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Accounting and Tax Treatment of Cryptocurrencies: A Systematic Review

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Abstract: The emergence of cryptocurrencies as a financial innovation has changed the financial industry and the accounting processes in recent years. The primary aim of this study was to discuss the possible treatment of cryptocurrencies in the context of accounting and taxation. Whilst a significant effort has been made to address the uncertainty of accounting and tax treatment of cryptocurrencies, the study also builds on existing knowledge; little is known about cryptocurrencies and the related implications. The study followed a qualitative approach and used paper analysis to achieve the primary objective. The paper analysis included a systematic review of papers. The study focused on the paper analysis of existing data to refine a conceptual framework. It was found that because of the volatility of cryptocurrencies, the existing measurement models, which are the cost model and fair value model, do not cater to cryptocurrencies. This study addressed the gap between financial information and regulations. These fintech advances do not merely challenge the monetary system but also the regulatory system.

Keywords: Crypto-assets; Virtual currency; Blockchain, Accounting and Tax

JEL Classification: G18, M41, H25, O33

1. Introduction

In this modern digital age, for companies to stay competitive and follow market trends, they must change the traditional way of doing business, adapt to new trends, and adopt new digital business models (Ivana Martinčević, 2022). In recent years, disruptive technology has changed the way of doing business, the financial market systems, and the way people live daily (Alharbi & Sohaib, 2021; Chaveesuk et al., 2022). As a result of digital transformation, the financial markets introduced the concept of FinTech as a financial innovation (Kucharova et al., 2021). The products of FinTech feature some of the most

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technological innovations that challenge the business models and accounting practices. So far, these products are blockchain technology and cryptocurrencies (Ivana Martinčević, 2022; Ramassa & Leoni, 2022; Sharma et al., 2021). The first cryptocurrency, Bitcoin, was developed in the late 2000s by the pseudonymous programmer or group “Satoshi Nakamoto” (Sharma et al., 2021; Warmke, 2021).

The underlying inspiration for developing Bitcoin originates from the 2008 financial crisis. Satoshi believed that the banks were responsible for the economic recession that occurred, and as a result, saw a need to create an alternative to the traditional banking system (Fauzi et al., 2020; Klopper & Brink, 2023). The next cryptocurrency was introduced by Vitalik Buterin in 2015 under the concept of smart contracts (Tikhomirov, 2018). This enabled the development of cryptographic decentralized applications on its blockchain (Klopper & Brink, 2023). Because of Bitcoin’s and Ethereum’s success, thousands of other cryptocurrencies were subsequently introduced and emerged into circulation (Armknecht et al., 2015). Cryptocurrencies by nature are virtual crypto assets that are computer-generated and are processed and facilitated in a decentralized digital ledger technology called “blockchain” (Kamps & Kleinberg, 2018; Sharma et al., 2021).

According to CoinMarketCap (2023), over 22,437 cryptocurrencies are available in the market with a combined market capitalization of over \$1,2 trillion. Currently, there are over 23,000 cryptocurrencies in the market circulation with a combined market capitalization of over \$1.6 trillion (CoinMarketCap, 2024). This reflects a decrease in the market capitalization compared to 2021. In October 2021, the market capitalization of cryptocurrencies peaked at \$2.5 trillion with only 13,260 cryptocurrencies in circulation (Klopper & Brink, 2023). This shows the significant increase in the number of cryptocurrencies being introduced and the volatility of their market capitalization in recent years. Kethineni et al. (2018) deduced that there is a direct relationship between market capitalization and the number of users of cryptocurrencies. However, the statistics contradict this conclusion. Recently, there has been an increase in the number of cryptocurrency users; however, there are fluctuations in their market capitalization. Given the increase in the number of entities and individuals investing in cryptocurrencies, their popularity, volatility, and the associated risks, it has become increasingly important to identify and consistently apply the appropriate accounting and tax treatment of cryptocurrency investments (Klopper & Brink, 2023; Mlambo, 2022; Wicht, 2016).

Cryptocurrencies in the financial market operate and function without the hand of an intermediary (Kamps & Kleinberg, 2018; Perkins, 2018; Tredinnick, 2019). Since cryptocurrencies operate without the mediation of banks, they enable users to complete transactions anonymously without being blocked or questioned about their purchases, and there is no limit to how much they can transfer. In addition, transactions can be completed more quickly than in the traditional banking system (Warmke, 2021). Hence, there are risks associated with cryptocurrency transactions as they are completely digital and decentralized (Klopper & Brink, 2023). To minimize the degree of uncertainty for users, there must be a regulatory market to ensure a transparent global network for cryptographic transactions and data credibility. The primary focus area that requires attention is the accounting and tax treatment of cryptocurrencies. This is because cryptocurrencies are associated with risks such as money laundering, tax evasion, and potential investment scams (Cao, 2020; Kethineni et al., 2018), which require the regulatory body and the establishment and implementation of regulation policies to ensure transparency in the business transactions that involve cryptocurrencies (Ivana Martinčević, 2022).

Blockchain technology and cryptocurrency present a challenge to the traditional financial system and existing regulations (Sotiropoulou & Guégan, 2017). The International Financial Reporting Standards (IFRS) did not cater to cryptocurrency when they were developed. Currently, there is an absence of specific IFRS or accounting standards that apply to cryptocurrencies (Luo & Yu, 2022). Consequently, this has opened room for flexibility when applying the existing standards, resulting in uncertainty for users when preparing their annual financial statements (Klopper & Brink, 2023). As a result, the International Accounting Standard Board (IASB), in June 2019, issued guidance on how cryptocurrencies may be treated for accounting purposes (Tan & Zhang, 2021). The IASB deduced that the applicable standard that may be appropriate to be applied to cryptocurrencies if held for trading may be the International Accounting Standard (IAS) 2 Inventory. Otherwise, the International Accounting Standard (IAS) 38 intangible assets may be applied (Klopper & Brink, 2023). However, this did not age well as many stakeholders (Mlambo, 2022; Procházka, 2018; Ramassa & Leoni, 2022), amongst others, have challenged this conclusion made by IASB based on whether the proposed guidance provides and represents relevant and faithful information to the users, resulting in them making better economic decisions (Klopper & Brink, 2023).

The study aimed to contribute to an existing theoretical financial reporting body and tax knowledge. Furthermore, the study aimed to contribute to practical knowledge by aiding stakeholders in comprehending the theory underlying the accounting and tax treatment of cryptocurrencies. The study had a primary objective to determine the accounting and tax treatment of cryptocurrencies in South Africa. This objective was sectioned into four sub-objectives. The first objective was to determine the appropriate classification of cryptocurrencies. The second objective was to ascertain whether the conceptual framework and International Framework Reporting Standards provide sufficient guidance to account for cryptocurrencies. The third objective was to determine whether the provisions contained in tax legislation sufficiently and appropriately deal with the taxation of cryptocurrencies, and lastly, to determine whether the guidance and regulations issued by other jurisdictions can be used to develop a framework to regulate cryptocurrencies in South Africa. The overview of the relevant areas relating to the accounting treatment and tax regulation of cryptocurrencies was provided by conducting a systematic review analysis of the collected papers.

The article is sectioned into three parts. The first part relates to obtaining an understanding of the concept of cryptocurrencies and blockchain technology. It also focuses on the recent regulation of cryptocurrencies and presents the accounting and tax knowledge about cryptocurrencies. The second part of this study touches on the research approach and methodology adopted in this study. The last part is the analysis, results, and discussion of findings.

2. Literature Review

2.1. The Concept of Cryptocurrency and Blockchain

The digitalization of currency and the emerging financial market trends led to the introduction of the widely adopted digital currency called cryptocurrencies. The introduction of cryptocurrencies changed the financial market and the regulatory system around the world. There are numerous individual definitions of cryptocurrency, but they all contain the same fundamental characteristics that must be present when defining cryptocurrency. According to Kamps and Kleinberg (2018), cryptocurrency is a

digital peer-to-peer medium of exchange that does not require third-party involvement. Mlambo (2022) defines cryptocurrency as a non-paper medium of exchange that is decentralized by the government and does not have a physical commodity backup. In addition, Mukhopadhyay et al. (2016) define cryptocurrency as an anonymous virtual exchange system in which currency units are generated and distributed. The keywords noted from the above definition are anonymous, digital, and decentralized currency.

Baur et al. (2018) articulate that cryptocurrency is merely an alternative currency and can be used in a multitude of transactions as one would use fiat money to pay for goods and services. Cryptocurrency has an element of account and ownership anonymity and requires cryptographic proofs to confirm transactions (Lansky, 2018). Since cryptocurrency is not in physical form, ownership is determined through recorded transactions in blockchain (Siswantoro et al., 2020). 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 make. However, even though the digital currency system is the most used, not everyone can understand it. Cryptocurrency 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.

Cryptographic transactions are facilitated by blockchain technology. Cryptocurrency and blockchain have shaped the world of science and technology (Vujičić et al., 2018). The concept of decentralized money was seen more as a theoretical concept, but in a few years, it became viable. 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. 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 cryptocurrency transaction is published in this network or information is entered, it cannot be changed (Segendorf, 2014). Only valid and verified transactions can be entered into a blockchain network (Gandal et al., 2018). This process is conducted by cryptocurrency miners. Blockchain is considered to function the same as a general ledger, which records every cryptocurrency transaction and movement. Sometimes it is referred to as a distributed ledger technology. Cryptocurrency miners then use complex mathematical algorithms to verify and authenticate the cryptocurrency transactions, and legitimate transactions are put together into blocks (Augot et al., 2017).

3. Comparing the Classification of Cryptocurrencies Using the Conceptual Framework and the IASB’s Recommended Treatment

3.1. Conceptual Framework

Before cryptocurrency gained popularity back in 2017, the International Accounting Standards Board and other regulators across the world were lagging in providing guidance on the treatment of cryptocurrencies because of their lack of mainstream interest and market exposure as a whole (Anderson et al., 2022). To ensure that financial statements are presented in a high-quality reporting manner, accountants adopt and apply standards that are issued by standard-setting bodies (Weygandt et al., 2018). According to IASB’s conceptual framework, “the objective of general purpose financial reporting is to

provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity” (IASB, 2018). In terms of IAS 8 (Accounting Policies, Changes in Accounting Errors and Estimates), the hierarchy of accounting transaction treatment depends on whether the transaction applies to a specific IFRS. If the transaction applies to a specific IFRS, then the transaction should be treated by applying the relevant IFRS (Klopper & Brink, 2023; Moosa, 2019).

In the absence of specific IFRS issued by the International Accounting Standards Board (IASB) to account for cryptocurrency, the conceptual framework serves as the main tool that assists the IASB in developing new standards and accounting policies to be applied to cryptocurrency. In examining whether cryptocurrency is an asset, one must first apply the definition of an asset, and if the definition is not met, then a possible expense exists. Furthermore, the recognition criteria must be considered (Klopper & Brink, 2023; Lesley Stainbank, 2021).

In terms of the conceptual framework, an asset is a resource owned or controlled by the entity as a result of a past event. A resource is a right that has the potential to result in future economic benefits (IASB, 2018). Klopper and Brink (2023) articulate that, in terms of cryptocurrencies, buying the digital currency unit for future disposal represents a possible future economic benefit. The decision to sell the digital currency unit shows that the entity has the power to control the resource. The buying of cryptocurrency is a past event. Thus, the definition requirements are met. Cryptocurrency is widely identified as an asset. When Moosa (2019) examined the adequacy of the conceptual framework to determine whether cryptocurrency can be classified as an asset, the conclusion was that cryptocurrency meets the definition of an asset.

3.2. IASB’s Proposed Classification of Cryptocurrencies

Intangible assets (IAS 38)

In terms of IAS 38, an intangible asset is an identifiable asset that is non-monetary without physical substance. When defining intangible assets, there are characteristics as per IAS 38 that need to be met before an item is treated as an intangible asset. These characteristics are an asset that must be identifiable, must not have a monetary value, and lastly, must not have a physical substance (Damián Pastor, 2016). For cryptocurrency to be identifiable, it must either be able to be separated from the entity and be sold or transferred separately, or it must arise from contractual or other legal rights. Furthermore, within the intangible classification, it must be treated as either an indefinite or finite intangible asset (Foy, 2019). Cryptocurrency is used as an exchange for either fiat money or another cryptocurrency. Thus, it can be sold or transferred (Mlambo, 2022). Thus, the first proviso of the definition is met.

The second proviso of the definition is that cryptocurrencies lack physical substance. According to Hartley (2019), the primary reason why cryptocurrency is considered an intangible asset is that it lacks physical form or substance. The exact reason why it was excluded from being considered as cash. Mlambo (2022) adds that the fact that cryptocurrency is referred to as virtual currency is appropriate to prove that cryptocurrency lacks physical substance.

It is therefore appropriate to conclude that cryptocurrencies may be classified as an intangible asset, even though cryptocurrencies may lack future economic benefit because of their volatility. Moosa

(2019) highlights that the possible exclusion of cryptocurrency from IAS 38 is when it is held for sale for the day-to-day running of the business.

Inventory (IAS2)

Moosa (2019) acknowledges that when applying the inventory definition as contemplated in IAS2, the relevance that can be assessed against cryptocurrency is the “held for sale in the day-to-day running of the business” proviso of the definition. Mlambo (2022) further adds that the holder should consider what constitutes the “ordinary course of the business”. Mining cryptocurrency and regular trading constitute an ordinary course of the business (Mlambo, 2022). Contrary to Tan and Zhang (2021), who argue that companies that mine and resell cryptocurrencies are allowed to classify cryptocurrency as inventory, it is not appropriate to classify cryptocurrency as inventory, as the measurement criteria are not met. Luo and Yu (2022) acknowledge that the interpretations committee suggests that if IAS 2 is not available, then IAS 38 should be adopted. It may be appropriate to deduce that, despite measurement criteria not being met, if the holder is trading regularly and or mines cryptocurrency for resale, the IAS 2 classification is appropriate.

3.3. Comparing the Measurement Criteria of Cryptocurrencies Using the Conceptual Framework and the IASB’s Recommended Treatment

The conceptual framework outlines two bases of measurement that may be applied to different assets, liabilities, incomes, and expenses. The measurement basis is historical cost and current value (IASB, 2018). Historical cost furnishes monetary information related to the element derived from the price of the transaction that gave rise to it. For instance, the historical cost of the asset may be the cost incurred to acquire the asset. For the liability, the historical cost may be the amount incurred to settle the obligation (IASB, 2018). The current value, also referred to as fair value, provides monetary information related to the elements recognized using the current updated information to reflect the true value of the elements based on their current condition. The basis for measurement of the current value could be:

- Fair value measurement under IFRS 13;
- Impairment of an asset under IAS 36;
- Current cost.

In determining which measurement to use, the entity must consider several factors before selecting the measurement basis. The single factor is not sufficient to conclude which measurement basis is appropriate (Lesley Stainbank, 2021). The factors include the usefulness of the measurement basis selected for the users of financial statements, meaning, the selected measurement basis must be relevant, faithfully represent what it is supposed to represent, and should be verifiable, comparable, timely, and understandable. The entity may use a mixture of different measurement basis (IASB, 2018). For instance, the entity may decide to measure some assets using the fair value method and measure other assets using historical cost or net realizable value. The adoption of a hybrid measurement basis is covered in the IFRS; however, it affects the usefulness of the information presented because of inconsistencies (Lesley Stainbank, 2021).

According to Moosa (2019), cryptocurrency, classified and recognized as an intangible asset, should initially be measured at cost. Moosa (2019) further states that, concerning the guidance provided, the cryptocurrency that has been separately acquired, the measurement cost is determined to be the amount paid by the holder of cryptocurrency. Moreover, if the cryptocurrency was obtained in the form of exchange of non-monetary assets, the value of the cryptocurrency should be the fair value. This may be considered appropriate; however, Tan and Zhang (2021) articulate that the Australian Accounting Standards Board (AASB) believes neither the cost model nor the fair value model provides an appropriate measurement for cryptocurrency.

In terms of IAS 38, an intangible asset can be measured in two ways: one, the cost model; Secondly, the fair value model. Mlambo (2022) highlights that these two measurement models do not cater to an asset that is subject to volatility. Thus, agreeing with AASB. Therefore, IAS 38 measurement criteria should be amended to cater to cryptocurrencies as they are subject to high volatility.

IAS 2 states that inventory is measured at a lower cost or net realizable value. Cost provides historical information that is not relevant, as cryptocurrencies are volatile. Again, Mlambo (2022) acknowledges that inventory measurement criteria do not cater to cryptocurrency and further suggests that an additional measurement model be introduced that will specifically account for cryptocurrency.

4. Income Tax Implications of Cryptocurrencies

The prompt of the need to provide guidance is important because, without guidance, it makes it flexible for taxpayers to engage in tax evasion. The need to change regulations and laws is encouraged due to the growth and increase in cryptocurrency transactions (Ivana Martinčević, 2022). Witnessing this level of popularity of digital currency, legal questions relating to taxation, illegal transactions, and financial regulation arise (Beebejaun & Dulloo, 2021). The rapid growth of cryptocurrencies in recent years has left many accountants and investors with uncertainty during tax season (Mordecai, 2019). This has resulted in some taxpayers being hit with large tax bills because of the misinterpretation and misconception of crypto-asset tax implications. In the context of tax collection, Bal (2013) articulates that cryptocurrency transactions are untraceable, and therefore, for tax compliance to be achieved, the identification of users and transactions is necessary. Beebejaun and Dulloo (2021) further highlight that academics believe that, because of cryptocurrency anonymity, they are not subject to tax.

Alsalmi et al. (2023) state that some tax authorities have already issued guidance on the tax treatment of digital currencies, which are currently taxable in countries like Canada, Germany, Italy, the United States, and the United Kingdom, amongst others. Ivana Martinčević (2022) highlights that in some countries like China, Bangladesh, Vietnam, Russia, etc., the possession of cryptocurrencies and exchange transactions is prohibited because of a lack of regulations, which results in increased illegal transactions (Siswantoro et al., 2020). According to Cao (2020), countries like Iran, Russia, Venezuela, etc. have, in recent years, been creating their own cryptocurrency. Furthermore, Cao (2020) adds that in Venezuela, the government developed a cryptocurrency called “Petro” back in 2018.

5. Research Methodology

The study had a primary objective to discuss the possible treatment of cryptocurrencies in the context of accounting and taxation. To achieve this main objective, the study focused on the analysis of existing data to refine a conceptual framework. Therefore, the conceptual research approach was adopted because it focuses on the exploration of abstract concepts. This was essential for the researcher because conceptual research challenges the existing knowledge and assumptions and allows the development of new ideas, concepts, and theories (Klopper & Brink, 2023; Mora et al., 2008). The researcher followed the qualitative approach because it allows the researcher to comprehend concepts and opinions. 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. Qualitative data collection includes various methods such as conducting interviews, paper analysis, and observations (Caudle, 2004; Friedman, 2011; Klopper & Brink, 2023). This secondary data was collected using key terms such as cryptocurrencies, tax, accounting, and blockchain, amongst others, from the Google Scholar database.

The study used paper analysis to achieve the primary objective. The paper analysis includes a systematic review of papers (Bowen, 2009) regarding tax regulation and the accounting rules on cryptocurrencies. The accounting treatment of cryptocurrencies was determined by reviewing past literature and applying the IASB's conceptual framework approach. Furthermore, the study specifically applied the accounting concepts of IFRS and considered the guidance issued by the IASB to reach the appropriate conclusion on the accounting treatment of cryptocurrencies. Similarly, the tax legislation was considered when analyzing the possible tax regulation of cryptocurrency transactions. The recommendations by the Davis Tax Committee were also considered and compared to the existing recommendations from past literature.

The study adopted Google Scholar as its research paper database to ensure that the risk of missing relevant literature was minimized. Google Scholar is a common research database used in related fields and is one of the most recognized research paper databases. Thus, most of the journals used in this study are indexed in the Google Scholar database. The study excludes publications such as editorials, letters, unrelated literature, unavailable full text, abstract-only papers, and technical reports since this is a systematic review study and primarily focuses on original studies. The reported outcomes used in this study include outcomes that are not self-reported but rather objectively measured. The study includes English language literature. The review of the study is limited to the countries that share similar regulations with South Africa. The study reviewed papers that were not older than five years. Therefore, to ensure the robustness of the literature, up-to-date and comprehensive papers were used and aligned with the scope of the review. The findings from papers older than the mentioned range were referred to and used in the introduction of this study. To ensure validity, a quality assessment of the papers was conducted. During the process of study, the risk of bias, including publication bias, Selection bias, and others, was evaluated to ensure an accurate and valid overall review process.

6. Analysis, Results, and Discussion of Findings

Comparing the classification of cryptocurrency using the conceptual framework and IASB's recommended treatment, the following was found. When applying the conceptual framework, it was

found that cryptocurrencies meet the definition and the recognition criteria of an asset as outlined in the conceptual framework. The conceptual framework is aligned with the IASB's proposed accounting treatment for cryptocurrencies. When evaluating IASB's proposed accounting treatment of cryptocurrencies, it was found that cryptocurrency may be classified as either an inventory or an intangible asset. The study revealed that cryptocurrencies lack the possibility of providing future economic benefits because of their high volatility. This, however, does not exclude cryptocurrencies from being classified as an intangible asset. Similarly, with regard to IAS 2, even though the measurement criteria are not met, entities that regularly mine and resell cryptocurrencies may appropriately classify cryptocurrencies as inventory.

When evaluating the measurement criteria of cryptocurrencies, it was found that the measurement method applicable for cryptocurrencies is the cost model, and the cost is the amount paid by the holder of cryptocurrencies. However, if the consideration was in the form of non-monetary exchange, the fair value model must be used as the measurement method. However, some researchers opposed this and stated that neither the cost model nor the fair value method caters to assets that are subject to high volatility, like cryptocurrencies. Thus, IASB should revisit and revise the accounting standards and introduce a model that will specifically cater to cryptocurrencies.

In the context of taxation within South Africa, an explanatory memorandum of the taxation laws amendment bill, which was issued on 20 January 2021, states that cryptocurrencies are treated as an asset, and all receipts and accruals may be subject to inclusion in income tax. Any gains and losses will be subject to capital gains tax implications. This is aligned with other tax regulations proposed and implemented by other jurisdictions, such as the United Kingdom and Australia. The taxpayers may claim a deduction for expenses incurred when initiating a transaction. From the context of VAT within South Africa, the treatment of cryptocurrencies is very clear. The issue was whether cryptocurrency could be classified as a financial service or not. It was found that in the South African tax legislation under the VAT Act, the definition of financial services now includes cryptocurrencies. This was not the case before the emergence of cryptocurrencies. Financial services are exempt from the VAT.

7. Conclusion and Recommendations

The absence of specific IFRS questions whether the guidance issued by IASB is sufficient in addressing the uncertainty faced by accountants and auditors in practice and theory. The measurement criteria do not necessarily deal appropriately with cryptocurrencies. It was identified that measurement models do not cater to an asset that is subject to volatility. Therefore, IAS 38 and IAS 2 measurement criteria should be amended to cater to cryptocurrencies, as they are subject to high volatility, or a new measurement model must be introduced. This reflects that the measurement criteria of cryptocurrencies within IAS 38 and IAS 2 still require further analysis and research. Should the uncertainties persist, the IASB's proposed accounting treatment of cryptocurrencies will continue to be questioned. As a result, the application of existing accounting standards will continue to be inappropriate, and uncertainty will persist as IASB lags in issuing the applicable specific IFRS that addresses cryptocurrencies. Thus, it is appropriate to conclude that the conceptual framework and International Framework Reporting Standards do not provide sufficient guidance on how cryptocurrencies should be accounted for from the accounting perspective.

Similarly, the lack of tax regulation of cryptocurrencies results in taxpayers engaging in illegal activities such as tax evasion. It is evident from this chapter that most countries classify cryptocurrency as property, and as a result, capital gains tax implications are triggered. It was mentioned that in South Africa, cryptocurrencies are referred to as crypto-assets and may be subject to normal income tax consequences such as, if the proceeds received from the trading of cryptocurrencies meet the definition of gross income, then it will be taxed, and the related expenses may be allowed as a deduction provided that the requirements of section 11(a) read together with section 23 are met. Moreover, it was found that cryptocurrencies may be treated as trading stock if the taxpayer is involved in the buying and selling of cryptocurrencies.

The study further highlighted that for cryptographic transactions to be subject to VAT, the supply must have been made in the furtherance of an enterprise, and the trader must be a registered VAT vendor. The requirements for a taxpayer to be a VAT vendor or be liable for VAT were outlined and discussed. It was noted that cryptocurrency cannot be classified as a financial service for the purposes of VAT; however, the mining of cryptocurrency may be treated as a service. Cryptocurrencies present complexities and challenges for both taxpayers and tax authorities from a practical perspective. Addressing these difficulties, taxpayers and tax authorities may work hand in hand and collaborate to combat possible non-tax compliance. It is also recommended that tax authorities develop tax policies and enhance technological measures to track the history of cryptocurrency transactions to ensure tax reporting obligations are met. Further inquiries within the spectrum of this study may include investigating the measurement inadequacies within IAS 38 and IAS 2 based on substance over form on cryptocurrencies. The secondary recommendation for future research may focus on how auditors may use auditing standards to obtain sufficient appropriate audit evidence on cryptocurrency transactions to ascertain faithful representation of financial statements.

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