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EXPLORING FINANCIAL INCLUSION IN KENYA THROUGH CRYPTOCURRENCIES: A CASE FOR A REGULATORY FRAMEWORK

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Submitted in partial fulfilment of the requirements for the Master of Laws Degree (International Financial Law & Regulation) at Strathmore Law School, Strathmore University.

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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Elisha Nyikuli

8th November 2021





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List of Abbreviations

CBK: Central Bank of Kenya

GDP: Gross Domestic Product

US/USA: United States

ATM: Automated Teller Machine



List of Cases and Statutes

- 1. Lipisha Consortium Limited & another v Safaricom Limited [2015] eKLR
- 2. In Re Estate of Carolyne Achieng' Wagah (Deceased) [2015] eKLR
- 3. Carlill v. Carbolic Smoke Ball Company. [1892] 2 Q.B. 484
- 4. Central Bank of Kenya, Public Notice 'Caution to the Public on Virtual Currencies such as Bitcoin' December 2015,
- 5. Constitution of Kenya, 2020.
- 6. Co-operative Societies Act (No. 12 of 1997).
- 7. Law of Succession Act, Cap 160, Laws of Kenya
- 8. The Law of Contract Act, Cap 23, Laws of Kenya
- 9. The Central Depositories Act (No 4 of 2000).
- 10. The Income Tax Act, (Chapter 470 of 1961).
- 11. The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).
- 12. Uniform Regulation of Virtual-Currency Business Act, 2017
- 13. Anti-Corruption and Economic Crimes Act (Chapter 65 of 2012).
- 14. Penal Code (Chapter 63 of 2010)
- 15. The Insolvency Act (No 8 of 2015).



ABSTRACT

The use and reliance on cryptocurrencies have gained significant popularity around the world and developing countries such as Kenya have not been left out of this trend. In Kenya, which is the focus of this dissertation, the Central Bank of Kenya has gone as far as to warn the Kenyan population about the use of cryptocurrencies, without at the same time declaring them illegal in Kenya. This dissertation demonstrates that relevant Acts of Parliament; namely, the Central Bank Act, the Central Depositories Act, the Income Tax Act, the Insolvency Act and the Proceeds of Crime and Anti Money Laundering Act do not form a regulatory framework that is fit for the regulation of cryptocurrencies. Further, Kenyan courts of law have also not provided a way forward on this matter. It is against this backdrop that this dissertation hypothesises that for any comprehensive homegrown regulatory framework cryptocurrencies to promote financial inclusion in Kenya, it should appreciate the areas in which Kenyans are most likely to interact with money. With admitted selectivity, it isolates currency (money), taxation, contracts and succession as some of the most important of such areas. To carve a way forward for a robust framework on cryptocurrencies in Kenya, the dissertation demonstrates that there are important lessons to be learnt from United States of America and Japan.

I. INTRODUCTION

1. Background

By definition, a virtual currency is deemed a virtual asset by its users.¹ It comes into being through a technological act of programming a virtual unit into existence at a predetermined and knowable rate to simulate a limited resource.² Units thereafter grow through a sophisticated and elaborate cryptographic process called 'mining' which refers to the process by which any transactions on the platform are verified and added to a public ledger known as the blockchain, and which in turn is also the means through which new virtual currency – or its derivative name cryptocurrency – is released. Mining is therefore both an incentivizing activity as well as a reward scheme.³ It is open source in the sense that anyone with access to the internet and suitable hardware may participate. The irony, however, is that within cryptocurrency systems the safety, integrity and balance of ledgers is maintained by a community of mutually distrustful miners, who have a financial incentive to maintain the security of a cryptocurrency ledger.⁴

A virtual currency's intrinsic value is deemed to emanate from the trust that it receives from its own users, and it derives its security from its limited nature as well as the elaborate and sophisticated process of cryptography required to generate additional cryptocurrency into circulation.⁵ Further to this, and because of its growing popularity and increasing desirability as an asset to have, virtual currency has also increasingly taken on the form of a commodity in which its adherents have invested for gainful return based on its fluctuations (its volatility notwithstanding).⁶

A cryptocurrency also comes with some tangible benefits that would resonate with an increasingly technologically advancing world. Some of these are:

¹ Richter C, Kraus S, Bouncken R, 'Virtual Currencies Like Bitcoin as a Pradigm Shift in the Field of Transactions' 14 *International Business and Economics Research Journal* 4, 575.

² Turpin JB, 'Bitcoin: The Economic Case for A Global Virtual Currency Operating in An Unexplored Legal Framework', 21 *Indiana Journal of Global Legal Studies* 1, 2014, 335.

³ Http://Www.Investopedia.Com On 29 January 2018.

⁴ Cvetkova I, 'Cryptocurrencies Legal Regulation' 5 BRICS Law Journal 2, 2018, 129.

⁵ Turpin JB, 'Bitcoin: The Economic Case for A Global Virtual Currency Operating in An Unexplored Legal Framework', 21 *Indiana Journal of Global Legal Studies* 1, 2014, 335-338.

⁶ Turpin JB, 'Bitcoin: The Economic Case for A Global Virtual Currency Operating in An Unexplored Legal Framework', 337-339.

- 1. it is almost fraud-free owing to the sophistication of the digitisation backing it up;
- 2. it offers immediate settlements due to elimination of intermediaries;
- 3. it is therefore cheaper;
- 4. it minimizes identity theft in digital transactions;
- 5. it enhances accessibility to everyone without the need for a financial intermediary;
- 6. it is highly decentralized; and
- 7. it can be used universally, transcending borders.⁷

Classifying virtual currency within an available legal framework for the purpose of regulating it appears to be a tough proposition for mainstream financial regulators because virtual currency bears characteristics both of a fiat currency, and as seen above, a commodity, thus it also comes with its own inherent risk profile owing to its functionality.⁸ The most significant risk may be the secrecy of a virtual currency transaction given its nature. Although attractive to those adherents who seek discretion in their transactions, such anonymity means that virtual currencies remain a possible avenue for criminal activity such as money laundering and terrorism financing owing to its discreet nature.⁹ Indeed, the same has been comprehensively documented in a recent study.¹⁰

The Central Bank of Kenya (hereafter CBK) has in the recent past issued stringent public notices categorically denouncing virtual currency and warning against its usage. ¹¹ However, none of these warnings from CBK have been accompanied with an outright ban on the use of virtual currency. ¹² They have largely been restricted to repudiating any liability in the event of losses suffered by any persons using virtual currency to settle transactions, as well as further declaring that virtual currency is not legal tender. ¹³ Additionally, the CBK has issued a terse

⁷ See -< <u>Https://Www.Huffingtonpost.Com/Ameer-Rosic-/7-Incredible-Benefits-Of- 1 B 13160110.Html</u> On 30 May 2018.

⁸ Tu KV And Meredith MW, 'Rethinking Virtual Currency Regulation in the Bitcoin Age', 90 *Washington Law Review*, 2015, 274.

⁹ Tu KV And Meredith MW, 'Rethinking Virtual Currency Regulation in the Bitcoin Age', 275.

¹⁰ European Parliament, Policy Department for Citizens' Rights and Constitutional Affairs, *Virtual Currencies and Terrorist Financing: Assessing the Risks and Evaluating Responses*, PE.604.970, May 2018.

¹¹ See Rojko M, 'Kenyan Central Bank Warns That BTC Is Unregulated. No Mention of Inflation' Cointelegraph: The Future of Money, 15 December 2015 -< Https://Cointelegraph.Com/News/Kenyan-Central-Bank-Warns-That-Btc-Is-Unregulated-No-Mention-Of-Inflation > On 25 May 2021. See Also 'Central Bank of Kenya' -< Https://Www.Centralbank.Go.Ke/ > 25 May 2021.

¹² Central Bank Of Kenya, Public Notice 'Caution To The Public On Virtual Currencies Such As Bitcoin' December 2015,

<u>Https://Www.Centralbank.Go.Ke/Images/Docs/Media/Public_Notice_On_Virtual_Currencies_Such_As_Bitcoin.Pdf</u> On 18 February 2019.

¹³ Central Bank Of Kenya, Public Notice 'Caution To The Public On Virtual Currencies Such As Bitcoin' December 2015,

statement making clear that it is 'hesitant' to regulate digital currencies.¹⁴ This is despite the fact that many countries are advanced in mitigating the risks relating to digital virtual currencies and are taking steps to regulate the system.¹⁵

Amidst all this, a recent report by Citibank features Kenya among frontier markets with significant interest in Bitcoin, a leading cryptocurrency. Therefore, it is puzzling that a matter of such importance would be dismissed by the very institution expected to offer regulatory oversight, guidance and direction to the public on the matter. The Central Bank Act does not address and appreciate the particularities of cryptocurrencies. He best, what the CBK has done so far has been confusing. This has been to tell Kenyans that it does not support cryptocurrencies but, at the same time, the use and reliance on cryptocurrencies is not prohibited within the Kenyan jurisprudential landscape. And Kenyans have been relying on cryptocurrencies. In January 2018, for example, cryptocurrencies represented 2 percent of the country's Gross Domestic Product (GDP).

Further, although some regions in Kenya have previously tried alternative forms of currency, the law is silent on their legality. This, as this dissertation will demonstrate, is seen from an analysis of select relevant laws such as the Central Bank Act, the Central Depositories Act, the Income Tax Act, the Insolvency Act and the Proceeds of Crime and Anti Money Laundering Act. All these Acts of Parliament have something to do in terms of regulating fiat money. It is interesting to investigate how the same will play out when it comes to cryptocurrencies.

<u>Https://Www.Centralbank.Go.Ke/Images/Docs/Media/Public Notice On Virtual Currencies Such As Bitcoin.Pdf</u> On 18 February 2019.

¹⁸ Blockchain, Cryptocurrency Regulation 2021 Kenya' Global Legal Insights -<

Https://Www.Globallegalinsights.Com/Practice-Areas/Blockchain-Laws-And-Regulations/Kenya#:~:Text=In%20December%202015%2C%20the%20Central,Exchanges%20or%20holds%20the%20virtual > On 25 May 2021.

Https://Www.Globallegalin sights. Com/Practice-Areas/Blockchain-Laws-And-Daws-And-

 $Regulations/Kenya\#: \sim : Text=In\%20 December\%202015\%2 C\%20 the\%20 Central, Exchanges\%20 or\%20 holds\%20 the\%20 virtual > On 25 May 2021.$

¹⁴ Ken Macharia, 'CBK Hesitant to Regulate Digital Currencies—Dr Njoroge' *Capital Business*, November 14, 2017.

¹⁵ Michelle Price and Pete Schroeder, 'US Regulators May Ask Congress for Virtual Currency Legislation' *Reuters*, February 6, 2018; Barney Jopson and Robin Wigglesworth, 'US Regulators Vow To Be On Guard For Bitcoin Risks' *Financial Times*, December 15 2017.

¹⁶ Citi GPS, Bank of The Future: The Abcs of Digital Disruption in Finance, March 2018.

¹⁷ Central Bank Act.

¹⁹ 'Blockchain, Cryptocurrency Regulation 2021| Kenya' Global Legal Insights -<

2. Statement of Problem

The statement of the problem of this dissertation, therefore, is that despite cryptocurrencies gaining popularity in Kenya, there is no comprehensive legal framework to regulate them yet they have the potential to promote financial inclusion. What would it take for Kenya to come up with a comprehensive homegrown regulatory framework for cryptocurrencies?

3. Justification of the Study

This dissertation is important in terms of adding to the literature on the regulation of cryptocurrencies in Kenya. As demonstrated in my literature review, very little has been written in this area and, even then, not much thought has gone into looking into the various aspects of life that cryptocurrencies may and do affect in Kenya. For reasons of space, the dissertation will be limited to the following aspects: fiat money, contracts, taxation, and succession. It is only by appreciating such matters that Kenya can get to a homegrown comprehensive and robust regulatory for cryptocurrencies that can help promote financial inclusion in the country. The dissertation will therefore be relevant to Parliament if they are to put in place a regulatory framework on cryptocurrencies. This will also help consumers because it will guarantee them a legal protection that fits their needs and circumstances. The work may also be relevant for many other African countries that are yet to embrace cryptocurrencies. There is need for Kenya to work towards a homegrown robust regulatory framework on cryptocurrencies because, although they have created much excitement in the technology community, their potential to really build a social and solidarity-based finance is yet to be tested.

4. Hypothesis

This dissertation hypothesises that for any comprehensive homegrown regulatory framework on cryptocurrencies to promote financial inclusion in Kenya, it should appreciate the areas in which Kenyans are most likely to interact with money. With admitted selectivity, my research settled on four of these areas:

VI OMNES VAVVM SINT

- a. 'Currency': recognising/defining cryptocurrencies as currency in Kenya because it is inevitable that Kenyans will interact with currency.
- b. Contracts: Cryptocurrencies transactions epitomise contractual transactions but do not cover the traditional elements of a contract.
- c. Taxation, which helps run government services: such framework should allow the government to tax income even when such income is in the form of cryptocurrencies.

d. Succession: if one's assets are in the form of cryptocurrencies s/he should be able to pass them to his/her heirs upon his/her demise.

5. Statement of Objectives

- a. To meticulously demonstrate that the laws related to money/currency in Kenya do not provide a framework that can deal with the nature of cryptocurrencies.
- b. To demonstrate how cryptocurrencies, because of their unique nature, fall outside of areas such as 'currency', contracts, taxation and succession; yet, these areas are key to the promotion of financial inclusion in the country.
- c. To draw lessons from the United States and Japan, which are best practices in matters of regulating cryptocurrencies. Particularly, my research looks into how they have approached cryptocurrencies as currency and how they have brought contract law, taxation law and succession in line with cryptocurrencies.

6. Research Questions

- a. Do the laws related to money/currency in Kenya provide a framework that can deal with the nature of cryptocurrencies?
- b. Do cryptocurrencies, because of their unique nature, fall outside regulations on 'currency', contracts, taxation and succession in Kenya; yet these areas are key to the promotion of financial inclusion in the country?
- c. Which lessons can Kenya draw from the United States and Japan, which are best practices in matters of regulating cryptocurrencies?

7. Conceptual framework

This part of the dissertation is a conceptual framework. It tries to explain the phenomenon under study. Particularly, it provides the lens through which the hypothesis advanced in this dissertation as well as all the major arguments advanced to prove that hypothesis are to be understood. For avoidance of doubt, the hypothesis advanced by this dissertation is that for any comprehensive homegrown regulatory framework on cryptocurrencies to promote financial inclusion in Kenya, it should appreciate the areas in which Kenyans are most likely to interact with money — currency, contracts, taxation and succession. This part will then start by discussing what has given rise to the need for financial inclusion in Kenya. Then, it will go on to link the realization of financial inclusion in Kenya to the role that cryptocurrencies play as digital assets. This include their role as reliable currencies, as contracts that are free from technical quagmires, as financial instruments that can expand the tax revenue base of a country, and, finally, as property assets that one may pass to their heirs or to a trust to promote financial inclusion.

There exist many aspects in which financial inclusion has been defined.²⁰ Financial inclusion has been defined as an assemblage of processes that a country puts in place in order to guarantee access to financial services, in a timely and adequate manner as well as at an affordable cost to the vulnerable groups of the society.²¹ It may help to understand that financial services is a broad term that encompasses several aspects of day-to-day, direct or indirect interactions with the finance industry. These aspects range from matters dealing with insurance and money management to digital banking and payments.²²

Financial inclusion is very important in the sense that poverty is not simply a matter of lacking money but a matter of lacking ways through which people can earn money. It is not surprising therefore that financial exclusion has been labelled as one of the major drawbacks to the realization of a world free of poverty. While financial exclusion of the poor has been

²⁰ Christine Mwangi, 'Factors Hindering Sustainable Financial Inclusion of Rural Women In Kenya: A Case of Garissa County, Kenya', Masters In Commerce And Accounting, Strathmore University, 2017, 5.

²¹ George Okello, Candiya Bongomin, Joseph M, Ntayi Munene &

Charles Malinga, 'Mobile Money and Financial Inclusion in Sub-Saharan Africa:

The Moderating Role of Social Networks' 19 Journal of African Business 3, 361.

²² Alicia Phaneuf, 'Financial Services Overview In 2021' Insider Intelligence -<

Https://Www.Insiderintelligence.Com/Insights/Financial-Services-Industry/ > On 2 October 2021.

experienced in developing countries, it is important to note that this is not due to lack of formal financial institutions in these countries; but rather, as studies focused on these countries have shown, more than half of households do not have an account with a formal financial institution in which they can save some money as they plan to make investment.²³

There have, however, been exceptions and one of them is Kenya. Kenya, with the promulgation of its 2010 constitution – which is a transformative constitution, ²⁴ attempts to transform Kenyans from a society in which financial exclusion was more of a trend than an exception into a society where financial inclusion is a lived reality. This is already evident from the expansive bill of rights enshrined in this constitution. ²⁵ This bill of rights has for instance comprehensive provisions on the respect, protection, and fulfillment of socioeconomic rights. For instance, Article 43, entitles every Kenyan to the right to health, accessible and adequate housing, reasonable standards of sanitation, being free from hunger, access to clean and safe water and in adequate quantities, social security, and education. The provision goes further to impose on the state the duty to make sure that these rights are realized even for those who are unable to realize them for themselves. ²⁶

It is along these lines that the country has set for itself a target by which to realize Kenyans' socioeconomic rights by promoting financial inclusion in the country.²⁷ This is best seen in The Kenya Vision 2030. This Vision has for aim to transform the country into an industrializing, middle-income country, that provides a high quality of life, in a clean and safe environment to everyone.²⁸ There are many ways through which financial inclusion can be realised under this Vision. One of them, which is the focus of this dissertation is the digital economy.²⁹ The government has also put in place a framework within which this economy can flourish. This framework includes the Kenya Digital Economy Blueprint launched in 2018 and draft strategy that was put in place in the year 2020. These tailor this framework around 5 key pillars; namely, digital government, digital business, infrastructure, innovation-driven

²³ Kevin Donovan, 'Mobile Money for Financial Inclusion' Information and Communications for Development 2012, 62.

²⁴ See Generally *Constitution of Kenya* (2010).

²⁵ Bill Of Rights, Constitution of Kenya (2010).

²⁶ Article 43, Constitution of Kenya (2010).

²⁷ See Agenda 2030

²⁸ See < Http://Vision2030.Go.Ke/ > On 2 October 2021.

²⁹ Institute Of Economic Affairs, 'Telecommunication Ecosystem Evolution in Kenya 2009 - 2019: Setting the Pace and Unbundling the Turbulent Journey to A Digital Economy in a 4IR Era', *Institute Of Economic Affairs*, 2021, 67.

entrepreneurship and digital skills and value.³⁰ While the government has done well in promoting the digital economy, as was demonstrated in the literature review in the introductory chapter of this work, more could still be done especially when it comes to making of Kenya a market within which cryptocurrencies can flourish.

The question that the Kenyan regulator needs to answer, then, is which areas deserve attention the most in regulating cryptocurrencies in Kenya so that they promote financial inclusion without hindering their growth. This dissertation has singled out four areas as the most likely to be interacted with by Kenyans in their day-to-day dealing with cryptocurrencies. These include what amounts to currency, how cryptocurrencies are to be looked in terms of contract law, how they can expand Kenyan tax revenue base and how one can pass them to their heirs or a trust for the benefit of financial inclusion.

The emergence over the last decade of cryptocurrencies, being a component of the programmer-created and self-regulating but largely unregulated virtual currency industry, is increasingly causing the global community to sit up and take notice.31 All of over the world countries are grappling with how to regulate cryptocurrencies by recognizing them as currencies, giving legitimacy to the type of contracts they give rise to, taxing cryptocurrencies that one may have earned as profits and passing them on to one's heirs or a trust, in the spirit of promoting financial inclusion.32

Given this, and looking at cryptocurrencies as an alternative system of financial payments and settlements but which also double up as assets, one realizes that cryptocurrencies have sparked a rethinking of the financial industry as we know it today. Various cryptocurrencies have proliferated and there are currently over 1,490 known virtual currencies in 'circulation' globally.³³ Indeed, some contributors have been confident enough to declare that cryptocurrencies are the solution to Africa's financial challenges, including the ones acting as

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³⁰ Institute Of Economic Affairs, 'Telecommunication Ecosystem Evolution in Kenya 2009 - 2019: Setting the Pace and Unbundling the Turbulent Journey to A Digital Economy in a 4IR Era', 66.

³¹ David Mcnugh, 'Central Banks Urged to Weigh Risks of Virtual Currencies'-<<u>Https://Phys.Org/News/2018-03-Central-Banks-Virtual-Currencies.Html</u>> on 12 March 2018.

³² David Mcnugh, 'Central Banks Urged to Weigh Risks of Virtual Currencies'-<<u>Https://Phys.Org/News/2018-03-Central-Banks-Virtual-Currencies.Html</u>> on 12 March 2018.

³³ See -< Http://Www.Coinmarketcap.Com> on 29 January 2018.

drawbacks to financial inclusion.³⁴ These drawbacks include the lack of formal identification documents such as IDs for one to access financial services, and the lack of government's assurance of consumer protection because of corruption for example.³⁵

In Kenya, there appears to be an increasing number of adherents to the use of cryptocurrencies, at least going by the entrepreneurs that have mushroomed in the country offering virtual currency related services such as purchases and exchange platforms, going as far as to earn endorsement from opinion-shapers in society.³⁶ An internet search on virtual currency exchanges in Kenya will return more than ten results of platforms offering these services.³⁷

There is a need to come up with regulation as there are benefits that accrue from cryptocurrencies in terms of helping promote financial inclusion. In the absence of adequate regulation, cryptocurrencies can be misused as conduits for offences such as money-laundering and tax evasion.³⁸ These benefits can be guaranteed by the peculiar features of cryptocurrencies themselves, which this dissertation has meticulously covered in its background to the problem. Additionally, it may help to note that cryptocurrency participants come together to set up a trading system through a multilateral contract.³⁹ Under this contract, they establish rules by which they are to abide, and one can only be part of this arrangement if they are ready to go by the rules. Also, dealing with parties outside this multilateral contract has to somehow be consented to by those participants within it. In a nutshell, cryptocurrency participants can agree on any set of rules under their multilateral contract and enforce them.⁴⁰

Through such a contract, therefore, it may be possible for the participants or/and even the state to agree on rules that may relate to the recognition of such a contract under the current Kenyan contract law, to agree on rules that relate on how the taxation of the profits made out of and in cryptocurrencies can be done as well as how one can pass cryptocurrencies as assets to an heir

³⁴ John Stevens, 'Why Cryptocurrencies Could Be The Solution To Africa's Payment Challenges' -

< Https://Thenextweb.Com/Contributors/2018/04/11/Cryptocurrencies-Solution-Africas-Payments-Challengeso on 13 February 2019.

³⁵ See, 'Challenges to Financial Inclusion' -< Https://Www.Technologyhq.Org/5-Challenges-Financial-Inclusion/> On 2 October 2021.

³⁶ Bitange Ndemo, 'Forget Land and Invest in Digital Currencies,' *Business Daily*, 16 August 2017.

³⁷ Abuya Kenn, 'Meet Crypto Exchange Platform that has Completed KES 100 Million Worth of Transactions' Techweez, 22 March 2021 -< Https://Techweez.Com/2021/05/22/Topit-Crypto-Exchange-Platform-Kenya/> 25 May 2021

³⁸ European Parliament, Policy Department for Citizens' Rights And Constitutional Affairs, *Virtual Currencies And Terrorist Financing: Assessing The Risks And Evaluating Responses*, PE.604.970, May 2018.

³⁹ Geiregat S, 'Cryptocurrencies are (Smart) Contracts', Computer *Law & Security Review: The International Journal of Technology Law and Practice*, 2018. 3.

⁴⁰ Geiregat S, 'Cryptocurrencies are (Smart) Contracts', 4-5.

or to a trust. There is therefore a need to put in place a framework in the country that recognizes cryptocurrencies as a form of a currency, because they serve as an alternative system of financial payments and settlements, and as assets because they also double up as assets. 41 It is reasonable to conclude that such a recognition would promote financial inclusion.

There are many ways in which cryptocurrencies address the drawbacks to financial inclusions such as the lack of formal identification documents such as national identity card (IDs) for one to access financial services or the lack of the rule of law to protect the poor.⁴² Once the rules by which cryptocurrency participants agree to are in place, they are enforced automatically hence cutting down administration and service costs because there is no third-party involvement in the enforcement of the contract. This is because such rules will be written in computer programs and will self-execute themselves when predefined conditions are met.⁴³

In this regard, a critique may conclude that cryptocurrencies, when looked at as multilateral contracts, carry the following advantages: Firstly, because of the immutability of these contracts, they cannot be arbitrarily altered by one powerful party once they are issued.⁴⁴ Therefore, they significantly do away with malicious behavior such as financial fraud. Secondly, they spare cryptocurrency participants from administrative costs because they guarantee trust and make no recourse to any third-party such as a mediator or a central broker.⁴⁵ Thirdly, given that there is no reliance on intermediaries, they give rise to business efficiency because they automatically settle business disputes in a peer-to-peer system.⁴⁶

Further, the more people become financially included, the more their income grows over time. As result, promoting cryptocurrencies in Kenya has the protentional of expanding the tax revenue base of the Kenyan government.⁴⁷ However, as the government tap into this new base of tax revenue, it should ensure that it does not hinder the development and smooth flourishing of cryptocurrencies in the country.⁴⁸

⁴¹, 'Exploring The Dynamic Relationships Between Cryptocurrencies and Other Financial Assets' 165 Economics Letter, 2018, 28-34.

⁴² See, 'Challenges to Financial Inclusion' -< Https://Www.Technologyhq.Org/5-Challenges-Financial-Inclusion/> On 2 October 2021.

⁴³ Zhen Z, Xie, Dai Et Al, 'An Overview on Smart Contracts: Challenges, Advances and Platforms', Future Generation Computer Systems, 2019, 1.

⁴⁴ Zhen Z, Xie, Dai Et Al, 'An Overview on Smart Contracts: Challenges, Advances and Platforms', 2.

⁴⁵ Zhen Z, Xie, Dai Et Al, 'An Overview on Smart Contracts', 2. ⁴⁶ Zhen Z, Xie, Dai Et Al, 'An Overview on Smart Contracts', 2.

⁴⁷ Gomez Yalaman, 'Financial Inclusion and Tax Revenue' 19 Central Bank Review, 2019.

⁴⁸ Justice Gatuyu, 'Taxing A Digital Economy: Exploring Intangible Assets To Broaden Revenue Base in Kenya,' 4 Strathmore Law Review 1, 2019, 106

Another way through which cryptocurrencies can serve as an effective tool to promote financial inclusion is by recognizing them as property that can be passed down to one's heir or to a trust. This is because, as already stated, they are not only payment system because they also double up as assets. ⁴⁹ The status of cryptocurrencies as a property that can be inherited or passed down to a trust is a question that academics, courts of law and legislatures in other places have started to address. ⁵⁰ This must lead to succession law questions such as what happens when a participant into cryptocurrency contract dies? Should the assets they have be extinguished? Does his or her heirs inherit his or her position? Should there be such a predefined conditions in the cryptocurrency arrangement? What happens when there is none? Should it be imposed by the state? Are there lessons to drawn from jurisdictions that have faced these questions? These are questions that any robust legal framework on cryptocurrencies will have to look into. ⁵¹

8. Literature Review

At this juncture, this dissertation reviews the scholarship available on the phenomena under study. The aim is to establish the contribution that the author is bringing to the field of knowledge.

i. Cryptocurrencies as tangible assets

Justice Gatuyu has discussed the legal framework on intangible assets in Kenya and has listed cryptocurrencies as one of them. He has noted that Kenya has taken some steps in regulating assets of this nature. He made mention of the Movable Property Security Rights Act of 2017, which is to facilitate among other things using intangibles as collaterals. He also made mention of the Consumer Protection Act of 2012, which takes cognisance of internet and remote agreements, and these are forms of digital-based transactions. He also made reference to the Accountants Act, the Income Tax Act and the Companies Act. Although he concluded by observing that there are already companies allowing for payment in Kenya by way of cryptocurrencies such as Bitpesa, he was careful to state that an overall assessment on the

⁴⁹ Kristin Nemeth & Jorge Morais, 'Digital Inheritance in the European Union' 6 Harbinja, Digital Inheritance in the United States, 2017, 253.

⁵⁰ Natalie M, 'Property Interests in Digital Assets: The Rise 0f Digital Feudalism', 38 Cardozo Law Review, 2017, 1001.

⁵¹ Matt B, 'Covering your Digital Assets: Why the Stored Communications Act Stands'.

regulatory framework of intangibles in Kenya shows that Kenya is taking some steps in this direction.⁵²

Irina Guseva, Svetlana Dzusova and Elena Kulikova have also gone ahead to study the nexus between intangible assets generally and multinational corporations. Their conclusion was that one of the key challenges that regulators are to deal with in regulating intangible assets owned by multinational companies is that these companies can engage in aggressive tax planning through such assets.⁵³ They also emphasised that many multinational companies have actually considered cryptocurrencies technologies in their day-to-day working. These include, they note, SWIFT or ABA, Microsoft, IBM, HSBC, etc.⁵⁴ They concluded by noting that a government does not have the luxury of saying that it will wait to be ready for it to regulate cryptocurrencies. Regulating cryptocurrencies, they argue, is an objective global change that is based on the opportunities that the internet offers, and nations across the world are to simply step into this change. It is not, therefore, a question of desire or willingness on the part of the regulator.⁵⁵ The regulator should simply watch out for the risks associated with cryptocurrencies. In this regard, they have noted that some nations such as Venezuela have started to build up their own cryptocurrencies.⁵⁶

ii. Cryptocurrencies: Question of growth in Kenya

Florence Dafe has provided an argument showing that cryptocurrencies can easily grow in Kenya, despite their decentralised nature. The reason for this because, she explained, the country goes by the liberal economic model, in which the government is not too hands on and promotes the private sector since its independence from the United Kingdom. It is not surprising therefore, she notes, that government of Kenya, under the auspices of its 2030 Vision, has entrusted the CBK with the task of putting in place policies that will allow for financial access.⁵⁷ To further substantiate her argument, she noted that from 2007, the CBK made it clear that its mandate is one of refraining from interventions in and instead fostering

⁵² Justice Gatuyu, 'Taxing A Digital Economy: Exploring Intangible Assets to Broaden Revenue Base in Kenya', 4 Strathmore Law Review, 2019, 117.

⁵³ Irina A, Svetlana S, and Kulikova A, 'The Financial and Economic Aspects of the Digital Economy' in EG Popkova (Ed.), Ubiquitous Computing and The Internet of Things: Prerequisites for The Development Of ICT, Studies In Computational Intelligence, 2019, 119

⁵⁴ Irina A, Svetlana S, and Kulikova A, 'The Financial and Economic Aspects of the Digital Economy', 603. ⁵⁵ Irina A, Svetlana S, and Kulikova A, 'The Financial and Economic Aspects of the Digital Economy', 603.

⁵⁶ Irina A, Svetlana S, and Kulikova A, 'The Financial and Economic Aspects of the Digital Economy', 603-6

⁵⁷ Florence Dafe, 'Ambiguity in International Finance and the Spread of Financial Norms: The Localization of Financial Inclusion in Kenya and Nigeria', 27 Review of International Political Economy 3, 2020, 510-2.

the support of technological interventions and in this way expanding access to finance for poor households.⁵⁸

Sarah Aketch, Felix Mwambia and Bernard Baimwera, based on a series of interviews, have found that part of problem hindering the development of cryptocurrencies in Kenya is that these technologies are mostly favoured by its young population, particularly because of easy access to the internet in the country.⁵⁹ Cryptocurrency technology is not, therefore, a new concept in Kenya as the country continue to see its young population deals in unusual local currencies for their communities before such include Bitpesa and Banglapesa.⁶⁰ Arguably, the most famous version of virtual currency is the 'Bonga Points' reward system of local telecommunication company Safaricom Plc. These are virtual units of value that are redeemed for different products like airtime, cellular gadgets, flights, and other products by running a USSD code.⁶¹

However, Sarah Aketch, Felix Mwambia and Bernard Baimwera's findings reveal that reliance on such technologies is not favoured by the older generation policymakers sitting in government. They concluded that:

'This makes the policy maker not to have a clear picture on directly how to make regulations that are mean to first make sure that the nation is safe and there is accountability in tax collection as far as digital transaction is involved. There is need to have clear policies meant to support user of blockchain technology in a way that is meant to promote economic growth and development especially to the young generation.'62

This situation, they concluded, does not leave young people and the country generally in safe hands because there has been evidence of cryptocurrencies being used to promote illegal business activities. These activities, they noted, include tax evasion, money laundering and financing of illicit business activities.⁶³

< <u>Https://Www.Researchgate.Net/Publication/309411431_Bitcoin_A_Political_Analysis</u> > on 16th February 2019.

⁵⁸ Florence Dafe, 'Ambiguity in International Finance and the Spread of Financial Norms: The Localization of Financial Inclusion in Kenya and Nigeria', 510-2.

⁵⁹ Alisa Sydow, Sanwar B, Chad C, 'Leveraging Blockchain's Potential – The Paradox of Centrally Legitimate, Decentralized Solutions to Institutional Challenges in Kenya', 1.

⁶⁰ Adoption Of Bitcoin In Kenya, A Case Study Of Bitpesa' -

< Http://Erepository.Uonbi.Ac.Ke/Bitstream/Handle/11295/74669/Mwangi Adoption%20of%20Bitcoin%20in%20Kenya,%20a%20case%20study%20of%20Bitpesa.Pdf?Sequence=4> on 6 October 2021.

^{61 &#}x27;Bruno Babirato, Bitcoin: A Political Anaysis' -

⁶² Sarah Aketch, Felix Mwambia and Bernard Baimwera, 'Effects of Blockchain Technology on Performance of Financial Markets in Kenya' 6 *International Journal of Finance and Accounting* 1, 2021, 13-14.

⁶³ Sarah Aketch, Felix Mwambia and Bernard Baimwera, 'Effects of Blockchain Technology on Performance of Financial Markets in Kenya', 1.

iii. Cryptocurrencies and financial inclusion

Suzan Johnson, however, has reviewed recent scholarship on financial sector development and concluded that, to promote financial inclusion today, there has been a shift from simply providing financial access to the poor to providing financial access for all, with a broader focus being placed on all those that are unbanked and on low income. For this reason, she has emphasised that it is very important to distinguish between access and use. Because someone can be financially excluded willingly because they have not been sufficiently educated on how to use technologies such as cryptocurrencies. It is along these same lines that Odongo Kadongo has called upon Kenyan financial regulators and policy agents to invest in the promotion of financial literacy as a tool toward guaranteeing financial inclusion for all. She has found that financial illiteracy works against the consumption of financial services, whether it is in rural or urban areas.

Still on this point of financial literacy, Michael Neubert, has argued that with any change comes some form of resistance and for this reason, Kenyan regulators and policy agents should invest in training people in technologies such as cryptocurrencies as these reduce the cost of transactions, guarantee the security of the assets at play and are more money-saving than Western Union and Paypal, especially when it comes to international fund transfers. Taking Bitpesa as an example, he was of the view that the operationalisation of this form of cryptocurrency reinforces the fact that other African countries have more to learn from Kenya on the regulation of emerging technologies such as cryptocurrencies.⁶⁷ Indeed, as Immaculate Ruba has also noted, there are so many benefits that come with virtual currencies, but they also pose a number of risks, hence the need to regulate them.⁶⁸

Siphesihle Myeni, Marshall Makate and Nyasha Mahonye have taken the time to study how the usage of mobile money can act as an accelerator of financial inclusion since mobile money usage has, in significant ways, serves as the banks of the many people who were excluded from the banking system because of administration fees and lack of formalities such as IDs.

⁶⁴ Susan J & Max Na, 'Financial Access and Exclusion in Kenya and Uganda', 477.

⁶⁵ Susan J & Max Na, 'Financial Access and Exclusion in Kenya and Uganda', 477.

⁶⁶ Odongo Kodongo. 'Financial Regulations, Financial Literacy, and Financial Inclusion: Insights from Kenya', 54 Emerging Markets Finance and Trade, 2011, 2870-1.

⁶⁷ Michael Neubert *ACBSP Region 8 Fall Conference 2018*, Impact of Digital Currencies on Economic Development in Kenya, 381-2.

⁶⁸ See generally Josephin I, 'An Analysis of Cryptocurrency and Its Challenges' EPRA International Journal Of Multidisciplinary Research, 2020.

Although their case in point was Eswatini,⁶⁹ this is also true of the benefits that cryptocurrencies do provide. Alisa Sydow, Sanwar Sunny, Chad Coffman have observed that the benefits of crypto currencies are more pronounced in developing countries because most of these countries there is still high institutional misalignment and dysfunction. Despite this, they noted that the adoption of decentralisation logics that come with crypto currencies can lead to financial inclusion since they spare one from the administrative issues that may result from such dysfunction or misalignment.⁷⁰ Sean Button has reiterated the same sentiments.⁷¹

Anton Didenko and Stephen Jairo have also made observations, separately, on the need for a regulatory framework for cryptocurrencies in the country. They have noted that the country has no actual plans going forward on how to regulate these technologies. What is available, he noted, are two pronouncements from the Kenyan Central Bank. One was directed to the general public, warning them to desist from transacting in crypto currencies. The other was directed towards financial institutions, cautioning them that the Central Bank may adopt forms of remedial actions against them if they deal in cryptocurrencies or engage in transacting with organisations that are. Jairo has noted that the Government of Kenya has tried to act on several suggestions that have been provided on the way forward in regulating cryptocurrencies in the country. This, he reports, led the government in 2008 to put in place a Sandbox Regulation that can help strike a proper balance between accommodating technologies such as cryptocurrencies within the Kenyan financial system while at the same time protecting consumers. However, it is more than a decade now and there are no results from this Sandbox.

iv. Need of a regulation

It is not surprising, therefore, that several authors such as Nelly Kinya and Marion Nekesa, writing on these matters in 2021, still observe that there is a gap in the Kenyan legal framework when it comes to the taxation of cryptocurrencies. This, she notes, has made of Kenya a tax

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⁶⁹ Siphesihle Myeni, Marshall Makate, and Nyasha Mahonye, 'Does Mobile Money Promote Financial Inclusion in Eswatini?' 47 *International Journal of Social Economics* 6, 2020,707.

⁷⁰ Alisa Sydow, Sanwar B, Chad C, 'Leveraging Blockchain's Potential – The Paradox of Centrally Legitimate, Decentralized Solutions to Institutional Challenges In Kenya' 14 *Journal of Business Venturing Insights*, 2020,

⁷¹ Sean Button, 'Cryptocurrency and Blockchains in Emerging Economies', 44.

⁷² Anton Didenko, 'Regulatory Challenges Underlying Fintech in Kenya and South Africa' *Bingham Center for the Rule of Law*, 2017, 6-7.

⁷³ Stephen Jairo, Institute of Economic Affairs, 'Cryptocurrencies' 2018, 7.

haven for cryptocurrencies and she has called upon regulators and policy agents to look at the developments in other jurisdictions so as to help Kenya pave a way forward for itself.⁷⁴

Mutugi has been of the same position as the Institute of Economic Affairs, recommending the putting in place of a regulatory sandbox that can be testing the operationalisation of new innovations such as cryptocurrencies within existing laws. ⁷⁵ Nour Naboulsi has also taken the time to discuss the advantages that the BitPesa platform offers to Kenyans in terms of the cost, the convenience, the security, and the transfer time of international fund transfers.⁷⁶ Like Anjarwalla, Bowmans and the Institute of Economic Affairs, he also emphasised on the need of coming up with regulations and training the general public on the advantages that may accrue from a reliance on cryptocurrencies.⁷⁷ Samora Marshell has also taken the time to look into the question. His major input has been that the government of Kenya should welcome cryptocurrencies with a change of attitude. This is by looking at them as complements and not replacements of fiat money. 78 To achieve this, he proposes that some lessons be learnt from Australia and Japan, which have been making efforts to align their legal framework on payment systems with cryptocurrencies in a supportive and formal way that give them legal recognition.⁷⁹

Globally, countries are adopting different approaches to dealing with the cryptocurrency phenomenon because currently, there is no worldwide consensus on whether to define cryptocurrencies as an asset or currency. 80 Sector regulators are evaluating these matters within the parameters of every jurisdiction and their capabilities to regulate it. For instance, in Germany, the virtual currency Bitcoin has been recognised as a unit of account or a financial instrument under German banking rules. This has made it possible for the currency to be used for private transactions or multilateral clearing circles, but it has not been given the status of electronic money or foreign currency.⁸¹ On the other hand Thailand, pursuant to a decree passed by its Cabinet that came into force in May 2018, has seen legislation come into force

⁷⁴ Nelly Kinya, Marion Nekesa, 'The Level of Deepening and Classification of Cryptocurrency Transactions And Taxation in Kenya', 91-3.

⁷⁵ Mutugi Mutugi, 'Cryptocurrencies in Commerce: A Kenyan Perspective', 2017, 17.

⁷⁶ Nour Naboulsi, 'Impact of Digital Currencies on Economic Development In Kenya' ACBSP Region 8 Annual Conference Paris, France November, 2018, 368.

⁷⁷ Nour Naboulsi, 'Impact of Digital Currencies on Economic Development In Kenya' ACBSP Region 8 Annual Conference Paris, France November, 2018, 382.

 ⁷⁸ Samora Marshel, 'The Regulation of Virtual Currencies In Kenya' LLM Thesis, 2017, Iv.
 ⁷⁹ Samora Marshel, 'The Regulation of Virtual Currencies In Kenya', 47.

⁸⁰ Maese, V. A., Avery, A. W., Naftalis, B. A., Wink, S. P., & Valdez, Y. D. (2016). Cryptocurrency: Primer. Banking Law Journal, 133(8), 468.

⁸¹ See -<Https://Www.Cnbc.Com/Id/100971898>n 30 May 2018.

empowering its Securities and Exchange Commission (SEC) to regulate digital currencies and their operators by (1) regulating the issuance and offering of cryptocurrencies and digital asset businesses, (2) setting fees and requirements for the registration and approval of cryptocurrencies and their operators and (3) establishing a guideline for dealing with potential problems and all other areas previously unforeseen.⁸²

Harwick, in his insightful paper, boldly opens his work by describing cryptocurrency as the incarnation of a new monetary system.⁸³ He further portends that cryptocurrency has the potential to render obsolete the conventional financial system that revolves around the regime of a central bank regulating issuance and circulation of currency. However, the barrier remains in that cryptocurrency may not acquire the purchasing power stability, economic efficiency and sustained economic growth – namely financial intermediation – required to supplant the financial system as we know it. Other than those barriers, the paper argues that cryptocurrency already possesses the following attributes that are typically characteristic of a commodity of exchange: (1) portability (2) durability (3) divisibility and (4) security. Harwick attempts to draw a similarity between cryptocurrency and gold to demonstrate how the same financial innovation brought about by fiat currency corrected the recurring nominal supply problem that was endemic to the use of gold as a currency. It is not outlandish to postulate that this now appears to be the very challenge posed by cryptocurrency to the conventional status quo.

Harwick further distinguishes between currency itself on one hand and its method of exchange on the other, and how the latter has evolved through the acceptance of electronic payments that can be transacted in whatever currency once connected to a network. These two fronts – recognition as a currency and what type of denomination – represent a double-hurdle that cryptocurrency would face in a quest to gain formal acceptance in the mainstream financial industry. Pertinently, he identifies regulatory uncertainty and legal hostility as being the key factors that could lead to the further instability of the cryptocurrency market structure. He does not elucidate further on this but rather delves into a financial and economic discourse on currency. In his conclusion, though, he does make a case for the relaxation of any prevailing regulatory prohibitions on cryptocurrency.

⁸² Https://News.Bitcoin.Com/Thailand-Cryptocurrency-Regulations On 31 May 2018

⁸³ Harwick C, 'Cryptocurrency and the Problem of Intermediation', 20 *The Independent Review* 4, 2016, 569-588.

Cryptocurrencies have received different legal responses in different jurisdictions. This is primarily due to lack of understanding on how it operates and attendant risks such as its volatility and anonymity. Due to differences in economic backgrounds and reception reactions, different jurisdictions have different legal and institutional frameworks on cryptocurrencies. While some jurisdictions have entirely legalized cryptocurrencies and have legislated on the same in order to exploit the opportunities that the technology presents, other jurisdictions have entirely illegalized the technology and banned it. It has been generally noted that cryptocurrencies are hard to regulate owing to the fact that there is no central bank or government that has control over the currency. However, this paper proposes that the key to regulation of cryptocurrencies does not lie in the regulation of the substance of cryptocurrency, which would be a wild goose chase. It lies, rather, in the regulation of the procedural aspects of transactions that involve cryptocurrency. These are what jurisdictions have sought to regulate. There is therefore a need for Kenya to perhaps look at best practices elsewhere.

Further, there is no jurisprudence that has come from Kenyan courts to settle these issues. When it had an opportunity to address them in *Lipisha Consortium Limited & another v Safaricom Limited*, the High Court of Kenya chose to give force to the lack of direction on dealing with cryptocurrencies just like the CBK. Robert This was a case in which Safaricom decided to suspend its M-PESA services to Lipisha Consortium and Bitpesa because Bitpesa were involved in money remittance schemes using a form of cryptocurrency known as Bitcoin and this was done without the CBK's approval. Instead of clarifying the legality around cryptocurrencies, the court chose not to compel Safaricom to deal in them for the fear of violating the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to suspend in the fear of violating the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of Crime and Anti-Money Laundering Act. Robert This was a case in which Safaricom to set the suspending the Proceeds of C

Bitcoin has been the apex of the cryptocurrency craze in Kenya owing to the fact that it is global. To date, there is no elaborate legal framework on cryptocurrencies in Kenya. The country has been categorised as a fence sitter which neither bans nor legalizes the adoption of cryptocurrencies. Other than the CBK being clear on this, the same has been seen in scholarship

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⁸⁴ Marian O, 'Framework for the Regulation of Cryptocurrencies'. University Of Chicago Law Review Dialogue, 57.

⁸⁵ Shailak Jani, 'The Growth Of Cryptocurrency In India: Its Challenges & Potential Impacts On Legislation' - <https://www.Researchgate.Net/Publication/324770908 The Growth Of Cryptocurrency In India Its Challe nges Potential Impacts On Legislation on 16 February 2019.

⁸⁶ Lipisha Consortium Limited & Another v Safaricom Limited (2015) eKLR.

⁸⁷ Lipisha Consortium Limited & Another v Safaricom Limited (2015) eKLR.

on the subject matter in Kenya. It is important to note that very little has been written in this area. Kenyan leading law firms such as Anjarwalla and Khanna as well as Bowmans have been clear that this has left Kenyans with very little legal protection although there is evidence that a growing number of Kenyans have started dealing in cryptocurrencies.⁸⁸ Anjarwalla and Khanna, for example, has in this regard looked into the way other countries have been considering creating their own cryptocurrencies and coming up with some form of regulations (an example is Venuezela and Dubai).⁸⁹ The firm has also shown how the United States and Australia have been attempting to subject cryptocurrencies to trade and taxation rules.⁹⁰

Bowmans has further also done a study demonstrating that cryptocurrencies are neither regarded as legal tender nor as assets under the Kenyan legal framework, noting of course that they are also not licensed in the country. The firm has also reported that it is not yet clear whether they can be described as securities within the meaning of the Kenyan Capital Markets Act because the law has been silent on them. 92

The Institute of Economic Affairs, a think tank forum that advises governments on policy matters through informed public debates, has been of the view that the government of Kenya should endeavour to establish a body that may be helping the country to deal with complex technological issues such as cryptocurrencies and pave a way forward that may be informed by public debate and work for the majority of the population at large. ⁹³

From the foregoing, one can clearly see that the direction in scholarship right now is to attempt to see which best practices Kenya can learn from elsewhere given that the country does not have a regulatory framework that is specific to cryptocurrencies. To add on to this scholarship, my dissertation, while agreeing that there are great practices that Kenya can learn from other countries in terms of coming up with legal framework on cryptocurrencies, adds a small contribution. This is to the effect that, while there is a lot to be learnt from other jurisdiction, a legal framework on cryptocurrencies in Kenya can only be comprehensive and robust only if

⁸⁸ See Sonal Sejpal, 'Bitcoins and Other Virtual Currencies From A Kenyan Legal Perspective' Legal Alert - Anjarwalla And Khana.

⁸⁹ See Sonal Sejpal, 'Bitcoins and Other Virtual Currencies From A Kenyan Legal Perspective' Legal Alert - Anjarwalla And Khana.

⁹⁰ See Sonal Sejpal, 'Bitcoins and Other Virtual Currencies From A Kenyan Legal Perspective' Legal Alert -Anjarwalla And Khana.

⁹¹ David Geral, Irene Muthoni and Brian Kalule, 'Unscrambling Blockchain: Regulatory Frameworks in Cryptocurrencies', Bowmans: The Value of Knowing, 15-20.

⁹² David Geral, Irene Muthoni and Brian Kalule, 'Unscrambling Blockchain: Regulatory Frameworks in Cryptocurrencies' 15-20.

⁹³ Stephen Jairo, 'Cryptocurrencies in Kenya', *Institute of Economic Affairs*, 2018, 1-5.

it addresses key areas that inevitably or will have to affect a Kenyan at some point in their life. These key areas are the use of currency to meet primary and secondary needs, the need to enter into contracts to make profits or accrue some benefits/salaries (basically here every Kenyan who earns money through business or employment is covered). So, there is a need to rethink contractual transactions if they are to involve cryptocurrencies. For such a regulatory framework to be comprehensive, taxation has to also be covered because a country such as Kenya significantly relies on taxpayer money. Finally, such a framework should also cater for succession. Cryptocurrencies do help people to 'quasi-bank' with a lot of convenience.

9. Research Methodology

This dissertation relies mostly on desk-based research. It has examined resources such as journal articles, laws and reports as it attempts to answer the research questions detailed in previous sections of this study. To guide the country towards adopting a homegrown comprehensive legal framework on cryptocurrencies, It has limited my analysis to showing the legal implications that the growing reliance and use of cryptocurrencies in Kenya has on fiat money, contracts, taxation and succession. It also draws lessons from Japan and the United States of America, which have tried to put in place specific 'cypto-regulations' touching on fiat money, contracts, taxation and, to some extent, succession.

10. Conclusion

Chapter One of this paper is this extensive introduction. It has provided a background to the problem that the author has identified and framed that problem in a statement. It has also justified why the problem under study is worth looking into. It has also provided for the objectives that this study intends to meet, the major hypothesis it intends to test, the research questions that it shall answer, the conceptual framework through which the major arguments advanced in this paper are to be viewed, a literature review of the problem under study and the research methodology that will be used to solve this problem.

II. Is There a Legal Framework on Cryptocurrencies in Kenya?

1. Introduction

The aim of this chapter is to demonstrate that Kenyan law related to money/currency do not cater for cryptocurrencies, given the peculiar nature of cryptocurrencies. To advance this aim, the discussion that it carries is limited to select relevant laws such as the Central Bank Act, the Central Depositories Act, the Income Tax Act, the Insolvency Act and the Proceeds of Crime and Anti Money Laundering Act. All these Acts of Parliament have something to do in terms of regulating fiat money. It is interesting to investigate how the same will play out when it comes to cryptocurrencies.

2. The Central Bank of Kenya Act

The Central Bank of Kenya Act is an Act established to create the Central Bank of Kenya (CBK), 94 its management and all other matters incidental to monies in Kenya. 95 According to the Act, the unit of currency in Kenya is the Kenyan shilling. 96 It is stated that the currency shall be used to settle all monetary obligations or transactions entered into or made in the country unless otherwise provided for by the law or agreed upon by the parties. 97 Expressly therefore, cryptocurrency and block chain technology do not formally constitute currency or legal tender in Kenya. 98 The Act does not recognize them as settlements of monetary obligations. The Act also recognizes foreign currency and provides for what shall guide transactions with foreign banks and non-residents by individuals in the country, where cryptocurrency cannot really fall because of a lack of a centralised body. 99

The Act further states that the CBK shall have the sole right to issue notes and coins in Kenya and only these notes and coins shall be legal tender for the settlement of transactions and

⁹⁴ The Central Bank Act (Chapter 491 of 2014).

⁹⁵ The Central Bank Act (Chapter 491 of 2014).

⁹⁶ Section 21, The Central Bank Act (Chapter 491 of 2014).

⁹⁷ The Central Bank Act (Chapter 491 of 2014).

⁹⁸ The Central Bank Act (Chapter 491 of 2014).

⁹⁹ The Central Bank Act (Chapter 491 of 2014).

monetary obligations.¹⁰⁰ A corresponding duty that comes with the issuance of these notes and coins under the Act is the power to withdraw any notes and coins issued by the CBK and such process is provided for in the Act.¹⁰¹ By dint of this statement, the form of currency that can be issued by the CBK and is recognized by the CBK is therefore apparently only notes and coins. As mentioned in the introduction, the CBK therefore does not recognize cryptocurrency as a form of either local or foreign currency.

The Act also recognizes instruments such as bills of exchange and promissory notes. ¹⁰² The CBK regulates these modes of payment through publishing regulations in the Kenya Gazette prohibiting the issuance of such bills by persons other than the CBK. ¹⁰³ This is in consultation with the Minister, contrary to which an offence is prescribed to be a fine not exceeding five hundred thousand shillings or an imprisonment for a term not exceeding three years or both. ¹⁰⁴ In the entirety of this provision equally, there is no mention of decentralized money or the technology of blockchain. ¹⁰⁵

The Act also regulates external relations by providing for a reserve fund under section 27. The reserve fund shall consist of:

- a. Gold;
- b. Convertible foreign exchange in form of:
 - i. Demand or time deposits with foreign central banks or with CBK's agents or correspondents outside Kenya.
 - ii. Documents and instruments customarily used for the making of payments or transfers in international transactions;
 - iii. Notes or coins
- c. Convertible and marketable securities of, or guaranteed by, foreign governments or international financial institutions.

The above provisions only touch on gold, notes, coins and such other instruments as recognized forms of value for exchange with foreign banks and as reserves. ¹⁰⁶ It equally provides nothing

¹⁰² Section 25, The Central Bank Act (Chapter 491 of 2014).

¹⁰⁰ Section 22, The Central Bank Act (Chapter 491 of 2014).

¹⁰¹ The Central Bank Act (Chapter 491 of 2014).

¹⁰³ See for instance Sections 4-8, *The Central Bank Act* (Chapter 491 of 2014).

¹⁰⁴ Section 33A (2), The Central Bank Act (Chapter 491 of 2014).

¹⁰⁵ See generally *The Central Bank Act* (Chapter 491 of 2014).

¹⁰⁶ Section 27, The Central Bank Act (Chapter 491 of 2014).

on other values such as cryptocurrencies. Section 29 provides an elaborate description on relations with foreign central banks, foreign banks and foreign financial institutions. ¹⁰⁷ The subject of such relations is purely monetary. ¹⁰⁸ It provides that the CBK shall open accounts for and accept deposits, collect money and other monetary claims for and on account of other foreign financial institutions alluded to therein. ¹⁰⁹ Therefore, while other jurisdictions may have moved ahead and may be dealing in cryptocurrency, the legal framework in Kenya that regulates the CBK does not provide for such relations that may include cryptocurrencies and other forms of blockchain technology.

3. The Central Depositories Act

The Central Depositories Act was enacted by Parliament to facilitate the establishment, operation and regulation of the Central Depositories and Settlements Corporation (CDSC) to provide for the immobilization and eventual dematerialization of dealings in securities deposited therewith in Kenya and for connected or related purposes.¹¹⁰ The Act describes securities to mean:

- a. Debentures or bonds issues or proposed to be issued by a government;
- b. Debentures, shares, bonds commercial paper or notes issued or proposed to be issued by a body corporate;
- c. Derivatives including futures and options contracts on securities, indices, interest or other rates, currency, futures or commodities;
- d. Any unit, interest or share offered under a collective investment scheme;
- e. Any instruments commonly known as securities but does not include
 - i. Bills of exchange;
 - ii. Promissory notes; or
 - iii. Certificates of deposits issued by a bank or financial institution licensed under the Banking Act.¹¹¹

Going by these definitions, the CDSC only deals in securities and those include such things as shares and bonds. There is no mention or allusion to cryptocurrency. However,

¹⁰⁷ Section 29, *The Central Bank Act* (Chapter 491 of 2014).

¹⁰⁸ Section 29, The Central Bank Act (Chapter 491 of 2014).

¹⁰⁹ Section 34, *The Central Bank Act* (Chapter 491 of 2014).

¹¹⁰ The Central Depositories Act (No 4 of 2000).

¹¹¹ Section 2, *The Central Depositories Act* (No 4 of 2000).

cryptocurrencies share a few characteristics with conventional securities. Other than also being virtual, cryptocurrency launches usually have initial offers just like stocks and shares. Interest launches usually have initial offers just like stocks and shares. Interest launches are commonly referred to as "security tokens" or "investment tokens." Investors are invited to these initial offerings in order to make investments in the currencies. Initial offers in the cryptocurrency world are known as Initial Coin Offers (ICOs). In some jurisdictions cryptocurrencies have been declared assets. This classification allows for cryptocurrencies to be taxed and be classified in the same category as securities.

Securities exchange is defined to mean a market, exchange, securities organization or other place at which securities are offered for sale, purchase or exchange, including any clearing, settlement or transfer services connected therewith. Generally, cryptocurrencies are very versatile. This usually necessitates the need to convert them to fiat money or to transfer ownership through sales. Therefore, by the fact that cryptocurrencies are dynamic and can either be classified as currency or as security, they can be easily included within the ambits of the Act, to be regulated by the Act. This would be a step towards the attempt of regulation of cryptocurrency by the State. The Act as is, therefore, does not have any provisions on the regulation of cryptocurrencies or Initial Coin Offers in the country. It does not equally leave room for a wide interpretation that would allow cryptocurrencies to fit within its ambits. This

¹¹² 'Crytocurrencies and Blockchain, Legal context and Implications for Financial Crime, money laundering and tax evasion, -

¹¹³ Snyers and K. Pauwels, "ICOs in Belgium: down the rabbit hole into legal no man's land? (Part 1)", ICCLR, 2018

¹¹⁴ Chen Liu and Haoquan Wang, 'Initial coin offerings: what do we know and what are the success factors' in Stephane Goutte, Khaled Guesmi, Samir Saadi 'Cryptofinance and mechanism of exchange: The making of virtual currency', Contributions to Management, 2019, 145-146.

^{115 &#}x27;Regulation of Cryptocurrency in Selected Jurisdictions,

^{&#}x27;https://www.loc.gov/law/help/cryptocurrency/regulation-of-cryptocurrency.pdf> on 16 February 2019.

¹¹⁶ Ramis Jamali, Sherwin Li P. and Rodrigo Pantoja, Cryptocurrency, digital asset class of the future bitcoin vs Ethereum' -< https://www.economist.com/sites/default/files/economist_case_comp_ivey.pdf>on 16th February 2019.

¹¹⁷ Section 2, *The Central Depositories Act* (No 4 of 2000).

¹¹⁸ Cryptocurrency and Blockchain, 'Legal Context and Implications for Financial Crime, money laundering and tax evasion' -

http://www.europarl.europa.eu/cmsdata/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf on 15 February 2019.

The Chen Liu and Haoquan Wang, 'Initial coin offerings: what do we know and what are the success factors' in Stephane Goutte, Khaled Guesmi, Samir Saadi 'Cryptofinance and mechanism of exchange: The making of virtual currency', Contributions to Management, 146.

¹²⁰ Lanouar Charfeddine, 'Investigating the dynamic relationship between cryptocurrencies and conventional assets: Implications for financial investors' Economic Modelling, 2020, 1-4.

is because it expressly states what shall include securities and subject matters of security exchanges.

4. Income Tax Act

The Income Tax Act is an Act of Parliament that makes provisions for the charge, assessment, and collection of income tax; for the ascertainment of the income to be charged; for the administrative and general provisions and for matters incidental to and connected with the business of taxation. 121 The Act is grey on matters concerning cryptocurrencies and blockchain technology. The Act is designed to make provisions for matters incidental to income tax. It does not define what income is but defines total income to mean an aggregate amount of an individual's income other than income exempt from tax or chargeable to tax. 122 The Act provides for the imposition of the tax that shall be known as income tax. 123 It accrues and is charged for each year upon all the income of an individual whether resident or non-resident. Such income should have accrued in or was derived from Kenya. According to the Act, income that is taxable is income in respect of: firstly gains and profits from any business for whatever period of time carried on, any employment or services rendered, any right granted to any other person for use or occupation of property; secondly dividends or interest made in the course of a venture of trade; thirdly pension, charge or annuity and any withdrawals from, or payments out of, a registered pension fund or a registered provident fund or a registered individual retirement fund, and any withdrawals from a registered home ownership savings plan. 124

In this regard, it is apparent that the Act does provide an array of taxable benefits categorized as income. It can be inferred from the above provisions that any monies made in any trade is taxable as income. Similarly, therefore, questions arise in this regard as to whether profits made through blockchain technology transactions are taxable. This seems fairly obvious, but the elephant in the room is whether bitcoin and other forms of digital currencies could be recognized to hold value as to offset income tax. This is because of the nature of the source of the incomes and the nature and form of the payments. Income from businesses, employment or services rendered and rights granted to another for the occupation of a property is usually paid in now what this paper shall henceforth refer as traditional mode of payments. Concerns

¹²¹ The Income Tax Act, (Chapter 470 of 1961).

¹²² Section 2, *The Income Tax Act*, (Chapter 470 of 1961).

¹²³ The Income Tax Act, (Chapter 470 of 1961).

¹²⁴ The Income Tax Act, (Chapter 470 of 1961).

amongst bitcoin traders have occasionally been raised on the possibility of KRA accepting tax in the form of bitcoin from bitcoin traders. ¹²⁵

Cryptocurrencies have now proven to be real sources of income from employments and services rendered online. A blockchain, for example, is essentially a distributed database of records or public ledger of all transactions or digital events that have been executed and shared among participating parties. Their main work is to authenticate transactions involving cryptocurrencies through what is generally known as stamping. In return they accrue in their e-wallets specific amounts of cryptocurrencies. Such transactions therefore fall within what may be categorized as either business or employment. Therefore, any such income should be subject to tax. However, miners have devised ways of avoiding taxation by accumulating the cryptocurrencies in their e-wallets and converting them to foreign amounts in off-shore accounts of other cryptocurrency dealing countries.

It can therefore be concluded that the Income Tax Act, does not provide for a sound legal framework when it comes to income that is accrued either in Kenya or outside Kenya that involves transactions whose underlying asset is primarily cryptocurrency. This allows for aggressive tax evasion and avoidance by those who are actively transacting in the industry, thus the need to interrogate this area of research.

5. Insolvency Act

The Insolvency Act was passed to consolidate the law relating to the insolvency of natural persons and incorporated and unincorporated bodies; to provide for and to regulate the bankruptcy of natural persons; to provide alternative procedures to bankruptcy that will enable the affairs of insolvent natural persons to be managed for the benefit of their creditors; to provide for the liquidation of incorporated and unincorporated bodies (including ones that may

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^{125 &#}x27;KRA Should offer clarity on how to tax bitcoin trading' -

< https://www.businessdailyafrica.com/analysis/KRA-should-offer-clarity-on-how-to-tax-bitcointrading/539548-4185490-if6mn0/index.html> on 16 February 2019.

¹²⁶ Joseph Bonneau, Andrew Miller , Jeremy Clark, Arvind Narayanan, Joshua A. Kroll, Edward W 'Research Perspectives and Challenges for Bitcoin and Cryptocurrencies', 2015, 105.

¹²⁷ Blockchain Technology: Beyond Bitcoin, Satardja Center for Entrepreneurship and Technology' - https://scet.berkeley.edu/wp-content/uploads/BlockchainPaper.pdf on 16 February 2019.

¹²⁸ Derek Leung, 'Vault: Fast Bootstrapping for Cryptocurrencies' Master of Science in Electrical Engineering and Computer Science, University of California, Berkeley (2016), 57.

¹²⁹ 'Cryptocurrencies and Blockchain, Legal context and implications for financial crime, money laundering and tax evasion' -

http://www.europarl.europa.eu/cmsdata/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf 15 March 2020 (Cryptocurrencies and Blockchain).

be solvent); to provide as an alternative to liquidation procedures that will enable the affairs of such of those bodies as become insolvent to be administered for the benefit of their creditors; and to provide for related and incidental matters.¹³⁰

Since bankruptcy largely involves assets in terms of money and property, it is paramount that the definitions of these terms within the context of the Act be reviewed. The Insolvency Act defines amount to mean an amount of money. 131 On the other hand it describes property to include money, goods, choses in action, land and every description of property, whether real or personal, legal or equitable, and whether located in Kenya or elsewhere, and includes obligations, easements and every description of estate, interest and profit, present or future, vested or contingent in, arising out of or incidental to property. 132 It further describes property to also include things in action. 133 These explanations in their entirety do not specify if money in this context would include cryptocurrencies. However, an in-depth analysis of the provisions of the Insolvency Act would determine whether cryptocurrencies would fall within the ambits of the bankruptcy procedures or offences and if they can form part or subject of assets under bankruptcy. In summary, it looks at the nexus between cryptocurrencies and bankruptcy.

The Act is quite large and my analysis will only pick on a few provisions that are relevant to cryptocurrencies and bankruptcy as a representative of the whole Act's applicability to virtual currencies. Section 13 of the Act describes the nature of bankruptcy. One of the provisions states that the consequences of being adjudged bankrupt would include the property of the bankrupt devolving to a bankruptcy trustee or to an Official Receiver. Property in this sense includes money. Cryptocurrencies are capable of being owned in anonymity and transacted anonymously. Therefore, if a court were to issue an order that the property of a bankrupt devolve to a trustee or an Official Receiver then the problem that arises would be that the bankrupt can successfully conceal any cryptocurrency they own and its value. Another problem that would also arise would be that the Official Receiver or the bankruptcy trustee would have to have an e-wallet in order for the cryptocurrency to be transferred to them. The subsequent provision states that the bankrupt cannot participate in any business activities.

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¹³⁰ The Insolvency Act (No 8 of 2015).

¹³¹ Section 2, *The Insolvency Act* (No 8 of 2015).

¹³² The Insolvency Act (No 8 of 2015).

¹³³ Section 13, *The Insolvency Act* (No 8 of 2015).

¹³⁴ Sections 14 and 15, *The Insolvency Act* (No 8 of 2015).

¹³⁵ The Insolvency Act (No 8 of 2015).

Cryptocurrency mining is one of the most anonymous businesses online. ¹³⁶ It is therefore easy to avoid application of these provisions by only staying away from the conventional forms of businesses that are not anonymous or alternatively by converting other values into the anonymity of cryptocurrency. The last provision to illustrate the inadequacy of this recent legislation is that the Official Receiver is entitled to recover the assets that the bankrupt has transferred within two years preceding the bankruptcy. ¹³⁷ Cryptocurrency, whether classified as money or property in this regard would be impossible to retrieve. This is because the blockchain does not allow for the reversal of a transfer of cryptocurrency. ¹³⁸ A single transfer affects the whole blockchain worldwide and therefore a reverse would be catastrophic to the online ledger hence the impossibility of a reverse. ¹³⁹ However, in the event that the person transferred to is known, then the amounts in cryptocurrencies can be transferred to anyone with an e-wallet. The risk to be occasioned however would be that the recovery of cryptocurrency would be impossible in the event that the party transferred to only uses a proxy name that is untraceable by the Official Receiver or the bankruptcy trustee.

6. The Proceeds of Crime and Anti Money Laundering Act

The Proceeds of Crime and Anti Money Laundering Act was passed to provide for and curb the offence of money laundering and to introduce measures for combating the offence, to provide for the identification, tracing, freezing, seizure and confiscation of the proceeds of crime, and for connected purposes. The implied connected purposes include crimes of corruption and fraud that are financially motivated. Kenya is known to be one of the most corrupt countries worldwide, marred with white collar crimes including money laundering. 140

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¹³⁶ Goriacheva A, Jakubenko N, Pogodina O and Dimitry Silnov, 'Anonymization Technologies of Cryptocurrency Transactions as Money Laundering Instruments' -

Laundering_Instrument> on 22 February 2019

¹³⁷ Sections 6, 13, 196, 200, 206, 207, 213 and 290, *The Insolvency Act* (No 8 of 2015).

¹³⁸ Tomaso Aste, Paolo Tasca 'Blockchain Technologies: Foreseeable Impact on industry and Society' -< http://discovery.ucl.ac.uk/10043048/1/Aste-BlockchainIEEE-600W-v3.3-A.doccceptedVersion.x.pdf> 22 February 2019.

¹³⁹ Marina Niforos, 'Blockchain in Development- Part I: A new mechanism for trust' - https://www.researchgate.net/publication/319629348 Blockchain in Development-Part I A New Mechanism for Trust> 22 February 2019.

¹⁴⁰ National Ethics and Anti-corruption Commission, 'National Ethics and Corruption Survey 2017' < http://www.eacc.go.ke/wp-content/uploads/2018/06/Final EACC National Survey on Corruption-2016.pdf > 22 February 2019.

It is imperative to critically look at this Act in relation to cryptocurrency in Kenya because cryptocurrencies now form a part of emergent financial technologies in Kenya. ¹⁴¹ The Act deals with offences that relate to money, therefore it is prudent to do an in-depth analysis in order to determine its potential in regulating blockchain technologies. The Act defines monetary instruments as;

- a. Coins and paper currency designated as legal tender of Kenya or of a foreign country and which is customarily used and accepted as a medium of exchange in Kenya or the country of issue;
- b. Traveller's cheques, personal cheques, bank cheques, money orders and securities;
- c. Any other negotiable instrument which is in bearer form, or other form through which title passes upon delivery.¹⁴²

Therefore, in its entirety, the Act deals with offences whose subjects are the above-mentioned forms of monetary instruments. The most common is the coin and paper currency and cheques, security orders or money orders. The negotiable instruments referred to in the Act are documents guaranteeing payment of specific amounts to settle debts when they fall due or upon demand. They vary from cryptocurrencies because they are not virtual and their title shifts with delivery. In conclusion therefore, the Act, in defining what constitutes money, does not recognize cryptocurrencies as forming the basis of monetary instruments. Instead it recognizes the conventional forms of currency that are recognized as legal tender by the Central Bank of Kenya Act. Moreover, the Act largely deals with property as well and defines property to mean all monetary instruments and all other real or personal property of every description, including choses in action or other incorporeal or heritable property, whether situated in Kenya or elsewhere, whether tangible or intangible, and includes in any such property and any such legal documents or instruments evidencing title to be interest in such property. It is not succinctly clear whether cryptocurrencies fall here.

On the other hand, proceeds of crime is defined to mean any property or economic advantage derived or realized, directly or indirectly, as a result or in connection with an offence

¹⁴¹ United Nations Economic Commissions for Africa draft report on Blockchain Technologies in Africa, 2017 available at https://www.uneca.org/sites/default/files/images/blockchain_technology_in_africa_draft_report_19-nov-2017-final_edited.pdf Last accessed on 22nd February 2019.

¹⁴² Section 2, *The Proceeds of Crime and Anti Money Laundering Act* (No 9 of 2009).

¹⁴³ Section 2, The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).

¹⁴⁴ See generally *The Proceeds of Crime and Anti Money Laundering Act* (No 9 of 2009).

¹⁴⁵ See generally *The Proceeds of Crime and Anti Money Laundering Act* (No 9 of 2009).

irrespective of the identity of the offender and includes, on a proportional basis, property into which any property derived or realized directly from the offence was later successfully converted, transformed or intermingled; as well as income, capital or other economic gains or benefits derived or realized from such property from the time the offence was committed.¹⁴⁶

The definition of proceeds of crime under the Act, includes monetary instruments and property. The former has been understood to exclude cryptocurrency while the latter is largely problematic when it comes to specifying if it may include cryptocurrency or not. This therefore, creates a lacuna under which misuse of cryptocurrency as virtual currencies may fall under the Act or otherwise. The Act does not define what economic advantage is. As a rider therefore, this ambiguity may allow for the inclusion of cryptocurrency as part of an economic advantage because it has economic value and allows for property within this context to be converted, transformed or intermingled with it in the blockchain thus which in consequence may result into the worst form of money laundering. Cryptocurrencies are also virtual in nature. While describing property, the Act uses the term incorporeal to define the nature of property that may form part of an offence under the Act. This translates to an inclusion of cryptocurrencies as part of 'property' under the Act since cryptocurrencies are incorporeal as well. It is established therefore that cryptocurrencies could form the subject of offences under the Act, owing to the broad description of the term property. In other jurisdictions, cryptocurrencies have been defined to be property that is taxable.

In respect to the offences under the Act, there are certain offences that are couched in words that exclude 'property' and expressly include monetary instruments. ¹⁵¹ As a result therefore, offences that are committed that involve cryptocurrency are not anticipated under the act. The cardinal offence under the Act is that of money laundering. It contains a caution against transactions that involve property forming part of or being proceeds of a crime whereby the intention of such transaction is to conceal the nature, source, location, disposition or movement of the said property or its ownership, or to enable or assist such as person who commits this

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¹⁴⁶ Section 2, *The Proceeds of Crime and Anti Money Laundering Act* (No 9 of 2009).

¹⁴⁷ Section 2, The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).

¹⁴⁸ See generally Section 2, The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).

¹⁴⁹ Section 2, *The Proceeds of Crime and Anti Money Laundering Act* (No 9 of 2009).

¹⁵⁰ See for instance: Kelvin FK Low & Ernie GS Teo (2017) Bitcoins and other cryptocurrencies as property? Law, Innovation and Technology, 9:2, 235.

¹⁵¹ The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).

offence avoid prosecution anywhere or to diminish any property acquired directly or indirectly through such an offence. 152

Cryptocurrency would easily form the subject of such an offence since it fits the description of property within the context of the Act and further, it can be used as a medium of exchange in transactions that are contemplated by the provisions on the offence.¹⁵³ It can be used to conceal the nature, source, location and movement of property including its ownership.¹⁵⁴ This is possible because blockchains are highly anonymous and therefore anyone who wants to conceal proceeds of a crime that are monetary instruments would easily convert them into cryptocurrency. Such transactions are untraceable, highly anonymous and irreversible.¹⁵⁵

The second offence under the Act is the offence of acquisition, possession or the use of proceeds of a crime. ¹⁵⁶ Proceeds of a crime include monetary instruments and property. As postulated above, cryptocurrencies are capable of being termed as property under the Act. Therefore, should they form part of proceeds of a crime, they can also form the subject of such an offence. The problem, however, arises in proving the use of cryptocurrencies since the blockchain system is anonymous. However, acquisition and use are enough proof bearing in mind that the presumption of innocence in economic crimes is guilty until proven innocent. ¹⁵⁷ The third offence under the Act that would be relevant to cryptocurrencies is the offence of financial promotion of an offence. ¹⁵⁸ It generally criminalizes the transfer and receipt of monetary instruments and anything of value to another person, with the intent to commit an offence. The Act does not describe what 'anything of value' means. ¹⁵⁹ It is this ambiguity that would befit cryptocurrencies as anything of value because cryptocurrencies have an innate economic value and can be used to facilitate crimes such as crimes of terror and fraud.

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¹⁵² Section 3, The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).

¹⁵³ Goriacheva A, Jakubenko N, Pogodina O. and Dimitry Silnov, 'Anonymization Technologies of Cryptocurrency Transactions as Money Laundering Instruments'

https://www.researchgate.net/publication/323205404 Anonymization Technologies of Cryptocurrency Transactions_as_Money_Laundering_Instrument> on 22 February 2019.

¹⁵⁴ Fabian Teichmann and Marie-Christin Falker, 'Money laundering through cryptocurrencies'.

¹⁵⁵ Goriacheva A, Jakubenko N, Pogodina O. and Dimitry Silnov, Anonymization Technologies of Cryptocurrency Transactions as Money Laundering Instruments,

Laundering_Instrument> on 22 February 2019.

¹⁵⁶ Section 4, The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).

¹⁵⁷ Section 4, *The Proceeds of Crime and Anti Money Laundering Act* (No 9 of 2009).

¹⁵⁸ Section 7, The Proceeds of Crime and Anti Money Laundering Act (No 9 of 2009).

¹⁵⁹ See generally *The Proceeds of Crime and Anti Money Laundering Act* (No 9 of 2009).

7. Conclusion

This chapter has analysed select relevant laws; namely, the Central Bank Act, the Central Depositories Act, the Income Tax Act, the Insolvency Act and the Proceeds of Crime and Anti Money Laundering Act. All these Acts of Parliament have something to do in terms of regulating fiat money. The Chapter has however demonstrated that they are ill-equipped in terms of adequately dealing with cryptocurrencies.



III. Cryptocurrencies and Financial Inclusion: A Look into 'Currency', Contracts, Taxation and Succession

1. Introduction

The uniqueness of cryptocurrencies has caused a difference in opinion on the laws that govern finance and financial technology in Kenya and other legal fields. ¹⁶⁰ Since cryptocurrencies can be converted to fiat money and vice versa, there would be implications on legislations that govern fiat money. ¹⁶¹ By extension, therefore, cryptocurrencies can be used in fraud and other financial crimes that involve fiat currency. ¹⁶² Equally, the challenge that is associated with classifying cryptocurrency either as assets, securities or as currency has legal implications on contractual, taxation and succession laws. ¹⁶³ These fields touch the day-to-day life of the ordinary citizen because one has to access some currency to meet their basic needs and in this respect they usually have to enter in some form of contracts because they need this access salaries/profits, salaries profits are to be taxed. Other than this, there is an increasing need for people to save some of what they earn. Succession might be affected in case they pass away, and their savings are in cryptocurrencies.

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¹⁶⁰ Morten Bech and Rodney Garratt, 'Central bank cryptocurrencies' BIS Quarterly Review, September 2017, 57.

¹⁶¹ See for instance Steve Huckle, Martin White, and Rituparna Bhattacharya, 'Towards a post cash society: An application to convert fiat money into cryptocurrecy' 22 Peer-reviewed Journal on the Internet 3 March 2017; See also Mohammad Rabiul Islam, Imad Fakhri Al-Shaikhli, Rizal Mohd Nor, Kabir Sardar Mohammad, 'Cryptocurrency vs fiat currency: Architecture, algorithm, cashflow and ledger technology on emerging economy: The influential facts of cryptocurrecy and fiat currecy' International Conference on Information and Communication Technology for the Muslim World, 2018, 69-72. See also Venkamaraju Chakravaram, Sunitha Ratnakaram, Ester Agasha, and Nitin Simha Vihari, 'Cryptocurrency: Threat or opportunity' in Lecture notes in electrical engineering, 2007, 747-752.

¹⁶² CNN, Cryptocurrency Fraud Now Second Most Common Investment Scam in Australia: Watchdog, https://www.cnn.com/cryptocurrency-fraud-now-most-common-investment-scam-in-australia/ on 14 March 2019.

¹⁶³ Svetlana Abramova, Artemij Voskobojnikov, Konstantin Beznosov, and Rainer Böhme, 'Bits under the matress: Understanding different Risk perceptions and Security behaviours of crypto-asset users', *CHI Conference on Human Factors in Computing Systems*, 2021.

2. Fiat Money

Fiat money or fiat currency is defined as a currency by official order whose value is based on the authorities' ability to pay. ¹⁶⁴ It is further stated that all money is fiat currency. ¹⁶⁵ Although Kenya's Central Bank Act does take the time to define money or fiat money, ¹⁶⁶ the definition provided under the Kenya's Penal Code can compensate for this. Under Section 4 of the Penal Code, money is defined as 'bank notes, currency notes, bank drafts, cheques and any other orders, warrants or requests for the payment of money.' This definition seems to be more appreciative of fiat currency rather than cryptocurrency. It is not clear whether cryptocurrency could legally fall under 'any other orders, warrants or requests for the payment of money'. ¹⁶⁷

This lack of clarity might be read against cryptocurrencies because cryptocurrencies have the potential of replacing fiat money hence the fear that it may create an imbalance in legal tender and how national governments deal with finances. A currency has to be trusted by the people to survive and the regulating body has to command trust from the general citizenry. If cryptocurrencies were to gain favour with and amongst a significant population in Kenya, the regime of fiat currency would perhaps be threatened. White collar crimes are generally those crimes that are non-violent and are financially motivated committed by persons in the managerial and administrative level, professionals and public servants. Examples include corruption cases and money laundering, among others. White collar crimes did not exist until 1939. The term was coined by an American sociologist Edwin Sutherland, an American sociologist, because he was concerned about what he referred as 'status' offences. His definition of white collar crimes was those committed by a person of high ranking and high

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¹⁶⁴ The Black's Law Dictionary, 12nd Edition.

¹⁶⁵Pascal-EmmanuelGobry, All Money is Fiat Money,

https://www.forbes.com/sites/pascalemmanuelgobry/2013/01/08/all-money-is-fiat-money/ on 14 March, 2019 for See generally Central Bank of Kenya Act (No 451 of 2019)

¹⁶⁷What is Fiat Money? Definitions and Examples http://marketbusinessnews.com/financial-glossary/fiat-money/ Last accessed on 14 March 2019

¹⁶⁸ Maryan, May Cryptocurrencies replace fiat money, https://infocoin.net/en/2018/07/12/may-cryptocurrencies-replace-fiat-money/ on 16 March 2019

Money is usually trusted by one person under the assumption that anyone he or she might be involved with in the market will just have trust in it too. See for instance Matthias Kaelberer, 'Trust in the euro: Exploring the governance of a supranational currecny' *European Societies* 9(4) 2007, 623.

Angeline Mbogo, *Kenyans Are Among the Highest Bitcoin Holders Per Capita According to Citi Report*, https://bitcoinafrica.io/2018/01/14/kenyans-are-amog-the-highest-bitcoin-holders-per-capita/ 2018 on 14 March 2019.

¹⁷¹ Black's Law Dictionary, 12nd Ed.

¹⁷² Sutherland E, 'White Collar Crime', New York: *The Dryden Press*, 1949.

social status in the course of his occupation.¹⁷³ The general consensus is that white collar crimes were committed by persons while in the line of their official duties.¹⁷⁴ It is further confirmed that these people were rarely prosecuted because:

- a) their acts were not considered to bring about the same moral dilemma as ordinary offences;
- b) the offenders maintained a certain social and economic status hence the authorities would be reluctant to detain them;
- c) these offences were mostly considered as administrative breaches rather than actual crimes;
- d) these were high class offenders. 175

The above definition was however modified to emphasize on the offender's class or occupation as well as to include the nature of the offence itself. Thus, it was defined to mean an illegal act or actions committed by concealment or deceit, to obtain money or property, or to gain business or personal advantage.¹⁷⁶ The most significant element of this definition was that crime is covered up by the creation of a deceiving paper, organization or transactional façade to hide the true nature of what has occurred.¹⁷⁷

There is no specific definition of white-collar crimes in Kenya but the concept has been incorporated in various legislations such as the Penal Code, ¹⁷⁸ the Anti-Corruption and Economic Crimes Act, ¹⁷⁹ and the Proceeds of Crime and Anti Money Laundering Act. ¹⁸⁰ Criminals who want to dispose of huge amounts of money through their activities mostly want to launder the money to conceal their criminal transactions. ¹⁸¹ This involves giving the money legitimate appearance that would hide its source. ¹⁸² It ensures that the money can be used

¹⁷³ Sutherland E, 'White Collar Crime'.

¹⁷⁴ Marshall B. Clinard, *The Black Market: A Study of White Collar Crime*, New York Holt, 1952.

¹⁷⁵ Marshall B. Clinard, *The Black Market: A Study of White Collar Crime*.

¹⁷⁶ Marshall B. Clinard, *The Black Market: A Study of White Collar Crime*.

¹⁷⁷ Marshall B. Clinard, The Black Market: A Study of White Collar Crime.

¹⁷⁸ Penal Code (Chapter 63 of 2010).

¹⁷⁹ Anti-Corruption and Economic Crimes Act (Chapter 65 of 2012).

¹⁸⁰ and the Proceeds of Crime and Anti Money Laundering Act

¹⁸¹ Stefan D Cassella, 'Reverse money laundering' 7 Journal of Money Laundering Control, 2003, 91-94.

¹⁸² The Black's Law Dictionary, 12nd Edition

without any danger of seizure by the authorities.¹⁸³ This is where cryptocurrencies are likely to be used because of lack of regulation and the anonymity that they guarantee.¹⁸⁴

As observed by Constance Gikonyo, Kenya is vulnerable to money laundering for the following reasons:

'Kenya is a transit point for international drug traffickers and trade-based money laundering. It also faces serious challenges from diverse forms of transnational organised crime, including illegal trade in counterfeit goods and other illegal commodities, trafficking in wildlife products, human trafficking and small arms trafficking. Besides, Kenya has specifically been identified as a locale for laundering of Somalia piracy proceeds. Additionally, amongst the countries in the Eastern African region, Kenya is considered to be a more developed financial centre and economy. These factors potentially increase the threat of money laundering in the country. Other factors increasing Kenya's susceptibility include the rampant corruption, culture of impunity and lack of political will to deal with major economic crimes. In the Kenyan context, the possibility of corruption is not assumed but real, considering that the country's institutions and individuals are ranked as some of the most corrupt in the world. The absence of political will is evidenced by the lack of action taken in terms of prosecuting, despite investigations having been conducted, certain high-profile financial crimes that have occurred. This is notwithstanding the elapsing of a substantial duration since their occurrence and conclusion of investigations. Cumulatively, these factors enable money laundering activities to advance in the country.'185

Since money laundering involves attempts to disguise or conceal the actual source of money or assets obtained through criminal activities, perpetrators of financial crimes could find a way through the use of blockchain technology to instigate their money laundering agenda. The reason for this is that cryptocurrencies allow an individual to anonymously own the currency and exercise control over the same through their e-wallets. The nature of cryptocurrencies and blockchain technology would allow them to easily change the form of criminal proceeds

¹⁸³ Ping He, 'A typological study on money laundering' 13(1) *Journal ion Money Laundering Control*, 2010, 16-17.

¹⁸⁴ Fabian Teichmann and Marie-Christin Falker, 'Money laundering through cryptocurrencies' in Elena G. Popkova Bruno S. Sergi, 'Artificial intelligence: Antropogenic nature v social origin' Springer, Advances in Intelligent Systems and Computing, 2020, 500.

¹⁸⁵ Constance Gikonyo, 'The legal profession in Kenya and its anti-money laundering obligations or lack thereof' 22 *Journal of Money Laundering Control* 2, 2019, 248-249,

¹⁸⁶ This is because blockchain technology successfully allows for anonymous use and therefore can easily conceal transactions. See Fabian Teichmann and Marie-Christin Falker, 'Money laundering through cryptocurrencies', 500-502.

¹⁸⁷Aroul Canessane, N.Srinivasan, Abinash Beuria, 'Decentralised'.

from fiat currency to a virtual currency that is safely put away in an online account that is highly secured. ¹⁸⁸ This may perhaps be easy in Kenya bearing in mind the arrival of the first cryptocurrency Automated Teller Machine (ATM) machine in the country. ¹⁸⁹ The ATM machine allows individuals to directly change fiat money at hand into virtual currency. ¹⁹⁰ Unlike the traditional means of having to transfer physical cash to an individual to sell one cryptocurrency, the ATM makes it easier to convert paper money into cryptocurrency. Basically, what happens is that you insert in the ATM some fiat money that it recognises, and this will be converted into, for example, Bitcoins. ¹⁹¹ This process would be achieved through three stages of money laundering known as placement, layering and integration. ¹⁹² These processes may take place simultaneously or in different stages.

Placement involves the injection of the money from the proceeds white-collar crimes into the financial system or legitimate commerce. This involves bank deposits because the goal is to change the form of the money and also ensure that law enforcers do not trace it. Layering is the process of concealing the money from its source. This is achieved by passing the money through lengthy financial transactions that may occur in a single or several business accounts. The ultimate aim of layering is to move the money around so its source is untraceable. With cryptocurrencies however, this process may be easier.

The proceeds of white-collar crimes would be taken to a cryptocurrency ATM and then converted into cryptocurrencies. Once this is done, the money is no longer under the control of the authorities or law enforcement.¹⁹⁷ This is because cryptocurrencies are decentralized and this means that no Central Bank has control over the currency thus there is no link between the

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¹⁸⁸ Todd Jaquez, 'cryptocurrency the new money laundering problem for banking, law enforcement, and the legal system' Masters of Science in Cybersecurity, May 2016, ii-2.

¹⁸⁹ Nasim Sabah, Cryptocurrency Accepting Venues, Investor Attention, and Volatility, Finance Research Letters (2019), 8-7.

¹⁹⁰ Nasim Sabah, Cryptocurrency Accepting Venues, Investor Attention, and Volatility, Finance Research Letters (2019), 8-7.

¹⁹¹ Coinsource, 'Converting cash into crypto and the rise of bitcoins ATM' -<https://coinsource.net/converting-cash-into-crypto-and-the-rise-of-bitcoin-atms/> on 23 May 2021.

¹⁹²Money Laundering a Three staged process, https://www.moneylaundering.ca/public/law/3_stages_ML.php
<a href="https://www.moneylaundering.ca/public/law

¹⁹³ Ibid

¹⁹⁴ Anwar Hasan Abdullah Othman, Syed Musa Alhabshi, Salina Kassim and Ashurov Sharofiddin, 'The impact of cryptocurrencies market development on banks' deposits variability in the GCC region' *12 Journal of Financial Economic Policy* 2, 2020, 161-163.

¹⁹⁵ Friedrich Schneider Æ Ursula Windischbauer, 'Money laundering: Some facts' 26 European Journal of Law and Economics 387, 2008, 394.

¹⁹⁶ Friedrich Schneider Æ Ursula Windischbauer, 'Money laundering: Some facts', 394.

¹⁹⁷ Friedrich Schneider and Ursula Windischbauer, 'Money laundering: Some facts', 394-397.

cryptocurrency and the government.¹⁹⁸ Secondly, the converted proceeds in form of cryptocurrency can now be owned in anonymity.¹⁹⁹ This allows for an individual to escape any direct relationship between such monies and themselves making it difficult for the money to be linked to them.²⁰⁰ Cryptocurrency accounts allow individuals to use proxy names unlike bank accounts that must use full identification and legitimate information of an individual.²⁰¹

Integration, the last phase involved in laundering money, entails mixing up the illegally obtained funds with those that are legally obtained.²⁰² This allows for a legitimate explanation of the source of the funds and their ownership in case any inquiries are asked regarding the funds.²⁰³ An example would be that a legitimate payment is deposited into the same accounts as those that are illegitimate. Also, since the conversion of proceeds of crimes in this context involves changing fiat money into cryptocurrencies, it would not be a difficult task proving the legitimacy of money converted to cryptocurrency once integration is done because in the blockchain world, there is no difference between legitimate and illegitimate currency.²⁰⁴

3. Contracts

In Kenya, contracts are governed by the Law of Contract Act Cap 23 Laws of Kenya. This Act substantially applies English contract law, but which does not speak to cryptocurrencies. In fact, the Act in its preamble is describe as 'An Act of Parliament to apply the English common law of contract to Kenya, with certain modifications'. 207

¹⁹⁸ Xavier Boyen, Christopher Carr and Thomas Haines, 'Blockchain-Free Cryptocurrencies: A Framework for Truly Decentralised Fast Transactions', 5-6.

¹⁹⁹ Jesse Bray, 'Anonymity, cybercrime and connection to cryptocurrency' Eastern Kentucky University, 2016, 1-4.

²⁰⁰ Jesse Bray, 'Anonymity, cybercrime and connection to cryptocurrency', 1-4.

²⁰¹ Jesse Bray, 'Anonymity, cybercrime and connection to cryptocurrency', 1-4.

²⁰² Jesse Bray, 'Anonymity, cybercrime and connection to cryptocurrency', 1-4.

²⁰³ Patrick Jost and Singh Sandhu, The Hawala alternative remittance system and its role in money laundering, Interpol General Secretariat, Lyon, January 2000, 11.

²⁰⁴ Angela S.M. Irwin and George Milad, 'The use of crypto-currencies in funding violent jihad' 19 *Journal of Money Laundering Control* 4, 2016, 419.

²⁰⁵The Law of Contract Act, Cap 23, Laws of Kenya

²⁰⁶ Eugene Cotran, 'Development and Reform of the Law in Kenya', 27 *The Journal of African Law* 1, 1983, 45-46.

²⁰⁷ Section 2, Law of contract (Chapter 23 of 1961).

The conventional contract includes an offer, an acceptance and consideration.²⁰⁸ Each party to the contract is obligated to fulfil their obligation under the contract through performance.²⁰⁹ An offer in a contract is made to an offeree who has to accept the terms and the conditions that come with the offer.²¹⁰ Acceptance has to be directly communicated to the offeror in certain terms. Consideration then passes from the party that accepts the offer to the offeror.²¹¹

In smart contracts carried out on blockchain technology, the agreement is in digital form that is self-executing and self-enforcing.²¹² They are considered innovative for this reason and have acquired a lot of interest.²¹³ It is not clear where consideration falls or whether it exists at all. Stephan Kinsella has taken the time to study this. What we may learn from Kinsella is that when it comes to transactions on cryptocurrencies such as bitcoins, the common law doctrine of consideration seems outdated. The reason for this is that it seems to elevate form over substance because a peppercorn can suffice for consideration to take place. Further, this key ingredient – consideration – for the formation of a standard contract to take place is not present in cryptocurrency transactions given their self-executing nature.²¹⁴

Decentralised exchanges in cryptocurrencies can either take the form of the conventional contract or smart contracts.²¹⁵ This means that a contract involving cryptocurrencies can involve the physical transfer of say a good like gold upon the successful transfer of a specific amount of consideration in cryptocurrency. In a smart contract that involves cryptocurrencies, upon the completion of a task or acceptance of an offer and payment of the necessary consideration, the cryptocurrencies are transferred from one e-wallet to another.²¹⁶ The problem however with blockchain contracts that involve cryptocurrency is that parties to the

²⁰⁸ Carlill v. Carbolic Smoke Ball Company. [1892] 2 Q.B. 484, before Hawkins J., [1893] 1 Q.B. 256, before the Court of Appeal. T

²⁰⁹ Carlill v. Carbolic Smoke Ball Company. [1892] 2 Q.B. 484, before Hawkins J., [1893] 1 Q.B. 256, before the Court of Appeal.

²¹⁰ Carlill v. Carbolic Smoke Ball Company. [1892] 2 Q.B. 484, before Hawkins J., [1893] 1 Q.B. 256, before the Court of Appeal.

²¹¹ Carlill v. Carbolic Smoke Ball Company. [1892] 2 Q.B. 484, before Hawkins J., [1893] 1 Q.B. 256, before the Court of Appeal.

²¹²What are Smart Contracts? A self-executing contract? Available at http://blockchainflashnews.com/what-are-smart-contracts-a-self-executing-contract/ Last Accessed on 17 March 2019

²¹³ Shuai Wang, Liwei Ouyang, Yong Yuan, 'Blockchain-Enabled Smart Contracts: Architecture, Applications, and Future Trends' Transactions On Systems, Man, And Cybernetics: Systems, Vol. 49, No. 11, November 2019, 2266-2268.

²¹⁴ Stephan Kinsella, 'A libertarian theory of contract: Tile transfer, binding promises and inalienability' 17 Journal of Libertarian Studies 2, 2003, 16-26.

²¹⁵ Lindsay X. Lin, 'Deconstructing decentralised exchanges' STANFORD JOURNAL OF BLOCKCHAIN LAW & POLICY [Vol. 2.1, 2019. 58-60.

²¹⁶ Saurabh Suratkar, Mahesh Shirole, and Sunil Bhirud, 'Cryptocurrency Wallet: A Review' 4th International Conference on Computer, Communication and Signal Processing, 2020, 2-3.

contract are anonymous.²¹⁷ While acceptance of an offer may be communicated to an offeror, the problem is that the offeror is unknown and therefore it cannot be specifically claimed that there was acceptance of the offer by the offeree. Therefore, when either party wants to enforce the contract, it becomes difficult to ascertain whether there was acceptance of the offer which renders the contract enforceable.²¹⁸

Another aspect of the legal impact that cryptocurrencies pose in contract law is that the high level of trust and encoding makes it easy to prove that consideration passed from one individual to another.²¹⁹ This is because of the third parties, known as miners, who are involved in authenticating the transactions. To justify this claim, and looking at Bitcoins as an example, Jozef Bucko, Dana Pal'ová, Martin Vejačka call us to observe the following:

'Bitcoins are generated by mining procedures, where miners use special software to solve cryptographic hash problems and it is primary source to gain bitcoins. Miners are awarded with bitcoins only if they provide valid proof-of-work and this keeps BTC network stable, safe and secure by approving transactions. Proof-of-work is a process of verifying the block of data (transactions) to generate the next block by computing some random sequence (cryptographic problem), which is computed using a brute-force method employing software or hardware resource. The first factor of cryptocurrency security is the security of block and block chains. A block of data with unverified cryptocurrency transactions has a unique key embedded. A new block cannot be submitted to the network without opening the present block of unverified transactions. When proof-of-work is found, the cryptocurrency network verifies whether the found key is correct. Every block contains a hash from its previous block and so blocks linked in this chronological order form the block. Each block in chain cannot be modified, because every block in chain after it would also have to be modified too. A valid block chain holds valid blocks and transactions only if it starts with the very first block.'220

Another proof would also lie in the fact that the transaction is posted automatically in the online ledger that cuts across all dealers in the cryptocurrency blockchain.²²¹ Therefore, the moment the one party has accepted the offer from the other party, and they dispense their consideration

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²¹⁷ Tu KV and Meredith MW, 'Rethinking virtual currency regulation in the Bitcoin age', 275.

²¹⁸ Koulu, R, 'Blockchains and online dispute resolution: Smart contracts as an alternative to enforcement', 13 *SCRIPTed: Journal of Law, Technology and Society*, 1, 2016, 42-3.

²¹⁹ See generally Jozef Bucko, Dana Pal'ová, Martin Vejačka, 'Security and trust in cryptocurrencies' Central European Conference in Finance and Economics, 2015.

²²⁰ Jozef Bucko, Dana Pal'ová, Martin Vejačka, 'Security and trust in cryptocurrencies', 8.

²²¹ Mingjun Dai, Shengli Zhang, Hui Wang, And Shi Jin, 'A Low Storage Room Requirement Framework for Distributed Ledger in Blockchain' *6 IEEE Access*, 2018, 72.

to the offeror, once the transaction is verified, they get their money immediately into their e-wallet.²²²

The other problem that cryptocurrency poses for contracts is the difficulty in obtaining remedies. One of the common remedies in common law under contracts that would make sense for cryptocurrencies is the remedy of restitution. The remedy of restitution involves returning a party to the position they were in before they occasioned any disadvantage arising from the contract. Essentially, contracts under blockchains, once executed cannot be reversed. This is because of the implications that the transfer of cryptocurrency has on the online ledger. Therefore, restitution cannot be enforced under such contracts because of the nature of the blockchain. However, other remedies may suffice such as damages or another transfer of cryptocurrency to the affected cryptocurrency account. They may mostly form compensation.

Enforcement of a contract that involves cryptocurrency would pose significant legal difficulties. The reason for this is mainly on the element of consideration which is required for a contract to be valid under common law.²²⁷ Yet, it is difficult to isolate this contractual ingredient for cryptocurrencies contracts. Further, there is no precedent forming jurisprudence that the courts would rely on when it comes to the enforcement of contracts that involve cryptocurrencies.²²⁸ The fact that parties to a dispute arising from a cryptocurrency contract are anonymous would pose problems on who appears in court and how service is done unless such parties that entered into the contract know each other.²²⁹ Another problem would be that cryptocurrencies are traded worldwide with anonymous persons and corporations. Since the contracts are trans-boundary, difficulties would arise when one party is to come under the

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²²² Daojing He, Shihao Li, Cong Li, Sencun Zhu, Sammy Chan, Weidong Min, and Nadra Guizani, 'Security Analysis of Cryptocurrency Wallets in Android-based Applications' IEEE Network • November/December 2020, 116.

²²³ Giannis Tziakouris, 'Cryptocurrencies—A Forensic Challenge or Opportunity for Law Enforcement? An INTERPOL Perspective' *IEEE Computer and Reliability Societies*, 2018, 92.

²²⁴ Smith, L, 'The province of the law of restitution', 71 *Canadian Bar Review* 4, 672-682.

²²⁵ Zakaria Dakhli, Zoubeir Lafhaj, and Alan Mossman, 'The Potential of Blockchain in Building Construction' 9 *Buildings* 97, 2019, 3.

²²⁶ See For Instance, Yaroslav Lazur, Oleksii Drozd, Ruslan Serbin, 'theoretical and legal perspective on certain types of legal liability in cryptocurrency relations' 3(5) Baltic Journal Of Economic Studies, 2017, 223.

²²⁷ This case captures all the common law elements that lead to the formation of a valid contract. *Carlill v Carbolic Smoke Ball Company* (1892), The Court of Appeal.

²²⁸ So far, courts of law have not provided any clear way forward in *Lipisha Consortium Limited & another v Safaricom Limited* (2015), eKLR.

²²⁹ Rabinovich-Einy, O., & Katsh, E. 'Blockchain and the inevitability of disputes: The role for online dispute resolution', 2 *Journal of Dispute Resolution*, 2019, 73.

jurisdiction of a court in another country and the aspect of conflicting laws of different countries unless the contract stipulates the particular law to govern the agreement.²³⁰

4. Taxation

The legal regime governing tax in Kenya in terms of profits that people make is the Income Tax Act.²³¹ The fact that the Act does not have any provisions on cryptocurrencies either as assets or as sources of income is a significant gap in terms of taxation of cryptocurrency as a source of income or asset in Kenya.²³² Therefore, cryptocurrency has far reaching legal implications when it comes to taxation in the country. First, income tax in Kenya is derived from income that accrues in Kenya, whether residents or non-residents.²³³ The Act does not define what amounts to income that accrues in Kenya.²³⁴ Therefore, cryptocurrencies can ride on this ambiguity because income from for example mining cryptocurrency can accrue elsewhere before finally being transferred to Kenya.²³⁵ Such transfers would be free from the regulation of foreign exchanges by the Central Bank of Kenya since cryptocurrency is decentralized and not regulated.²³⁶

Another legal implication that cryptocurrencies have on taxation is that they are very volatile and can therefore pose significant uncertainties if they were to be taxed. Cryptocurrencies have no fixed value. Their value is usually based on its demand and the value it is worth in fiat currency. However, fiat currency is not as unstable as cryptocurrency. The risk of such volatility is that first, it can cause an economic depression or fluctuation on fiat currency. Consequently, it would disrupt the taxation of income and other products in a country creating instability in the economy because most government revenue comes from taxation and also uncertainties with legislations that govern taxation in the country as cryptocurrency is not regulated in Kenya.

²³⁰ Giannis Tziakouris, 'Cryptocurrencies—A Forensic Challenge or Opportunity for Law Enforcement? An INTERPOL Perspective', 92.

²³¹ The Income Tax Act, (Chapter 470 of 1973).

²³² The Income Tax Act, (Chapter 470 of 1973).

²³³ Section 3(1), The Income Tax Act, (Chapter 470 of 1973).

²³⁴ *The Income Tax Act*, (Chapter 470 of 1973).

²³⁵ William J. Luther, 'Regulatory ambiguity in the market for bitcoin', *Review of Austrian Economics*, 2020.

²³⁶ Lindsay X. Lin, 'Deconstructing decentralised exchanges' *Stanford Journal of Blockchain Law & Policy*, 2019. 58-60.

Cryptocurrencies are not controlled by any single centralized institution.²³⁷ It is libertarian in nature meaning it seeks to maximize on political freedom and autonomy contrary to capitalism, and therefore confers more rights to a person to control their funds. As Walter Block observes, libertarianism is premised on the rights to equality, liberty and the fact that anyone's right to legitimately owned property has to be respected.²³⁸ In this sense, people should feel free to transact in a market. However, and this is one of the critiques of libertarianism, any such transactions have to be done to the extent that a central regulating body allows body.²³⁹ For instance, one cannot sell their own person into slavery. It is for this reason that even among some libertarians, there is a consensus that some although it should be legal to sell some, if not most items, there should be room for some exceptions.²⁴⁰ This is embodied in Kenya under the limitation clause.²⁴¹

Libertarianism as a theory of rights is relevant to any discussion on cryptocurrencies because, as Ittay Eyal observes, the ideas of some cryptocurrencies such as Bitcoins 'began as a means for creating a secured currency that had no central control.' In this sense, individuals could transact freely without the government determining the inflation rate or giving certain transactions benefits over the others, based on a arbitrary considerations. For Bitcoins, this is not the case because everything is left to an algorithm. Due to this, it has attracted many tax evaders who want to invest in the cryptocurrency during Initial Coin Offerings. For a country like Kenya where taxation has not yet reached its peak in terms of development of taxation mechanisms, the problem would be greater because individuals who trade in cryptocurrencies would easily evade tax before there are any regulation mechanisms put in place to govern trading in cryptocurrencies.

Kenya is not new to the concept of offshore accounts and tax havens, where both legitimate and illegitimate money is stored in strategic jurisdictions around the world.²⁴³ This has made

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²³⁷ Lindsay X. Lin, 'Deconstructing decentralised exchanges' 2 Stanford Journal of Blockchain Law & Policy 1, 2019, 58-60.

²³⁸ Walter Block, 'Towards a libertarian theory of inalienability: A critique of Rothbard, Barnett, Smith, Kinsella, Gordon and Espsgten' 17 *Journal of Libertarian Studies* 2, 2003, 39.

²³⁹ Walter Block, 'Towards a libertarian theory of inalienability: A critique of Rothbard, Barnett, Smith, Kinsella, Gordon and Espsgten', 240.

²⁴⁰ Walter Block, 'Towards a libertarian theory of inalienability: A critique of Rothbard, Barnett, Smith, Kinsella, Gordon and Espsgten', 41 and 44.

²⁴¹ Article 24, *Constitution of Kenya* (2020). This is the limitation clause in the constitution.

²⁴² Ittay Eyal, 'Blockchain technology: transforming a libertarian cryptocurrency dreams to finance and banking realities' Cornel University, September 2017, 38-39.

²⁴³ Brian Ngugi, Wealthy Kenyans Hiding Sh.5trn in foreign banks https://www.businessdailyafrica.com/news/Wealthy-Kenyans-hiding-Sh5trn-in-foreign-banks/539546-4800972-x4qybk/index.html on 16th March 2019

the situation unique in terms of evasion of tax with regards to cryptocurrencies. It has formed an avenue for the evasion of tax through cryptocurrencies, enabled by blockchain technology.²⁴⁴ Since cryptocurrencies are global, conversion of money would be easy and untraceable. Cryptocurrencies would be converted to any other currency in a country that allows it and the currency would then be stored in bank accounts in those currencies.²⁴⁵ The process therefore is simple compared to the conventional way of having to convert one's currency into another country's currency before depositing it with banks in that country. Therefore, one would have a steady income of cryptocurrencies being deposited in a tax haven over a period of time. The result is that such an individual would be able to completely evade the payment of tax obligations.²⁴⁶ As Omari Marian reports for example in the United States' case:

'On May 23, 2013, the U.S. federal government brought an indictment against the operators of Liberty Reserve, a popular virtual currency, charging the operators with money laundering and operating an unlicensed money-transmitting business. The same month, the Government Accountability Office ("GAO") made public a report exploring the potential tax-compliance risks associated with virtual currencies and economies.'247

5. Succession

Succession in Kenya is governed by the Law of Succession Act. ²⁴⁸ It provides for what happens to the estate of an individual upon his or her death and who becomes the executor or administrator of any of their defined property that remains behind.²⁴⁹ The Law of Succession Act in Kenya does not provide for inheritance of a digital nature.²⁵⁰ It only provides for

²⁴⁴ Gruber, S, 'Trust, identity and disclosure: Are bitcoin exchanges the next virtual havens for money laundering and tax evasion' 32 Quinnipiac Law Review 1, 2019, 204-205.

²⁴⁵ Kabir Sardar Mohammad, 'Cryptocurrency vs fiat currency: Architecture, algorithm, cashflow and ledger technology on emerging economy: The influential facts of cryptocurrecy and fiat currecy'.

²⁴⁶ See for instance Omri Marian, "Are Cryptocurrencies Super Tax Havens," *Michigan Law Review First* Impressions 112, 2013-2014, 38-48.

²⁴⁷ Omri Marian, 'Are Cryptocurrencies Super Tax Havens,' 38.

²⁴⁸Law of Succession Act, (Chapter 160 of 2012).

 ²⁴⁹ Section 2, *Law of Succession Act*, (Chapter 160 of 2012).
 ²⁵⁰ See generally Gatua Peter Njoroge, 'Legislative and institutional framework governing digital assets inheritance in Kenya' University of Nairobi, LLB Thesis 2015, 7.

succession under constructed wills or intestate succession governed by the Act.²⁵¹ The lack of such laws affects valuable property that belongs to deceased persons including mobile money. Kenya does not have any definition of what a digital asset is and there is no law that is passed to deal with the inheritance of digital assets that are virtual in nature.²⁵²

Essentially, in case of a dispute that involves digital money that is left by the deceased, the courts hands are tied.²⁵³ In the year 2019, mobile operators handed to the government Ksh. 500 million in mobile money whose owners were not found or presumed dead.²⁵⁴ This colossal amount of money only shows digital assets that were reported and handed in. While the country has at least 90% of its mobile phone network subscribers transacting billions and more than 50% being online, Kenyans have never sought to recover such amounts or even write a will on the same.²⁵⁵ M-PESA has however put in place a procedure whereby a next of kin to the deceased can claim the deceased's money.²⁵⁶

McKinsey & Company released a report in 2013 that pointed out the fact that Kenya's annual output in terms of finance that is generated online sums up to Ksh. 99.8 billion. It said that at the time, this was the second largest in Africa relative to the total yearly production.²⁵⁷ This shows the magnitude of people transacting and storing their money through online platforms.

The Judiciary under Chief Justice David Maraga was of the view that digital assets should be inherited or disposed of accordingly.²⁵⁸ The challenge also exists in deciding who among the nominees is to inherit the digital assets and have control over such property. When Carolyne Achieng' died in 2004, she had shares worth KSh. 72, 800 in Huduma Savings Credit Cooperative Society. During her application, she had appointed her children as nominees but they

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²⁵¹ Law of Succession Act, Cap 160, Laws of Kenya

²⁵² See generally Gatuyu Justice, 'Managing digital assets in Kenya: Regulatory framework, practices and future prospects' November 2015.

²⁵³ Kamau Muthoni, *No law for inheritance of digital assets or property, Judiciary reveals,* 2018, https://www.standardmedia.co.ke/article/20011284484/no-law-for-inheritance-of-digital-assets-or-property-judiciary-reveals on 16 March 2019.

²⁵⁴ Kamau Muthoni, *No law for inheritance of digital assets or property, Judiciary reveals*, 2018, https://www.standardmedia.co.ke/article/20011284484/no-law-for-inheritance-of-digital-assets-or-property-judiciary-reveals on 16 March 2019.

²⁵⁵ Kamau Muthoni, *No law for inheritance of digital assets or property, Judiciary reveals*, 2018, https://www.standardmedia.co.ke/article/20011284484/no-law-for-inheritance-of-digital-assets-or-property-judiciary-reveals on 16 March 2019.

²⁵⁶ Ignacio Mas and Dan Radcliffe, 'Mobile money go viral in Kenya'32 *Capco Institute's Journal of Financial Transformation*, 2011.

²⁵⁷ McKinsey & Company, 2013.

²⁵⁸ Kamau Muthoni, 'No law for the inheritance of digital assets or property, Judiciary reveals' 8 June 2018, The Standard, -< https://www.standardmedia.co.ke/business/article/2001284484/no-law-for-inheritance-of-digital-assets-or-property-judiciary-reveals > on 25 May 2021.

were underage at the time of her death. The husband was therefore to hold the shares in trust for the children. The court granted him orders to that effect as the sole heir. He could not access the money despite these orders. The Co-operative Societies Act further states that shares held in co-operative societies do not form part of a deceased's estate and can be transferred to a nominated person only. If such challenges are faced regarding money left in a Sacco by the deceased, then digital money poses a greater challenge even where the deceased left a will. And, as mentioned above, where there is no will, the Law of Succession Act does not provide for succession of digital assets hence the virtual money will be left unclaimed.

This may seem to be problematic for cryptocurrencies such as Bitcoin that have already proven to be playing the role of quasi bank accounts in which one can start accumulating savings.²⁶¹ The question is, what happens to these savings if one dies? And as quasi bank accounts they are advantageous in the sense that they reduce the cost of international transfers. For Bitcoins, it is enough for a person to simply have a personal computer or a smart phone that can download a Bitcoin wallet. With this they can obtain a public key that represents their account on a global level.²⁶² A failure to appreciate succession in this respect may expand the gap of financial exclusion.²⁶³

Cryptocurrencies are digital assets because they are virtual like any other digital asset. The problem however that would arise is that they are owned anonymously and as such can prove impossible to access upon the death of an owner of such cryptocurrency account.²⁶⁴ The fact that they are decentralized as well poses the problem of a difficulty of enforcement in a court of law because the court cannot grant orders against a specific centralized institution to transfer the digital assets to a beneficiary. This is because there is no central body regulating the transactions.²⁶⁵

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²⁵⁹In Re Estate of Carolyne Achieng' Wagah (Deceased) (2015) eKLR

²⁶⁰Co-operative Societies Act (No. 12 of 1997).

²⁶¹ Scott Brett, 'How can cryptocurrency and blockchain technology play a role in building a social and solidarity finance?', 6.

²⁶² Scott Brett, 'How can cryptocurrency and blockchain technology play a role in building a social and solidarity finance?', 6.

²⁶³ Scott Brett, 'How can cryptocurrency and blockchain technology play a role in building a social and solidarity finance?', 7.

²⁶⁴ Jesse Bray, 'Anonymity, cybercrime and connection to cryptocurrency', 1-4.

²⁶⁵ See genrally Aroul Canessane, N.Srinivasan, Abinash Beuria, 'Decentralised'.

6. Conclusion

This Chapter has looked into the legal implications that lack of a robust and comprehensive legal framework on cryptocurrencies can have on the day-to-day life of Kenyans. It has looked, in what may appear to be a very simplistic manner, into the fact that one may need access to some form of currency for them to meet their basic and secondary needs. In the life cycle of an average Kenyan, it is inevitable that they may need some form of currency to address their basic needs. It is also inevitable that they may need to be engaged in some contractual arrangement for them to access this. Looking at any payment or profits that may be made through cryptocurrencies, it may be hard to have certain elements of the common law contract law such as consideration. It is also almost inevitable for the government of Kenya to run the country with no form of reliance on taxes. And taxes may need to be applicable to profits or salaries earned in the form of cryptocurrencies. The Chapter has also made it clear that cryptocurrency can contribute to the promotion of financial inclusion. This is by allowing those with no bank accounts to have some quasi-bank accounts that dealing in cryptocurrencies may afford them with a lot of convenience. A question that may arise with regard to taxation is how one's next kin can inherit from these quasi-banks. While there are many things that may be covered in terms of putting in place a comprehensive and robust regulatory framework on cryptocurrencies, questions to do with what a currency is and how it can be used, contracts, taxation and succession have to be on the table to contribute to what is workable towards formulating any such framework. VT OMNES VNVM SINT

IV. Lessons from the US and Japan

1. Introduction

From the discussion carried out in the previous Chapter, one may admit at this stage that for Kenya to come up with a comprehensive and robust regulatory framework for cryptocurrencies there is a need for such a framework to address areas/sectors that, inevitably, will have to affect the majority of Kenyans. These included fiat money (what qualifies for it and to what ends can be used), contracts, taxation, and succession. Japan and the United States of America emerge as the best examples in terms of regulating cryptocurrencies. Taking into accounts these thematic areas, as one may call them, this Chapter attempts to see what Kenya can learn from these two countries.

2. Fiat Money

Cryptocurrencies have been met with different approaches and legal responses all over the world in regard to the matter of regulation. While some countries have fully accepted the virtual currency and even legalized it, some countries have had problems in the use and regulation of cryptocurrencies in their jurisdictions. They have therefore, illegalized the currency and all the trading and transactions that involve the currency citing risks such as fraud and the fact that the cryptocurrency is volatile. Countries such as Japan where the first models of cryptocurrencies were rolled out have legalized cryptocurrencies and have heavily legislated on the same in a bid to regulate the use of the currency. This has resulted in other countries adopting legislations approaches from Japan as model laws and as regulatory templates for

²⁶⁶ Doles Silva, 'Crypto currencies International Regulation and Uniformization of Practices' https://www.uncitral.org/pdf/english/congress/Papers_for_Congress/29-DOLES_SILVA-Cryptocurrencies and International Regulation.pdf 14 May 2020

²⁶⁷Regulation of Crypto currencies around the world,

https://www.loc.gov/law/help/cryptocurrency/cryptocurrency-world-survey.pdf on 14 May 2020; Countries like Japan have allowed the use of cryptocurrencies subject to very strict rules and regulations. Countries like China have however completely rendered cryptocurrencies illegal and banned its use and trade within the country.

268 Regulation of Crypto currencies around the world,

https://www.loc.gov/law/help/cryptocurrency/cryptocurrency-world-survey.pdf 14 May 2020; Countries like Japan have allowed the use of cryptocurrencies subject to very strict rules and regulations. Countries like China have however completely rendered cryptocurrencies illegal and banned its use and trade within the country.

their own countries. In the United States, different states are free to come up with legislations that govern cryptocurrencies on their own volitions.²⁶⁹ However, there are federal laws that govern finance that have attempted to govern how cryptocurrencies are being used and how they can possibly be regulated.

Japan has moved to build legislative frameworks on how cryptocurrencies shall operate and also on how initial coin offerings, known as ICOs shall operate in the country.²⁷⁰ Therefore it has attracted virtual currency operators that are able to conform to and adhere to its strict regulations in respect to the use of cryptocurrencies and other virtual currencies. In this regard, it is also creating a regulatory framework that the rest of the Asian continent may follow up on and to adopt.

In 2014, Japan underwent a massive hit that involved one of the worst cryptocurrency hackings in its Tokyo based exchange Mt. Gox.²⁷¹ It was in charge of over seventy percent of all the cryptocurrency transactions in the world. After several mistakes that resulted in complicated transactions, it stopped trading in cryptocurrencies in February 2014. Consequently, 650,000 Bitcoin that was worth 390 million dollars at the time and currently worth 6 billion dollars was reported missing.²⁷²

Consequently Japan was called upon by the Paris-based Financial Action Task Force to create policies to combat money laundering. In 2015, it issued a 46 paged report that recommended that countries should licence virtual currency exchanges and subject them to the regulations and the oversight as in any other financial institution or businesses that were involved in moving of money.²⁷³ Japan has therefore revised its Payment Services Act to first, legally define virtual currencies and to also require any virtual currency exchange that wants to do business in Japan or solicit its citizens to register with the country's Financial Services Agency (FSA).²⁷⁴ Japan does not define Bitcoin as legal tender but agrees that it can be used to purchase goods and services just like legal tender can.

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²⁶⁹ Scott Hughes, 'Cryptocurrency Regulation and Enforcement in the US', 45 *Western State Law Review* 45 Guidance Note on the Japanese Virtual Currency Legislation and Overview on the Registration Requirements thereunder, http://www.so-law.jp/wp-content/uploads/2017/07/Japanese_VC_Act_and_Registration-Overview_170704.pdf Last Accessed on 14th May 2020.

²⁷¹ Josius Dewey, *Blockchain and Cryptocurrency Regulation*.

²⁷² Andrew Norry, *The History of Mt Gox Hack: Bitcoin's Biggest Heist*, https://blockonomi.com/mt-gox-hack/ on 14 May 2020

²⁷³ Financial Action Task Force, Guidance of Risk-Based Approach to Cryptocurrencies (2015).

²⁷⁴ Chapter VII, Payment Services Act of Japan (Act No. 59 of June 24, 2009).

The FSA therefore gave all other financial institutions a grace period within which they could apply for licences in order to conform to the new regulations and standards. Applications forwarded during this time allowed them to continue with operation until such a time that their licences are issued by the authority. In Japan, under the new law, virtual currency operators are expected to keep records that would show their accountability with their customers.²⁷⁵ They undergo annual audits, they file business reports and they also comply with all the anti money laundering rules put in place to curb irregularities that may come with the use of cryptocurrencies.²⁷⁶

Japan also has in place a rigorous process of registering for a licence as a cryptocurrency dealer. The process can take up to six months. The FSA had given licences to the first 11 exchanges by September 2017. In early December 2017, it licensed another cohort of four operators and by the end of the month licensed the last 16th exchange. This shows that Japan sought to regulate cryptocurrencies through issuing of licenses to all institutions that were involved in the trading of cryptocurrencies and therefore, could easily regulate the use of cryptocurrencies in return.

In January 2018, however, Coincheck, one of the licensed operators suffered an attack that resulted in it losing 530 million dollars' worth of cryptocurrency.²⁷⁷ This consequently prompted heavier oversight. The FSA has therefore developed a regulation mechanism of conducting inspections on the spot for all operators in cryptocurrency in order to look for security gaps in their systems. In March 2018, the FSA sent out punishment notices to seven exchanges, requiring two to halt their operations for a full month.²⁷⁸

Japan intends to pass on oversight work to a body that is self-regulating and that will function in a similar fashion as the Financial Industry Regulatory Authority (FINRA) in the USA.²⁷⁹

In April 2018, the Japan Virtual Currency Exchange Association (JCVA) was launched. It comprises of the first 16 licensed Japanese virtual currency exchanges. It has the power to

²⁷⁵ Article 114(iii) Payment Services Act of Japan (Act No. 59 of June 24, 2009).

²⁷⁶ This follows the revised Payment Systems Act that took effect in April 2017 that is in tandem with the regulations of the Act and requires cryptocurrency operators to undergo regular audits and file business reports ²⁷⁷ Reuters, *Tokyo-based cryptocurrency exchange hacked, losing \$530 million dollars: NHK* https://www.reuters.com/article/us-japan-cryptocurrency/tokyo-based-cryptocurrency-exchange-hacked-losing-530-million-nhk-idUSKBN1FF29C on 14 May 2020

²⁷⁸ Molly Jane Zuckerman, *Japanese Financial Regulator Issues 'Punishment Notices' For 7 Crypto Exchanges* (2018) available at https://cointelegraph.com/news/japanese-financial-regulator-issues-punishment-notices-for-7-crypto-exchanges Last accessed on 14 May 2020

²⁷⁹ Amy Castor, *How Japan is Creating a Template for Cryptocurrency Regulation*,

Amy Castor, *How Japan is Creating a Template for Cryptocurrency Regulation*, https://bitcoinmagazine.com/articles/how-japan-creating-template-cryptocurrency-regulation/ 14 May 2020.

create and enforce rules and also to set fines and eventually develop standards for initial coin offerings.²⁸⁰

Japan has equally moved to form rules concerning legalizing Initial Coin Offerings. The process of regulating Initial Coin Offerings began in October 2017 when the FSA gave notice to the effect that ICO tokens were very volatile. It was a warning to investors and also a move to curb potential fraud. It further stated in the notice that depending on how an ICO is structured, it can find itself within the umbrella of the Payment Services Act or the Financial Instruments and Exchange Act.²⁸¹

In April 2018 also, the Center for Rule-Making Strategies at Tama University released a guideline for the regulation of ICOs.²⁸² The report, which is backed by the state, puts it that ICO projects should clearly spell out how they plan to distribute funds. It also outlines rules for tracking the progress of a project, confirming the identity of buyers and restricting insider trading. These proposals may be debated upon by the FSA and adopted as law.

Japan, therefore, has the most robust and watertight regulation system when it comes to cryptocurrencies although it is still working on its oversight of cryptocurrencies and ICO framework in the country.

The level of seriousness in the crackdown on regulation of cryptocurrencies in Japan was shown when the Japan Virtual Currency Exchange Association lost its two vice presidents. Mr. Yuzo Kano and Mr. Noriyuki Hirosue, were the CEOs of bitFlyer and Bitbank respectively. They vacated their posts after their own cryptocurrency exchanges had a turf with the FSA. They were served with business improvement letters from the FSA. The letters demand for a risk management overhaul that is centred on its anti-money laundering policy and also know your customer requirements popularly known as AML and KYC respectively. ²⁸⁴

²⁸⁰ Omar Faridi, Japan's Virtual Currency Exchange Association (JVCA) Now Authorized As Self-Regulatory Body https://www.cryptoglobe.com/latest/2018/10/japan-s-virtual-currency-exchange-association-jvcea-now-authorized-as-self-regulatory-body/ 14 May 2020.

²⁸¹Financial Services Agency, 'Initial Coin Offerings (ICOs) –User and business operator warning about risks of ICOs', 2017.

²⁸² Center for Rule-Making Strategies', Call for Rule Making on ICO; Proposal by ICO Business Research Group 2018

²⁸³ Molly Jane Zuckerman, Japanese Crypto Investors To Pay Tax of Up To 55 Percent on Profits, https://cointelegraph.com/news/japanese-crypto-investors-to-pay-tax-of-up-to55-percent-on-profits on 14 May 2020.

²⁸⁴ Molly Jane Zuckerman, Japanese Crypto Investors To Pay Tax of Up To 55 Percent on Profits, https://cointelegraph.com/news/japanese-crypto-investors-to-pay-tax-of-up-to55-percent-on-profits Last 14 May 2020.

Money laundering as concerns cryptocurrencies in the United States is governed by the Financial Crimes Enforcement Network commonly known as the FinCEN. In the U.S, the primary law governing money laundering is the Banking Secrecy Act. FinCEN is the enforcing agency of the Act. The Act binds banks and non-bank financial institutions including securities and other money service businesses.²⁸⁵

FinCEN later issued interpretive guidance to make issues clear in regard to BSA and cryptocurrencies. FinCEN defined convertible virtual currency to mean a medium of exchange that operates like a currency in some environments but does not have all the attributes of real currency and has an equivalent value in real currency or acts as a substitute for real currency. FinCEN has classified Bitcoin as a decentralized virtual currency for the purposes of the Act. The above guidance is to the effect that any user who obtains convertible virtual currency and uses it to purchase real or virtual goods or even services is not considered as a money service business. However, FinCEN holds a belief that any individual who uses any centralized cryptocurrency to this effect is not a money transmitter and therefore falls within the confines of the BSA. This means that cryptocurrency exchanges are required to register with FinCEN and to comply with very strict regulatory rules.

Later in January, FinCEN issued a document clearing the application of its regulations to virtual currency mining, stating that;

'to the extent that a user mines bitcoin and uses the Bitcoin solely for the user's own purposes and not for the benefit of another, the user is not an MSB under FinCEN's regulations, because these activities involve neither 'acceptance' nor 'transmission' of the convertible virtual currency and are not the transmission of funds within the meaning of the Rule.'287

Under cryptocurrency investment in the U.S, the legal instrument that governs the same is the Securities and Commodities Regulations. It focuses on the legal issues that involve Bitcoin especially on investments purchased using Bitcoin and also on investing in Bitcoins. The Securities Exchange Commission (SEC) has the authority to regulate securities and securities-

²⁸⁵ Banking Secrecy Act of United States (1970).

²⁸⁶Department of the Treasury Financial Crimes Enforcement Network, *Application of FinCEN'S Regulations to Persons Administering, Exchanging or Using Virtual Currencies*, 2014.

²⁸⁷ Department of the Treasury Financial Crimes Enforcement Network, *Application of FinCEN's Regulations to Virtual Currency Mining Operations*.

based derivatives and also the markets on the same. The primary legislation on securities is the Securities Act of 1993.²⁸⁸

3. Contracts

It is worth noting that cryptocurrencies in the United States are not considered legal tender and the regulation of cryptocurrencies varies from state to state. States therefore remain free to come up with their legislation regarding cryptocurrencies. An example is Arizona that passed the Arizona House Bill 2417 that sought to regulate blockchains and also smart contracts on March 29, 2017. Permont, on the other hand, passed a bill recognizing the admissibility of data embedded on blockchains as evidence in court without the need for verification and authentication. Delaware has interestingly taken affirmative action by adopting cryptocurrencies. This State's law went into effect by letting corporations maintain their shareholder lists, among other corporate records using blockchain technology. The general feeling therefore is that the USA has a good number of cryptocurrency rich legislations all across its states that can be useful as tools of regulation in other countries, just like Japan's model.

The most recent development on cryptocurrencies on a federal level is the legislation dubbed Uniform Regulation of Virtual-Currency Business Act by the Uniform Law Commission on 9 October 2017.²⁹¹ The ULC is a body comprised of persons from the judiciary and legislature including lawyers who have been selected by the government to conduct research, draft and also to promote the enactment of uniform state laws in areas of state law where uniformity is required.

The Act aims at creating a statutory structure that equally aims at improving the unification of regulations of laws across states. It does not substantially regulate cryptocurrencies but regulates what is known as virtual currency business activity. It defines such business to mean:²⁹²

²⁸⁸Securities Act of 1993 48 Stat. 74

²⁸⁹Arizona House Bill 2417

²⁹⁰ Jeff John Roberts, *Companies Can Put Shareholders on a Blockchain Starting Today* (2017) available at https://fortune.com/2017/08/01/blockchain-shareholders-law/ Last Accessed on 10th June 2020.

²⁹¹Uniform Regulation of Virtual-Currency Business Act, 2017

²⁹² Uniform Regulation of Virtual-Currency Business Act (2017).

- i. The exchange of virtual currencies for cash, bank deposits, or other virtual currencies;
- ii. The transfer from one customer to another person of virtual currencies; or
- iii. Certain custodial or fiduciary services in which the property or assets under the custodian's control or under management include property or assets recognized as 'virtual currency'. ²⁹³

A critique may fairly conclude that the Act has appreciated and provided for a way within which contract law has to be updated so as to fit the key features and the nature of the types of contractual transactions that may be done through cryptocurrencies.

The Commodity Futures Trading Commission (CFTC) in the United States is another body that exercises oversight on the exchange trades of future contracts. It derives its power from a statute known as the Commodity Exchange Act.²⁹⁴ The CFTC exercises oversight over futures, options and derivative contracts, regardless of if they involve virtual currencies or not. Since 2015, the CFTC regulates cryptocurrencies such as Bitcoin as a commodity. Any fraud, therefore, that involved cryptocurrencies in business involving states falls under the CFTCs jurisdiction.

According to the CFTC, there is no inconsistency between the Security Exchange Commission's stance that some cryptocurrencies can be securities and the CFTC's position that virtual tokens may be commodities or derivative contracts depending on the facts and circumstances. The CFTC further reiterates that it looks beyond form and considers the actual substance and purpose of an activity when applying the federal commodities laws and its regulations.²⁹⁵

4. Taxation

For the taxman to efficiently tax cryptocurrencies in Kenya, it will require more than just an evolution of the legislation on tax. Taxpayers would have to report their income from cryptocurrencies to the taxman. This would be entirely dependent on the classification of

²⁹²Uniform Regulation of Virtual-Currency Business Act (2017).

²⁹³ Jeff John Roberts, *Companies Can Put Shareholders on a Blockchain Starting Today* https://fortune.com/2017/08/01/blockchain-shareholders-law/ on 10 June 2020.

²⁹³Uniform Regulation of Virtual-Currency Business Act, 2017

²⁹⁴ See generally, *Commodity Exchange Act* (1936).

²⁹⁵ Commodity Futures Trading Commission, A CFTC Primer on Virtual Currencies, (2017).

cryptocurrencies in Kenya as either currency or an asset. However, this may not be the case. In the USA, out of the 7% of individuals who trade in cryptocurrency, only 0.04% individuals who trade in cryptocurrencies reported their income to the Internal Revenue Service.²⁹⁶ This is because in the USA each trade in cryptocurrency is taxable. These are the challenges that cryptocurrencies pose to both the taxpayer and the taxman. It cuts across both spheres. The Internal Revenue Service, which is responsible for taxation in the USA, classifies cryptocurrencies as property. In March 2014, the IRS issued a guide that spelt out and explained how existing general tax principles apply to virtual currencies like Bitcoin.²⁹⁷ The reason why IRS has classified Bitcoin as property are for taxation purposes. According to the IRS, the use of virtual currencies is deemed to a realization event and thus the amount realized passes for the fair amount in value of the property. The sale of cryptocurrencies also results in taxable gains or even loss arrived at by lessening the seller's basis from the total amount realized in any sale.

The requirement is that individual miners in the cryptocurrency blockchain to include their fair market value of the mined cryptocurrency as per the date of receipt of gross income. Additionally, if the miner engages in the mining activity in the course if its trade or business and not as an employee then the taxpayer is required to pay self-employment tax on the net earnings from such earnings.

Before amendment, section 1031 of the Internal Revenue Code provided for free taxation on goods considered as 'like kind.' This part has since been limited only to real property. Therefore, every time and individual uses cryptocurrency, the government requires you to pay capital-gains tax as such a transaction is viewed as a disposition of assets.²⁹⁸

As regards taxation, the National Tax Agency (NTA), in Japan, ruled that gains on cryptocurrency should be categorized as 'miscellaneous income' and investors should be taxed at rates of 15% to 55%.²⁹⁹ Japan has therefore, in relation to cryptocurrencies and taxation, successfully classified cryptocurrencies in their taxation regime as taxable and therefore a form of regulation.

²⁹⁷ Internal Revenue Service, Notice 2014-21

²⁹⁶ Helen Partz, US: Tax Filing Service Says Only 0.04% Of Customers Reported Crypto To IRS For 2017, https://cointelegraph.com/news/us-tax-filing-service-says-only004-of-customers-reported-crypto-to-irs-

for-2017 on 17 March 2019

²⁹⁸ Section 1031 of the Internal Revenue Code (2017).

²⁹⁹ Molly Jane Zuckerman, Japanese Crypto Investors To Pay Tax of Up To 55 Percent on Profits, (https://cointelegraph.com/news/japanese-crypto-investors-to-pay-tax-of-up-to55-percent-on-profits 14 May 2020.

In conclusion, cryptocurrencies in the country can be used, if not already being used, to evade taxation by the government. Cryptocurrency wallets simply need an address and a name that can be faked and transactions arising from this can be easily conducted anonymously through computers that do not keep logs on any transaction. Kenya therefore needs to start taking steps immediately and emulate other jurisdictions like the United States and Japan where taxation of cryptocurrencies is being made possible despite the inherent difficulties.

5. Succession

Relevant to succession, it is worth mentioning that in the United States there arose a question whether the investments purchased with Bitcoins qualify as securities. The courts have pronounced themselves conclusively on this. In *SEC v Shavers*, it was held that such investments are securities. It was counter-argued that only investments bought with fiat currency are securities. The court however held that it was irrelevant whether such purchases had been made using fiat currency or cryptocurrency.³⁰⁰ A statement by the chairman of the Securities Exchange Commission resolved the legal issue of investing in Bitcoins by stating that:

"On cryptocurrencies, I want to emphasize two points. First, while there are cryptocurrencies that do not appear to be securities, simply calling something a "currency" or a currency-based product does not mean that it is not a security. Before launching a cryptocurrency or a product with its value tied to one or more cryptocurrencies, its promoters must either (1) be able to demonstrate that the currency or product is not a security or (2) comply with applicable registration and other requirements under our securities laws. It has been asserted that cryptocurrencies are not securities and that the offer and sale of cryptocurrencies are beyond the SEC's jurisdiction. Whether that assertion proves correct concerning any digital asset that is labelled as a cryptocurrency will depend on the characteristics and use of that particular asset."

According to a report of investigation pursuant to section 21(a) of the Securities Exchange Act of 1934, the Decentralized Autonomous Organization concludes that the DAO tokens are

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³⁰⁰SEC v Shavers, Case No. 4:13-CV-416

Jay Clayton, Statement on cryptocurrencies and Initial Coin Offerings (2017) https://www.sec.gov/news/public-statement/statement-clayton-2017-12-11 Last Accessed on 10th June 2020

securities and that foundational principles of the securities laws bind virtual organizations or capital raising entities making use of distributed ledger technology.³⁰²

6. Conclusion

In conclusion, one cannot help but admit that a study of Japan and the USA provides some important guidelines that Kenya can follow when it comes to the legal status of cryptocurrencies, and further how money laundering can be curbed in this regard through an establishment of some institutional framework. This Chapter has equally looked into taxation when it comes to cryptocurrencies in both jurisdictions. There are important lessons that Kenya might learn from them. On the issue of contracts, there is a lot that can be learnt from the US as it has passed regulations that appreciate contractual relationships that may accrue from transactions in cryptocurrencies. In terms of succession, the fact that cryptocurrencies are already recognised as securities in the United States and recognised as currency both in the United States and Japan is a good step towards any succession law matters in this regard.



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³⁰² Securities Exchange Commission, *Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO* (July 25, 2017)

V. Conclusion and Recommendations

The problem that this dissertation was looking into has been that there is no comprehensive and robust legal framework to deal with cryptocurrencies in Kenya that can lead to the promotion of financial inclusion. Whatever legislation that is currently in force is either does not provide a regulatory framework fit for cryptocurrencies.

There is no law or provision within laws that are specific to cryptocurrencies. The Central Bank of Kenya, with the endorsement of the Kenyan High Court, has taken it upon itself to warn Kenyans against the use of cryptocurrencies. Unfortunately, it did not outrightly mention that the use and reliance on cryptocurrencies is illegal.

This problem led this dissertation to develop the following hypothesis: for any comprehensive homegrown regulatory framework on cryptocurrencies to promote financial inclusion in Kenya, it should appreciate the areas in which Kenyans are most likely to interact with money. With admitted selectivity, my research settled on 4 of these areas: 'Currency', contract, taxation and succession.

To test this hypothesis, this dissertation first analysed select relevant laws; namely, the Central Bank Act, the Central Depositories Act, the Income Tax Act, the Insolvency Act and the Proceeds of Crime and Anti Money Laundering Act. It found that, standing together and even individually, these Acts do not provide for a legal framework for cryptocurrencies in Kenya yet they are the ones dealing with money/currency and any matters incidental to this.

The dissertation then went on to investigate the legal implications that the lack of a robust and comprehensive legal framework on cryptocurrencies can have on the day-to-day life of Kenyans, particularly when it comes to financial inclusion. It has looked, in what may appear to be a very simplistic manner, into the fact that one may need access to some form of currency for them to meet their basic and secondary needs. In the life cycle of an average Kenyan, it is inevitable that they may need some form of 'currency' to address their basic needs. It is also inevitable that they may need to be engaged in some contractual arrangement for them to access this. Looking at any payment or profits that may be made through cryptocurrencies, it may be hard to have certain elements of the common law contract law such as consideration. It is also

almost inevitable for the government of Kenya to run the country with no form of reliance on taxes. And taxes may need to be applicable to profits or salaries earned in the form of cryptocurrencies. Cryptocurrencies also being assets, there are also questions of how and whether one can pass them to his heirs or a trust. While there are many other aspects that may need to be covered in terms of putting in place a comprehensive and robust regulatory framework on cryptocurrencies, questions to do with what a currency is and how it can be used, contracts, taxation and succession have to be on the table to contribute to what is workable towards formulating any such framework.

To help Kenya formulate such a framework, the dissertation settled on Japan and the USA to provide some important guidelines that Kenya can follow when it comes to the legal status of cryptocurrencies, and further how money laundering can be curbed in this regard through an establishment of some institutional framework. This Chapter has equally looked into taxation when it comes to cryptocurrencies in both jurisdictions. There are important lessons that Kenya might learn from them. On the issue of contracts, there is a lot that can be learnt from the US as it has passed regulations that appreciate contractual relationships that may accrue from transactions in cryptocurrencies. In terms of succession, the fact that cryptocurrencies are already recognised as securities in the United States and recognised as currency both in the United States and Japan is a good step towards any succession law matters in this regard.

The US and Japan have critical lessons for Kenya in the way they approach the interplay between cryptocurrencies and currency, contracts, taxation, and succession. To use these lessons in developing a homegrown robust framework on cryptocurrencies in Kenya, recourse may be made to the Finance Act to help amend the relevant laws. The aim of this Act, which makes any necessary amendments to finance-related laws every year, reads as 'An Act of Parliament to amend the law relating to various taxes and duties; and for matters incidental thereto.' It can therefore serve as the appropriate terrain that would the effect the necessary amendments to Kenyan legislation to usher in a well-grounded development of cryptocurrencies in Kenya in order for them to flourish. It would be hoped that this may serve to rope in a wider population into the financials services ecosystem.

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³⁰³ Finance Act of Kenya (2021)

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