup>103</sup> See *ibid* guideline 28 (c).

<sup>104</sup> See *ibid* guideline 28 (d).

<sup>105</sup> See Digital Economy Kit (n 13) p. 2.

<sup>106</sup> See opening remarks by the AMERC Chair, Mr. Paul Muthaura, MBS, at the 42<sup>nd</sup> Africa/Middle-East Regional Committee (AMERC) meeting, Jumeirah Messilah Beach Hotel and SPA, Kuwait, 22<sup>nd</sup> January, 2019.

<sup>107</sup> Act No. 4 of 2000 of the laws of Kenya.

Talent Ventures Ltd'. That business urged Kenyans to purchase virtual currencies in return for gain or profit.<sup>108</sup>

The Central Depositories Act is therefore of particular interest if this aspect of trade in virtual currencies for profit is to be properly regulated in the country. This Act gives power to the CMA to license and supervise central depository businesses, set standards for the competence of central depository agents, and counter and suppress illegal activities relating to depository functions.<sup>109</sup> Section 4 (1) offers that an entity registered under the Companies Act<sup>110</sup> that wishes to be registered as a central depository shall apply to CMA for approval. This application must be accompanied by central depository rules of the entity to ensure orderliness, efficiency, and security for its operations to be approved by the CMA. CMA then vets the documents as well as the owners of the entity before issuing a license to operate a central depository under section 5. A central depository business is required to run its business efficiently and transparently to prevent fraudulent transactions.<sup>111</sup>

Overall, the provisions of this Act are geared at regulating central depositories to protect the investments of honest and hardworking Kenyans. It gives power to the CMA to investigate central depository businesses and deregister any such businesses that have questionable dealings. It makes requirements for central depository businesses to stay on the straight path and deal with investors justly. However, this Act does not capture or encapsulate a position where a Kenyan would invest in virtual currencies for gain. It would therefore be wise for the legislature to rethink this because the word 'securities' as defined under the Act has a wide range of meanings. Further, the Act defines dealing in securities as making or attempting to offer or induce a third party to make a capital investment to secure profit.<sup>112</sup> It would therefore be fiscally prudent as envisioned under Chapter 12 of the Constitution, that this particular legislation is reviewed to capture the recent dealings in securities with virtual currencies.

The following review of legislation is a discourse on curbing money laundering efforts by criminal elements in the country. This law is aimed at criminalizing money laundering and aimed at proscribing countering efforts to reduce money laundering.

---

<sup>108</sup> See Commercial and Tax Civ. Suit [2019] eKLR.

<sup>109</sup> See S. 2A of the Central Depositories Act.

<sup>110</sup> Cap. 486 of the laws of Kenya.

<sup>111</sup> See S. 8 (1) of the Central Depositories Act.

<sup>112</sup> *ibid* S. 2.

### **3.3.7. Proceeds of Crime and Anti-Money Laundering Act, 2009**

The fight against money laundering in Kenya has culminated into the enactment of the above-mentioned Act.<sup>113</sup> This law outlaws and criminalizes the laundering of currency. It advocates for measures combating the vice through various means outlined under the Act. The Act designates financial institutions, various designated non-financial entities, and professions as reporting organs.<sup>114</sup> The Act establishes the Financial Reporting Center which focuses on enhancing preventive measures for reporting suspicious activities by financial criminal networks. It also plays the role of increasing awareness of AML/CFT measures through a risk-based approach. It also strengthens institutions' compliance with AML/CFT obligations. The Act further provides that reporting institutions shall monitor for and on behalf of the Financial Reporting Center and make reports of any complex, unusual and suspicious transactions.<sup>115</sup>

The protracted goal of this Act is to obtain financial intelligence information that enables the regulators to detect, prevent and interdict the flow of illicit funds in the economy. It also intends to significantly reduce risk to the Kenyan public as well as its businesses. With this in place, more criminal schemes are bound to be detected, disrupted and eventually, prosecuted. There is also going to be a seizure and forfeiture of criminal assets in Kenya through the Assets Recovery Agency<sup>116</sup> as well as a respectable global economic reputation.

This piece of legislation is critical in the discourse of virtual currency transactions due to the potential negative effects that transacting in virtual currencies, such as cyber laundering. As discussed under part 2.4.3.1., the fact that some virtual currencies can be classified under the umbrella of functioning as transferable instruments, this piece of legislation could be amended to view virtual currencies as functioning as currencies for purposes of regulation. The Act defines monetary instruments as currency possessing legal tender status in Kenya, including, negotiable instruments or other forms of title through which title in property passes.<sup>117</sup> This part of the Act should be reviewed to specifically capture the issue of virtual currencies or assets. This would provide the reporting institutions with the wherewithal to justifiably make suspicious activity reports (SARs) concerning virtual currencies to the relevant authorities. This will be instructive

---

<sup>113</sup> Act No. 9 of 2009 of the laws of Kenya.

<sup>114</sup> See Central Depositories Act S. 2.

<sup>115</sup> *ibid* S. S. 44, 45, 46, 47 and 47A.

<sup>116</sup> *ibid* Part VI.

<sup>117</sup> *ibid* S. 2.



in handling instances of money laundering as in the *United States v. Budovsky*<sup>118</sup> case, where the respondent was prosecuted for laundering virtual currencies worth billions of US dollars. The court found that the term "funds" included virtual currencies. This enabled the regulators to punish money laundering of virtual currencies in the USA.

The resulting section shall discuss legislation that is closely related to this Act. The legislation will make provisions concerning the curbing of terrorist acts through proceeds of crime encapsulated under Part VII of this Act.

### **3.3.8. Prevention of Terrorism Act, 2012**

This piece of legislation makes provision in relation to the detection and prevention of terrorist activities. Terrorist activities require a lot of financial resources in planning and executing through covert practices. This, therefore, means that regulative agencies have to be very innovative, professional and up to the task for them to effectively combat and prevent terrorist activities. This includes nabbing and curtailing means through which terrorist affiliated criminal groups can obtain as well as transact money. Thus enters virtual currency, a mostly clandestine means of currency that can be transacted almost anonymously at any given time so long as the sender and recipient have an internet connection. This, therefore, reveals the seriousness and primacy of this piece of legislation in Kenya. It also stresses the need for legislators to keep metamorphosing with the current financial times to prevent terrorism activities.

Section 2 of this Act defines funds to mean assets, whether physical or intangible, real or incorporeal, moveable or immovable, including legal documents or title evidencing property in such assets. This definition is very contemporary in that it encapsulates the fact that funds relating to terrorist activities may not be corporeal or tangible. It captures assets such as virtual currencies which certainly have such features and are property for purposes of consideration in a financial transaction. Part IV of the Act grants the investigative authorities power to investigate offenses relating to terrorist activities. Section 40A establishes a Counter-Terrorism Center, an inter-agency body with officers from different investigative departments in the country. The functions of the Counter-Terrorism Center include the keeping of a database to assist in preventing terrorism, conduct public awareness on terrorism, de-radicalizing and countering

---

<sup>118</sup> 13cr318 (DLC), 2015 U.S. Dist. LEXIS 127717, at \*37-38 (S.D.N.Y. Sept. 23, 2015).

terrorist efforts.<sup>119</sup> Section 40C imputes a duty on the public and government agencies to report any dealings that may culminate in terrorist activities.

This piece of legislation has a very modern and contemporary outlook. It bears in mind the fact that criminals are thinking beyond the traditional means to conduct criminal activities such as terrorist acts. It, therefore, envisions monetary assets to include intangible property which removes from doubt, in the mind of an interpreter, that virtual currency would be viewed as funds under the Act. It further sets in motion the efforts of research to understand and regulate such currencies in a manner that would protect the public from terrorist activities. Such forward-thinking legislation should be the new normal in Kenya.

The next piece of legislation relates to the outlawing of practices conducted on the internet or with computer systems to commit a crime. With effective regulation of computer-related crimes, offenses such as terrorism, unregulated cyber gambling, online fraud, and money laundering will be minimized.

### **3.3.9. Computer Misuse and Cybercrimes Act, No. 5 of 2018**

The Computer Misuse and Cybercrimes Act<sup>120</sup> provides for the enablement of time-sensitive and efficient discovery, deterrence, and preclusion of cybercrimes. The Act sets out a series of offenses under Part III on cybercrimes and provides penalties for their commission.

This Act defines blockchain technology as a platform on which virtual currencies are transacted on an electronic, decentralized DLT.<sup>121</sup> It establishes the National Computer and Cybercrimes Co-ordination Committee (NCCCC) and provides that among its functions is to advise the Government on security and economic related perils occasioned by cybercrimes.<sup>122</sup> Amongst the Committee's functions is to present periodic updates to the National Security Council.<sup>123</sup>

Part V of the Act advocates for concerted action with international bodies through cooperation, to curb cybercrimes.<sup>124</sup> It further provides that a State may request joint legal support from the Central Authority to combat cybercrime.<sup>125</sup>

---

<sup>119</sup> *ibid* S. 40B.

<sup>120</sup> Act No. No. 5 of 2018 of the laws of Kenya.

<sup>121</sup> *ibid* S. 2.

<sup>122</sup> *ibid* S. S. 4 and 6 (1) (a) respectively.

<sup>123</sup> *ibid* S. 8.

<sup>124</sup> *ibid* S. 57 (2).

<sup>125</sup> See *ibid* S. 57 (2).

This piece of legislation is very contemporary and makes provisions relating to keeping track of blockchain technology and its consequent activities. It also takes cognizant of the fact that online transactions need monitoring and thus gives this critical responsibility to the NCCCC. The NCCCC is in turn to make periodic reports to the National Security Council for further input and action. The Ministry of ICT has to this effect recommended that the NCCCC be made operational to ensure that both data and systems are more secure.<sup>126</sup> Further, it defines the all too important underlying and enabling mechanism of virtual currencies, which is the DLT. It lastly refers to the use of cooperative efforts to combat cyber-related offenses. All these key provisions of this legislation are critical to the regulation of virtual currencies. It can only be hoped that more will be done to protect Kenyans from any cyber-related offenses.

### **3.4. Conclusion**

This chapter commenced by analyzing the unique experiences of Kenya and examined the regulative model that Kenya has taken with regard to virtual currencies. This chapter revealed that Kenya's current style of regulation is the restrictive model of regulation of virtual currencies.<sup>127</sup> This is because Kenya, through various regulative directives has prohibited activities relating to virtual currencies. Both the CBK and the CMA have issued prohibitive public notices to the public cautioning them from engaging in transactions relating to virtual currencies or from investing in them. Both entities crafted their advisories around the fact that virtual currencies do not possess legal tender status in Kenya or any other jurisdiction in the world. They opine that virtual currencies have not been legislated upon and therefore Kenyans cannot be legally protected should there be a contravention of their consumer rights. They also cited the fact that virtual currencies have volatile prices and that Kenyan consumers ought to be cautioned against investing in them as they could be subject to economic slumps. This position of prohibiting the use of virtual currencies also seems to have stemmed from the fact that virtual currencies can be used by criminal entities to conduct various heinous activities such as fraud, unregulated cyber gambling, and terrorism financing. The study further revealed that Kenya is moving towards a more permissive cum licensing approach to regulating virtual currencies with the commissioning and implementation of CMAs sandbox regulations. The sandbox regulations allow Fintech businesses (participants) to operate in a controlled setting under the attentive eyes

---

<sup>126</sup> See Ministry of Information, Communications and Technology (n 3) p. 85.

<sup>127</sup> See The Common Wealth Working Group on Virtual Currencies (n 10) p. 38.

and regulatory reach of CMA to ensure that the products' stability, user-friendliness, and consumer security are substantiated. If the participant exemplifies prudent features during the sandbox test period, a license may be granted to the participant to launch their product at a commercial scale. The participant shall then be required to operate under existing or new CMA regulations fashioned from the sandbox experiences.

The second part of the chapter discusses the various legislative provisions in Kenya that could or should relate to virtual currencies. This part commenced by analyzing the provisions of the Constitution as well as acts of parliament and any relevant regulations. The purpose of the analysis of these laws was to evaluate and discuss any provisions that relate to regulating virtual currencies. This study has discovered that the enactment of the said acts of parliament chronologically continues to soften their stance on provisions relating to the regulation of digital or virtual currencies. For example, the role of blockchain technology to facilitate crime is appreciated under the Computer Misuse and Cybercrimes Act. On the other hand, the Prevention of Terrorism Act defines funds to mean assets, whether real or incorporeal. Such a broad definition of funds could be critical when deciphering regulations relating to the role played by virtual currency users to commit terrorist activities. These references to attributes of the DLT in Kenyan legislation are encouraging and there is hope for more headway in terms of legislating and regulating virtual currencies in the country. Further, the sandbox regulations offer much reprieve for virtual currency businesses that offer services of an investment nature. This acquiescence by the CMA to practice regulation that monitors the investment business while allowing innovation to thrive is an encouraging development.

Chapter four shall undertake a study of the styles of regulation from other jurisdictions across the globe. The chapter will be dedicated to examining the best practices used to adequately and efficiently regulate virtual currencies in those jurisdictions. The chapter will buttress the view that a regulatory measure that involves registration of virtual currency businesses, proper reporting mechanisms, and adherence to AML/CFT measures, among other qualities, are legally robust means of regulating virtual currencies.

## **CHAPTER FOUR – ANALYSIS OF THE REGULATORY APPROACHES OF VIRTUAL CURRENCIES IN AFRICA AND AROUND THE WORLD**

### **4.1. Introduction**

The previous chapter attempted to provide an in-depth understanding of Kenya's response to virtual currencies. It was an insightful discussion of Kenya's style of regulation which is restrictive in nature but through CMAs sandbox regulations, can be argued to be leaning towards permissive cum licensing regulation approach. It delved into the analysis of legislations in Kenya that are impactful on the subject of virtual currencies noting any possible areas for amendment or further legislation. It also analyzed Kenyan legislation which features provisions that could be associated with the regulation of virtual currencies in the country.

This chapter on the other hand will examine whether there are valuable lessons that Kenya can learn from other jurisdictions relating to the regulation of virtual currencies. This chapter will adopt a benchmarking approach towards regulation of virtual currencies which will be achieved by examining and analyzing those foreign jurisdictions. This chapter will draw lessons from the foreign jurisdictions, to comprehend how they addressed their challenges through regulation. This chapter will further examine foreign legislation or regulative texts from those countries to determine whether they are effective and adequate in regulating virtual currencies. It will further discuss identifiable instances where Kenya would benefit relating to the regulation of virtual currencies.

This chapter will at the outset discuss the current regulatory approaches undertaken by States around the world under part 4.2. It will then consider how some countries in Africa, under part 4.3., and around the world, under part 4.4., regulate virtual currencies. By identifying those jurisdictions' approaches to regulating virtual currencies, these parts will converse the various lessons that the country can learn from those foreign jurisdictions. Part 4.5. will discuss any gaps identified in the case studies and conclude with part 4.6.

### **4.2. A Discussion of the Existing Regulatory Styles in the World**

This part will discuss the four major regulatory styles exercised by States around the world. Through these styles, States have been able to respond to outstanding issues and challenges

relating to virtual currencies in their jurisdictions. The four styles of regulation are the licensing, restrictive, permissive (guidance), and hybrid styles of regulation.

#### **4.2.1. Licensing style**

The licensing style of regulation has been practiced by some States such as New York State. As can be deduced from its name, the licensing style is a practice where States require that virtual currency businesses operate in their jurisdictions only upon being licensed by a licensing authority in the regulating State.<sup>1</sup> The licensing process involves the filling of application forms and going through vetting processes to determine whether virtual currency business owners are compliant with licensing requirements and possess integrity and financial scrupulousness. The licensing documents usually require information which includes; the names of shareholders, owners, or critical officers of the virtual currency business, the physical addresses of the virtual currency business and its owners, a statement of compliance with the licensing provisions, and an affirmation that what the applicant has stated in the application is truthful. The shareholders, owners, and critical officers who will run the daily transactions of the virtual currency business will be subjected to integrity and financial prudence-vetting process to validate their capacity to effectively run the business.

For most States, licensing is usually conditional based on the businesses' willingness to be subjected to supervision by the licensing authority, adherence to AML requirements, and keeping of proper records of their clientele pursuant to the KYC rules.<sup>2</sup> An example is the Australian licensing system where virtual currency businesses are obligated to enroll themselves with the Australian Financial Intelligence Agency and AML and Counter-Terrorism Financing Regulator (AUSTRAC).<sup>3</sup> The virtual currency exchanges are also supposed to craft AML and CFT programmes to mitigate AML/CFT risks. The virtual currency exchanges are also required to keep proper records of their customers in line with the KYC rules.

The benefits of the licensing style of regulation are that it provides demarcated permissible activities within its territory. It also encourages businesses within the scope of the restriction to

---

<sup>1</sup> See The Common Wealth Working Group on Virtual Currencies, *Regulatory Guidance on Virtual Currencies* (Working Group Report, 2019) para. 52.

<sup>2</sup> *ibid.*

<sup>3</sup> *ibid* para. 58.

flourish in their activities. This style of regulation also provides a database of virtual currency businesses operating within a regulating country's territory and provides that country with an avenue for protecting the consumers from potential financial hazardous schemes. However, this style of regulation also has downsides in that it may be a deterrent to many start-up virtual currency businesses thus negatively impacting innovation. This is majorly because most start-up virtual currency businesses may not be able to raise the set minimum capital requirements, which are usually substantial. The virtual currency licensing laws of such States are also bound to be inconsistent with other national payment laws due to hurried legislation.<sup>4</sup> This can be illustrated by a State's rushed action to regulate without first consulting its other financial regulative texts or authorities. Another factor is the formulation of regulations by different regulators without working as collaborative partners thereby making legislative pronouncements that are contradictory and inconsistent when applied by enforcement authorities.

#### **4.2.2. Restrictive style**

The restrictive style of regulation is a practice of regulating virtual currencies where States, such as Thailand and Iceland, constrain some or all activities relating to virtual currencies.<sup>5</sup> This type of regulation indicates that users of virtual currencies, within their territories, are on their own and that virtual currency businesses are not welcome in such jurisdictions.

A benefit of this type of regulation is that it clearly outlines to market players what the lawmaker's response to virtual currencies is and what is permissible or impermissible. This, therefore, allows virtual currency businesses which are not prohibited by restrictions of the State to conduct their activities within the scope of what is not restricted in that State. The disadvantage of this style of regulation is that it is likely to suffocate innovation. It may also diminish the restrictive State's international reputation as a Fintech-friendly country. It could also be financially draining for a State entity that has to utilize all available resources to shut down the restricted businesses. Further, such restrictions may run down the legitimate virtual currency businesses making them only attractive to criminals.

---

<sup>4</sup> See *ibid* para.60.

<sup>5</sup> See The Common Wealth Working Group on Virtual Currencies (n 1) para. 63.

### **4.2.3. Permissive or guidance style**

The permissive or guidance style of regulation is an exercise where States, such as Gibraltar and the United Kingdom, provide an outline of what permissible activities are through regulation, codes, advisories, or guidance.<sup>6</sup> These countries through these excerpts specify to virtual currency businesses what is expected of them for their activities to run unperturbed and without interruption by the State.<sup>7</sup> A permissive state would be differentiated from a licensing state as the former state may regulate by the provision of codes of conduct for industry players without the requirement for licensing. The latter state would specifically issue laws that relate to the issuance of licenses to virtual currency businesses with or without other regulations for the operation of virtual currency businesses in their territory.

The advantage of this style of regulation is that it allows for virtual currency businesses to be malleable thereby encouraging further innovation. On the flip side, its disadvantages are that enforcement of such a style may be challenging and costly. This can be illustrated by a State's willingness to enforce a code without necessarily obtaining revenue from virtual currency industry players that would otherwise be obtained from license and related fees. Enforcement authorities of such States are thus limited in their capacity to manage and control the virtual currency businesses. Another disadvantage is that regulations are usually prescribed by different state departments and thus they may end up being unharmonious.<sup>8</sup> This may be unattractive for legitimate business entities which may be unsure of their legal status.<sup>9</sup>

### **4.2.4. Hybrid (Licensing or permissive) style**

As the name suggests, this style of regulation is a practice of fusion of the licensing and permissive style of regulation.<sup>10</sup> In this style, States encourage virtual currency businesses to conduct their affairs through the formulation of licensing regulations alongside other guidance and coded provisions.

These efforts allow virtual currency businesses to thrive and create an avenue for more innovation to take place. It also delineates what is permissible and impermeable by the hybrid

---

<sup>6</sup> See The Common Wealth Working Group on Virtual Currencies (n 1) paragraph 64.

<sup>7</sup> *ibid* paragraph 65.

<sup>8</sup> *ibid* paragraph 66.

<sup>9</sup> *ibid* paragraph 66.

<sup>10</sup> *ibid* paragraph 56.



State and therefore virtual currency businesses operate within legal bounds. The hybrid State-agencies responsible for regulating virtual currency businesses also benefit from the record of virtual currency businesses for purposes of better regulation. A classic example of a State practicing the hybrid licensing/permissive style of regulation is South Africa as will be further discussed under part 4.3.3. of this study.

### **4.3. Examination of the regulatory methodologies adopted by Egypt and South Africa**

#### **4.3.1. Introduction**

In part 4.2., this study discussed the regulatory approaches being undertaken in the world. It discovered that there are four types of regulation of virtual currencies by States. This part, on the other hand, will focus on the regulative approaches taken by some States within the African continent. Part 4.3.2. will look into the regulation of virtual currencies by Egypt whereas part 4.3.3. will address regulatory approaches of South Africa. Those two parts will examine and analyze the Egyptian and South African jurisdictions with a view of determining how they handle virtual currencies and how they address their regulative challenges. This will be important to be able to deduce what lessons Kenya can acquire from these African countries.

This study chose the two African States because both Egypt and South Africa started regulating virtual currencies from a restrictive style of regulation. Eventually, both States adjusted to their differentiated circumstances and challenges to come up with peculiar regulative styles from their initial regulative styles. Both states have also evolved to promote and encourage invention and innovation by venturing into efforts such as the developing a CBDC by the Central Bank of Egypt. Conversely, South Africa prides itself in hosting the most blockchain seminars in Africa and has even registered a Blockchain Academy that has been instrumental in offering education and publications of critical research studies on the issues of virtual currency in Africa and the World.

Egypt shifted from its restrictive style of regulation to a permissive or guidance style of regulation. The Central Bank of Egypt issued a direction that it would recognize virtual currency assets for purposes of formulating rules that govern the development, promotion, trading, and operation of virtual currency businesses. Egypt has made the bold move of drafting a bill that

will regulate the licensing and registration of virtual currency businesses as will be further discussed under part 4.3.2.

South Africa on the other hand, softened its initial restrictive style of regulation in favor of a hybrid licensing or permissive style of regulating virtual currencies. South Africa has reformed its laws to provide for the registration and licensing of all crypto assets service providers (CASPs) by the Financial Sector Conduct Authority. It has also made an advisory provision where it has recommended that its existing laws be reviewed with a view of amending and enacting new legal frameworks that accommodate virtual currencies. South Africa has also formulated a Taxation Laws Amendment Bill, 2018, that provides that virtual currency consumers are required to declare their profits or losses for purposes of taxation.

Kenya is therefore certainly going to acquire critical information and benchmarking experiences from studying these two African states that are still making effort to grapple with the issues of regulating virtual currencies. This study spells out to Kenya that it is not alone and that it has an enumerable number of states it can learn from and formulate beneficial regulations.

#### **4.3.2. Egypt**

Egypt started by restricting the use of virtual currencies. This restrictive model of regulation of virtual currencies can be substantiated by Egypt's initial uncompromising stand against the use of virtual currencies, and particularly, Bitcoin.<sup>11</sup> Virtual currencies became a subject for discussion in Egypt in about 2015 when a startup company called Yellow launched a Bitcoin voucher service for the Egyptian market.<sup>12</sup> This was the first business based on virtual currencies in North Africa, and specifically, Egypt, that permitted Egyptians to purchase Bitcoins in exchange for the Egyptian currency – the Egyptian pound. At that time, it was estimated that only a fraction of about 98 million Egyptians owned bank accounts or had any form of banking

---

<sup>11</sup> See Jon Buck, 'Egyptian Government's Hardline Stand Against Bitcoin Remains Unshaken: Egyptian Government Renews Commitment Against Botcoin, cryptocurrencies' (*Cointelegraph*, 17 July 2017) <https://cointelegraph.com/news/egyptian-governments-hardline-stand-against-bitcoin-remains-unshaken/> accessed on 24 November 2020.

<sup>12</sup> See Elena Perez, 'Egypt Lays out Path for a Crypto Future with Draft Law' (*Cointelegraph*, 6 June 2019).

arrangement.<sup>13</sup> This virtual currency market was therefore embraced by several Egyptians because it was quick, convenient, and cost-effective.<sup>14</sup>

Another Bitcoin exchange business called Bitcoin Egypt was launched in Egypt in August, 2017.<sup>15</sup> This business was sculpted to be similar to its predecessor, Yellow, and was primarily an exchange avenue between Bitcoin and the Egyptian Pound. Shortly after the launch of Bitcoin Egypt, the Egyptian Government dispensed a harsh caveat to the public against the use of virtual currencies due to the risks associated with cybercrime and financial fraud.<sup>16</sup> Further, an influential Islam cleric, Grand Mufti Shawki Allam, pronounced a Fatwa to the effect that virtual currencies are an unacceptable means of exchange and therefore, unlawful under the Sharia Law.<sup>17</sup>

The Egyptian government's resolve against virtual currency subsisted until late 2018 when the Central Bank of Egypt (CBE) proposed the introduction into the Egyptian market, of a CBDC. This CBDC will be an electronic representation of the Egyptian Pound and the CBE launched a viability research to verify the efficacy of such an action.<sup>18</sup> Some proponents for the introduction of a CBDC stated that it would be a great move as it would significantly reduce the cost of the CBE to issue paper and coin-based currencies.<sup>19</sup> Further, with the issuance of a CBDC, the CBE would be a determinable issuer and administrator of the Egyptian CBDC as discussed under chapter 2. The relationship of the Egyptian Pound to the CBDC would be identical<sup>20</sup> and therefore inviting classification of this virtual currency to be e-money as discussed under part 2.4.3.4.

The CBE proclaimed its goal of licensing Fintech businesses in May 2019 to allow them to conduct the business of issuance and facilitation of trade of virtual currencies.<sup>21</sup> This can be attributed to the fact that most virtual currencies embody the function of a payment product as

---

<sup>13</sup> See *ibid.*

<sup>14</sup> See *ibid.*

<sup>15</sup> See Eric Knecht, 'Egypt's first bitcoin exchange to begin trading this month' (*Reuters*, 17 August 2017) <https://www.reuters.com/article/egypt-bitcoin-idUSL4N1L33NK/> accessed on 24 November 2020.

<sup>16</sup> See Elena Perez (n 12). Also, see Jon Buck (n 11).

<sup>17</sup> See Elena Perez (n 12).

<sup>18</sup> See Elena Perez (n 12).

<sup>19</sup> See Elena Perez (n 12).

<sup>20</sup> See Elena Perez (n 12).

<sup>21</sup> See Elena Perez (n 12).

explained under part 2.4.3.1. The CBE's intention was embodied in a draft bill that proposes to grant the Directors of the Board of CBE the prerogative to regulate the development, promotion, trade, and operation of a virtual currency business.<sup>22</sup> This new licensing approach will allow the CBE to establish effective State control over virtual currency businesses. It will also allow CBE to collect relevant data and understand the various stakeholders in the virtual currency arena to better regulate the economy.<sup>23</sup>

In the current times, descriptive of tough economic conditions and unemployment, brought about by the COVID-19 pandemic, the virtual currency market in Egypt has continued to increase.<sup>24</sup> This is due to the reduced working hours of the Egyptian workforce occasioned by the work from home directive. There have also been massive layoffs by companies of staff due to losses occasioned by the COVID-19 pandemic. The spare time coupled with imposed curfews cause people to seek alternative means of income through online platforms which may include mining and trading of virtual currencies.<sup>25</sup>

In summary, the CBE has softened its original hardline stance of restricting the use and trade of virtual currencies and is inclined to move towards a permissive or guidance style of regulation and the likely indication of finally taking on the hybrid licensing or permissive model of regulation.<sup>26</sup> This can be seen by its formulation of a draft bill whose enactment though somewhat delayed by the COVID-19 pandemic<sup>27</sup> will pave the way to the licensing and registration of virtual currency businesses. That draft bill makes provision where virtual currency businesses are required to register with the CBE. The CBE is also empowered by that draft bill to register businesses that fulfill the requirements of the licensing laws. The draft bill provides that the owners of a virtual currency business will undergo integrity and financial probity tests. The law further imputes on the virtual currency businesses an obligation to adhere to AML/CFT measures and to file suspicious activity reports (SARs) with the CBE.

---

<sup>22</sup> See CBE to Ban Issuance of Cryptocurrency (*Egypt Independent*, 28 May 2019).

<sup>23</sup> See Elena Perez (n 12).

<sup>24</sup> See Kevin Helms, 'Interest in Bitcoin Soars in Egypt Amid Economic Crisis and Unemployment' (*NewsBitcoin.com*, 3 October 2020).

<sup>25</sup> See *ibid.*

<sup>26</sup> See The Common Wealth Working Group on Virtual Currencies (n 1) paragraphs 52-60.

<sup>27</sup> See Kevin Helms (n 24).

This draft bill is a success as it clearly outlines permissible activities within Egypt. It will further provide Egypt with a database of virtual currency businesses operating within its territory. It will finally afford Egypt an avenue of protecting consumers of virtual currencies from potential financial harmful schemes in line with the public interest theory of regulation.

What is clear is the CBE's realization that the Fintech industry is a formidable one and as such, a potential new sector of the economy in line with the economic theory of regulation. Through feasibility studies, the CBE has gained knowledge from other States, such as the United Arab Emirates (UAE), which have efficaciously licensed virtual currency businesses and guaranteed sanctuary for virtual currency resources.<sup>28</sup> In conclusion, it can be stated that Kenya can progressively learn to employ reformist regulatory measures such as the ones Egypt has to properly regulate the virtual currency market.

#### **4.3.3. South Africa**

Having gone through the regulative approaches undertaken by Egypt, we can now embark on another African jurisdiction – South Africa, and examine its response to virtual currency products and services.

As most countries, South Africa started from a prohibitionist position on matters regarding virtual currencies. The South African Reserve Bank (SARB) published a position paper on virtual currencies by the end of 2014.<sup>29</sup> That position paper outlined the SARB's sole prerogative to issue legal tender currency and further posed that virtual assets did not possess legal tender status in South Africa.<sup>30</sup> The position paper further placed a caveat on the use of virtual assets in the country citing various reasons including unstable prices, proneness to fraudulent schemes, and lack of elaborate insurance schemes to protect consumers in case of losses.<sup>31</sup> The position further indicated that no legal recourse would be accorded to consumers who fall victim to criminal virtual currency transactional schemers.<sup>32</sup> It however concluded by stating that it would

---

<sup>28</sup> See Elena Perez (n 12).

<sup>29</sup> See Library of Congress, *Regulation of Cryptocurrency Around the World* (GLRC, June 2018) 92.

<sup>30</sup> See Library of Congress (n 29) 92.

<sup>31</sup> See Library of Congress (n 29) 92.

<sup>32</sup> Library of Congress (n 29) 92.

constantly monitor the virtual currency market and that it could change its position upon the conviction that it was time to intervene.<sup>33</sup>

The position paper was made against a backdrop of a South African industry that was knee-deep in the use of virtual currencies. This is because South Africa hosted a couple of blockchain conferences in Africa, and offered training on virtual currency and DLT proficiency through the Blockchain Academy.<sup>34</sup> South Africa is also home to Llew Classen, the director of Bitcoin Foundation (international).<sup>35</sup> Further, South Africa has seen a lot of virtual currency exchanges taking place in its financial market through exchanges such as Luno and VALR<sup>36</sup> from as early as 2013. There are also various virtual currency ATMs in South Africa.<sup>37</sup> It would therefore be considerably astute to expect that there would be some form of regulation that would cause sanity to rein in the South African Fintech field.

Subsequently, the South African Revenue Service (SARS) declared that it expected virtual currency traders to declare their profits or losses for purposes of taxation under their income tax law.<sup>38</sup> This, therefore, meant that any revenue or capital income from virtual currencies would be considered taxable by SARS occasioned by their classification due to transfer as well as creation attributes, discussed under parts 2.4.3.3. and 2.4.3.2., respectively. SARS views virtual currencies as intangible assets as espoused under the South African Taxation Laws Amendment Bill, 2018.

With the continued use of virtual currencies in the country, the government constituted the South African Intergovernmental Fintech Working Group (IFWG) comprising of members from the National Credit Regulator, the SARS, the National Treasury, the Financial Sector Conduct Authority (FSCA), the Financial Intelligence Centre and the SARB.<sup>39</sup> IFWG, with its

---

<sup>33</sup> Library of Congress (n 29) 93.

<sup>34</sup> See Reddy E. and Lawack V., 'An Overview of the Regulatory Developments in South Africa Regarding the Use of Cryptocurrencies' (2019) 31 SA MERC LJ p. 15.

<sup>35</sup> *ibid.*

<sup>36</sup> *ibid.*

<sup>37</sup> *ibid.*

<sup>38</sup> See Library of Congress (n 29) 93.

<sup>39</sup> See Kevin Helms, 'South Africa Proposes 30 Rules to Regulate Cryptocurrency' (*NewsBitcoin.com*, 19 April 2020).

membership, was to work with the Intergovernmental Crypto Assets Regulatory Working Group.<sup>40</sup>

In January 2019, the IFWG unit through its SARB officials published a consultation paper detailing proposals for policy formulation of virtual currency assets.<sup>41</sup> The consultation was made in accordance with guidelines set by the FATF, the international overseer for matters relating to AML and CFT. The consultation paper proposed an approach for regulatory changes in the virtual currency arena that would be realized in three steps.<sup>42</sup> The first step would involve the registration and licensing of all crypto assets service providers (CASPs) by the FSCA.<sup>43</sup> The first step would also involve the invocation of a requirement on CASPs to be treated as accountable financial institutions for purposes of reporting suspicious activity<sup>44</sup> under the surveillance of the Financial Intelligence Center.<sup>45</sup> The second step would comprise of the examination of existing laws against the unique features of virtual currencies with a view of amending and enacting new legal frameworks.<sup>46</sup> The third step would involve the scrutiny by IFWG of regulatory actions already implemented to protect virtual currency consumers.<sup>47</sup>

In line with those policy reform proposals, the FSCA published a draft statement recognizing virtual currency resources as fiscal products under their Financial Advisory and Intermediary Services (FAIS) Act.<sup>48</sup> This would majorly be because of the ability of some virtual currencies to play the role of payment instruments as discussed in chapter 2. The declaration was an advisory stating that CASPs would provide intermediary services for virtual currency products in compliance with the FAIS Act.<sup>49</sup> The declaration further stated that CASPs included advisors

---

<sup>40</sup> See Kevin Helms, 'South Africa Proposes 30 Rules to Regulate Cryptocurrency' (*NewsBitcoin.com*, 19 April 2020).

<sup>41</sup> See Reddy E. and Lawack V. (n 34) p. 23.

<sup>42</sup> See *ibid.*

<sup>43</sup> See Kevin Helms, 'South Africa Proposes 30 Rules to Regulate Cryptocurrency' (*NewsBitcoin.com*, 19 April 2020).

<sup>44</sup> See Reddy E. and Lawack V. (n 34) p. 24.

<sup>45</sup> See Kevin Helms, 'South Africa Proposes 30 Rules to Regulate Cryptocurrency' (*NewsBitcoin.com*, 19 April 2020).

<sup>46</sup> See Reddy E. and Lawack V. (n 34) p. 23.

<sup>47</sup> *ibid.*

<sup>48</sup> See Nathan DiCamillo, 'Crypto Assets in South Africa Would Be Considered Financial Products under Regulator Proposal' (*coindesk*, 21 November 2020).

<sup>49</sup> *ibid.*

and brokers within the scheme of virtual currency service providers.<sup>50</sup> The draft declaration has since been subjected to a public participatory process where comments have been invited by FSCA by 28 January 2021.<sup>51</sup>

The implications of this declaration recognizing virtual currencies set the stage for regulation of virtual currencies by South Africa, without necessarily recognizing it as legal tender status. Recognition of virtual currencies is also critical as it will translate to virtual currencies forming part of the South African national payment systems in the country. The declaration further legitimizes all enforcement efforts to ensure that virtual currency businesses in South Africa comply with legislation regulating virtual currencies.

In conclusion, South Africa could be said to come at regulation of virtual currencies from a restrictive perspective. With time, and as more and more South Africans consumed virtual currency's financial services, the SARB in January 2019, pursuant to the public interest theory of regulation, advocated for a regulative approach that would protect consumers.<sup>52</sup> Soon thereafter, there were numerous efforts by various South African agencies to regulate virtual currency through the licensing regulative model. Later, South Africa shifted to the hybrid licensing and permissive style of regulation of virtual currencies.

South Africa can be said to be a front-runner in terms of regulating virtual currencies in Africa. Through the IFWG's three-pronged approach, there is a semblance of a tangible regulative framework for South Africa for other African countries such as Kenya to emulate. This is because, being an African State, South Africa faces challenges unique to the African continent and therefore Kenya would do well to accommodate regulatory proposals and initiatives in its Fintech regulatory sphere similar to the South African jurisdiction.

---

<sup>50</sup> *ibid.*

<sup>51</sup> *ibid.*

<sup>52</sup> See Yogita Khatri, 'South Africa's Central Bank Proposes Rules for Crypto Companies' (*coindesk*, 17 January 2019).



#### **4.4. Analysis of regulatory approaches implemented by the State of New York in the USA and South Korea**

##### **4.4.1. Introduction**

Part 4.3. explored the challenges faced by two African States – Egypt and South Africa, with a particular focus on the regulatory approaches undertaken by those jurisdictions. Part 4.4. on the other hand, veers into jurisdictions outside the African continent with a view of understanding their regulatory approaches and frameworks so as to learn critical lessons from their challenges and successes.

Part 4.4.2. will discuss the regulative methodology of the State of New York, USA. Part 4.4.3. will feature the regulatory journey and choices made by South Korea on virtual currencies. The purpose of this comparative approach on jurisdictions from without the African continental borders is because virtual currency products are predominantly cross-border financial assets. Therefore, an international perspective or lens ought to be worn in order to gain profitable lessons from those jurisdictions. Further, Western and Asiatic countries have jolted into the consumption of virtual currencies and have faced considerable challenges that African States such as Kenya can learn from and avoid, and achievements that can be emulated.

The rationale for choosing the state of New York is that it is the only State in the world that commenced with the regulation of virtual currencies from a proactive licensing style of regulation. Under the guidance and patronage of the New York State Department of Financial Services (NYDFS), headed by then chief financial regulator Benjamin Lawsky, New York developed the novice BitLicense Regulations. These Regulations were met with a lot of criticism and backlash from industry players which NYDFS has grappled with to ensure a sound business environment for virtual currency businesses and their consumers. Currently, the NYDFS has come up with an innovative way of green-listing virtual currencies it considers safe to be transacted by virtual currency businesses within its territory in line with the public interest theory of regulation. Through the NYDFS' persistent efforts, Kenya can learn that the regulative journey is not all rosy but that resoluteness and certainty of purpose-filled legislation will eventually ensure a proper regulative atmosphere for virtual currency industry players.

South Korea, on the other hand, was chosen because despite its geographic remoteness to Kenya, their initial reaction to virtual currencies seems as if the Kenyan and South Korean regulators were reading from the same script. This is because, just like Kenya, South Korea through its Central Bank, issued caution to financial institutions and the public warning them against transacting in virtual currencies as they were not legal tender and were volatile and unreliable financial assets. South Korea also made a similar pronouncement as that of Kenya's CMA banning ICOs and investment ventures on virtual currency assets in the country. What is most peculiar about this State is that it has made a complete regulative about-turn embracing a new regulative style that has permissive and guidance underpinnings. It is also seen to be a promoter of research efforts, encourager of innovation and technological developments through the sanctioning of research efforts that would among other things culminate in the development of a CBDC. In March 2020, the National Assembly of South Korea amended the Reporting and Use of Specific Financial Information Act that would impute a condition on virtual currency businesses to comply with AML/CFT requirements as advocated for by the FATF. Kenya can therefore learn a great deal from this East Asian State that started from a restrictive style of regulation and forge a more efficient regulative style that will inspire fiscally prudent confidence in the Kenyan market.

#### **4.4.2. State of New York (USA)**

New York is arguably the epicenter of the world's global financial market and was thus at the forefront of grappling with the regulation of virtual currencies.<sup>53</sup> The NYDFS was the first Public department to take up the challenge to regulate the novice Fintech products.<sup>54</sup> The NYDFS Chief Director however cautioned that a balance between the law and innovation ought to be struck stating that the regulator needed to be careful not to react harshly and stifle technology.<sup>55</sup> Thus the NYDFS in August 2013 commenced the formulation of a legal framework that would enable New York to license virtual currency businesses<sup>56</sup> essentially

---

<sup>53</sup> See Sean Hayes, 'Basics of Cryptocurrency Law in New York' (*The New York Law Blog*, 14 September 2020) <<https://www.thenewyorklawblog.com/2020/09/cryptocurrency-currency-Law-new-york.html/>> accessed on 26 November 2020.

<sup>54</sup> See Samantha J. Syska, 'Eight-Years-Young: How the New York BitLicense Stifles Bitcoin Innovation and Expansion with Its Premature Attempt to Regulate the Virtual Currency Industry' (2017) 17 *J. High Tech. L.* 313 at p. p. 328 and 335.

<sup>55</sup> See Samantha J. Syska (n 54) p. p. 328 and 335.

<sup>56</sup> *ibid.*

meaning that New York practiced the licensing style of regulating virtual currencies, from the onset.

The NYDFS released its first draft rules for licensing virtual currency businesses in mid-2014 and subjected them to public participative comments.<sup>57</sup> Eventually, the regulations were issued in June 2015.<sup>58</sup> These Regulations titled Virtual Currency Regulations<sup>59</sup> were issued pursuant to the New York Financial Services Law and are oft referred to as the ‘BitLicense Regulations’.<sup>60</sup> These regulations provide that an entity or company carrying out the business of virtual currency should obtain a license before commencing operation within New York State.<sup>61</sup> Enterprises are viewed as virtual currency businesses under the Regulations if they—<sup>62</sup>

- (a) receive virtual currency for the purpose of transmitting it;
- (b) maintain custodial possession of virtual currencies for third parties;
- (c) buy or sell virtual currencies for gain;
- (d) conduct virtual assets interchange services; or
- (e) they deal in, manage or distribute virtual currency assets.

A transitional period of 45 days was given to virtual currency businesses to comply with these Regulations and obtain BitLicenses.<sup>63</sup> A superintendent under the Regulations was to approve or deny licenses to virtual currency businesses within 90 days and any businesses so denied licenses were to close shop forthwith.<sup>64</sup> A condition for being granted a license was for the virtual currency business to disclose any material peril associated with virtual currency transactions.<sup>65</sup> Virtual currency businesses were also to formulate policies for resolution of consumer complaints and prevention of fraud, to keep up-to-date records of any transactions conducted, and to assure their businesses from loss and material claims.<sup>66</sup>

---

<sup>57</sup> *ibid.*

<sup>58</sup> *ibid.*

<sup>59</sup> 23 NYCCRR Part 200.

<sup>60</sup> See Sean Hayes (n 53).

<sup>61</sup> *ibid.*

<sup>62</sup> See Sean Hayes (n 53) and Samantha J. Syska (n 54) at p. 328.

<sup>63</sup> See Samantha J. Syska (n 54) p. 328.

<sup>64</sup> *ibid* p. 329.

<sup>65</sup> *ibid* p. 330.

<sup>66</sup> *ibid* p. 330-333.

The publication and implementation of the Regulations was met with mixed reactions. While some lauded the process stating that a concise set of regulations was just what was needed by the virtual currency businesses, some opined that it was going to suffocate technology and innovation.<sup>67</sup> Soon after the release of the Regulations, several key virtual currency businesses closed shop in favor of operating in other jurisdictions, within and without the USA, which did not practice any form of regulation of the virtual currencies.<sup>68</sup> It is noteworthy that the USAs States each had different reactions to virtual currencies and that each State in the USA practices its differentiated regulatory approach towards virtual currencies. At the federal level, regulation of virtual currencies is carried out by state entities, for instance, the SEC, the IRS, and the Department of Treasury's Financial Crimes Enforcement Network (FinCEN). Therefore, for States in the USA that do not have progressive regulations relating to virtual currencies, federal agencies have played a critical role in ensuring that disputes are solved and the consumers are adequately protected.<sup>69</sup>

Virtual currency businesses that closed business due to the Bitlicense Regulations considered the application process for the Bitlicense to be very stringent and lengthy.<sup>70</sup> As a result, the Regulations were amended to give lee way to virtual currency businesses to obtain conditional licenses. These conditional licensee seekers would have to enter into a Service Level Agreement with existing virtual currency businesses with a license.<sup>71</sup> The conditional licenses would be valid for two (2) years within which the licensees should have obtained full licenses to operate virtual currency businesses<sup>72</sup> in New York. It is hoped that once the conditional licenses regime is well implemented, it shall pave way for the entry and reentry into New York of virtual currency enterprises.<sup>73</sup>

A contemporary development is the announcement of Relief to Start-up Virtual Currency Businesses Guidelines by the NYDFS on 24 June 2020.<sup>74</sup> On this fifth anniversary since the

---

<sup>67</sup> *ibid* p. 333.

<sup>68</sup> *ibid*.

<sup>69</sup> See SEC v. Shavers, No. 4:13-CV-416, 2013 WL 4028182, (E.D. Tex. Aug. 6, 2013).

<sup>70</sup> Sean Hayes (n 53).

<sup>71</sup> Sean Hayes (n 53).

<sup>72</sup> Sean Hayes (n 53).

<sup>73</sup> Sean Hayes (n 53).

<sup>74</sup> See The National Review, *New Empire State of Mind? Potential Easing of Restrictions for the New York Virtual Currency Business Licenses* (Vol. X, No. 331, 22 July 2020).

inauguration of the BitLicense Regulations, the NYDFS hoped that the announcement would bring reprieve to start-up virtual currency businesses that were hard hit by the Regulations.<sup>75</sup> The announcement proposed the formulation of a green list of NYDFS-approved virtual currencies which would be used by virtual currency businesses in New York.<sup>76</sup> It also recommended that there be further regulative efforts to operationalize the conditional licensing regime to ease up the licensing process<sup>77</sup> for start-up virtual currency businesses.

The NYDFS Regulations were intended to ensure that there would be accountable innovation and also to secure the market from negative financial schemers in accordance with the public interest theory of regulation. By licensing virtual currencies, the NYDFS admitted that some virtual currencies operate as currency and are classifiable under the header of financial products as elaborated under part 2.4.3.1. of this study. Even though this licensing style of regulation was met by harsh reactions and was regarded to be too soon, it has survived and provided guidance and sanity for virtual currency stakeholders in New York. Virtual currency businesses are regulated because they facilitate the interchange of virtual currencies which plays the critical role of transferring value as described under part 2.4.3.3. of this paper. Further, it can be argued that the NYDFS Regulations were in line with the Guidance for Risk-Based Approach to Virtual Currencies, 2015, of FATF, meant to mitigate the perils of money laundering and financing terrorist activities. States, such as Japan have learned from New York's challenges and taken up the bold step of also formulating a law for regulating virtual currency businesses titled the Virtual Currency Act, 2017.<sup>78</sup> Kenya could therefore benchmark with the New York State's experiences and forge legislation that will bring reasonable control to its growing virtual currency turf.

#### **4.4.3. South Korea**

Part 4.4.2. analyzed the regulative journey of the State of New York, a pioneer regulator of virtual currencies and its businesses, through the licensing style of regulation. Whereas the State of New York started as a tolerant regulator on virtual currency businesses, this was not the case for South Korea. Upon the entry of virtual currencies into its territory in early 2013, South Korea

---

<sup>75</sup> The National Review (n 74).

<sup>76</sup> The National Review (n 74).

<sup>77</sup> The National Review (n 74).

<sup>78</sup> See Reddy E. and Lawack V. (n 34) p. 3.

was skeptical about the benefits and relevance of virtual currencies within its territory.<sup>79</sup> Its initial reaction to virtual currency in its territory was to employ the restrictive style of regulation. As it encountered different circumstances and challenges, South Korea adopted a permissive or guidance style of regulation.

Through a conglomeration of officials from the Bank of Korea, Ministry of Strategy and Finance and Financial Services Commission and the Financial Supervisory Services (FSS), South Korea declared that virtual currencies did not have legal tender status in its jurisdiction.<sup>80</sup> These officials further cautioned South Koreans from utilizing virtual currencies stating that they do not meet the required standard for regulation or for transacting, whether through the internet or commercial institutions.<sup>81</sup> They further stated that virtual currencies were volatile and lacked intrinsic value and that its citizenry should stay clear of them.<sup>82</sup>

In 2017, South Korea came alive to the need for switching from its restrictive style of regulating virtual currencies. It advocated for the formulation of regulations that would define what virtual currencies are and describe the different key users of virtual currencies for purposes of regulation.<sup>83</sup> Further proposals for regulation were to ensure that virtual currency businesses that held deposits would take out insurance policies to protect their clients from cyber-attacks<sup>84</sup> in line with the public interest theory of regulation. Later that year, through the FSS, South Korea issued directives that security firms were banned from engaging in intermediary bitcoin futures transactions.<sup>85</sup> Prior to this directive, there had been planned seminars on virtual currency futures

---

<sup>79</sup> See Park Hyung-Ki, 'Korea Decides not to Recognize Bitcoin as Real Currency' (*The Korea Herald*, 10 December 2013) < <http://www.koreaherald.com/view.php?ud=20131210000673/>> accessed on 26 November 2020.

<sup>80</sup> *ibid.*

<sup>81</sup> *ibid.*

<sup>82</sup> *ibid.*

<sup>83</sup> See Wolfie Zhao, 'A South Korean lawmaker has proposed amending the country's Electronic Financial Transaction Act to more closely regulate cryptocurrencies' (*NewsCoindesk*, 2 August 2017) < <https://www.coindesk.com/south-korean-lawmaker-seeks-tighten-cryptocurrency-rules/>> accessed on 26 November 2020.

<sup>84</sup> *ibid.*

<sup>85</sup> See Yoon Yung Sil, 'S. Korean Financial Authorities Ban Bitcoin Futures Trading' (*Business Korea*, 7 December 2017) < <http://www.businesskorea.co.kr/news/articleView.html?idxno=20022/>> accessed on 26 November 2020.

trading which had to be cancelled.<sup>86</sup> The FSS however clarified that virtual currencies in themselves were not banned from use.

The Bank of South Korea's annual report on the Payment and Settlement Systems featured proposals to undertake further research on virtual currencies to properly regulate them.<sup>87</sup> That report recommended that a task force be constituted to conduct research into virtual currencies and give pointers to the possibility of the formulation of a South Korean CBDC by January 2018.<sup>88</sup> The terms of reference of the task force included analyzing the effects of virtual currencies on payment and settlement systems in South Korea.<sup>89</sup> The government further instigated the actual-name system for virtual currency transactions thereby forbidding anonymous trading of virtual currencies being facilitated by virtual currency businesses.<sup>90</sup> This measure was also aimed at curtailing speculative trades of virtual currency. Virtual currency businesses would obtain information on the identities of their customers from banking institutions.<sup>91</sup> This measure would apply to virtual currency businesses that obtained their accounts from banks<sup>92</sup> and is a unique novel approach to curb suspicious fiscal activities of virtual currency consumers. This system was however criticized by some stating that banks would only share identity data with the country's renowned virtual currency businesses.<sup>93</sup>

In March 2020, the National Assembly of South Korea unanimously amended the Reporting and Use of Specific Financial Information Act.<sup>94</sup> This law would become effective in September 2021 when all subsisting virtual currency businesses are expected to comply with its provisions.<sup>95</sup> This law enacts AML requirements on virtual currency businesses according to the

---

<sup>86</sup> *ibid.*

<sup>87</sup> See Bank of Korea, *Payment and Settlement Systems Report, 2017* (15 June 2018) p. p. iii and vi.

<sup>88</sup> See *ibid* p. vi.

<sup>89</sup> *ibid.*

<sup>90</sup> See Kevin Helms, 'South Korea Thinks Real-Name System is working – Stepping Up Crypto Monitoring' (*NewsBitcoin.com*, 29 June 2018) < <https://news.bitcoin.com/south-korea-real-name-system-crypto-monitoring/>> accessed on 26 November 2020.

<sup>91</sup> *ibid.*

<sup>92</sup> *ibid.*

<sup>93</sup> *ibid.*

<sup>94</sup> See Kevin Helms, 'South Korea Passes Bill to Regulate Cryptocurrency in Line with FATF Standards' (*NewsBitcoin.com*, 7 March 2020) < <https://news.bitcoin.com/south-korea-bill-cryptocurrency/>> accessed on 26 November 2020.

<sup>95</sup> *ibid.*

FATF guidelines which were collectively conceded to by the G20 countries, including South Korea, in June 2019.<sup>96</sup>

Recently, in November 2020, South Korea issued a directive banning virtual currency businesses from facilitating trade in virtual currency assets that were untraceable.<sup>97</sup> This ban would be operative from March 2021 and was an amendment under the South Korean Special Payments Act.<sup>98</sup> South Korea deems these privacy-oriented virtual currencies as conduits for facilitating money laundering and terrorist activities.<sup>99</sup> As a result of this, various virtual currency businesses have delisted those cryptic and untraceable virtual currencies in compliance with this requirement.<sup>100</sup> The amendment will further require strict adherence to the KYC, CFT, and AML provisions.<sup>101</sup> The law further requires a virtual currency business to make a report of its operations six months after the amendment becomes effective.<sup>102</sup>

South Korea commenced its regulative journey from a restrictive regulative model and eventually has come to take on the permissive or guidance model of regulating virtual currencies. Virtual currency businesses in South Korea have responded reasonably well to this regulative approach and the State can be said to be obtaining a legal grip on virtual currency transactions within its jurisdiction. South Korean regulative principles evolved as a result of the challenges it faced in managing and controlling virtual currency businesses. South Korea put in its best when it set up a task force to research virtual currencies and their underlying systems. It gave directives against the use of virtual currencies and even banned futures trading of the currency. Later, upon researching the virtual asset, it changed its initial restrictive stance and even went ahead to make amendments to its legislation to accommodate virtual currencies. This was majorly due to the realization of the fact that most virtual currencies play a critical role of transferring value from one person to another and can be classified as a financial product as discussed in part 2.4.3.1. of this paper. South Korea is also considering developing a CBDC to

---

<sup>96</sup> *ibid.*

<sup>97</sup> See Jeffrey Gogo, 'South Korea to Ban Crypto Exchanges from Handling Privacy Coins' (*NewsBitcoin.com*, 6 November 2020).

<sup>98</sup> Jeffrey Gogo (n 97).

<sup>99</sup> Jeffrey Gogo (n 97).

<sup>100</sup> Jeffrey Gogo (n 97).

<sup>101</sup> Jeffrey Gogo (n 97).

<sup>102</sup> Jeffrey Gogo (n 97).



stay relevant in today's progressing Fintech market. This would cause such classification of a CBDC to fall under the category of e-money as discussed by part 2.4.3.5. of this study. This, therefore, means that such a CBDC would have a linkage to South Korean Won and would thus be classified under part 2.4.3.4. of chapter 2. Such classifications would further assist South Korea to develop more legislative texts to assist in the regulation of virtual currencies.

Kenya can learn a great deal from the South Korean experience on the regulation of virtual currencies and implement regulative provisions that move away from the restrictive style of regulation to a more proactive and fiscally responsive approach.

#### **4.5. Gaps identified in the case study**

This case study has identified that the issue relating to futures trading of virtual currencies, or simply capital investments of virtual currencies, has not been well captured in the foregoing case studies. Another gap is the omission to regulate criminal activity related to virtual currencies such as Ponzi schemes, other than matters relating to AML and CFT. This is closely trailed and related to the third gap identified by this study that States have not delved into regulating the law relating to virtual currencies to protect the consumer.

#### **4.6. Conclusion**

This chapter primarily focuses on the regulative models taken up by select States around the world. It commences by reviewing the four styles of regulation utilized by States in the world. The first part also notes the merits and demerits of each regulatory approach.

The second part of the chapter analyzes aspects of regulative approaches taken up by two African States namely Egypt and South Africa. Both Egypt and South Africa commenced their regulative journeys on virtual currency from a prohibitive perspective. However, with time, they both abandoned their restrictive models of regulating virtual currencies and are adopting legislation and guidelines that possess licensing underpinnings. Based on those experiences by the two African States, Kenya is counseled to also take a bold step and proactively regulate virtual currencies.

The third part of the chapter examined the regulative approaches taken up by the State of New York (USA) and South Korea. It was learned that the State of New York's mode of regulating virtual currencies was bold and original, as it was the first State in the world to formulate

legislation that would license virtual currency businesses from the get-go. This licensing model of regulation by New York was however met with a lot of challenges which the State of New York tackled by formulating further amendments to its licensing regulations. In the long run, there seems to be hope that virtual currency businesses which were initially run out of the New York market will be encouraged to reenter the New York market.

South Korea on the other hand, responded to virtual currencies from a restrictive model of regulation. Like Kenya, it issued warning to the public against the use and trade of virtual currencies. Further, it went ahead and banned all futures trading of virtual currencies. However, with time, the South Korean regulative model has taken a reformist approach by embracing principles of the FATF. As a G20 member, South Korea has committed to adhere to the AML and to counter funding efforts of terrorist entities. As a result, South Korea has formulated legislation that has seen it subscribe to the permissive or guidance regulation of virtual currencies. There are further indications that through its latest proposal for amendment, to have virtual currency businesses register with regulative authorities, it will shift to the hybrid licensing or permissive (guidance) regulative approach.

It has been said that virtual currencies and the convenience of online payments have the potential to enable Africans to make significant economic leaps.<sup>103</sup> This is because Africans will be escaping the predominant formal payment systems which are mostly Western and have very hefty transactional costs.<sup>104</sup> If virtual currency payment systems are accepted as legal modes of payment, it will be more advantageous and suitable for Kenyans as online payments are more convenient, time efficient and less costly.

In conclusion, this study notes that Kenya should instigate a comprehensive research of the virtual currency market in its jurisdiction. This research will enable Kenya to adopt better regulative approaches that will protect the virtual currency consumers and businesses in line with the public interest theory of regulation. This would also be in line with the recommendations of

---

<sup>103</sup> See Reddy E. and Lawack V. (n 34) 25.

<sup>104</sup> See Reddy E. and Lawack V. (n 34) 25.

the Kenya task force on Blockchain and Artificial Intelligence, calling for better regulation of virtual currencies in Kenya.<sup>105</sup>

The following chapter will outline regulative implementable commendations that Kenya could pursue an instructive regulation of virtual currencies. These recommendations shall be influenced by previous discussions on the regulation of virtual currencies around the world. It will also feature recommendations derived from scholarly excerpts obtained from this study's literature review.

---

<sup>105</sup> See Daniel Mpala, Kenyan Task force calls for State to Regulate AI and Blockchain (*Ventureburn* 2 August 2019).

## CHAPTER FIVE - RECOMMENDATIONS AND CONCLUSIONS

### 5.1. Introduction

This study conceptualized a problem where Kenya is utilizing a style of regulating virtual currencies which have been deemed to be ineffective. This is because this restrictive style of regulating virtual currencies has been argued to likely suffocate innovation of Fintech products and services. It may also diminish the restrictive State's reputation as a Fintech-friendly nation-State. Further, such restrictions may run down legitimate virtual currency activities making virtual currency transactions only attractive to criminal elements.

This study proposes a switch from Kenya's restrictive mode of regulation to a more hands-on model of regulation such as the one being executed by the CMAs sandbox regulations. Such a move will encourage virtual currency businesses that have made good on the regulations to flourish in their activities and thereby encourage further innovation. It will also provide an avenue for the State to protect virtual currency consumers from potential financially harmful schemes under the public interest theory of regulation. This move will open Kenya's Fintech market and make for a good additional revenue base. It will further secure Kenya's global reputation as a tech-savvy State that embraces Fintech advancements whilst at the same time safeguarding its market against money laundering and terrorism financing activities.

Chapter three reviewed the various laws in Kenya that have or may have provisions relating to the regulation of virtual currencies. It was however realized that later legislative provisions have softened their stance on virtual currencies and have in them definitions for articles that are analogous to virtual currencies as was the case in the Prevention of Terrorism Act, 2012. This Act describes funds as an asset, whether real or incorporeal, tangible or intangible, moveable or immovable, and their legal documents proving property in such assets. This definition is very accommodative to virtual currency assets and thus one would appreciate that virtual currency proceeds to terrorist activities would be utterly punishable under that legislation. This was also seen to be the case for the Computer Misuse and Cybercrimes Act which appreciates the centrality of the DLT in committing cyber-related crimes. Also, the Draft Regulatory Sandbox PGN, 2018, implemented by CMA is a suitable legislation that provides a structured mechanism for regulating virtual currency businesses that deal in products and services utilized in futures trading. The study urges the State's legislature and regulative entities not to stop there but to

forge on and to craft more contemporary legislation that is alive to the current development of technology and particularly, Fintech advancements. This will ensure that the industry is adequately regulated and any criminal elements are punished under the laws of Kenya.

The following part will be dedicated to discussing some of the important findings of this study. These findings shall stem from the answers to the research questions obtained from the conduct of this study. Part 5.3. will be dedicated to expound on the benefits of the findings of this study. Part 5.4. will feature recommendations that Kenya could gain from implementing. The chapter will then make conclusions to this study under part 5.5.

## **5.2. Key findings of the research**

This study has provided an insightful background of virtual currencies as well as outlined its various types and categories of groupings. The study further noted that under common law, virtual currencies are regarded as personal incorporeal property and thus owners of virtual currencies accrue certain legal rights based on different circumstances. It further gave a chronological perspective of currencies in general from the gold-backed coinage era to the age of digital currencies which set the stage for the formulation of Fintech technologies in the form of virtual currency assets. This study also revealed that virtual currencies ought to be understood in terms of their classification or taxonomy to properly proscribe apt regulative assignments to them depending on such classifications.

It was also discovered that Kenya initially leaned towards a regulatory style of virtual currencies known as the restrictive style of regulation. This style of regulation has been observed to be a natural response by most States to the entry of virtual currencies in their jurisdictions. However, that style of regulation is not an efficient manner to regulate and manage virtual currency activities as was the case for Egypt, South Africa, and South Korea. It was further bare to see that even a bold move at regulating virtual currencies by licensing them from the get-go, as the State of New York did, does not come without challenges. What became clear from this study is that most states are legislating by learning what works for their peculiar jurisdictions. This may have been the case for Kenya's CMA which seems to be embracing a hybrid permissive and licensing style of regulation with the implementation of provisions under the Draft Regulatory Sandbox PGN, 2018. It is also clear that a balance must be struck between the law and innovation and the regulator needs to be careful not to react harshly and stifle Fintech

advancement. In other words, it is a generally accepted principle to lightly regulate technology but to sternly regulate financial products to guard and protect property rights.

Another realization made by this study is that there are regulatory gaps in the laws of Kenya with regards to the use of virtual currencies primarily brought about by the restrictive style of regulation. Even though some Kenyan legislation could be argued to be futuristic in their approach, as to encompass regulation of virtual currencies, most of Kenyan legislation is averse to the regulation and continued use of virtual currencies in the Republic. This study, therefore, reveals those legislative gaps and calls for their review, amendment, and reenactment to cater for and pertinently regulate the use of virtual currencies in the country. Enacting provisions, such as the Draft Regulatory Sandbox PGN, 2018, that specifically address challenges and perils posed by virtual currencies' use in the Kenyan market will lead to a safer and financially prudent economic atmosphere.

The subsequent section links up to this section as it discusses the importance or significance of the findings of this research. This is of benefit to the study as it aligns the findings of this study with its initial objectives. It also provides validation for the findings obtained by this study.

### **5.3. Importance of the findings**

This study from the outset was aimed at providing meaning to the term 'virtual currency'. It further aimed at advancing a means for general and legal classification of virtual currencies for purposes of regulation. This culminated in the examination of the legal features of virtual currencies based on their attributes and legal classification. The significance of all this was so that it would be used to assist the study to examine the viability of the regulative approach of virtual currencies employed by Kenya. If the study would find that Kenya's regulative approach of virtual currencies is not feasible, it would make recommendation that other approaches being practiced by other States would benefit it. Challenges suffered by those States should be viewed as lessons for regulatory actions not to be taken.

This study is a contribution to knowledge and literature on virtual currencies in Kenya and the world. This study proposes that virtual currencies ought to be recognized as viable and legal means of payment capable of being transacted in the national payment system arena. Such an approach would pave the way to focusing on highlighted areas of regulation of virtual currencies

in the country. This would be made possible by obtaining lessons from what other States have grappled with and triumphed over in their respective regulative journeys. This would certainly lead to the adoption of a regulative style that would be fiscally beneficial for Kenya's Fintech market.

The following section will feature a discussion of recommendations made concerning the findings of this study. Those recommendations will be useful in addressing the regulative needs of virtual currencies in the Republic.

## **5.4. Recommendations**

### **5.4.1. Research and definition of terms**

For something to be regulated, it must certainly be comprehended. This part, therefore, advocates for the featuring into the laws of Kenya definition of terms that include virtual currency as a topic as well as other Fintech terms. This could be made possible in part through the commissioning of key persons knowledgeable in the topic – virtual currencies, to conduct research and report to relevant authorities on the benefits of a more proactive means of regulating virtual currencies. This research approach was conducted by Egypt, South Africa, and South Korea. It can even be said that their change of regulatory approach stemmed from the fact that they better understood virtual currencies. This was echoed by the Ministry of ICT which vouched for an evidence-based policymaking process based on empirical and factual data<sup>1</sup> stating that such an approach will yield progressive and efficient results. CMAs Draft Regulatory Sandbox PGN, 2018, also embraces an evidence-based approach to regulating virtual assets.<sup>2</sup>

Definitions should, as much as possible, be uniform to other jurisdictions to provide impetus to the development of virtual currency Fintech products across borders.<sup>3</sup> This is because virtual currency can be transacted across borders and therefore a uniform approach in defining terms would be most desirable – in the long run. A skim through Kenya's legislation related to Fintech regulation reveals that DLT, a critical aspect of virtual currency is defined as a platform where

---

<sup>1</sup> See Ministry of Information, Communications, and Technology, *Emerging Digital Technologies for Kenya: Exploration and Analysis* (July 2019) p. p. 98 – 99.

<sup>2</sup> See Guideline 3 of the Draft Regulatory Sandbox Policy Guidance Note, 2018.

<sup>3</sup> See Gregory V. Ficcaglia, 'Heads or Tails: How Europe Will Become the Global Hub for Bitcoin Business If the United States Does Not Reexamine Its Current Regulation of Virtual Currency' (2017) 40 STLR 103 at p.p. 128-130.

virtual currencies can be used to perform cyber-related crimes.<sup>4</sup> Also, the term ‘Fintech’ and ‘regulatory sandbox’ have been defined in the Draft Regulatory Sandbox PGN, 2018.<sup>5</sup> Other than that, there are no other attempts at providing meaning for virtual currency-related terms.

Various sources would inspire and inform the definition of terms for virtual currency and analogous products. For example, it could be said that virtual currencies are chains of digital signatures.<sup>6</sup> Another important reference point is the European Central Bank’s direction on the categorization of virtual currency into three; closed schemes, unidirectional schemes, and bidirectional schemes. The Commonwealth Working Group Report on Virtual Currencies<sup>7</sup> and the FATF guidelines<sup>8</sup> are also important reference points for the definition of virtual currency terms. The latter text defines terms such as virtual currencies and it specifically differentiates virtual currencies from fiat currencies, e-money, or digital currency. It further describes centralized vis-à-vis decentralized systems and convertible and nonconvertible virtual currencies. It also features definitions for the deep dark web tools, such as the ‘The Onion Router’ (TOR), which are web outfits used by virtual currency developers to cloak the identities of its users.

By defining terms, Kenyan authorities will have a reference point when it comes to comprehending virtual currency topics. Further, a set of definition of terms describing how virtual currencies operate is a critical major step to empower enforcement agencies and the private sector to analyze probable benefits or threats posed by virtual currencies as a new payment method. Technology is evolving and therefore, now and then, the legislature ought to review the definitions to ensure that they are effective in assisting in the regulation of virtual currencies in the State.

The following section features a recommendation that the State ought to recognize virtual currencies as a critical article that facilitates payment.

---

<sup>4</sup> See S. 2 of the Computer Misuse and Cybercrimes Act, 2018.

<sup>5</sup> See the first Guideline of the Draft Regulatory Sandbox Policy Guidance Note, 2018.

<sup>6</sup> See Soonpeel Edgar Chang, ‘Legal Status of Virtual Currency in Indonesia in the Absence of Specific Regulations’ (2018) 8 Indon. L. Rev. 328 at p. p. 329; 331. See also Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System (White Paper, BITCOIN.ORG 2008) at p. 2.

<sup>7</sup> See The Common Wealth Working Group on Virtual Currencies, *Regulatory Guidance on Virtual Currencies* (Working Group Report, 2019) Introductions 2-4.

<sup>8</sup> See Financial Action Task Force, *Virtual Currencies: Key Definitions and Potential AML/CFT Risks* (June 2014).



#### 5.4.2. Recognition of virtual currency as currency for purposes of facilitating payment

Even though virtual currencies are not State-developed and do not have legal tender status, they fulfill a monetary function due to a conglomerate agreement by groups of users who view them as currency. Kenya's per capita holding of virtual currencies, and especially Bitcoin, is on the rise.<sup>9</sup> Therefore a swift recognition of virtual currencies and their underlying technology as effective payment systems would be a great regulatory step. This is because it will bring into the purview of the regulator, virtual currencies, and their underlying technologies. It will also empower the regulator to forbid transactions of virtual currencies that are unstable and privacy-oriented which predominantly serve as conduits for facilitating financial criminal activities. For example, by recognizing virtual currencies as currency for payment purposes, South Korea was able to ban privacy-oriented currencies from its jurisdiction and a lot of virtual currency businesses have complied with this requirement.<sup>10</sup>

The National Payment System Act, 2011, defines a payment instrument as any tangible or intangible device that permits a person to receive money, goods or services, and to make payment.<sup>11</sup> This definition coupled with the foregoing argument suggests that any instrument or technology that facilitates payment amongst Kenyan citizens ought to be considered as a national payment system as was decided in the *Lipisha Case*.<sup>12</sup> This should therefore stir up legislative efforts by the legislator and regulative authorities to ensure that Fintech technologies are well regulated. This will make certain that virtual currency businesses are operating pursuant to set principles and that consumers are well protected.

South Africa took this direction when it declared virtual currency assets as fiscal products pursuant to the Financial Advisory and Intermediary Services Act.<sup>13</sup> That declaration set the pace

---

<sup>9</sup> See Kenyan Wall Street, 'Kenya Among the few Countries in the World with Highest per capita Holding of Bitcoin-citi' (*The Kenyan Wall Street*, 8 October 2019) <[www.kenyanwallstreet.com/kenya-among-countries-world-highest-per-capita-holding-bitcoin-citi/](http://www.kenyanwallstreet.com/kenya-among-countries-world-highest-per-capita-holding-bitcoin-citi/)> accessed on 24 August 2020.

<sup>10</sup> See Jeffrey Gogo, 'South Korea to Ban Crypto Exchanges from Handling Privacy Coins' (*NewsBitcoin.com*, 6 November 2020).

<sup>11</sup> See section 2 of the National Payment System Act.

<sup>12</sup> See *Lipisha Consortium Ltd. and BitPesa Ltd. v. Safaricom Ltd.* Constitutional and Human Rights Division Petition [2015] eKLR.

<sup>13</sup> See Nathan DiCamillo, 'Crypto Assets in South Africa Would Be Considered Financial Products Under Regulator Proposal' (*coindesk*, 21 November 2020).

for CASPs to be considered as financial intermediary service providers which would be subject to the regulation of the South African government regulators.

This study, therefore, proposes that Kenya should recognize virtual currencies as money for purposes of facilitating payment. This recognition will set the stage for the regulation of Fintech products by Kenya to forge a formidable, protective, responsive, and prudent financial market. As has already been discussed under chapter three, there are acts of Parliament in Kenya that would be a starting point for the regulation of virtual currencies. Such legislation would be the National Payment System Act based on the fact that virtual currencies have attributes of money and serve to facilitate payments. Amendments to the said National Payment System Act to accommodate virtual currencies will be well advised. Efforts to curb money laundering and terrorism finance will also greatly benefit from legislation recognizing virtual currencies as money for such criminal activities.

The aspect of taking deposits of virtual currencies by virtual currency service providers such as the e-wallet providers should also be of concern to the Kenyan banking regulator. This is because such businesses are carrying out services that have been traditionally carried out by banking institutions. The recognition of virtual currencies as money would allow banking authorities to regulate this industry effectively. It would for example come up with a list of approved virtual currencies that could be transacted within its territory such as the NYDFS-approved green list of virtual currencies for virtual currency businesses operating in New York.<sup>14</sup> Kenya can therefore gain some great insight from such instances and make bold regulative pronouncements that will enable it to ensure a secure financial market.

The ensuing section advocates for the recognition of virtual currencies as property for purposes of making market investment undertakings which will pave the way to their regulation under the CMA's mandate.

#### **5.4.3. Recognition of virtual currency as property for purposes of facilitating investments**

Recent happenings in Kenya have revealed that the Kenyan consumer views virtual currencies, such as bitcoins, as assets that can be procured for speculative purposes. This is because virtual

---

<sup>14</sup> See Sean Hayes, 'Basics of Cryptocurrency Law in New York' (*The New York Law Blog*, 14 September 2020) <<https://www.thenewyorklawblog.com/2020/09/cryptocurrency-currency-Law-new-york.html/>> accessed on 26 November 2020.

assets such as bitcoins' value is very erratic and is subject to market and price index rises and falls.

Recognizing virtual assets as property for purposes of investment will allow the Kenyan consumer to be properly informed and protected under the law. Financial criminal schemes such as virtual currency-related Ponzi schemes would be harder to execute in Kenya with such a proactive regulative move. Issuances of investor reports focusing on the potential for virtual currency investment-related fraudulent schemes could be a useful tool for the Kenyan market. Further, this study has observed that CMA has issued regulations stating that virtual currency businesses selling virtual assets securities have to observe registration requirements under the Draft Regulatory Sandbox PGN, 2018. This will be an effective way to handle criminal elements in this futures trading field, as the United States SEC did.<sup>15</sup>

This study proposes that recognition of virtual currency as property will be of great benefit for the Kenyan investor. This is because such a regulative shift will ensure that virtual currency related investments are controlled, managed, and administered under the watchful eyes of the CMA. This will be a productive approach that will ensure that the virtual currency businesses that purport to offer their products for investment are accountable and operate in a system that is legally prescriptive corresponding to the public interest theory of regulation.

Section 5.4.4. will make commendation that Kenyan consumers of virtual currencies are worthy of protection under the various consumer protection laws.

#### **5.4.4. Consumer protection**

Regulation of virtual currencies should be aimed at protecting the typical 'unsophisticated' and less-savvy Kenyan consumers of virtual currencies.<sup>16</sup> This is agreeable with Article 46 of the Constitution which safeguards the consumer rights of Kenyan citizens. Protection of consumers includes the guarantee of reasonable quality of goods and services;<sup>17</sup> exposure to information so

---

<sup>15</sup> See SEC v. Shavers, No. 4:13-CV-416, 2013 WL 4028182, (E.D. Tex. Aug. 6, 2013).

<sup>16</sup> See Ethan D. Jeans, 'Funny Money or the Fall of Fiat: Bitcoin and Forward-Facing Virtual Currency Regulation' Colo. Tech. L.J. Vol. 13 (1) at p. 99 and Kevin V. Tu and Michael W. Meredith, 'Rethinking Virtual Currency Regulation in the Bitcoin Age' (2015) 90 WLR 271 at p. 307.

<sup>17</sup> See Article 46 (1) (a) of the Constitution.

that they may obtain absolute value of such goods and services;<sup>18</sup> safeguarding fiscal rights;<sup>19</sup> and recompense for damage or harm caused by utilizing those products or facilities.<sup>20</sup>

To protect consumer rights, the Kenyan legislator has to rise to the occasion and make regulations and legislative pronouncements that would ensure that consumers of virtual currencies obtain all the guaranteed protections of the law. In Kenya, the law that guarantees that the Kenyan consumer is protected is the Competition Act.<sup>21</sup> The Competition Act became operational on 1 August 2011, having been enacted to encourage and control competition in Kenya, to shield consumers from bigoted deceptive market practices, and to constitute the Competition Authority (CA) and the Competition Tribunal. The Competition Act describes a consumer as a person who buys a product or good to utilize it and not to resale it. Going by that definition, the Kenyan virtual currency consumer can be argued to not have been excluded from the applicability of the Act. Part VI of the Act guarantees consumer welfare pursuant to the public interest theory of regulation. The CA is constituted under section 7 of the Competition Act and charged with promoting public information and comprehension of their duties, legal rights and reliefs under the Act.<sup>22</sup> The CA is also responsible for formulating regulations.<sup>23</sup> It is also responsible for conducting inquiries, studies and research into matters relating to the protection of the interests of consumers.<sup>24</sup> It is in charge of promoting and establishing respectable and ethical principles and procedures to be adhered to by businesses in Kenya.<sup>25</sup>

The inclusion of requirements for virtual currency businesses to keep a record of their clientele through the KYC guidelines under the Proceeds of Crime and Anti-Money Laundering Act will also be critical to protecting consumers. An additional requirement for virtual currency businesses to file SARs would also be crucial to consumers as this would ensure that fraudulent virtual currency schemers are nabbed and controlled.<sup>26</sup> This is because, in the larger scheme of

---

<sup>18</sup> See Article 46 (1) (b) of the Constitution.

<sup>19</sup> See Article 46 (1) (c) of the Constitution.

<sup>20</sup> See Article 46 (1) (d) of the Constitution.

<sup>21</sup> Act No. 9 of 2010 of the laws of Kenya.

<sup>22</sup> See S. 9 (1) (c) Competition Act.

<sup>23</sup> See S. 9 (1) (f) Competition Act.

<sup>24</sup> See *ibid* S. 9 (1) (g).

<sup>25</sup> See *ibid* S. 9 (1) (d).

<sup>26</sup> See Part V of the Proceeds of Crime and Anti-Money Laundering Regulations, 2013.

things, a market that is protected from criminal undertakings provides a more secure environment for the virtual currency consumer to thrive in.

The Access to Information Act<sup>27</sup> is also instructive in safeguarding the right to information in Kenya. The Act attests that citizens have the right to acquire information in the possession of other people where the information may safeguard or protect their rights or freedoms.<sup>28</sup> This Act provides that such information should be delivered to a Kenyan citizen without prohibition.<sup>29</sup> The Ministry of ICT, in its report, buttressed this point further by recommending that citizenry's financial literacy and capacity be enhanced through access to information on different financial services and products.<sup>30</sup> That report further advocated for the adoption and establishment of robust consumer protection frameworks by regulatory and supervisory agencies, through the use of ICT to boost scrutiny.<sup>31</sup>

Legislation relating to finance in Kenya should also be reformed to punish and outlaw financial-cyber-related crimes. Such proactive activities as outlined in this part will make the fiscal market for virtual currency users safer.

The following section makes recommendation as to reform of taxation laws to qualify virtual currency profits as profits for purposes of taxation.

#### **5.4.5. Taxation**

Taxes are a great source of revenue for any country. Revenue collected by States, if properly applied, could be used to run government programmes that usually have a great public benefit to its citizenry. This study has illuminated the fact that virtual currencies have been utilized the world over to pay for services and goods and to conduct businesses on various fronts such as agri-business, hotel industry, and so on. In the conduct of such businesses, virtual currency users are bound to make significant profits. The KRA would therefore do well to include this base of consumers under its authority for purposes of taxation. Furthermore, an additional taxable base would spell relief to the ordinary Kenyan taxpayer.

---

<sup>27</sup> Act No. 31 of 2016 of the laws of Kenya.

<sup>28</sup> See section 4 (1) (b) of the Access to Information Act.

<sup>29</sup> See *ibid* section 6.

<sup>30</sup> See Ministry of Information, Communications, and Technology, *Emerging Digital Technologies for Kenya: Exploration and Analysis* (July 2019) p. 100.

<sup>31</sup> *ibid*.

The Kenya Revenue Authority Act<sup>32</sup> establishes the KRA<sup>33</sup> and provides that it shall assess and collect revenue as well as administer and enforce the country's taxation laws.<sup>34</sup> Resident virtual currency users that carry on their ventures in Kenya or partly in Kenya and derive profits or gain from such businesses should be subject to taxation under the Income Tax Act.<sup>35</sup> Virtual currency businesses by non-residents that have derived profits from their ventures in Kenya should also be subject to taxation under the Income Tax Act. Virtual currency businesses and users should file self-assessment declarations to the Tax Commissioner.<sup>36</sup> This requirement of self-assessment provides that Kenyans shall declare all their sources of income by the end of the sixth month. All the sources of income of taxpayers could include profits/gains obtained carrying out virtual currency related activities. Payments made to Kenyan businesses in virtual currencies should be subjected to withholding tax.<sup>37</sup> The KRA should also target employers who chose to pay their employees using virtual currencies for purposes of taxing such earnings as income from employment.<sup>38</sup> Such employer's records could be subjected to periodic inspections to ensure compliance.<sup>39</sup> Products of virtual currency should also be subjected to taxation under the Value Added Tax Act.<sup>40</sup> Further, virtual currencies that take on the character of property should also be taxed under the capital gains dispensation.

The subject of taxation cannot be effectively handled without considering the aspect of tax evasion. Virtual currency transactions are anonymous, partially anonymous or hard to trace. It is thus quite practical to assume that taxation of virtual currencies will be rife with implementation challenges, key among them being tax evasion and particularly, off-shore tax evasion.

Many States have grappled with this challenge but perhaps the best address to offshore tax evasion has been carried out in the USA through the implementation of the Foreign Account Tax Compliance Act (FATCA). The FATCA obliges foreign financial institutions to inform the IRS about fiscal portfolio of account holders of American descent, in jurisdictions outside America.

---

<sup>32</sup> Cap. 469 of the laws of Kenya.

<sup>33</sup> See section 3 of the Kenya Revenue Authority Act.

<sup>34</sup> See *ibid* section 5.

<sup>35</sup> Cap. 470 (amendment Act No. 2 of 2020) of the laws of Kenya.

<sup>36</sup> See section 52B (1) (a) of the Income Tax Act.

<sup>37</sup> See *ibid* section 12C.

<sup>38</sup> See *ibid* section 5.

<sup>39</sup> See *ibid* section 14.

<sup>40</sup> Cap. 476 of the laws of Kenya.

Chapter four of the FATCA requires those foreign fiscal entities to report such information to the IRS to avert discrepancies between what those account-holders report in America and what is reported by the foreign fiscal entities. FATCA is implemented through two types of agreements; the first, entered into by the IRS (USA) and another sovereign State (intergovernmental bilateral agreement) and the second, entered into between IRS (USA), and a foreign financial institution.<sup>41</sup>

The downside to implementing the FATCA is that it is considered to be a costly affair and is deemed to eventually reduce market efficiency.<sup>42</sup> It is also considered to be an unconscionable contractual relationship as USA's influential bargaining power over other States and foreign financial institutions would taint such agreements with aspects of undue influence.<sup>43</sup> However, there is a significant silver lining brought about by the international principle of mutuality of assistance between two sovereign States.<sup>44</sup> This has had the effect of laying emphasis on entering into the intergovernmental bilateral agreements as opposed to foreign financial institution agreements.<sup>45</sup> By this, States are encouraged to enter into bilateral agreements and expect the same treatment by American financial institutions that they will provide for America under the auspices of FATCA.<sup>46</sup>

Kenya has a multitude of experiences and legislative formulations to benefit from. This issue of taxation is critical as revenue collected by States is reflected through the carrying out of crosscutting public financial programs. Kenya should therefore take advantage of this new stream of revenue and make proper amendments to its laws to benefit from it.

The following section will recommend the registration of virtual currency businesses in Kenya and provide general guidelines that those businesses would have to adhere to.

#### **5.4.6. Licensing and keeping of virtual currency business data**

In recent times, virtual currency businesses have been instituted in Kenya for gain. Trade regulation and development (except for professional businesses), including the issuance of

---

<sup>41</sup> See Elizabeth M. Valeriane, 'IRS, Will You Spare Some Change: Defining Virtual Currency for the FATCA' (2016) 50 Val. U. L. Rev. 863 at p. p. 882-3.

<sup>42</sup> *ibid.*

<sup>43</sup> *ibid.*

<sup>44</sup> See Article 49 of the United Nations Charter.

<sup>45</sup> *ibid* p. 891.

<sup>46</sup> *ibid.*

licenses, has been delegated to county governments constitutionally.<sup>47</sup> This study makes recommendation that Kenya ought to come up with a licensing regime for virtual currency businesses but that is governed by the national government and not county governments. Virtual currency businesses pose far-reaching consequences for money laundering and terrorism finance activities and therefore their licensing regime requires national management and not differentiated control through different county legislation. Further, the County Governments are not adequately equipped to handle surveillance and investigative assignments brought about by virtual assets financial risks because the judicial and policing portfolios have not been devolved to County Governments.

Virtual currencies being conduits for effecting payment transactions ought to be licensed under the CBK Act (Money Remittance) Regulations. Such a regulation would include virtual currency assets in its definition of the terms for ‘money remittance’ and ‘money remittance providers’. It should further provide that virtual currency businesses must have the approval of the CBK before commencement of operations. It should also set a minimum capital value for virtual currency businesses to safeguard consumer’s deposits. Such law should require that persons operating such virtual currency businesses have fixed physical addresses and be critically vetted by the CBK for purposes of certifying that they are fit to conduct transmission services in Kenya. These regulations should further empower the CBK to disqualify shareholders, directors, or senior officers of money remittance providers who fail the vetting process or who do not adhere to its rules.

Virtual currency transmission providers must amongst other conditions ascertain that there are measures to mitigate risks associated with their transmission businesses. In this regard, the law should require that virtual currency businesses are assured to protect their customers from potential financial risks. The CBK should possess the prerogative to access records of virtual currency transmission providers for inspection whenever necessary. These virtual currency transmission providers should also be mandated to come up with policies to tackle and curb money laundering and terrorist financing activities. Virtual currency transmission providers should also be required to keep an up-to-date record of their clientele, which should be subject to inspection by the CBK. Any transactions facilitated by virtual currency transmission businesses

---

<sup>47</sup> See the Fourth Schedule, Section 2 (7) (a) of the Constitution of Kenya.



through mobile money platforms or financial institutions should be made on the condition that these virtual currency businesses adhere to the KYC principles. There should also be a requirement that virtual currency remittance providers constitute a complaints addressing mechanism and a customer-care programme. The CBK should also reserve the prerogative to shut down, suspend or forbid the conduct of virtual currency transmission services if those businesses flout the provisions of CBK rules. The CBK should also formulate a green list of CBK-approved virtual currencies which would be used by virtual currency businesses in Kenya. The CBK should further develop guidelines for the proper conduct of virtual currency transmission businesses in Kenya.

Such regulative efforts by the CBK will ensure that virtual currency businesses strive to comply with the law and that their transactions are guided by proper fiscal requirements and conditions. The issuance of licenses will require the payment of license or compliance fees which is added revenue for services offered. Errant virtual currency businesses will be punished pursuant to the said laws and further be required to cease conduct of business in Kenya which could be a deterrent to fraudulent activities by virtual currency businesses. The keeping of a list of approved virtual currencies to be transacted by virtual currency businesses and Kenyans will provide guidance for what financial assets are safe for Kenyan consumers. Further, such regulative approaches would offer guidance on what acceptable virtual currency transactions in Kenya are and what transactions are unlawful. The requirement that these virtual currency businesses file SARs to the CBK will greatly assist the nation to comply with the FATF's requirement to adhere to AML/CFT measures.

The CMA would also play a pivotal role in registering virtual currency businesses that have futures trading underpinnings in them through the Capital Markets Act (Cap. 485) as read with the Central Depositories Act, 2000. Apart from the Draft Regulatory Sandbox PGN, 2018, the CMA ought to enact more laws that would allow adequately protect Kenyan consumers of virtual assets. Such legislation would allow the CMA to license virtual currency businesses that engage in capital markets activities by setting minimum requirements to be met by such businesses before being licensed. It would also set standards for those virtual currency businesses to insure their clients from potential financial risk. It would have the power to investigate ongoing virtual currency businesses that engage in capital markets activities and make recommendation as to the

carrying out of their mandates. The CMA would also be able to ensure that such businesses adhere to the AML/CFT requirements. It would also have the prerogative of revoking licenses issued to such businesses in case of fundamental breaches. Such legislation would be able to adequately provide CMA with a list of virtual currency businesses that engage in capital markets activities in Kenya. From such a database, CMA would be able to advice and effectively regulate activities relating to virtual currency investments.

Licensing virtual currency businesses is a beneficial option for Kenya. The evidence of a license under such regulations would be a critical starting point for enforcement agencies that are cracking down on preventing proceeds of crime from going into nefarious and reprehensible actions. Licensing will bring certainty and lawfulness to the industry and ensure that virtual currency transmissions are regulated. Kenya's revenue basket will also gain from added proceeds in the form of license fees and related levies or charges. The consumer will also gain confidence in transacting in virtual currencies and will be better protected against cyber-related financial rip-offs.

## **5.5. Conclusion**

Technology has revolutionized the 21<sup>st</sup> Century. The introduction of virtual currencies or Fintech assets has roused the question of whether such novel creations solve a financial problem, or instead create fresh ones. This coupled with the fact that these creations are not iterations but novel and ground-breaking advancements have caused some to consider the fact that virtual currencies are disruptive innovations.

A disruptive innovation is described as a procedure of industrial transmutation that eventually transforms the economic structure destroying a previous economic order and resulting in a new economic dispensation.<sup>48</sup> The world is moving away from physical currency and heralded a period where money has become a programmable product. The use of virtual currency to facilitate money transmissions of as low as 9 US Dollars across borders makes this financial asset quite attractive to under-banked populations.<sup>49</sup> Virtual currencies have the potential to be supportive to small businesses, start-up companies, and developing economies like Kenya.<sup>50</sup>

---

<sup>48</sup> See Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (Routledge 1994) p. p. 82–83.

<sup>49</sup> See Isaac Pflaum and Emmeline Hateley, 'A Bit of a Problem: National and Extraterritorial Regulation of Virtual Currency in the Age of Financial Disintermediation' (2014) 45 GJIL 1169 at p. 1195.

<sup>50</sup> See Soonpeel Edgar Chang (n 6) p. 330.

Naturally, technology precedes regulation. There have been admonitions that regulating virtual currencies now is too soon.<sup>51</sup> This study does not agree with this caution because, virtual currencies being Fintech products, should be generally subjected to strict financial regulation requirements to ensure a safe and stable economic atmosphere in Kenya for the benefit of the greater public good. Consequently, early virtual currency business entrants may enjoy lower regulation as the regulatory entities grapple with understanding the novel industry and how to manage it.

The need not to stifle new technologies vis-à-vis financial prudence in the State is a critical balance to strike. CBK's elective option of restrictive regulation of virtual currencies has proven to be counteractive in other jurisdictions because this only serves to drive legitimate virtual currency businesses underground.<sup>52</sup> On the other hand, there has been reported continued use of virtual currencies in the Kenyan market, despite the restrictive efforts of the CBK. It is therefore prudent for Kenya to regulate virtual currencies through deliberative and consultative means and to tackle the challenges that come with the implementation of such regulations. As such, efforts by the CMAs Draft Regulatory Sandbox Policy Guidance Note, 2018, are welcome because they are a departure from the initial stance by CMA to restrictively regulate virtual assets. Progressive and prudent regulatory provisions based on industry trends and affiliated to best practices across the globe, will eventually ensure a secure economic market for all virtual currency stakeholders.

---

<sup>51</sup> See Samantha J. Syska, 'Eight-Years-Young: How the New York BitLicense Stifles Bitcoin Innovation and Expansion with Its Premature Attempt to Regulate the Virtual Currency Industry' (2017) 17 J. High Tech. L. 313 at p. 334.

<sup>52</sup> See Jerry Brito and Andrea Castillo, Bitcoin: A Primer for Policy Makers (Mercatus Center, GMU 2013) 25 at p. 25.

## BIBLIOGRAPHY

### Books

Burda Michael and Wypolz Charles, *Macroeconomics: a European Text* (6th ed., Oxford University Press, 2013).

Carl E. Walsh, *Monetary Theory and Policy* (3rd ed., The MIT Press 2010).

Christopher J. Westland, *Global Innovation Management* (Macmillan International 2016).

Dufour, Jean-Marie, 'Model Selection' in Steven N. Durlauf and Lawrence E. Blume (eds), *New Palgrave Dictionary of Economics* (2<sup>nd</sup> ed.. Palgrave Macmillan, 2008).

Ha-Joon Chang, *Economics: The User's Guide* (Penguin, 2014).

Henry Campbell Black, *Black's Law Dictionary* (4th ed., West Publishing Co. 1968) 412.

Jerry Brito and Andrea Castillo, *Bitcoin: A Primer for Policy Makers* (Mercatus Center, GMU 2013).

Johan den Hertog, *Review of Economic Theories of Regulation* (Utrecht School of Economics Utrecht University December 2010) 22.

John M. Buchanan and Robert D. Tollison (eds), *The Theory of Public Choice-II* (The University of Michigan Press 1972).

Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (Routledge 1994).

Low Kelvin F.K. and Lin Jolene, *Carbon credits as EU like it: property, immunity, tragic Comedy?* (JEL 2015).

Ludwig Von Mises, *The Historical Setting of the Austrian School of Economics* (TLMIAU, 1984).

Milton Friedman and Anna Jacobson Schwartz, *A Monetary History of the United States, 1867-1960* (Princeton University Press 1963).

Peter Boettke and Peter Leeson, *The Austrian School of Economics: 1950-2000* (GMU 2002).

Peter J. Boettke, *The legacy of Friedrich von Hayek* (Vol. 1. Edward Elgar 2000).

Peter J. Boettke and Peter T. Leeson, 'The Austrian School of Economics 1950-2000' in Warren Samuels, Jeff E. Biddle, and John B. Davis (eds.), *A Companion to the History of Economic Thought* (Blackwell Publishing 2003).

Pigou A. C., *The Economics of Welfare* (Macmillan and Co. 1932).

Rebecca J. Simmons, *The Regulation of Virtual Currencies: Presentation at the Flagship Seminar on Law and Financial Stability Hosted by the International Monetary Fund* (Sullivan and Cromwell LLP., 2018).

Richard A. Posner, *Theories of Economic Regulation* (NBER 1974).

Željka Rostaš Blažekovic and Mislav Vukina, *Virtual currencies - EU legal overview* (European Union, 2019).

### **Journal articles**

Abigail J. Farmer and Cory Elizabeth Tyszka, 'Currency Estate Planning, Bit by Bit' (2014) 40 ACTEC L.J. 249.

Alan Cohn, Travis West, and Chelsea Parker, 'Smart After All: Blockchain, Smart Contracts, Parametric Insurance, and Smart Energy Grids' (2017) 1 GEO. L. TECH. REV. 273.

Daniel Smith, 'More Money, More Problems: The Bitcoin Virtual Currency and the Legal Problems that Face It' (2012) 3 Case W. Res. J.L. Tech. and Internet 427.

Deborah S. Thoren-Peden, JiJi Park, Amy L. Pierce, and Elsa S. Broeker, 'Financial Crimes Enforcement Network Issues Guidance on Virtual Currency' (2013) 130 Banking L.J. 379.

D. L. K. Chuen and Robert Deng, *Handbook of Blockchain, Digital Finance, and Inclusion* (2018) Vol. 1. 233.

Ethan D. Jeans, 'Funny Money or the Fall of Fiat: Bitcoin and Forward-Facing Virtual Currency Regulation' *Colo. Tech. L.J.* Vol. 13 (1) 99.

Gary E. Kalbaugh, 'Virtual Currency, Not a Currency' (2016) 16 *J. Int'l Bus. and L.* 26.

George J. Stigler, 'The Bell Journal of Economics and Management Science' (1971) 2 (1) RC.

Gregory N. Mankiw, *Real Business Cycles: A New Keynesian Perspective* (Vol. 3, JEP 1989).

Hantke-Domas, Michael "The Public Interest Theory of Regulation: Non-Existence or Misinterpretation?" (2003) *EJLE* 15 (2) 165.

Isaac Pflaum and Emmeline Hateley, 'A Bit of a Problem: National and Extraterritorial Regulation of Virtual Currency in the Age of Financial Disintermediation' (2014) 45 *Geo. J. Int'l L.* 1169.

Jared A. Kleiman, 'Beyond the Silk Road: Unregulated Decentralized Virtual Currencies Continue to Endanger US National Security and Welfare' (2013) 4 (1) *AUNSLB* 59.

Jessica Hoyer, 'Sex Trafficking in the Digital Age: The Role of Virtual Currency-Specific Legislation in Keeping Pace with Technology' (2017) 63 *Wayne L. Rev.* 83 1201.

Joanna Perkins and Jennifer Enwezor, 'The legal aspect of virtual currencies' [2016] *BJIBFL* 569.

Jonathan B. Turpin, 'Bitcoin: The Economic Case for a Global, Virtual Currency Operating in an Unexplored Legal Framework' (2014) 21 *Ind. J. Global Legal Stud.* 335.

Jonathan Lane, 'Bitcoin, Silk Road, and the Need for a New Approach to Virtual Currency Regulation' (2014) 8 *Charleston L. Rev.* 511.

Joseph Bonneau et al, "SOK: Research Perspectives and Challenges for Bitcoin and Cryptocurrencies" [2015] *IEEE Symposium on Security and Privacy*.

Matthew Kien-Meng Ly, 'Coining Bitcoin's "Legal-Bits": Examining the Regulatory Framework for Bitcoin and Virtual Currencies' (2014) HJoLandT Vol. 27, No. 2 587.

Matthias Tarasiewicz and Andrew Newman, "Cryptocurrencies as Distributed Community Experiments" [2015] Handbook of Digital Cryptocurrency.

Patrick Kirby, 'Virtually Possible: How to Strengthen Bitcoin Regulation within the Current Regulatory Framework' (2014) 93 N.C. L. Rev. 189.

Reddy E. and Lawack V., 'An Overview of the Regulatory Developments in South Africa Regarding the Use of Cryptocurrencies' (2019) 31 SA MERC LJ.

Robert G. Natelson, 'Paper Money and the Original Understanding of the Coinage Clause' (2008) 31 HARV. J.L. and PUB. Po'Y 1017.

Samantha J. Syska, 'Eight-Years-Young: How the New York BitLicense Stifles Bitcoin Innovation and Expansion with Its Premature Attempt to Regulate the Virtual Currency Industry' (2017) 17 J. High Tech. L. 313.

Samuel Njoroge Njeri, 'Smart Contracts: Blockchain Technology is About to Disrupt Commercial Law' (2019) The Advocate 23.

Sanford J. Boxerman and Michelle Feit Schwerin, 'Its Bark is Worse than Its Bit(e): Regulatory and Criminal Law Implications of Virtual Currency' (2017) 31 Crim. Just. 10.

The National Review, 'New Empire State of Mind? Potential Easing of Restrictions for the New York Virtual Currency Business Licenses' (2020) Vol. X, No. 331.

The Review of Economics and Statistics in Paul M. Sweezy, 'Professor Schumpeter's Theory of Innovation' (1943) 25 (1) The MIT Press 93.

Vijay M Gawas, 'Doctrinal legal research method a guiding principle in reforming the law and legal system towards the research development' (2017) 3 (5) IJL.

Witold Srokosz and Tomasz Kopyscianski, 'Legal and Economic Analysis of the Cryptocurrencies Impact on the Financial System Stability' (2015) JTE 04(02) 619.

Xin Li and Chong Alex Wang, “the Technology and Economic Determinants of Cryptocurrency Exchange Rates: The Case of Bitcoin” (2017) 95 DSS.

### **Newspaper articles**

Brad Stone and Ashlee Vance, ‘\$200 Laptops Break a Business Model’ (*New York Times*, 25 January 2009).

Daniel Mpala, Kenyan Task force calls for State to Regulate AI and Blockchain (*Ventureburn*, 2 August 2019).

Suleiman Shahbal, ‘Africans to blame for Chinese mistreatment’ (*The Kenyan Standard Newspaper*, 28 April 2020).

Stolp J., Perumall A. and Selfe E., Blockchain and Cryptocurrency in Africa (*Baker McKenzie*, 2018).

Tom Jackson, ‘BitPesa Plotting Continued African Expansion’ (*Disrupt Africa*, 26 March 2018).

### **Online resources**

Alyssa Hertig, How Do Ethereum Smart Contracts Work? COINDESK (Sept. 8, 2018) < <http://bit.ly/2psci7B/>>.

Amrit Kharel, ‘Doctrinal Legal Research’ (2018) at p. p. 6 - 8. Available at SSRN: < <https://ssrn.com/abstract=3130525/>> or < <http://dx.doi.org/10.2139/ssrn.3130525/>>.

Bettina Warburg, How the blockchain will radically transform the economy (8 December 2016) < <https://www.youtube.com/watch?v=RplnSVTzvnU/>>.

Braendgaard P., “Kipochi Launches First Bitcoin Wallet in Africa with M-PESA integration” (July 2013).

Carolyn Tanui, ‘The Kenya Blockchain Task force Concludes its Report’ (The Kenyan Wall Street, 24 August 2018) < [www.kenyanwallstreet.com/the-kenya-blockchain-task-force-concludes-report-on-blochain-technology/](http://www.kenyanwallstreet.com/the-kenya-blockchain-task-force-concludes-report-on-blochain-technology/)>.



CBE to Ban Issuance of Cryptocurrency’ (Egypt Independent, 28 May 2019) <  
<https://egyptindependent.com/cbe-to-ban-issuance-of-cryptocurrency-without-licenses/>>.

Central Bank of Kenya, Caution to the Public on Virtual Currencies such as Bitcoin  
 (December 2015) <  
[https://www.centralbank.go.ke/images/docs/media/Public Notice on virtual currencies such as Bitcoin.pdf](https://www.centralbank.go.ke/images/docs/media/Public%20Notice%20on%20virtual%20currencies%20such%20as%20Bitcoin.pdf)>.

Daniel Mpala, *Kenyan Task force calls for State to Regulate Artificial Intelligence and Blockchain* (Ventureburn 2 August 2019).

Don Tapscott, How the blockchain is changing money and business (16 September 2016) <  
<https://www.youtube.com/watch?v=Pl8OlkkwRpc/>>.

Elena Perez, ‘Egypt Lays out Path for a Crypto Future with Draft Law’ (Cointelegraph, 6 June 2019) <  
<https://cointelegraph.com/news/egypt-lays-out-path-for-a-crypto-future-with-draft-law/>>.

Eric Knecht, ‘Egypt's first bitcoin exchange to begin trading this month’ (Reuters, 17 August 2017) <  
<https://www.reuters.com/article/egypt-bitcoin-idUSL4N1L33NK/>>.

FiNews Asia, ‘Takeaways From This Year's Singapore Fintech Festival’ (18 November 2019) <  
<https://www.finews.asia/finance/30228-technology-for-good-singapore-fintech-festival-2019-ravi-menon-mas/>>.

Hansen J. D., Howland S. and Conley W., ‘Digital Currencies: International Actions and Regulations’ (Perkinscoie, April 2020) <  
[www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html](http://www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html)>.

Iyke Aru, ‘Kenya’s Central Bank Warns Against Cryptocurrency’ (CCN, April 14, 2018) <  
[www.ccn.com%2Fkenyan-apex-bank-warns-citizens-against-the-use-of-cryptocurrencies%2Fandusg=AOvVaw07Ut2asHSFUQhp-faPBO7t/](http://www.ccn.com%2Fkenyan-apex-bank-warns-citizens-against-the-use-of-cryptocurrencies%2Fandusg=AOvVaw07Ut2asHSFUQhp-faPBO7t/)>.

Jeffrey Gogo, ‘South Korea to Ban Crypto Exchanges from Handling Privacy Coins’ (NewsBitcoin.com, 6 November 2020) <  
<https://news.bitcoin.com/south-korea-to-ban-crypto-exchanges-from-handling-privacy-coins/>>.

Jon Buck, 'Egyptian Government's Hardline Stand Against Bitcoin Remains Unshaken: Egyptian Government Renews Commitment Against Botcoin, cryptocurrencies' (Cointelegraph, 17 July 2017) < <https://cointelegraph.com/news/egyptian-governments-hardline-stand-against-bitcoin-remains-unshaken/>>.

Joseph Young, 'Former Kipochi CTO Explains Controversial M-Pesa Deal' (NewsBTC 11 January 2016).

Kenyan WallStreet, 'Kenya Among the few Countries in the World with Highest per capita Holding of Bitcoin-citi' (The Kenyan Wall Street, 8 October 2019) < [www.kenyanwallstreet.com/kenya-among-countries-world-highest-per-capita-holding-bitcoin-citi/](http://www.kenyanwallstreet.com/kenya-among-countries-world-highest-per-capita-holding-bitcoin-citi/)>.

Kevin Helms, 'South Korea Thinks Real-Name System is working – Stepping Up Crypto Monitoring' (NewsBitcoin.com, 29 June 2018) < <https://news.bitcoin.com/south-korea-real-name-system-crypto-monitoring/>>.

Kevin Helms, 'Kenya has Two Weeks to Decide Whether to Regulate Cryptocurrencies' (Bitcoin.com, 5 July 2018) < [www.news.bitcoin.com/kenya-crypto-regulation/](http://www.news.bitcoin.com/kenya-crypto-regulation/)>.

Kevin Helms, 'South Korea Passes Bill to Regulate Cryptocurrency in Line with FATF Standards' (NewsBitcoin.com, 7 March 2020) < <https://news.bitcoin.com/south-korea-bill-cryptocurrency/>>.

Kevin Helms, 'Regulatory Roundup: 10 Countries Actively Regulating Cryptocurrency Despite Global Crisis' (Bitcoin.com, April 6, 2020) < <http://www.worldbank.org/en/news/feature/2013/10/02/Migrants-fromdeveloping-countries-to-send-home-414-billion-in-earnings-in-2013/>>.

Kevin Helms, 'South Africa Proposes 30 Rules to Regulate Cryptocurrency' (NewsBitcoin.com, 19 April 2020) < <https://news.bitcoin.com/south-africa-cryptocurrency/>>.

Kevin Helms, 'Interest in Bitcoin Soars in Egypt Amid Economic Crisis and Unemployment' (NewsBitcoin.com, 3 October 2020) < <https://news.bitcoin.com/bitcoin-egypt-economic-crisis-unemployment/>>.

Hansen J. D., Howland S. and Conley W., 'Digital Currencies: International Actions and Regulations' (Perkinscoie, April 2020) < [www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html/](http://www.perkinscoie.com/en/news-insights/digital-currencies-international-actions-and-regulationns.html/)>.

Mary-Ann Russon, 'Crypto-currencies gaining popularity in Kenya' (BBC News, 22 February 2019) < <https://www.bbc.com/news/business-47307575> />.

Nathan DiCamillo, 'Crypto Assets in South Africa Would Be Considered Financial Products Under Regulator Proposal' (coindesk, 21 November 2020) < <https://www.coindesk.com/crypto-assets-in-south-africa-would-be-considered-financial-products-under-regulator-proposal/>>.

Neha Narula, 'The Future of Money' (3 October 2016) < <https://www.youtube.com/watch?v=pPg7Hj3ABQ/>>.

Park Hyung-Ki, 'Korea Decides not to Reognise Bitcoin as Real Currency' (The Korea Herald, 10 December 2013) < <http://www.koreaherald.com/view.php?ud=20131210000673/>>.

Press Release 16-200, Dep't of Justice, 'Texas Man Sentenced for Operating Bitcoin Ponzi Scheme' (July 21, 2016), < <http://tinyurl.com/glwbt2c/>>.

Rebecca A. Clay, 'Conducting research during the COVID-19 pandemic: Advice from psychological researchers on protecting participants, animals and research plans' (American Psychological Association, 19 March 2020) < <https://www.apa.org/news/apa/2020/03/conducting-research-covid-19/>>.

Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (White Paper, BITCOIN.ORG 2008).

Sean Hayes, 'Basics of Cryptocurrency Law in New York' (The New York Law Blog, 14 September 2020) < <https://www.thenewyorklawblog.com/2020/09/cryptocurrency-currency-law-new-york.html/>>.

Wolfie Zhao, 'A South Korean lawmaker has proposed amending the country's Electronic Financial Transaction Act to more closely regulate cryptocurrencies' (NewsCoindesk, 2

August 2017) < <https://www.coindesk.com/south-korean-lawmaker-seeks-tighten-cryptocurrency-rules/>>.

Yogita Khatri, ‘South Africa’s Central Bank Proposes Rules for Crypto Companies’ (coindesk, 17 January 2019) < <https://www.coindesk.com/south-africas-central-bank-proposes-rules-for-crypto-companies/>>.

Yoon Yung Sil, ‘S. Korean Financial Authorities Ban Bitcoin Futures Trading’ (Business Korea, 7 December 2017) < <http://www.businesskorea.co.kr/news/articleView.html?idxno=20022/>>.

## Reports

Capital Markets Authority, *Launch Infographic* (March 2019).

Digital Economy Kit, *Kenya: A regulatory sandbox for the financial sector* (Case Study 9, November 2019)

European Banking Authority, *EBA Opinion on ‘virtual currencies’* (EBA/Op/2014/08, 2014).

European Central Bank, *Virtual Currency Schemes* (European Union, 2012).

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

Financial Action Task Force, *Guidance for Risk-Based Approach to Virtual Currencies* (June 2015).

Library of Congress, *Regulation of Cryptocurrency Around the World* (GLRC, June 2018).

Ministry of Information, Communications, and Technology, *Emerging Digital Technologies for Kenya: Exploration and Analysis* (July, 2019).

The Common Wealth Working Group on Virtual Currencies, *Regulatory Guidance on Virtual Currencies* (Working Group Report, 2019).

The Fifth Anti-Money Laundering Directive of the European Parliament and of the Council, (DIRECTIVE (EU) 2018/843, 2018).

The Financial Markets Law Committee, *Taxonomical Approaches to Crypto assets: Response to European Commission Consultation—Part I* (FMLC, 2020).