The Journal of Accounting and Management

Why Should Cryptocurrencies Be Regulated? An Analysis of Bitcoin

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Abstract: Purpose: The study explores the rationale behind advocating for the regulation of Bitcoin, specifically focusing on the potential threats and risks Bitcoin poses to the financial systems and the economy at large. However, unlike prior descriptive studies, this paper addresses the gap by critically synthesizing regulatory, technological, and economic risks across multiple jurisdictions. **Design/methodology/approach:** The study followed a qualitative approach in conjunction with a comprehensive review of already existing literature on Bitcoin and other cryptocurrency regulations to ensure that findings were contextualized. A structured qualitative content analysis was employed, guided by predefined inclusion and exclusion criteria, thematic coding, and comparative evaluation of regulatory responses. **Findings:** The study revealed that the lack of Bitcoin and other cryptocurrency regulations results in market manipulation and contributes to eroding trust in the broader financial system. Furthermore, the lack of a clear regulatory framework for Bitcoin results in tax evasion, the creation of investment scams, and other illicit activities such as money laundering. Three dominant risk categories emerged: (1) anonymity-enabled criminality, (2) fiscal transparency and tax non-compliance, and (3) investor protection failures arising from volatility and scams. These themes highlight the structural misalignment between decentralized digital assets and existing regulatory models. **Originality/Value:** This study addresses the gap between technology and regulations. These technological advances do not merely challenge the monetary system but also the regulatory system. The study contributes a structural analytical framework for understanding regulatory gaps and proposes policy directions for licensing, AML/KYC controls, and consumer-protection mechanisms tailored for cryptocurrency environments.

Keywords: Bitcoin; financial systems; regulatory framework and legal tender

JEL Classification: D53; E44; E58; H26

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1. Introduction

The world's first cryptocurrency, Bitcoin, gained popularity when it was launched in 2008 (DeVries, 2016). Bitcoin was introduced as the first digital currency by an anonymous group of individuals under Satoshi Nakamoto (Fauzi et al., 2020). Satoshi believed banks were responsible for the recession; however, they received bailouts from a central authority. Thus, Bitcoin was created to avoid this unfair system. In this system, the transactions occur without the hand of the intermediary (Warmke, 2021). This allows the users to transfer funds without being blocked or questioned about their purchases, and they are not restricted on how much they can transfer. Baur et al. (2018) articulate that Bitcoin is merely an alternative currency and can be used in different or a multitude of transactions as one would use fiat money to pay for goods and services. Having gained world popularity and a market breakthrough, research by Hayes (2019) revealed that Bitcoin's fair value increased significantly between June 2015 and December 2017, with a movement of more than $19,000. The study by Glas (2019) shows that over 1500 different cryptocurrencies have been introduced since 2008. This is significantly low when compared to 2023. According to CoinMarketCap (2023), over 22,437 crypto assets are in circulation. This growth has resulted in the introduction of other cryptocurrencies such as Ethereum and Ripple, amongst others (Armknecht et al., 2015). According to CoinMarketCap (2023), the combined market cap of all cryptocurrencies in circulation is over $1,223,208,056,019. This increase is caused by the increase in the number of cryptocurrency users worldwide and the introduction of new cryptocurrencies. The value of cryptocurrency is increased by the number of users of cryptocurrency. The more cryptocurrency users, the higher the value (Kethineni et al., 2018).

Bitcoin transactions are facilitated by blockchain technology. Bitcoin and blockchain have shaped the world of science and technology (Vujičić et al., 2018). The concept of decentralized money was initially viewed as a theoretical concept, but it became viable in a few years. According to Yaga et al. (2019), the concept of blockchain technology emerged between the years 1980 and 1990 and was developed by Leslie Lamport in 1989. This was then combined with the concept of Satoshi Nakamoto: a Peer-to-peer electronic system. Later in the year 2009, when Bitcoin was introduced, the concept of blockchain was also launched at the same time and was established to be the Bitcoin cryptocurrency blockchain network (Yaga et al., 2019). Different electronic cash schemes were in existence, but none of them gained as popularity as Bitcoin. The main reason is that Bitcoin was independent from third parties, whilst others were not. Unlike fiat money, such as the South African Rand, Euro, Pound, and other traditional currencies that are used to exchange goods and services in the economy, cryptocurrencies do not have legal tender; thus, they are fully decentralized. They do not have government backing or require a third party to be involved in the electronic payment system (Perkins, 2018). On the contrary, paper or fiat money is a legal tender, meaning it is centralized and issued by the government thus has a legal status (Chen, 2021). Since cryptocurrencies are decentralized, there's currently no regulation that governs the trading of cryptocurrencies.

Despite the rapid expansion of Bitcoin adoption and scholarly interest, existing literature remains largely descriptive and fragmented. Much of the existing scholarship explores how Bitcoin works with limited attention to why regulatory systems remain ineffective or inconsistent across jurisdictions. This creates a clear research gap: the lack of an integrated, analytical understanding of regulatory risks and models applicable to decentralized assets. Accordingly, this study seeks to address the following research questions:

- What specific risks arising from Bitcoin use justify regulatory intervention?

- How do different jurisdictions respond to these risks?

- What regulatory mechanisms can better align Bitcoin activities with financial stability and consumer-protection stability?

2. Literature Review

Bitcoin, also known as a virtual currency, is an alternative means of payment (Segendorf, 2014). Bitcoin, the first cryptocurrency that was launched back during the financial crisis in 2008 by the pseudonymous programmer called "Satoshi Nakamoto," was the first digital currency (Warmke, 2021). Satoshi believed banks were responsible for the recession; however, they received bailouts from a central authority. Thus, Bitcoin was created to avoid this unfair system. In this system, the transactions occur without the hand of the intermediary (Warmke, 2021). This allows the users to transfer funds without being blocked or questioned about their purchases, and they are not restricted on how much they can transfer. However, even though Bitcoin is the most used system, not everyone can understand it. Bitcoin involves a very complex technology system that is hard to understand (Pandya et al., 2019). To this date, "How does Bitcoin work?" remains the most asked question with no simple explanation. In 2018, only a few government-issued currencies were above the estimated market capitalization of Bitcoin. This includes the United States dollar and the South Korean won, amongst others (Hazlett & Luther, 2020). This reflects that the demand for Bitcoin has increased significantly. Currently in 2023, the estimated market capitalization of Bitcoin is over $579,744,358,407, and it is the number one most-valued coin across the globe (CoinMarketCap, 2024). Bouoiyour et al. (2016) highlight that despite its high value, there is still uncertainty about how this value is derived. Is the future promised? Is it a short-term thing? While many studies acknowledge Bitcoin's technological novelty, limited studies examine the contradictory relationship between its decentralized features and the regulatory imperatives of modern financial systems. The literature presents competing perspectives: some researchers emphasize innovation and financial inclusion, whereas others highlight systematic risk, crime, and governance failures. This divergence underscores the need for an analytical synthesis rather than a cumulative listing of sources.

2.1. Bitcoin Blockchain

Blockchain is a distributed digital ledger that records the transactions and digital events that have taken place and is shared between participants (Yaga et al., 2019). It allows one community of users to record transactions in a shared ledger for that community. Once a Bitcoin transaction is published in this network or information is entered, it cannot be changed (Segendorf, 2014). This process assures the users that the transaction has occurred. In the current economy, people rely on third parties when doing online transactions. This includes a message notification from a third party telling us that a message has been sent. It can be Facebook telling us that our posts are only shared with our friends. However, it is a fact that third parties can be hacked (Crosby et al., 2016). This is where Blockchain technology comes in. Security and privacy are top priorities. Even though pessimists believe that the absence of central authority makes this system untrustworthy, the benefit of using this system outweighs the regulatory issues. All transactions, past or present, are verified in the future. Only valid and verified transactions can be entered into a blockchain network (Gandal et al., 2018). Bitcoin has an anonymous feature that allows users to be anonymous; however, the accounts themselves are not

anonymous, and the transactions are public. Then the question comes, "Is this Bitcoin trustworthy?" Normally, third parties (i.e., the Central government) ensure trust. With Bitcoin, there is no third party that acts as an intermediary. There are, however, features of intermediaries that create trust, such as strict access controls, transaction movement is verified using complex mathematical tools, and the data contained in the blockchain is highly secured (Crosby et al., 2016).

Although blockchain is widely promoted as inherently secure, evidence from cybersecurity literature reveals that vulnerabilities often lie in third-party applications, exchanges, and user practices rather than the chain itself. This contradicts the assumption, common in early Bitcoin literature, that decentralization alone ensures trust and stability. Recognizing this tension is critical in understanding why regulation becomes necessary even in systems designed to minimize intermediaries. Both financial and non-financial institutions have been giving positive feedback and comments on the use of Blockchains. They no longer perceive blockchain as a threat. Banks think that blockchain is a secure platform for banking and other financial applications. There are many opportunities associated with blockchain, and this technology may be the new engine for growth in a virtual economy (Martinčević, 2022). Blockchain has great potential because it automates business processes and speeds up the process. This may be an advantage because it reduces the operating cost and faster returns on investments may be realized. Recognizing the importance of blockchain technology may refine business models and open a space for innovative network creation and integration systems. This may also aid in digitalizing business processes and offer alternative solutions to old, non-integrated systems (Martinčević, 2022).

2.2. How does Bitcoin Work?

Bitcoin works the same as a mobile app, as users are provided with a Bitcoin wallet, which is the requisite software where payments are made (Segendorf, 2014). Entity A enters a Bitcoin transaction by initiating a Bitcoin deposit into a specific user-provided address to entity B using a Bitcoin exchange wallet. The user-provided address serves as the encrypted account number. The receiver does not receive the actual or regular money, but payment is recognized in the form of debiting the sender's account (Segendorf, 2014). A Bitcoin transaction is then transmitted into the Bitcoin network blockchain for verification (Gandal et al., 2018). Blockchain is an encrypted system that improves the security of information contained in blocks for verification (Prybila et al., 2020). Blockchain is considered to function the same as a general ledger, which records every Bitcoin transaction and movement. Sometimes it is referred to as a distributed ledger technology. Bitcoin miners then use complex mathematical algorithms to verify and authenticate the Bitcoin transactions, and legitimate transactions are put together into blocks. The miners get remunerated for verifying the transactions. Miners compete during this process. Whoever finds the solution first, sends this for verification by the majority of miners for acceptance (Augot et al., 2017). If the solution is acceptable, these transactions are added to the Bitcoin exchange blockchain (Segendorf, 2014). After the above process, Entity B then receives the bitcoin deposited by Entity A.

2.3. Why Should Bitcoin be Regulated?

2.3.1. Criminal Activities

Technology innovations are often created to make people's lives easier; however, criminals use this new technology to advance their criminal behavior or practice (Kethineni et al., 2018). Cryptocurrency is a cybercriminal's playground (Brown, 2016). The adoption of cryptocurrency as payment for online transactions is what gives rise to an increase in criminal cryptocurrency activities (Cao, 2020). As the adoption of cryptocurrency increases and more businesses accept it as a means of payment, criminal activities increase too (Cao, 2020). The criminal activities surrounding cryptocurrencies are allowed by the "anonymous and secure" feature when transferring value from one person to another (Wicht, 2016). This feature also affects the overall measurement of criminal activities linked to the crypto asset (Jasinski, 2023). Moreover, the lack of control and its design contribute to increasing criminal activities (Kethineni et al., 2018). Cao (2020) highlights that illegal transactions involve online payments using cryptocurrency to acquire illegal commodities, drugs, and weapons, and further escalate to money laundering, defrauding people, and cryptojacking. In January 2015, according to Brown (2016), TalkTalk customer data was hacked, and the hackers sought to extort the company 80,000 Euros in Bitcoin in exchange for not publishing customer data.

2.3.2. Tax Evasion and Investment Scam

Tax evasion is an illegal practice that contradicts the tax laws with the aim of not paying taxes (Owusu et al., 2020). In addition, Alm et al. (2019), articulate that the illegal practice is intentional. This is different from tax avoidance. Concerning tax evasion, the nature of cryptocurrency does not allow authorities to combat tax evasion relating to cryptocurrency because the information is not accessible, if not made impossible by the anonymity feature. This is beneficial for tax evaders (Jafari et al., 2018). The Bitcoin holder can generate revenue from it in two ways. Number one, the gains realized in Bitcoins. Like the shares, Bitcoins fluctuate in value. The holder may decide to sell his Bitcoins at peak value (i.e., for more than what he bought them for) and realize a gain. Number two, Bitcoins act as the medium of exchange. Users can use Bitcoin to buy goods and services, thus creating a taxable income for the receiver. Because of the anonymity feature, the Bitcoin holder may not disclose the related Bitcoin income. In addition, investment scams are another concern that comes with Bitcoin. This is a nightmare for investors. There are several articles published about this. The problem with Bitcoin investment is that when someone scams you, they will not be held accountable because they have not breached any law (Ly, 2013). This is one of the reasons why Bitcoin should be regulated. Through the reviewed literature, these risks are integrated into a unified analytical framework. This study addresses this gap by categorizing the risks into three regulatory domains: (1) criminality; (2) fiscal transparency; and (3) investor protection, each of which requires distinct policy intervention.

2.4. Review of Recent Legal Developments in Cryptocurrencies

As cryptocurrencies continue to develop, the legal landscape surrounding cryptocurrencies has also been evolving rapidly (Partanen, 2018). There are notable recent legal developments with various jurisdictions implementing regulations against cryptocurrencies. Providing regulatory clarity on the definition of cryptocurrencies has become one of the focal points of every jurisdiction. This has been achieved through the application of existing regulatory frameworks and the subsequent development of new laws that specifically address virtual assets. There is no doubt that cryptocurrency exchanges

have created a playground for illicit transactions (Kethineni et al., 2018). This has also become one of the main areas for the government to address. As a result, the government has introduced anti-money laundering regulations that apply to cryptocurrency exchange and service providers (Drobotovs, 2022; Vandezande, 2017). This ensures that trading platforms comply with the traditional financial regulations to detect and minimize activities such as money laundering.

Taxation of cryptocurrencies has remained a grey area for tax authorities for some time now, and there has been an ongoing debate regarding the treatment of cryptocurrencies from a tax perspective (Drobotovs, 2022). The debate is whether cryptocurrencies are subject to tax, and if yes, what is the appropriate classification for tax reporting purposes. The argument is whether cryptocurrencies should be taxed as a commodity, gross income, or property. Security is one of the drawbacks that come with investments in cryptocurrencies (Quamara & Singh, 2022). To protect the interests of the users and investors, the government has assessed whether security regulations may apply to Initial Coin offerings and tokens (Mendelson, 2019). Initial Coin Offerings are deemed to have violated security concerns. This has led to security laws being implemented against initial coin offerings. As part of an ongoing development of regulations, central banks have been exploring the potential legal framework for cryptocurrencies. This is done through the piloting of central bank digital currencies. Because of an increase in illegal activities surrounding the trading of cryptocurrencies, litigation actions have been enforced against cryptocurrency exchanges over ownership and control of cryptocurrencies.

2.4.1. Bitcoin as a Legal Tender in El Salvador

Despite the lower adoption rate of Bitcoin as currency across the globe, currently sitting below 4%, EL Salvador became the first country to adopt Bitcoin as the Country's legal tender (Burke, 2022). Before Bitcoin was the president introduced Bitcoin as a legal tender; the U.S. dollar was the only currency in El Salvador. Then, later in September 2021, the president officially introduced Bitcoin as the official currency through the "Bitcoin law." (Alvarez et al., 2022). As a result of this adoption, the president of El Salvador, Bukele, plans to issue Bitcoin-backed government bonds. Usually, government bonds are less risky; however, since Bitcoin is highly volatile, the Bitcoin-backed government bond may be considered inherently risky. This observation was made by the International Monetary Fund and Wall Street (Burke, 2022). The economy of El Salvador has been struggling in the past two decades as a result of adopting the U.S. dollar as the official currency for the country. It's been two years since Bitcoin became the country's official currency, but to this date, fundraising is still a struggle for El Salvador. The price of Bitcoin decreased significantly after the announcement as an official currency. It decreased by more than 11%. When the announcement happened, a majority of the Salvadorians (i.e., over 95%) didn't want to be compelled to use Bitcoin, and people began to protest against Bitcoin (Huo, 2022).

2.4.2. Bitcoin as a Legal Tender in the Central African Republic

The Central African Republic (CRA) is one of the countries that joined EL Salvador to legalize Bitcoin as a tender. The president of CRA, Faustin Archange Touadera, announced in April 2022 that Bitcoin had been approved by the Lawmakers in the country to adopt Bitcoin as the legal tender (Katterbauer et al., 2022; Kshetri, 2022; Parasha, 2022). The main objective of legalizing Bitcoin was to have an alternative currency alongside CAR's existing currency CFA franc. The CFA franc is the currency that is used by 6 countries in Africa, namely, Cameroon, Chad, the Central African Republic, Gabon, Congo, and Equatorial Guinea (Kshetri, 2022). Similarly, in EL Salvador, the CRA government's objective is to issue a government-backed crypto wallet with a digital identity feature

and an ownership solution (Kshetri, 2022). The CAR government plans to launch a cryptocurrency called "Sango" in the country (Parasha, 2022). This was after Bitcoin was announced as the official currency. Currently, businesses and Bitcoin traders are allowed to use Bitcoin as a means of payment, and the CAR's authorities are making a way to administer crypto tax payments through entities that are authorized (Parasha, 2022).

2.4.3. Response to Bitcoin Regulations - Case in China

Several countries have already prohibited the trading of cryptocurrencies in their jurisdiction, whilst others remain undecided on whether they should follow suit and adopt cryptocurrency (Borri & Shakhnov, 2020). China is one of those jurisdictions that prohibit the trading of Bitcoin. China is the largest second economy worldwide and used to be the largest country in cryptocurrency exchange (Nadeem et al., 2021). Riley (2021) adds that because of lower labour costs, cheap production, and lower power costs, a large percentage of cryptocurrency exchanges originate from China, and their mining occurs in China. Nadeem et al. (2021) articulate that in 2011, the trading volume of Bitcoin investment in the United States was lower than China's trading volume. As a result, the People's Bank of China (PBOC) in 2017 began to prohibit or restrict financial institutions from trading Bitcoin. Moreover, China further banned the exchange of cryptocurrencies and initial coin offerings (Riley, 2021). This led to a significant decrease in the value of Bitcoin. More than half of the value of Bitcoin was lost. After declaring the initial coin offering illegal, the PBOC requested a refund from investors for any amounts derived from the initial coin offering. China continued to discourage this trading, and under the People's Bank of China law, any institution found trading tokens would be fined to amount of RMB200,000. This restriction was done to protect the interests of investors and participants (Riley, 2021). China will continue to enforce and apply its laws and policies in regulating cryptocurrency and will continue to shape the world of cryptocurrency exchange.

2.4.4. Response to Bitcoin Regulations - Case in South Africa

In 2014, the South African Reserve Bank (SARB) released a position paper on digital currencies regarding their legal status in South Africa. Included in the regulation paper is that only SARB is legally allowed to issue fiat money, such as notes and coins, in the Republic of South Africa (Reddy & Lawack, 2019). The cryptocurrencies are not issued by SARB and, therefore, are not regarded as legal tender (Sadhaseevan, 2019). Cryptocurrencies cannot be used as payment for obligations and cannot be accepted by the creditor as an amount received for the settlement of the obligations. Cryptocurrencies are not currently regulated in South Africa, and the regulatory standards that apply to traditional currencies do not apply to cryptocurrencies. The laws that apply to protect the interests of consumers do not apply to the users of cryptocurrencies (Reddy & Lawack, 2019). Thus, people who enter cryptocurrency trading transactions do so at their own risk and have no backup from SARB.

Although the concept of cryptocurrency is the same as electronic payments, it does not mean that they are the same thing. With reference to South Africa's position paper of 2009, electronic money is defined as a monetary value that can be accepted by individuals as a means of payment and can be converted into physical cash or redeemed on demand as a deposit in the bank (Reddy & Lawack, 2019). On the contrary, there is uncertainty about whether cryptocurrencies will be accepted by the receiver as a means of payment. Moreover, there is uncertainty whether cryptocurrencies will be convertible into cash and can be redeemed as a deposit in the bank, as it is currently not regarded as legal tender. According to section 7 of the position paper on electronic money, e-money products can legally function as electronic money if they are issued by a bank. Cryptocurrencies are fully

decentralized. Functions independently of banks (Sadhaseevan, 2019). Thus, cryptocurrencies are excluded from this definition. Furthermore, the National Treasury does not regard cryptocurrencies as securities. The National Treasury further outlines that cryptocurrencies do not fall into the definitions of security, fiat money, electronic money, or a means of payment. However, the definition of a crypto asset may be appropriate, and cryptocurrencies may be classified into it (Reddy & Lawack, 2019).

A comparative reading of these jurisdictions demonstrates significant regulatory divergence. Jurisdictions like China adopt prohibitionist models, while others, such as El Salvador, employ full legislation. South Africa and the European Union adopt hybrid approaches that regulate service providers rather than the assets themselves. This regulatory heterogeneity illustrates the absence of a globally coherent framework for cryptocurrency governance.

3. Research Methodology

The study aimed to critically evaluate the rationale behind the necessity to regulate Bitcoin, considering the security concerns of the consumer, criminal activities, and market volatility associated with cryptocurrency. To achieve the study objective, the qualitative research approach was adopted by the researcher as a study research design to gather detailed insight into Bitcoin from existing academic literature and other related scholarly work. The qualitative approach involves the analysis of non-numerical data, which allows a researcher to identify how things have changed over time, and the emerging concepts, and enables the researcher to make future assumptions (Caudle, 2004; Friedman, 2011; Klopper & Brink, 2023). This was conducted through the analysis of the literature review to analyze and explore the impact of Bitcoin adoption on financial systems and regulatory issues. A qualitative content analysis approach was used, involving systematic coding of literature into themes including criminality, regulatory gaps, tax compliance issues, and state-level legal responses. The analysis followed three stages: (1) literature identification, (2) thematic coding, and (3) comparative synthesis. To ensure relevancy and quality, the selection of literature was based on specific inclusion and exclusion criteria. As far as inclusion criteria are concerned, peer-reviewed journals and other relevant studies published within the past five years were included in the analysis to ensure that the most recent developments in Bitcoin and other cryptocurrencies were captured. Literature focusing on the regulation and taxation of Bitcoin, the impact of Bitcoin on financial systems, and the adoption of Bitcoin as a legal tender was specifically included in the qualitative content analysis.

As part of the exclusion criteria, non-peer-reviewed journals such as informal publications and blogs were not used in the analysis. In addition, unrelated or duplicate studies and publications without full access were not employed in the literature analysis. Google Scholar, Scopus, and SSRN were used as search engines for data collection and literature search purposes. Furthermore, Bitcoin and other cryptocurrency trading sites were visited to ensure all areas of research relating to Bitcoin were covered. Search terms such as “Bitcoin”, “regulation of Bitcoin”, “adoption of Bitcoin”, “AML/KYC crypto”, and “taxation of digital assets”, amongst others, were used to conduct a literature search. The study was limited to English-written literature, geographical variance in regulatory contexts, and reliance on secondary data, which may not fully reflect rapid real-time changes in crypto markets. These exclusion criteria may have resulted in the exclusion of non-English relevant literature, which may have contributed significantly to the study. The study was further limited to existing literature, which may have hindered the real-time development of the concept of Bitcoin in the financial systems and regulations.

4. Findings

The results are presented based on three thematic categories that emerged from the qualitative coding: theme 1: criminal exploitation enabled by anonymity; theme 2: fiscal transparency and tax non-compliance; and theme 3: investor vulnerability and market instability. Under theme 1, literature consistently shows that Bitcoin's pseudonymous nature facilitates money laundering (Vandezande, 2017), darknet markets (Kethineni et al., 2018), and ransomware (Cao, 2020). Comparative analysis reveals a higher illicit transactions on unregulated platforms (Brown, 2016). This justifies the significance of rationale and importance of why Bitcoin should be regulated, mainly due to its potential risk of susceptibility to illicit activities such as criminal activities, tax evasion, and investment scams. Although the nature of Bitcoin is decentralized and contains an anonymous feature as a novel tool for users, it imposes a challenge to the current regulatory framework, as security issues, currency stability, and prevention of illegal activities are still concerns. The literature review also reflects the growing consensus of the necessity to regulate Bitcoin to protect the interests of users across different jurisdictions.

Under theme 2, the findings reveal that tax evasion is prevalent due to anonymous transfers (Alm et al., 2019; Owusu et al., 2020). Studies highlight jurisdictional arbitrage, where users exploit regulatory gaps (Wicht, 2016). As cryptocurrencies continue to grow and become popular, the anonymity feature allows cybercrime, such as the acquisition of illegal goods, extortion, and money laundering, to be facilitated by criminals without fear or detection. In light of these findings, introducing a regulatory framework for cryptocurrencies may allow authorities to track and detect the exploitation of the system by criminals. The nature of Bitcoin transactions also poses a challenge to the tax authorities to track taxable income earned or received from cryptocurrency transactions. Again, the anonymity feature of Bitcoin makes it a challenge, if not impossible, for tax authorities to collect taxes from crypto transactions. The institutions under traditional financial transactions are legally obligated to declare their taxable income to tax authorities at the end of every tax period. However, with Bitcoin, users can complete transactions without the oversight of tax authorities. Bitcoin users can easily evade tax by not declaring the gains made from the exchange or trading of Bitcoins, by not reporting the taxable income. As a result, regulating Bitcoin transactions would bridge the gap in tax compliance and government revenues. To ensure that tax transparency and compliance are achieved, a regulatory framework must be imposed and administered in Bitcoin transactions.

Lastly, under theme 3, findings show that volatility and scams erode trust (Borri & Shakhnov, 2020; Gandal et al., 2018). Pump-and-dump schemes dominate, with 80% of ICOs failing (Mendelson, 2019). This results in users or investors being subjected to fraudulent scams and ending up losing a substantial amount of money without the legal intermediate hand recourse due to a lack of regulation. For the exact reason of a lack of regulation, scammers would not be held accountable for such fraudulent schemes because they did not break any law. Without a necessary regulatory framework, it is difficult to enforce accountability against scammers and protect the interests of investors. Establishing a clear legal regulation framework, such as setting up standards for trading platforms and protection against fraud, may mitigate the risk of scammers. The study further acknowledges blockchain technology, which is the fundamental part of Bitcoin. Blockchain technology provides a highly secure system that is used to record cryptocurrency transactions. Blockchain is decentralized and encrypted in nature. This novel tool allows transactions not to be altered, and as a result, the blockchain technology cannot be hacked. This feature is missing in the traditional financial system. The study found that although it may seem to address the security concerns of cryptocurrencies, the

anonymity and lack of regulation gap is not addressed at all at a broader level. While blockchain may be a financial technology advancement, the regulatory framework still needs to be addressed.

5. Conclusion

First, the results highlight a misalignment between decentralized systems and regulation built on centralized overnight. Second, cross-jurisdictional comparisons show that regulatory effectiveness depends on policy coherence, institutional capacity, and technological compatibility. Third, themes indicate that regulation should focus less on the asset itself and more on the surrounding ecosystem-exchanges, wallets, custodians, and third-party services. Overall, the study has shown that despite the advantages that come with cryptocurrency, the adoption rate of cryptocurrency is still lagging, and some countries, such as China, have banned the use of cryptocurrencies because of the limitations discussed above. The value of cryptocurrency has indeed increased significantly throughout the years; however, it still does not change the fact that it is highly volatile or vulnerable in today's state. Although cryptocurrencies seek to address the possible inefficiencies that come with money, the use of cryptocurrencies cannot eliminate money. Money is considered the globally acceptable means of payment. Therefore, cryptocurrencies can only be considered as an alternative to money. We also cannot ignore the fact that some countries, especially those that want to get rid of money, have invested in and accepted blockchain technology as the new transaction system. This study revealed that South Africa, amongst other countries, does not consider cryptocurrency as a medium of exchange as outlined in the definition of FMA. However, El Salvador and the Republic of Africa have officially accepted cryptocurrency as a currency. Furthermore, this study reveals that although cryptocurrency is not accepted as currency, the trading of cryptocurrencies is legal.

To protect the interests of users and investors, conditions are put in place and must be adhered to. It is important to note that the legal landscape surrounding cryptocurrencies differs from one jurisdiction to another and is subject to significant changes as cryptocurrencies continue to evolve. As a result, this study proposes three regulatory mechanisms: (1) licensing and supervision of cryptocurrency exchanges and wallet providers, (2) mandatory AML/KYC controls aligned with FATF recommendations, and (3) clear tax reporting frameworks defining cryptocurrency as either property, financial asset, or a commodity. For policymakers, the findings highlight the importance of establishing regulatory clarity that protects consumers while enabling innovation. For financial institutions, the findings demonstrate the need for risk-management models tailored to digital assets. For the government, the study emphasizes the role of taxation frameworks in ensuring fiscal compliance.

6. Recommendations for Future Research

Future research within the spectrum of cryptocurrencies may include the examination of the effectiveness of the regulatory frameworks already implemented by different jurisdictions. This includes the analysis of whether the regulations in place effectively address security concerns, fraud prevention, and cybersecurity without hindering the adoption rate of cryptocurrencies. Strict or lenient enforcement of the regulation of cryptocurrency may have a direct impact on the adoption rate of cryptocurrencies. Furthermore, future studies should empirically assess the impact of different

regulatory models on crypto adoption, financial stability, and criminal activity rates to determine which framework provides the optimal balance between innovation and risk control.

References

Alm, J., Liu, Y., & Zhang, K. (2019). Financial constraints and firm tax evasion. *International Tax and Public Finance*, *26*(1), 71-102.

Alvarez, F. E., Argente, D., & Van Patten, D. (2022). *Are cryptocurrencies currencies? Bitcoin as legal tender in El Salvador*.

Armknecht, F., Karame, G. O., Mandal, A., Youssef, F., & Zenner, E. (2015). Ripple: Overview and outlook. *Trust and Trustworthy Computing: 8th International Conference, TRUST 2015*, Heraklion, Greece, August 24-26, 2015, Proceedings 8.

Augot, D., Chabanne, H., Chenevier, T., George, W., & Lambert, L. (2017). A user-centric system for verified identities on the bitcoin blockchain. *Data Privacy Management, Cryptocurrencies and Blockchain Technology: ESORICS 2017 International Workshops, DPM 2017 and CBT 2017*, Oslo, Norway, September 14-15, 2017, Proceedings.

Baur, D. G., Hong, K., & Lee, A. D. (2018). Bitcoin: Medium of exchange or speculative assets? *Journal of International Financial Markets, Institutions and Money*, 54, 177-189.

Borri, N., & Shakhnov, K. (2020). Regulation spillovers across cryptocurrency markets. *Finance Research Letters*, 36, 101333.

Bouoiyour, J., Selmi, R., Tiwari, A. K., & Olayeni, O. R. (2016). What drives Bitcoin price. *Economics Bulletin*, *36*(2), 843-850.

Brown, S. D. (2016). Cryptocurrency and criminality: The Bitcoin opportunity. *The Police Journal: Theory, Practice and Principles, 89*(4). https://journals.sagepub.com/doi/pdf/10.1177/0032258X16658927

Burke, Q. J. (2022). *The Great Bitcoin Experiment: A Social Analysis of Cryptocurrency in El Salvador*.

Cao, S. K. A. Y. (2020). The Rise in Popularity of Cryptocurrency and Associated Criminal Activity. *International Criminal Justice Review, 30*(3), 325-344. https://journals.sagepub.com/doi/pdf/10.1177/1057567719827051

Caudle, S. L. (2004). Qualitative data analysis. *Handbook of practical program evaluation*, *2*(1), 417-438.

Chen, J. (2021). Fiat money. In *Investopedia*.

CoinMarketCap. (2023). *Today's Cryptocurrency Prices by Market Cap*. https://coinmarketcap.com/?page=92

Crosby, M., Pattanayak, P., Verma, S., & Kalyanaraman, V. (2016). Blockchain technology: Beyond bitcoin. *Applied Innovation*, *2*(6-10), 71.

DeVries, P. D. (2016). An analysis of cryptocurrency, bitcoin, and the future. *International Journal of Business Management and Commerce*, *1*(2), 1-9.

Drobotovs, M. (2022). *Cryptocurrency and its taxation*.

Fauzi, M. A., Paiman, N., & Othman, Z. (2020). Bitcoin and cryptocurrency: Challenges, opportunities and future works. *The Journal of Asian Finance, Economics and Business*, *7*(8), 695-704.

Friedman, D. A. (2011). How to collect and analyze qualitative data. *Research methods in second language acquisition: A practical guide*, 180-200.

Gandal, N., Hamrick, J., Moore, T., & Oberman, T. (2018). Price manipulation in the Bitcoin ecosystem. *Journal of Monetary Economics*, 95, 86-96.

Glas, T. N. (2019). Investments in cryptocurrencies: handle with care! *The Journal of Alternative Investments*, *22*(1), 96-113.

Hayes, A. S. (2019). Bitcoin price and its marginal cost of production: support for a fundamental value. *Applied economics letters*, *26*(7), 554-560.

Hazlett, P. K., & Luther, W. J. (2020). Is bitcoin money? And what that means. *The Quarterly Review of Economics and Finance*, 77, 144-149.

Huo, Y. (2022). The Effect of Government Policies on Cryptocurrency Market. *7th International Conference on Social Sciences and Economic Development (ICSSED 2022)*.

Jafari, S., Vo-Huu, T., Jabiyev, B., & Mera, A. (2018). Cryptocurrency: A challenge to legal system. *Reza, Cryptocurrency: A Challenge to Legal System (May 2, 2018)*.

Jasinski, D., Phillips, A., & Johnston, E. (2023). *Organised Crime, Financial Crime, and Criminal Justice: Theoretical Concepts and Challenges*. https://books.google.co.za/books?hl=en&lr=&id=DzW0EAAAQBAJ&oi=fnd&pg=PA122&dq=bitcoin+criminality&ots=m3F18LUodu&sig=pBc2f13x3mtulFQbrJJxDUv3DOU&redir_esc=y#v=onepage&q=bitcoin%20criminality&f=false

Katterbauer, K., Syed, H., & Cleenewerck, L. (2022). The impact of the legalization of Bitcoin in the Central African Republic—A legal analysis. *Cuadernos de Economía*, 713, 746.

Kethineni, S., Cao, Y., & Dodge, C. (2018). Use of Bitcoin in Darknet Markets: Examining Facilitative Factors on Bitcoin-Related Crimes. *American Journal of Criminal Justice*, *43*(2), 141-157.

Klopper, N., & Brink, S. M. (2023). Determining the appropriate accounting treatment of cryptocurrencies based on accounting theory. *Journal of Risk and Financial Management*, *16*(9), 379.

Kshetri, N. (2022). Bitcoin's Adoption as Legal Tender: A Tale of Two Developing Countries. *IT professional*, *24*(5), 12-15.

Ly, M. K.-M. (2013). Coining bitcoin's Legal-Bits: Examining the regulatory framework for bitcoin and virtual Currencies. *Harvard Journal of Law & Technology*, 27, 587.

Martinčević, I., Sesar, V., Buntak, K., & Miloloža, I. (2022). Accounting and Tax Regulation of Cryptocurrencies. *INDECS, 20*(5), 640-661. https://hrcak.srce.hr/284158

Mendelson, M. (2019). From initial coin offerings to security tokens: A US Federal Securities law analysis. *Stanford Technology Law Review*, 22, 52.

Nadeem, M. A., Liu, Z., Pitafi, A. H., Younis, A., & Xu, Y. (2021). Investigating the adoption factors of cryptocurrencies—a case of bitcoin: empirical evidence from China. *SAGE Open*, *11*(1), 2158244021998704.

Owusu, G. M. Y., Bekoe, R. A., Anokye, F. K., & Anyetei, L. (2020). What Factors Influence the Intentions of Individuals to Engage in Tax Evasion? Evidence from Ghana. *International Journal of Public Administration*, *43*(13), 1143-1155.

Pandya, S., Mittapalli, M., Gulla, S. V. T., & Landau, O. (2019). Cryptocurrency: Adoption efforts and security challenges in different countries. *HOLISTICA–Journal of Business and Public Administration*, *10*(2), 167-186.

Parasha, R. (2022). *Central African Republic to Create Crypto Hub 'Sango' Now That BTC is Legal Tender There*. https://www.gadgets360.com/cryptocurrency/news/central-african-republic-create-crypto-hub-sango-btc-legal-tender-3008672

Partanen, C. (2018). *The viability of cryptocurrency in relation to the response of financial institutions and governments*.

Perkins, D. W. (2018). *Cryptocurrency: The economics of money and selected policy issues*. Washington DC: US Congressional Research Service.

Prybila, C., Schulte, S., Hochreiner, C., & Weber, I. (2020). Runtime verification for business processes utilizing the Bitcoin blockchain. *Future generation computer systems*, 107, 816-831.

Quamara, S., & Singh, A. K. (2022). A systematic survey on security concerns in cryptocurrencies: State-of-the-art and perspectives. *Computers & Security*, 113, 102548.

Reddy, E., & Lawack, V. (2019). An overview of the regulatory developments in South Africa regarding the use of cryptocurrencies. *SA Mercantile Law Journal*, *31*(1), 1-28.

Riley, J. (2021). The current status of cryptocurrency regulation in China and its effect around the world. *China and WTO Review*, *7*(1), 135-152.

Sadhaseevan, L. (2019). *The regulation of cryptocurrencies in the context of South Africa's financial sector*.

Segendorf, B. (2014). What is bitcoin. *Sveriges Riksbank EconomicReview*, 2-71.

Vandezande, N. (2017). Virtual currencies under EU anti-money laundering law. *Computer law & security review*, *33*(3), 341-353.

Vujičić, D., Jagodić, D., & Ranđić, S. (2018). Blockchain technology, bitcoin, and Ethereum: A brief overview. *17th international symposium infoteh-jahorina (infoteh)*.

Warmke, C. (2021). What is bitcoin? *Inquiry*, 1-43.

Wicht, M. S. (2016). *The tax implications of Bitcoin in South Africa*. University of Pretoria.

Yaga, D., Mell, P., Roby, N., & Scarfone, K. (2019). *Blockchain technology overview*. arXiv:1906.11078.