



**A CRITICAL EVALUATION OF THE CLASSIFICATION OF CRYPTOCURRENCY
TRANSACTIONS AS AN ASSET IN THE SOUTH AFRICAN CONTEXT**

**(Part of a research project titled: A Critical Evaluation of The Tax Treatment of
Cryptocurrency Transactions in the South African Context)**

by

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“Do not be anxious about anything, but by prayer and supplication with thanksgiving let your requests be known to God. And the peace that transcends all understanding will guard your hearts and minds in Christ Jesus.” – Philippians 4:6-7

ABSTRACT

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Background

The emergence of cryptocurrency is one of the significant innovations of the Fourth Industrial Revolution. Cryptocurrency is an interesting phenomenon as it was created to be an independent, peer-to-peer payment system operating as an alternative to the traditional fiat currency system. Currently, cryptocurrency is mainly used on a speculative basis as it does not have legal tender status in most countries around the world. Cryptocurrency's popularity has grown at a tremendous rate over the recent years while limited guidance has been issued to date regarding the taxation of cryptocurrency transactions both locally and globally. The Organisation for Economic Co-operation and Development has acknowledged that policymakers should attend to regulating cryptocurrency as a matter of importance. In South Africa, cryptocurrency has been included in the financial instrument definition and classified as an asset.

Main purpose of study

The aim of the study was to understand the appropriateness of the current tax classification of cryptocurrency transactions in South Africa and to identify possible alternative classifications for cryptocurrency transactions from the view of tax specialists.

Method

An open-ended questionnaire together with a thematic analysis were used as primary data to evaluate the appropriateness of the current tax classification in South Africa. In addition, secondary data was used to determine whether the current tax treatment in South Africa is aligned with other jurisdictions and to make recommendations, if needed.

Results

The majority of participants to the open-ended questionnaire noted that the current classification of cryptocurrency as assets in South Africa is appropriate. A few participants indicated that additional guidance is required to clarify the application of the existing tax principles to the taxation of cryptocurrency transactions. Other participants acknowledged that the different types of cryptocurrency and the different stages in its life cycle drive the tax treatment.

Conclusions

The classification of cryptocurrency as an asset is in line with other jurisdictions and as such is deemed appropriate. Attention needs to be given to the different stages in the life cycle of cryptocurrency as the asset has different characteristics in the various stages and as such could require different tax treatment and tax principles. In addition, taxpayers' intention with their cryptocurrency holdings are of the utmost importance to ensure the classification as an asset as opposed to trading stock is appropriate.

Keywords: Cryptocurrency, Currency, Asset, Income, Tax collection, Tax administration, South Africa.

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LIST OF ABBREVIATIONS AND ACRONYMS

Table 1: Abbreviations and acronyms used in this document

Abbreviation	Meaning
ATO	Australian Tax Office
BEPS	Base Erosion and Profit Shifting
CGT	Capital Gains Tax
DLT	Distributed Ledger Technology
DTC	Davis Tax Committee
EBIT	Earnings before interest and taxes
FATF	Financial Action Task Force
FDI	Foreign Direct Investment
FTA	Federal Tax Office
IFWG	Intergovernmental Fintech Working Group
IRS	Internal Revenue Service
ITA	Income Tax Act
OTC	Over the Counter
OECD	Organisation for Economic Co-operation and Development
SARB	South African Reserve Bank
SARS	South African Revenue Service
TAA	Tax Administration Act
TIGTA	Treasury Inspector General for Tax Administration
TLAA	Taxation Laws Amendment Act
USA	United States of America

CHAPTER 1: INTRODUCTION

1.1. INTRODUCTION/BACKGROUND

Klaus Schwab, Founder and Executive Chairman of the World Economic Forum, is of the opinion that: “The Fourth Industrial Revolution will affect the very essence of our human experience.” As the world is in the midst of the digital era, the various sectors of the economy will have to evolve and adapt to the changes occurring as a result of the Fourth Industrial Revolution, otherwise referred to as the Digital Revolution (Schwab, 2016). Each of the four Industrial Revolutions builds on the previous revolution, whereby innovation led to advanced methods of production (Xu, David & Kim, 2018:91).

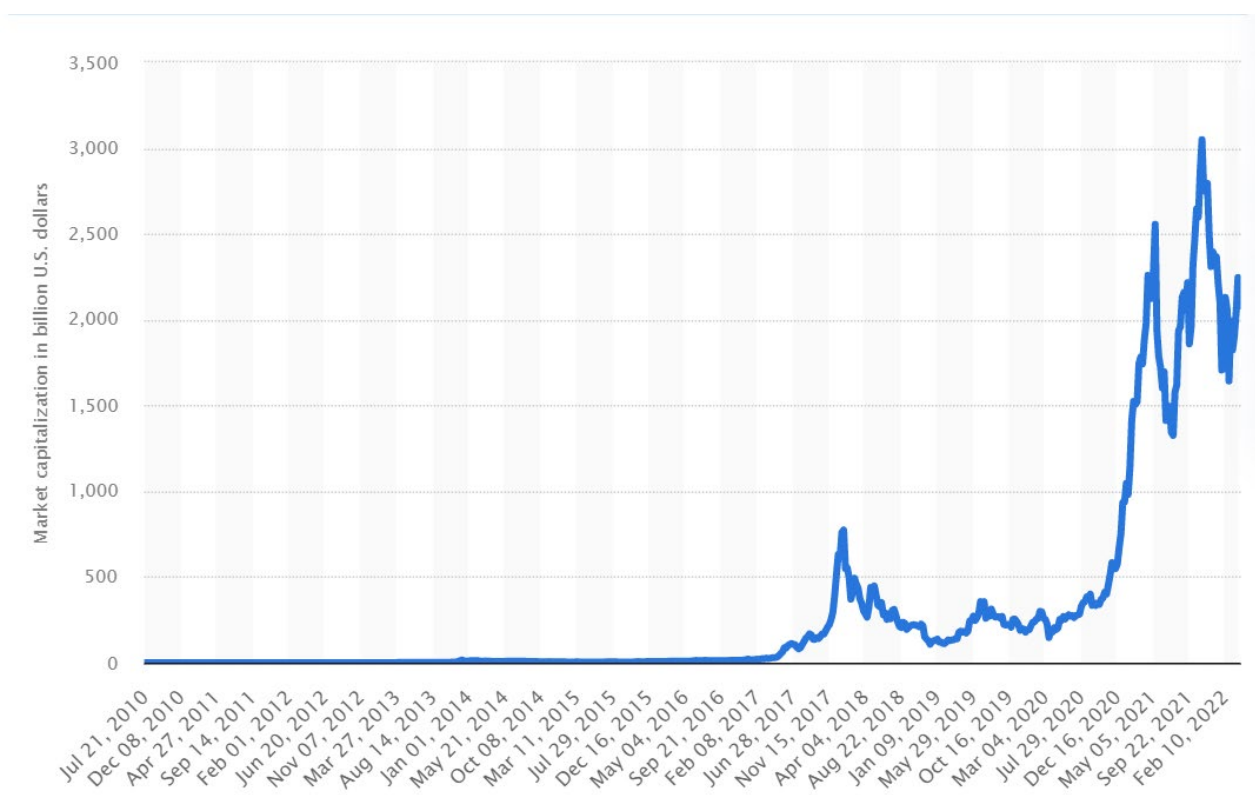
The First Industrial Revolution was the transition from farming to manufacturing processes from about 1760 (Xu *et al.*, 2018:90). The First Industrial Revolution changed lives as well as the economy; these changes included the transition from a labour-driven economy to an industry driven by machine manufacturing (Xu *et al.*, 2018:90). The Second Industrial Revolution was characterised by the invention of the internal combustion engine in the 1900s (Xu *et al.*, 2018:90). The 1960s marked the start of the Third Industrial Revolution, where the implementation of electronics and information technology was used to automate production (Xu *et al.*, 2018:90).

The Fourth Industrial Revolution is evolving at an exponential rate. It is due to bring about rapid change in almost every industry in the world (Xu *et al.*, 2018:90). This revolution makes use of artificial intelligence and computer-generated product design to move individuals to “digital domains and online reality with the use of connected technology to enable and manage their lives” (Xu *et al.*, 2018:90). This Digital Revolution resulted in technology being at an all-time peak, which in turn led to the formation of a digital form of money known as cryptocurrency (Milutinovic, 2018:105).

Limited data is available relating to the South African cryptocurrency market. Ndemo (2022), however, notes that cryptocurrency payments received by Africans in sub-Saharan Africa increased by 1 200 per cent between July 2020 and June 2021. The below graph obtained

from the Statista website shows the growth in the global market capitalisation of cryptocurrency over the past 12 years. Market capitalisation measures the amount of money traded in relation to shares on an exchange and is calculated by multiplying the price of a share with the number of shares in the open market. This same measure can therefore be used to measure the overall market capitalisation of cryptocurrency as the price of the cryptocurrency can be multiplied by the number of coins in the market to illustrate the amount of money flowing through the platforms (Statista, n.d.).

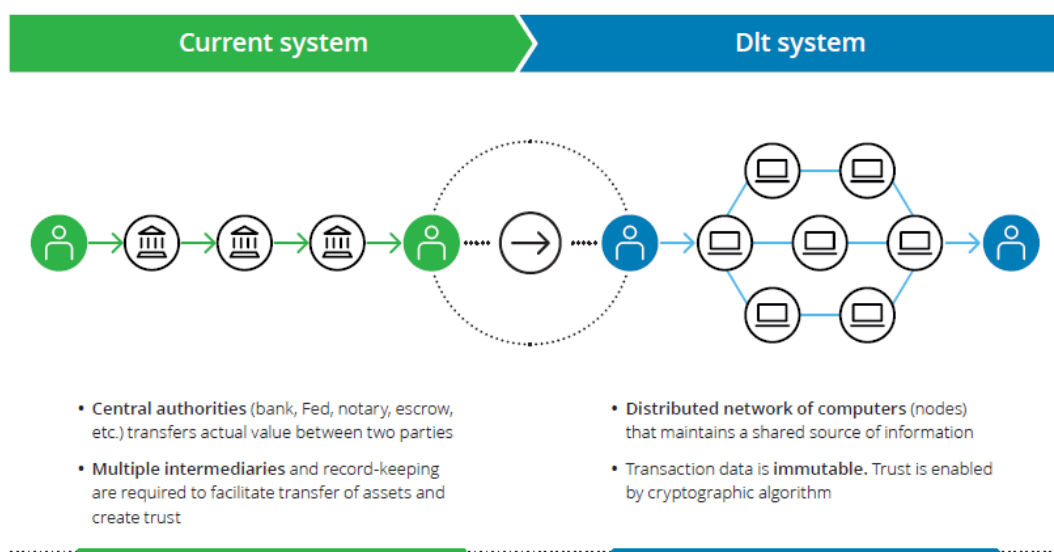
Figure 1: Overall cryptocurrency market capitalisation per week from July 2010 to February 2022



It is clear from Figure 1 that the trading of cryptocurrency has grown at a rapid rate in recent years. It is evident that cryptocurrency transactions strike curiosity and have gained popularity and credibility within the marketplace (Krafft, Penna & Pentland, 2018:1). This spike in popularity of cryptocurrency necessitates an understanding of not only cryptocurrency transactions but also the classification thereof for tax purposes in order to ensure the appropriate tax revenue is collected in relation to these transactions.

Cryptocurrency is a digital currency that functions with the help of cryptography (Basson, 2020:1). Cryptography is the process that translates legible information into codes (Milutinovic, 2018:105). The cryptography process secures the information stored on a distributed ledger and ensures that the data is stored in a consistent format (Zhai *et al.*, 2019:2). Each cryptocurrency transaction is recorded on a distributed ledger, and although these terms are often used interchangeably, a distributed ledger is not a synonym for blockchain. Blockchain is in actual fact a method used to organise and store data on a distributed ledger (Deloitte, 2019:6). The information translated as part of the cryptography process is documented and verified on this digital ledger as explained on the Coinbase website (Coinbase, n.d.) and was confirmed by Deloitte (2019:6), where it is stated that “Distributed Ledger Technology (“DLT”) platforms can securely identify all participants, confirm data and generate consensus”. Blockchain technology enables cryptocurrency transactions to be conducted on a decentralised system, not governed by a government or legal entity (Berger, 2016:1). A decentralised system refers to the peer-to-peer network whereby cryptocurrency is distributed amongst different computer networks (FATF, 2014:5). This peer-to-peer network is under the control of multiple users and computer algorithms (FATF, 2014:5). Blockchain technology essentially stores the data in “blocks” and connects the blocks of data through a “digital chain” (OECD, 2020:11). The end result of this cryptographic process on a distributed ledger is a crypto asset (Deloitte, 2019:8).

Figure 2: Distributed Ledger Technology versus centralised systems



Source: Deloitte, 2019:7

Cryptocurrency or crypto assets in the distributed ledger are created through a process known as “cryptocurrency mining”. Cryptocurrency mining is the process of creating cryptocurrencies by firstly securing and verifying transactions on the blockchain and, secondly, by generating blocks on which the chain is built (IG, n.d.). Cryptocurrency mining uses cryptographic proof and is the basis upon which decentralised trust is formed. This is a process whereby individuals compete to solve computational puzzles and are awarded coins as a result of this process (Reddy & Lawack, 2019:11).

The mined cryptocurrency or crypto assets can then be exchanged for fiat currency, used to purchase goods and services or traded on cryptocurrency exchanges (Parsons, 2014:). With respect to the taxable transaction of trading with cryptocurrency, this could be defined as the short-term approach to generate income as the trader buys and sells already mined cryptocurrency on a speculative basis (Binance Academy, n.d.).

1.2. RATIONALE FOR THE STUDY

According to the Organisation for Economic Co-operation and Development (OECD), “Crypto-assets, and virtual currencies in particular, are in rapid development and tax policymakers are still at an early stage in considering their implications” (OECD, 2020:3). In June 2014 the Financial Action Task Force (FATF) released a report on virtual currencies, classifying them as either convertible or non-convertible (FATF, 2014:4). The FATF further split the classification of convertible virtual currencies into centralised and decentralised virtual currencies, where cryptocurrencies were classified as decentralised convertible virtual currencies (FATF, 2014:5). In September 2014, National Treasury released a document on cryptocurrency to make the public aware of the risks associated with cryptocurrencies, then referred to as “virtual currencies” (National Treasury, 2014:1). The South African Reserve Bank (SARB) issued a position paper in December 2014 to clarify terms relating to virtual currencies and highlight risks associated with these currencies (SARB, 2014:2). Thereafter, in 2016 the Intergovernmental Fintech Working Group (IFWG) was established, and its objective is to understand financial technology in the South African context and assist regulators to proactively assess risks and opportunities in the market (IFWG, n.d.). In April 2018 the South African Revenue Service (SARS) issued a media release confirming that normal income tax principles should be applied to cryptocurrency

transactions and confirmed that the onus is on the taxpayer to declare cryptocurrency transactions (SARS, 2018). A joint working group known as the Crypto Assets Regulatory Working Group was established in January 2019 with a combination of members from SARS and the IFWG (IFWG, 2019:5). This Working Group released a consultation paper which further highlighted the risks and benefits of cryptocurrency and discussed regulatory approaches and policy proposals to address the risks identified (IFWG, 2019:7). In April 2020, the IFWG released a position paper, updated in 2021, which makes recommendations to bring cryptocurrency transactions into the regulatory system (IFWG, 2021a:3).

Following the SARS media release in 2018, the definition of a financial instrument in section 1(1) of the Income Tax Act (58/1962) (hereafter referred to as the ITA) was amended to include the term “any cryptocurrency”. The definition was further amended in 2020 and “any cryptocurrency” is currently defined as “any crypto asset” (Explanatory Memorandum on the Taxation Laws Amendment Bill, 2021). As set out in the 2018 press release, cryptocurrency transactions are still taxed using normal tax principles. The normal tax principles, discussed in further detail as part of the Literature Review in Chapter 2, classify income as either revenue or capital in nature. Income of a revenue nature is included in a taxpayer’s income at the total amount, in cash or otherwise, received by or accrued to a taxpayer as defined in the definition of gross income in section 1 of the ITA. Income of a capital nature is included in an individual’s taxable income at 40% of the net capital gain for a natural person. Therefore, if taxpayers do not classify cryptocurrency transactions correctly in accordance with their true nature it will result in a loss to the fiscus.

This mini-dissertation seeks to expand on the understanding of cryptocurrency transactions and the current tax classification, as it is said that cryptocurrency is the wave of the future for payment systems (FATF, 2014:3).

1.3. RESEARCH PROBLEM

The initial short-term expectations for the use of cryptocurrency to transform the payment system were extremely high; however, the excitement quickly diminished when the commercial and economic challenges came to light (Georgiou, 2020:125). One of the sectors in the economy that is faced with challenges as a result of the increased use of

cryptocurrency is the taxation sector (McClure, 2021). The emergence of cryptocurrency was perceived negatively by a few countries at first, which resulted in cryptocurrency being banned in these countries (Pravdiuk, 2021:31). Subsequently a variety of markets for trading cryptocurrency have emerged and cryptocurrency is used as a means of transacting and for financial investments (Pravdiuk, 2021:31). The increase in the use of cryptocurrency has resulted in different views worldwide regarding the timing, jurisdiction, nature of, and the value added to each of the taxable events (Fennimore, 2022). With different views worldwide, the appropriateness of the tax treatment of cryptocurrency transactions has been questioned (Hsieh, 2019:1080). In addition, the Davis Tax Committee (DTC) in its final report on Base Erosion and Profit Shifting (BEPS), advised South African legislators to monitor international developments and find an approach to prevent abuse in South Africa (DTC, 2016:14).

As per the Position Paper on Virtual Currencies, published by the SARB, cryptocurrency is not considered to be a legal tender for a currency in South Africa (SARB, 2014:2). Only banknotes and coins issued by the SARB are currently accepted as legal tender in South Africa (IFWG, n.d.). Accordingly, cryptocurrency is regarded as an asset, which is defined in paragraph 1 of the Eighth Schedule to the ITA as “property of whatever nature, whether movable or immovable, corporeal or incorporeal, excluding any currency”. In terms of the current requirements in South Africa, cryptocurrencies are to be disclosed as a financial asset in an individual’s income tax declaration (SARS, 2022). The ITR 12 form specifically includes capital gains or losses from the disposal of crypto assets under the capital gains or losses section of the form (SARS, 2022). There is a risk that taxpayers, in error, disclose all cryptocurrency gains or losses as capital in nature, irrespective of their intention. Depending on a taxpayer who is a natural person’s income bracket for tax purposes, capital gains are taxed at a maximum effective rate of 18%, compared to 45% if the gain was revenue in nature (Van Schalkwyk & Warneke, 2021). Therefore, if taxpayers erroneously disclose gains made from the sale of cryptocurrency as capital in nature, it will result in lower tax revenue. This gives rise to the question of whether the current classification of cryptocurrency as an asset is appropriate, and how the classification affects the tax revenue of South Africa.

Based on the above-mentioned problem, this mini-dissertation will seek to obtain tax specialists' perspectives on the classification of cryptocurrency as an asset and the impact thereof on the tax revenue in South Africa.

1.4. RESEARCH QUESTION

What is the impact of cryptocurrency transactions on tax revenue in South Africa?

1.5. RESEARCH OBJECTIVES

The research objective addressed in this mini-dissertation is:

- To determine whether the current classification of cryptocurrency as an asset is appropriate.

This mini-dissertation is, however, part of a bigger research project that also includes the following objectives:

- To determine the impact on tax when cryptocurrency is received as payment.
- To analyse alternate methods of taxing cryptocurrency transactions.
- To evaluate the ability of SARS to administer the tax on cryptocurrency transactions.

1.6. RESEARCH DESIGN AND METHODOLOGY

1.6.1 Research Methodology and Design

The research methodology is driven by the research problem (Jamshed, 2014:87). There are three common methodological classifications for research: qualitative, quantitative and a mixed-method approach (Williams, 2007:65). Rahi (2017:2) notes that qualitative and quantitative research methods are the most dominating research methods used by researchers. Qualitative research is the collection and analysis of non-numerical data that makes concepts, opinions, or experiences more understandable (Bhandari, 2020). A qualitative research methodology is used to gain an in-depth understanding of a particular topic through the researcher observing and interpreting data to develop a theory (Rahi, 2017:2). Quantitative research refers to the numerical representation of findings for the

purposes of describing and explaining the occurrences that the findings represent (Sukamolson, 2007:2). A mixed-method approach is used where a combination of numerical and non-numerical evidence is needed to sufficiently answer the research question and address the research problem (Williams, 2007:70).

In this mini-dissertation, the research question posed, regarding the impact that cryptocurrency transactions have on the tax revenue of South Africa, has to be analysed. A qualitative research methodology will be applied in this mini-dissertation as the purpose of this study is not to quantify the impact of the current tax treatment of cryptocurrency transactions on the tax revenue, but rather to understand the current legislation and its implications. The qualitative method will also provide supporting information which could be used to determine whether the current tax regime is the most appropriate taxing regime to be used in South Africa.

The research design is based on the type of evidence necessary to answer the research question and can be seen as the blueprint within which research is conducted (Akhtar, 2016:68). There are four types of research design, namely Explanatory, Exploratory, Descriptive and Experimental (Akhtar, 2016:68). Exploratory research is often used where the subject matter has few or no earlier research. Exploratory research therefore focusses on gaining insight to aid future investigation (Akhtar 2016:73). The aim of this mini-dissertation is to obtain tax specialists' opinions on the current tax treatment of cryptocurrency transactions, specifically its classification, and therefore an exploratory design in the form of an open-ended questionnaire is deemed the most appropriate research design. An open-ended questionnaire was selected as opposed to face-to-face interviews as it is more time-efficient given the limited time available to complete the study. In addition, due to this study forming part of a bigger research project, data is collected by multiple researchers. In an interview process this could create bias in the data gathered as the researchers' interview styles might have varied, which could impact the data gathered (McClelland, 1994:27-28).

1.6.2 Data Collection and Sampling

An open-ended questionnaire will collect primary data. The use of an open-ended questionnaire will allow participants to provide detailed answers for each question, which

will allow for the researchers to identify and analyse themes in the responses. Open-ended questionnaires will also allow participants sufficient time to provide in-depth and well-thought-out responses. These questionnaires will be completed by tax specialists in senior roles, who have an understanding of cryptocurrency transactions and how they are dealt with in South Africa. Participants will include work colleagues and other acquaintances of the researchers, employed as tax specialists. Consent will be obtained from the researchers' employers where work colleagues are approached. Participants with whom the researchers are acquainted will be approached directly to obtain consent. Participants will be provided with a Google Forms link, whereafter the response will be anonymous. The participants will also be made aware of the anonymity of the response and that participation is voluntary through the consent letter included as question 1 of the questionnaire. The time available for the completion of the research study was limited. The questionnaire was distributed mid-April 2022 and participants were allowed time until the end of May 2022 to respond.

Qualitative research use “naturalistic” sampling techniques rather than probabilistic sampling. Amongst others, naturalistic techniques include purposive sampling (Kelly, 2010:317). Kelly (2010:317) states that “purposive sampling is used to select respondents that are most likely to yield appropriate and useful information”. Specified criteria are employed as part of the sampling process and a smaller group of participants are used with the aim to obtain an in-depth understanding of the subject matter (Campbell, Greenwood, Prior, Shearer, Walkem, Young, Bywaters & Walker, 2020:653).

The format of the open-ended questions that will be distributed is included below in **Annexure B**.

Secondary data will be obtained through an extensive review of the literature published on existing taxation and regulation of cryptocurrency in South Africa, Australia, the United States of America (USA) and Switzerland. The literature will consist of a variety of sources such as academic journal articles, reports issued by taxation bodies such as SARS, the OECD and the revenue authorities of Australia, the USA and Switzerland, case law, previous dissertations of the University of Pretoria and other universities as well as commonly used cryptocurrency websites.

1.6.3 Data Analysis

The data gathered from the questionnaires will form the basis of a thematic analysis. A thematic analysis identifies, analyses and reports themes within the data that has been collected (Braun & Clark, 2006:6). A theme captures important aspects of the data gathered in relation to the research question (Braun & Clark, 2006:10). Guest, MacQueen and Namey (2012:10) explain that a thematic analysis is the process of identifying ideas or themes that are either explicitly stated or implied in the qualitative data collected.

The understanding obtained through the literature review will be integrated with the data collected from the thematic analysis on the questionnaires to draw conclusions on the impact of the current stance of cryptocurrency transactions on tax revenue in South Africa.

1.6.4 Trustworthiness

The trustworthiness of the data collected and analysed in this mini-dissertation will be ascertained through questionnaires completed by tax specialists with experience in the field of taxation, and as a result the data will be reliable and relevant for use in this study. In addition, the participants are made aware that participation is voluntary and anonymous.

1.6.5 Ethical Considerations

In this academic research, the questionnaires used to obtain the relevant responses of participants have undergone a process of Ethical Clearance with the University of Pretoria's Ethics Committee. This process ensures that the questionnaire is in line with the principles of the University of Pretoria's (UP) Strategic Plan and supports the institutional management decision-making processes.

1.6.6 Limitation of Design

The research data obtained through the open-ended questionnaire was limited since only tax specialists with an understanding of cryptocurrency transactions were approached. The specialists targeted were specialists known to the researchers, either as work colleagues,

family or friends. This is in line with the purposive sampling technique used which based the questionnaire on a specialised group in an attempt to make use of limited research resources in the most effective manner as explained by Campbell *et al.* (2020:654). There are individuals in different occupations with an interest in cryptocurrency that participate in individual research and trading on a regular basis. These individuals may have an understanding of and/or an opinion on the tax treatment of cryptocurrency in relation to their personal tax liability. However, such individuals were excluded from this study. Future studies can incorporate individuals from different walks of life (not specifically tax specialists) to obtain a wider perspective of the tax treatment and the impact thereof, not only on tax revenues but also investment decisions.

1.7. STRUCTURE OF THE MINI-DISSERTATION

This mini-dissertation will present the findings of the research conducted to determine the appropriateness of the current classification of cryptocurrency transactions as an asset for tax purposes in South Africa, in the following format:

Chapter 1: Introduction

This chapter introduces the broad research area by summarising the Industrial Revolutions which led to the Digital Revolution. This chapter further introduces the research topic and rationale for the mini-dissertation by providing a background to cryptocurrency transactions and the current classification of cryptocurrency transactions for tax purposes in South Africa. This chapter further presents the research problem, the research question and the research objective identified to address the research question. Lastly, it provides an overview of the research design and methodology applied in this mini-dissertation.

Chapter 2: Literature review

The objective of this chapter is to provide an understanding of the current tax treatment of cryptocurrency transactions in South Africa. This is achieved by obtaining a better understanding of the classification of cryptocurrency transactions currently applied in South Africa, which forms the basis of the data analysis performed in Chapter 3 and the

conclusions drawn in Chapter 4 on whether amendments to the current tax regimes should be considered to ensure optimal collection of tax revenue. The analysis is based on the South African taxation system, namely Income Tax as set out in the ITA and Capital Gains Tax (CGT), which is a subset of the income tax legislation contained in the Eighth Schedule to the ITA. The focus of this chapter is to review relevant academic literature on the current classification of cryptocurrency as an asset for income tax purposes together with a comparative analysis between the tax treatment of cryptocurrency in South Africa, Australia, the USA and Switzerland.

Chapter 3: Data analysis and presentation of results

This chapter presents an analysis of the data collected from the questionnaire distributed to tax specialists (refer to Appendix B) along with an evaluation of selected academic articles and journals, tax legislation, court cases, theses and reports relating to the research problem identified to address the research question of this mini-dissertation.

Chapter 4: Conclusion

This chapter provides concluding remarks by summarising the findings of the current tax classification of cryptocurrency as an asset explored in this mini-dissertation. This chapter also provides a discussion of the study's limitations and makes recommendations for future studies to be conducted.

CHAPTER 2: LITERATURE REVIEW

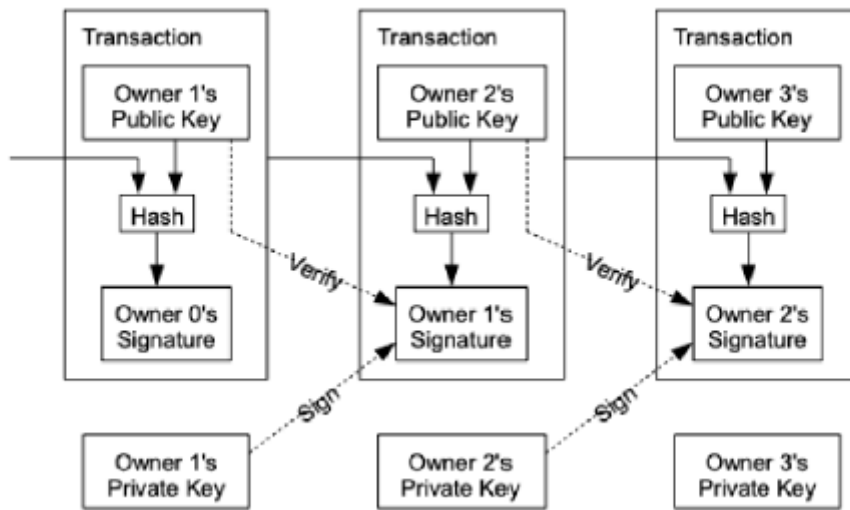
2.1. INTRODUCTION

Chapter 1 introduced cryptocurrency as a digital currency created through a process known as cryptography. It further introduced the current tax classification of cryptocurrency as assets in South Africa. This chapter expands on the nature of cryptocurrency and its classification as an asset. It also explores different taxable events and the basic tax principles of classifying income between revenue and capital in nature. Lastly, this chapter compares the current tax classification in Australia, Switzerland and the USA to the classification in South Africa. The reasons for including the respective countries in the comparative analysis are discussed in more detail below. However, one of the main reasons for selecting these countries is the fact that their revenue authorities have issued guidance to some extent in relation to cryptocurrencies (OECD 2020:16).

2.2. BACKGROUND AND NATURE OF CRYPTOCURRENCY

Bitcoin was the first established cryptocurrency (Marr, 2017). This form of cryptocurrency was developed by Satoshi Nakamoto in 2008 (Marr, 2017). The purpose was to establish a secure method of payment based on a trust system without the intervention of a third party. Nakamoto used the definition “a chain of digital signatures” when describing the electronic coins (Nakamoto, n.d.). Cryptocurrency is an international, decentralised, convertible, digital currency that cannot be physically held. Each coin is made up of a digital key that contains a series of digital signatures, also referred to as hashes (Fombad, 2018:19). These coins are created via the web on a peer-to-peer network. Open-source software is used that allows direct transfers between individuals, thereby eliminating the need for banks and other financial institutions (Reddy & Lawack, 2019:2). The payor transfers coins by adding a hash to the public key of the buyer which the buyer then verifies to ensure the chain of ownership is valid and prevents double spending; refer to Figure 3 below for an illustration (Nakamoto, n.d.).

Figure 3: Execution of Bitcoin transactions



(Source: Nakamoto, n.d. Bitcoin White Paper)

In order to accurately classify cryptocurrency transactions it is important to understand the functions they perform and how they are currently used, or can be used in future (OECD, 2020:18).

2.3. CRYPTOCURRENCY AS CURRENCY

As mentioned above, Bitcoin was established with the primary purpose of being an alternative to normal fiat currency which refers to the coin and paper money known to the general public as “currency” (Parsons, 2014; FATF, 2014:4). As such, we look into the definition of currency and the basic characteristics thereof.

The Merriam-Webster Dictionary defines currency as “*something (such as coins, treasury notes, and banknotes) that is in circulation as a medium of exchange*”. Similarly, money is defined as “*something generally accepted as a medium of exchange, a measure of value, or a means of payment*”.

In South Africa, money is defined in section 17 of the South African Reserve Bank Act (90/1989) as follows:

- a) *“A tender, including a tender by the Bank itself, of a note of the Bank or of an outstanding note of another bank for which the Bank has assumed liability in terms of section 15(3)(c) of the Currency and Banking Act or in terms of any agreement entered into with another bank before or after commencement of this Act ...”*; and
- b) *“A tender, including a tender by the Bank itself, of an undefaced and un mutilated coin which is lawfully in circulation in the Republic and of current mass”*

The three basic elements of money are (Jevons, 1896:4; OECD, 2020:20):

1. Store or measure of value: Embodying purchasing power.
2. Unit of account: Standard numerical unit for measuring value.
3. Medium of exchange: Means of procuring necessities of life.

Although the fact that “currency” is alluded to in the name, cryptocurrencies work contrary to traditional financial systems. Only banknotes and coins issued by the SARB are currently accepted as legal tender in South Africa (IFWG, n.d.). Therefore, cryptocurrency is not yet recognised as legal tender or currency in South Africa (Reddy & Lawack, 2019:2). This is similar to the stance of most countries around the world as only El Salvador and the Central African Republic have accepted cryptocurrency as legal tender at the time of writing this mini-dissertation (Mint, 2022).

However, although not legal tender, cryptocurrency can be used as a means of payment if accepted by the counterparty at their own risk (IFWG, n.d.).

2.4. TYPES OF CRYPTOCURRENCIES

The OECD has clarified that the term “crypto-asset” is a “catch-all term” for virtual currencies, otherwise referred to as cryptocurrencies, that are based on distributed ledger technology, for example blockchain (OECD, 2020:10). Deloitte (2019:2) confirms that the reference to “crypto-assets” are used to include all virtual assets while the term “cryptocurrencies” are often used to refer to digital currencies (payment tokens as explained below) used in place of fiat currencies. Although no standardised definition has been established for cryptocurrencies or “crypto assets”, the FATF has defined virtual assets as follows: “A virtual

asset is a digital representation of value that can be digitally traded, or transferred, and can be used for payment or investment purposes” (FATF, 2022:132).

It is globally accepted that there are three main types of crypto assets, namely (OECD, 2020:12; Deloitte, 2019:4):

- Payment or exchange tokens: These tokens are intended to operate similar to fiat currency, which means that they are usable as a means of payment. Examples of such tokens are Bitcoin, Litecoin and Ether.
- Security tokens: Designed to be assets classified as securities which are tradable. These tokens have investment components which include ownership. Examples include Spice, tZero and BCAP.
- Utility tokens: Mainly used as access to a product or service such as a licence which provides access to a product or service. An example is Storj.

Virtual currencies, specifically security tokens, can be traded on exchanges similar to shares traded on stock exchanges. A share is defined in section 1 of the ITA as a unit into which the proprietary interest of a company is divided, while cryptocurrencies or virtual assets are “digital representations of value” as stated above. The OECD explains that virtual currencies can be traded for fiat currency or other crypto assets on Virtual Currency Exchanges and through Over the Counter (OTC) brokers (OECD, 2020:14). Both shares and cryptocurrencies are included in the financial instrument definition in section 1 of the ITA and it is therefore clear that these two assets are similar in nature.

2.5. LIFE CYCLE OF CRYPTOCURRENCIES AND TAX EVENTS

VLČEK (2019:37) suggests that there are four different events giving rise to tax consequences. These events are Mining, Initial Coin Offerings (ICOs), Trading and Using cryptocurrency as a means of payment. The OECD (2020:13) similarly describes the life cycle of cryptocurrency which drives taxable events as creation, storage and transfer, exchange and evolution of a token. Lastly, Bal (2018) explains that income tax is generally levied on both realised and unrealised gains. As such it is important to understand the status of cryptocurrency in order for the tax treatment to be confirmed (property, currency or other types of assets.). She then states that triggers for tax are cryptocurrency mining, exchanging

cryptocurrency for goods or services, legal currency or other virtual currencies, possession of virtual currency that appreciate in value and receipt of currency as a gift or inheritance.

All three authors mentioned above provided different though similar tax triggers for cryptocurrency transactions. Therefore, three of the general stages of cryptocurrencies which trigger tax events are explained below.

Countries vary in their view as to the first taxable event in the life cycle of cryptocurrency. In 2020 the OECD as part of their report on taxing virtual currencies obtained several countries' view on the matter (OECD, 2020:24)

Figure 4: First taxable event for mined virtual currencies under income taxes

First event on receipt of new tokens from mining	First event on disposal	Different approaches for businesses/regular traders & individuals/occasional traders
Andorra	Croatia	Australia
Argentina*	Czech Republic	Canada
Austria**	Denmark	Germany
Cote d'Ivoire	Estonia	Hong Kong (China)
Colombia	France	Netherlands
Croatia	Latvia	Norway
Estonia	Lithuania	Singapore
Finland	Poland	Sweden
Japan	Slovak Republic	Switzerland
Luxembourg**		
New Zealand		
Slovenia		
South Africa		
United Kingdom		
United States		

* Note from Argentina: Tax treatment will depend on a case-to-case analysis.

** Mining is considered to be a commercial activity and therefore taxed on an ongoing basis.

Source: Delegates' responses to questionnaire; OECD research

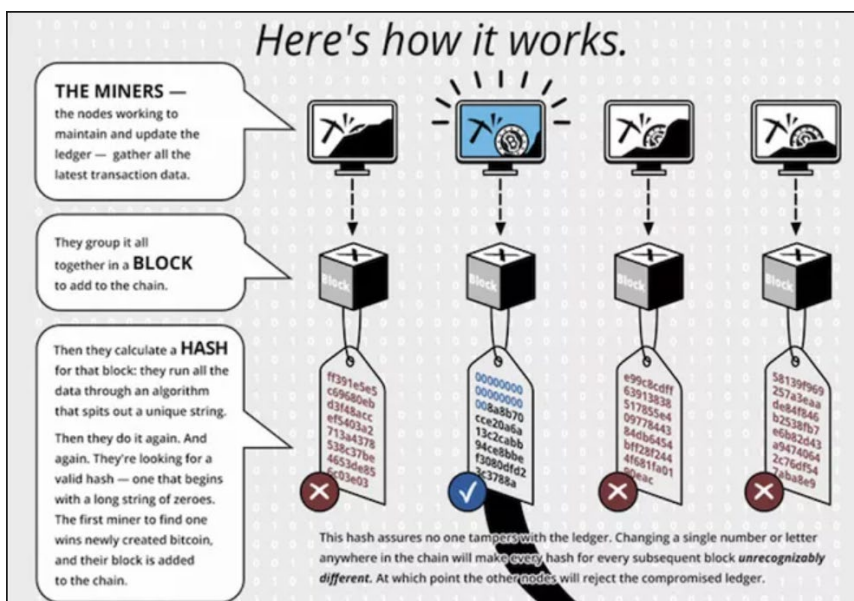
2.5.1 Cryptocurrency creation

Cryptocurrency creation extends beyond cryptocurrency mining, which is only one of the methods through which cryptocurrency is created (OECD, 2020:13). The OECD (2020:13) explains that there are four methods of creating cryptocurrency, since creation includes making new cryptocurrencies available in the market. The first method is airdrops. In an airdrop, cryptocurrency is given away freely with the intention to increase awareness of a

new type of cryptocurrency. The second method is Initial Token Offerings (ITO). This process is similar to Initial Public Offerings of shares and is also referred to as ICO for cryptocurrencies. An ICO is used to raise funds by issuing a new cryptocurrency. The first ICO was the release of Ethereum, which occurred in 2016 (Marr, 2017). The use of this method has decreased in recent years mainly due to the fact that new offerings cannot compete with the established currencies such as Bitcoin (OECD, 2020:13). ICOs have also become quite regulated in order to protect investors. Switzerland, for example, has indicated that tokens which qualify as securities are protected under securities law, and where public deposits are accepted by promoters for ICOs these deposits are protected under the banking law (Quimbayo & Broby, 2021:6). The third method is cryptocurrency mining. As explained in section 1.1, mining is the origination process through which cryptocurrencies are formed, verified and added to a distributed ledger. Not all cryptocurrencies use DLT, but the popular cryptocurrencies such as Bitcoin and Ethereum which are based on “proof of work” technology, use DLT. Miners are rewarded either by receiving tokens/coins or through a fee calculated as a percentage of the value of the transaction that is created. Cryptocurrencies using “proof of work” technology often have an upper limit on the number of coins that can be mined. The fourth method is Forging. This is the process through which transactions on a distributed ledger are verified in cryptocurrencies that use “proof of mechanism” technology.

Figure 5 below illustrates the origination of a coin through the mining process and how the coin is added to a distributed ledger that uses blockchain as an information “block” on the “chain”. The FATF (2014:5) explains that cryptocurrency is math-based and protected by cryptography as explained in section 1.1. Cryptocurrency uses both private and public keys and in the transfer process, cryptocurrency must be cryptographically signed with each transaction to ensure validity. Virtual currencies operating with the use of cryptography is transferred when the owner digitally signs the coin with a hash from its private key onto the public key of the new owner as illustrated in Figure 3 (VLČEK, 2019:25).

Figure 5: Origination of cryptocurrency – Mining



(Source: Floyd, D. 2022)

Cryptocurrency creation is seen as the first taxable event in the life cycle of cryptocurrency transactions. As shown in Figure 4 above, the majority of countries, including South Africa, view coins received from the process of mining as the first taxable event. The OECD (2020:25) explains that the income received as a result of the mined cryptocurrency is included in taxable income or treated as capital or other income depending on the classification in the respective countries, and the expenditure incurred in the mining process is usually deductible expenses. The value of the income taxed is either equal to the fee earned from mining or the market value of the cryptocurrency created (OECD, 2020:25).

2.5.2 Cryptocurrency exchanges

Cryptocurrency, specifically security tokens, can be traded on exchanges similar to stock markets for shares. Exchanges are either centralised platforms operated by an exchange operator (for example Coinbase) or decentralised platforms which are peer-to-peer trading using blockchain. On these centralised exchanges fiat currency can be converted into cryptocurrency for trading purposes and vice versa if trading is ceased (Little, 2022). Factors to consider when identifying an exchange include accessibility, security, liquidity, fees and

storage options (Little, 2022). These exchange platforms are often referred to as Virtual Asset Service Providers (VASPs) (OECD, 2020:14). Different levels of regulation have been implemented across the globe in relation to VASPs, but it is important to note that the European Union (EU) issued a directive in 2018 in relation to Money Laundering. The main aim thereof is to reduce the anonymity of VASPs by requiring “know-your-client” information which includes identity and address verification (Quimbayo & Broby, 2021:5). Countries such as the USA and Australia, on the other hand, have regulated VASPs similar to security exchanges, requiring VASPs to register with regulatory authorities before they are allowed to facilitate transactions (Quimbayo & Broby, 2021:5).

Figure 4 indicates that some countries deem the first taxable event as the disposal of the mined cryptocurrency which often occurs on these virtual exchanges. Taxable events upon disposal are mainly treated as income of a capital nature, taxed using the countries’ capital gains tax principles, which often have a reduced rate compared to income of a revenue nature (OECD, 2020:25). The gains from mined cryptocurrency can even go untaxed in some countries where a capital gain exemption is applied after securities are held for a certain period (OECD 2020:25).

2.5.3 Storage of cryptocurrency

Cryptocurrency is stored in “wallets”. Albayati, Kim and Rho (2021:720) state that cryptocurrency wallets are “the gateway to buying, selling, sending, receiving and trading” and as such form the basis of all taxable events. The OECD (2020:13) gives four examples of cryptocurrency “wallets”, namely:

- Hot custodial wallet: The “hot” refers to being connected to the internet. These wallets represent third parties holding the private keys of an investor’s cryptocurrency.
- Hot non-custodial wallet: A wallet connected to the internet, but the wallet is represented by a software application downloaded onto an investor’s personal computer which then holds the investor’s private keys.
- Cold hardware wallet: This wallet is not connected to the internet as the name suggests “cold” and is held in a physical device such as a USB. This wallet can be connected to the internet when needed by inserting the device into a computer.

- Cold paper wallet: Also not connected to the internet, this wallet records the private keys of the investor on a piece of paper. Software is downloaded onto a computer which runs offline. The wallet then produces the digital/private keys offline and prints the keys onto a piece of paper, whereafter the digital keys are deleted before the computer is reconnected to the internet.

According to Conway (2022), the best cryptocurrency wallet for beginners is the Exodus wallet. The Exodus wallet has both “hot” and “cold” options, being a hot non-custodial wallet in the form of an application that can be downloaded onto a mobile phone or computer or a cold hardware wallet in the form of a Trezor device. An example of a hot custodian wallet is Coinbase, where the investor’s private keys are stored by Coinbase as the custodian of an investor’s web wallet (Elliott, 2022).

2.6. CURRENT TAX TREATMENT OF CRYPTOCURRENCY IN SOUTH AFRICA

2.6.1 Introduction

Cryptocurrency was initially introduced into the ITA by the Taxation Laws Amendment Act (23/2018) (TLAA). The definition of financial instrument was amended to include the term “any cryptocurrency”. The Explanatory Memorandum to the TLAA of 2018 explains this inclusion was to clarify that cryptocurrency is not a personal-use asset for CGT purposes. In terms of paragraph 53 of the Eighth Schedule to the ITA, capital gains and losses on the sale of assets classified as personal-use assets should be disregarded. A personal-use asset is defined in paragraph 53 of the Eighth Schedule to the ITA as an asset used by a natural person or special trust mainly for purposes other than carrying on of a trade but specifically excludes financial instruments. As a result, capital gains and losses on cryptocurrency transactions cannot be disregarded as it is excluded from the personal-use asset definition (Basson, 2020:5). The growing interest, investment and participation in crypto assets is one of the factors that led to the need for a policy and regulatory response to crypto asset activities in South Africa (IFWG, 2019:3).

The Explanatory Memorandum to the TLAA of 2021 further replaced the term “any cryptocurrency” in the definition of financial instrument with “any crypto asset”. According to the Explanatory Memorandum to the TLAA of 2021, the change is aligned with the proposed

adoption of a uniform definition for virtual currencies and is aligned with the term used by the OECD in their overview of the tax treatment of virtual currencies.

According to the press release made by SARS, cryptocurrency will be taxed using normal tax principles (SARS, 2018). These principles apply to both natural persons and persons other than natural persons alike, therefore in South Africa there is no distinction between the tax principles applied to individuals and businesses. Any income, not of a capital nature, received by or accrued to a taxpayer should be included in their gross income as per section 1 of the ITA. Section 1(1) of the ITA defines gross income as “in relation to any year or period of assessment, in the case of any resident, the total amount, in cash or otherwise, received by or accrued to in favour of such resident during such year or period of assessment, excluding receipts or accruals of a capital nature”. Where the taxpayer has held the cryptocurrency for investment purposes the proceeds received from the sale of the cryptocurrency will be capital in nature in accordance with the principles explained below. The classification of receipts will impact both the taxpayer and the revenue authority as the effective rate for capital gains is lower than the normal income tax rate (Koinly, 2022c).

The classification of cryptocurrency as either a capital asset or trading stock will directly impact whether the resulting gains will be taxed according to the CGT rules set out in the Eighth Schedule to the ITA or taxed using normal income tax principles. The effective tax rate will be lower when the gain is taxed as a capital gain. The principles relevant to the classification of assets as capital assets or trading stock will be discussed below, followed by the principles to classify the resultant receipts between income of a capital or revenue nature. These principles form the basis of determining the impact that classification of cryptocurrency transactions as capital assets has on the tax revenue in South Africa.

2.6.2 Classification of cryptocurrency – Asset or Trading Stock

An asset is defined in the Eighth Schedule to the ITA as follows:

*“(a) property of whatever nature, whether moveable or immovable, corporeal or incorporeal, excluding any currency, but including any coin made mainly from gold or platinum; and
(b) a right or interest of whatever nature to or in such property”.*

The Merriam-Webster Dictionary defines property as “*something owned or possessed*” and includes in the definition “*the exclusive right to possess, enjoy, and dispose of a thing: Ownership*”. In addition, the Merriam-Webster Dictionary defines incorporeal as “*having no material body or form*”. Cryptocurrency can therefore be described as an incorporeal or intangible asset.

Trading stock is defined in section 1 of the ITA as:

- (i) *anything produced, manufactured, constructed, assembled, purchased or in any other manner acquired by a taxpayer for the purposes of manufacture, sale or exchange by him or on his behalf; or*
- (ii) *the proceeds from the disposal of which forms or will form part of his gross income, otherwise than—*
 - (aa) in terms of paragraph (j) or (m) of the definition of “gross income”;*
 - (bb) in terms of paragraph 14 (1) of the First Schedule; or*
 - (cc) as a recovery or recoupment contemplated in section 8 (4) which is included in gross income in terms of paragraph (n) of the definition of “gross income”;* or
- (iii) *any consumable stores and spare parts acquired by the taxpayer to be used or consumed in the course of the taxpayer’s trade.*

To determine whether crypto assets are capital assets or trading stock is not always easy (Olivier, 2012:173). The *Commissioner for Inland Revenue v Visser*, 1937 (8 SATC 271) case sets out the tree and fruit analogy which is widely known and used to refer to capital assets versus trading stock. In the Visser case the court held that: “*Adopting a profession is likened to a tree (capital), but the earnings from the profession are likened to the fruit of the tree (revenue). Capital is the structure which enables you to earn income. ‘Income’ is what “capital” produces*”. Applying the fruit and tree principle to crypto assets to determine the nature of the asset disposed of is difficult since crypto assets generally do not earn dividends or any other form of income. Income is derived only by selling a crypto asset, which is in contrast with the tree and fruit analogy as it can be said that there is no “tree” producing “fruit” as would normally be the case where a capital asset is involved. As a result, one would be inclined to classify a crypto asset as trading stock and the resulting income as gross

income. However, using the current tax principles, the taxpayer's intention with their crypto asset holdings should be the determining factor.

The classification of assets between capital assets, resulting in receipts being taxed as capital in nature, and trading stock, resulting in receipts being taxed as revenue in nature, is determined with reference to common law. *ITC 1510*, 1989 (54 SATC 30 at 36) confirmed the classification of receipts is based on a subjective test of a taxpayer's intention. If the taxpayer's intention is to keep an asset for capital appreciation, any proceeds in relation to the asset will be treated as capital in nature and the proceeds taxed accordingly. However, where a scheme of profit-making is entered and assets, such as crypto assets, are sold for a profit over and above merely realising the capital assets to their best advantage, the receipts will be treated as gross income and the assets deemed to be trading stock (*Natal Estates v Secretary for Inland Revenue*, 1975 (4) SA 117 (A) (37 SATC 193)).

These principles were confirmed in the *T v COT*, 1972 R (34 SATC 15) case, where an investment holding company sold shares to obtain a more balanced portfolio and earn higher dividends. It was decided that the sale of shares did not result in a change of the taxpayer's intention from capital in nature to a scheme of profit-making.

2.6.3 Receipts, revenue or capital in nature

Income for tax purposes is treated as either revenue or capital in nature and this classification is the basis upon which taxation principles are applied. Income of a revenue nature is included in taxable income as gross income while revenue of a capital nature is excluded from the definition of gross income set out in section 1 of the ITA. Revenue of a capital nature is included in taxable income through section 26A of the ITA if it is received from the disposal of a capital asset.

Taxable capital gains are defined in paragraph 10 of the Eighth Schedule, in relation to a natural person, as 40% of a person's net capital gain which is the amount by which that person's capital gains exceeds their capital losses for a year of assessment as stated in paragraph 8 of the Eighth Schedule. Capital gain in turn is defined in paragraph 3 of the Eighth Schedule as the proceeds received less the base cost of an asset upon disposal.

The Eighth Schedule, in Part VIII, sets out exclusions to CGT, which means that capital gains or losses arising from the disposal of capital assets, meeting the requirements set out in the respective paragraphs, are disregarded and therefore no capital gain or loss arises from the disposal of certain assets. Currently, the only exclusion that could have applied to cryptocurrency transactions is personal-use assets defined in paragraph 53 of the Eighth Schedule to the ITA. However, as explained in 2.6.1, financial instruments are specifically excluded from the personal-use asset definition and as such, currently in South Africa no CGT exclusion exists for cryptocurrency transactions.

2.6.4 Tax treatment based on the cryptocurrency life cycle

In section 2.5 the importance of the cryptocurrency life cycle was explained and the impact thereof on determining when tax is triggered. The tax treatment in the different stages of the cryptocurrency life cycle are discussed below for South Africa.

Cryptocurrency Mining

Where monetary reward is received for the successful mining of cryptocurrency the amount is included in gross income. When additional cryptocurrency is awarded, the cryptocurrency is deemed to be trading stock until exchanged for fiat currency or another cryptocurrency. The taxable amount will be the fair market value of the cryptocurrency mined or equal to the monetary reward received and is included in gross income as receipts of a revenue nature (SARS, 2018). Cryptocurrency miners derive income from the mining process and as such, expenditure incurred in the mining process will be expenditure incurred in the production of income, which will then qualify for deduction under section 11(a).

Exchanging cryptocurrency

Cryptocurrency exchanged for fiat currency or cryptocurrency exchanged for another cryptocurrency depends on a taxpayer's intention. Where the asset is deemed to be a capital asset the receipt will be capital in nature. Where the asset is deemed to be held for short-term profit-making, in other words held as trading stock, the receipts will be classified as revenue in nature as explained in sections 2.6.2 and 2.6.3 (Vumazonke, 2021:26).

Cryptocurrency stored

Cryptocurrency stored in a crypto wallet does not attract tax unless it earns interest or transaction fees are payable. The interest will generally be taxable as gross income on the basis that it represents “fruit from the tree”, while transaction fees will not be deductible unless a cryptocurrency trade is carried on and the expenditure can be proved to be in the production of income for section 11(a) of the ITA.

2.7. CURRENT TAX TREATMENT OF CRYPTOCURRENCY IN AUSTRALIA

The PWC Annual Global Crypto Tax Report 2021 sets out the PWC crypto tax index, which was created to depict and compare the tax guidance on cryptocurrencies between jurisdictions. Australia was one of the forerunners listed on this index (PWC, 2021b:6). Due to the high regulation of cryptocurrency transactions and Australia being one of the earliest jurisdictions to implement tax on cryptocurrency transactions, as per the PWC Annual Global Crypto Report, this country was selected for the comparative analysis.

The Australian government has declared that cryptocurrency will not be regarded as a currency under the laws of the country, nor will it be recognised as foreign currency (Deloitte, 2021). The Australian Tax Office (ATO) has further stated that different principles apply when cryptocurrency is used in business or transacted with in a taxpayer’s personal capacity (ATO, 2022c).

When cryptocurrency is used in a business either by trading, mining or exchanging, the cryptocurrency will be regarded as trading stock and income will be taxed as ordinary income. Expenditure incurred to acquire the cryptocurrency held as trading stock will be deductible. To qualify as carrying on a business the taxpayer’s cryptocurrency activities are required to be for commercial reasons and commercially viable, undertaken in a business-like manner (for example, the business should have accounting records and marketing campaigns) and intended to be for the making of a profit (ATO, 2022b). Where cryptocurrency is used to acquire goods or services in a business other than a cryptocurrency business, the value of the items acquired and the corresponding deduction

for tax purposes is determined with reference to the fair market value in Australian dollars obtained from a cryptocurrency exchange.

When cryptocurrency transactions are undertaken other than through the carrying on of a business it is described as “hobby mining” and, similar to South Africa, the Australian Tax Office (ATO) has classified cryptocurrency as an asset which is subject to CGT (ATO, 2022a). The taxpayer’s intention with their cryptocurrency needs to be taken into account to determine if the sale should be seen as the carrying on of a business, which will result in the income being revenue in nature and taxed using income tax principles (Koinly, 2022a). PWC (2021b:31) confirms that the determination of a taxpayer’s intention is not straight-forward, and based on the nature of crypto assets, revenue authorities might be inclined to a default treatment being that disposals are revenue in nature unless the taxpayer can demonstrate an investment-holding intention. Investors in cryptocurrency are generally subject to CGT; however, if the holding is considered a personal-use asset, it will not be subject to tax (PWC, 2021b:31). Crypto assets can only be regarded as personal-use assets if they are used to purchase items for personal use or consumption, excluding situations where crypto assets are held for investment, profit-making or business purposes (PWC, 2021a:2). The ATO provided guidance that a CGT event occurs when cryptocurrency is disposed of (ATO, 2022a). A disposal can occur when cryptocurrency is traded, gifted, used to obtain goods and services, exchanged, or converted to fiat currency (ATO, 2022a). Similar to other CGT assets, if a taxpayer holds cryptocurrency for at least a year before selling or trading it, then the taxpayer may be entitled to the 50% CGT exclusion providing relief to individual taxpayers transacting in cryptocurrency (Koinly, 2022a).

2.7.1 Tax treatment based on the cryptocurrency life cycle

As previously explained, the life cycle of cryptocurrency triggers tax. Below we discuss the guidance available in Australia regarding the different stages of cryptocurrency transactions.

Cryptocurrency Mining

Receipts from the mining process depends on whether the mining is a hobby, or a business carried on. Mining as a business is treated as ordinary income at the fair value of the

cryptocurrency, while mining as a hobby is treated as a transaction of a capital nature (Koinly, 2022a).

Exchanging cryptocurrency

Cryptocurrency exchanged for fiat currency or cryptocurrency exchanged for another cryptocurrency is taxed as a capital gain unless a business is carried on, and then the trading stock rules apply (ATO, 2022a).

Cryptocurrency stored

Currently the ATO has not provided guidance on the tax impact when cryptocurrency is stored.

2.8. CURRENT TAX TREATMENT OF CRYPTOCURRENCY IN SWITZERLAND

Switzerland is generally known for being a country that has favourable tax regimes (Huang, 2019). According to the OECD, the average net tax rate of an individual in Switzerland was 22.8% in 2021, while the OECD average was 34.6% in the same year (OECD, 2022:2). It is further noted that Switzerland has the 34th lowest tax wedge out of 38 countries (OECD, 2022:1). The tax wedge refers to the tax paid on labour income (OECD, 2022:2). This has sparked the interest in comparing Switzerland's method of taxing cryptocurrency to the measures of South Africa, Australia and the USA. Switzerland has been at the forefront of cryptocurrency since its inception and it is said that Switzerland is "the most crypto-friendly country in the world" (Schlumpf, 2021). In the town of Zug, cryptocurrency can even be used to pay tax (Schlumpf, 2021). The Swiss Federal Tax Administration (FTA) has provided clear guidance on Switzerland's cryptocurrency taxes, and it is to the benefit of the investor of cryptocurrency (Koinly, 2022b).

In Switzerland the guidance on the tax treatment has been split into the different types of crypto assets such as payment tokens, asset-backed tokens and utility tokens (Zulauf & Ingold, 2022). It further split the guidance into the various tax events in the life cycle of cryptocurrency, being the revenue earned from mining and airdrops, ICOs, trading and

receiving cryptocurrency as a salary (Zulauf & Ingold, 2022). Pure holding of payment and utility tokens do not result in taxable income, while asset tokens can give rise to taxable income where interest or dividends are earned (Jäggi & Klipfer, 2022). The corporate income taxation of asset and utility tokens where the issuer is a company will be discussed below in further detail.

Asset tokens

Asset tokens represent a right of an investor to specified compensations such as participation in earnings before interest and taxes (EBIT) of the issuer (Favre, Houdrouge, Tribolet & Elsener, 2021). Asset tokens are divided into debt tokens, asset tokens on a contractual basis and asset tokens with participation rights (Burri & Stoecklin, 2022). The nature of these tokens is similar to other debt, equity and participation instruments.

Debt tokens place an obligation on the issuer to repay the debt, including interest in some instances. Debt tokens are treated as bonds. As such, income received from debt tokens is not taxable income, the funds are regarded as capital and treated as liabilities. Where interest is paid, this is treated as deductible as it qualifies as business expenditure (Favre, Houdrouge, Tribolet & Elsener, 2021).

Asset tokens with participation rights are treated as derivative financial instruments and are similar to shares where no repayment is required, and the investor is entitled to payments based on profit ratios or a proportional share in a reference value such as EBIT similar to dividends, and the income tax treatment follows normal dividend treatment which is subject to withholding tax and securities transfer tax (Favre, Houdrouge, Tribolet & Elsener, 2021; Jäggi & Klipfer, 2022).

Asset tokens with contractual rights entitle the investor to delivery by the issuer in terms of the contractual agreement. Income earned from asset tokens with a contractual basis is treated as income from both an accounting and a tax perspective. Where the tokens were issued in exchange for a contractual commitment, expenditure incurred in relation to the commitment qualifies as tax deductible expenditure (Favre, Houdrouge, Tribolet & Elsener, 2021).

Utility tokens

Utility tokens represent contractual agreements between an issuer and an investor. In terms of the contractual obligation the issuer needs to develop a digital service to which the investor will gain access upon completion. Income received is consequently taxable income, and expenditure incurred in the development process is deductible expenditure (Favre, Houdrouge, Tribolet & Elsener, 2021).

With regard to individual investors, the regulations provide some relief to the investor as they are not liable to pay CGT, only businesses and self-employed traders being liable for CGT (Koinly, 2022b). Cryptocurrencies are subject to a wealth tax in Switzerland and are included at the year-end market value under the tax return's security statement (Joye, Eiselé & Visinand, 2021). The net wealth tax is based on the balance of worldwide gross assets less debt (PWC, 2022a). The FTA has also, similar to Australia and South Africa, not declared cryptocurrency as a legal tender in Switzerland (Haeberli, Oesterhelt & Wherlock, 2022). Instead, the FTA has declared it as an asset. This declaration provides for some degree of certainty that the cryptocurrency will be deemed as a private wealth asset like stock or a bond (Spitz, 2021). The result of this classification is that the private investor is exempt from capital gains tax as it is not applicable to private wealth assets (Spitz, 2021).

To determine whether the cryptocurrency sold by a private cryptocurrency investor will be liable for CGT, the FTA has set out requirements that have to be met (Koinly, 2022b). These include: the taxpayer holding the cryptocurrency for at least six months, the taxpayer having a trading turnover that is less than five times the holding at the start of the financial year, the taxpayer's net capital gain being smaller than 50% of the total income earned through the financial year, no debt financing used, and the taxpayer using derivatives solely for hedging (Zulauf & Bell, 2022). If the taxpayer does not fall within the ambit of these requirements as mentioned, the cryptocurrency will not be exempt from CGT. The FTA provides that it is the responsibility of the taxpayer to determine if they are considered to be a private investor or a self-employed trader (Koinly, 2022b).

In the case where the taxpayer receives cryptocurrency as payment of their salary, that amount will be included in the taxpayer's taxable income (Koinly, 2022b). The value attached thereto will have to be disclosed on the pay slip in Swiss francs at the time of receipt thereof (Koinly, 2022b). This is also applicable when the cryptocurrency is accepted as payment for goods and services that were rendered, and the value will be included in the taxpayer's taxable income at the time of receipt in Swiss francs (Koinly, 2022b).

2.8.1 Tax treatment based on the cryptocurrency life cycle

As explained, the life cycle of cryptocurrency triggers tax. As such we set out below the guidance available in Switzerland to explain the tax treatment in the various stages of cryptocurrency.

Cryptocurrency Mining

The tax treatment of cryptocurrency mining is not as straight-forward in Switzerland as it is in some other jurisdictions since different cantons have different rules. Bern and Zurich deem the income to be self-employment income which is taxable as capital gains, while Lucerne and Bern assesses the mining activity on a case-by-case basis (Koinly, 2022b).

The amount of tax payable depends on where the taxpayer lives, due to the tax rates differing depending on the canton in which the taxpayer is liable to tax. The type of tax payable differs based on the level of trading and whether the taxpayer is seen as a personal investor, self-employed or carrying on a business (Koinly, 2022b).

Exchanging cryptocurrency

Following the tax treatment as set out in detail above, income tax, capital gains tax and/or wealth tax is payable based on the type of activity.

Cryptocurrency stored

No detailed guidance exists but according to Koinly (2022b), holding cryptocurrency is a tax-free event except for the wealth tax payable on total assets.

2.9. CURRENT TAX TREATMENT OF CRYPTOCURRENCY IN THE UNITED STATES OF AMERICA

According to Business Insider (2022), economies in the world are ranked based on their Gross Domestic Product (GDP). The USA's GDP is estimated to be \$20.94 trillion, which far exceeds the GDP of China (ranked second) estimated to be \$14.72 trillion. The USA therefore has the largest economy in the world. On that basis it is considered a relevant jurisdiction to include in the comparison of tax principles on cryptocurrency transactions (Business Insider, 2022).

The basic principles of federal income tax in the USA are similar to those of South Africa where the starting point for taxing earnings is gross income and earnings is split into capital and revenue in nature (Bal, 2018). Cryptocurrency was first regulated in the USA in 2014 when the Internal Revenue Service (IRS) of the United States issued Notice 2014-21. This Notice explains that virtual currency is treated as property for Federal Income Tax purposes and that the same tax principles apply to virtual currency as are applied to other property transactions (IRS, 2014:1). The IRS goes further and explains that taxpayers who receive income from the mining of cryptocurrency or for the sale of goods or services must include the fair market value in their gross income, and expenditure incurred in the furtherance of such trade is deductible against the income earned. Lastly it notes that the same reporting requirements apply to cryptocurrency transactions as to other transactions where payment is made using property. The IRS also made it clear that cryptocurrency is currently not considered to be currency or legal tender in the USA, and it was explicitly stated that it will not give rise to foreign currency gains or losses.

Leech (2022) explains selling cryptocurrency, sending cryptocurrency as a gift, purchasing goods or services and trading one crypto asset for another are events resulting in capital gains tax. Similar to the tax treatment in South Africa, the full proceeds received on a capital asset are not taxable, the capital gain or loss being the proceeds received minus the cost of the crypto asset and is included in taxable income (Koinly, 2022d).

When the proceeds received exceed the cost of the crypto asset a capital gain is derived. The capital gains tax payable on cryptocurrency varies depending on how long the crypto assets were held by the taxpayer (Koinly, 2022d). If cryptocurrency is held for less than a year, the capital gain qualifies as a “short-term” capital gain. The tax rate applicable to such gains and the resulting tax payable will be equal to the income tax rate, which is based on a sliding scale with a maximum tax payable of 37% (in the 2022 year of assessment) (Koinly, 2022d). Crypto assets held for longer than a year qualify as “long-term” capital gain, where the tax rate is 0%, 15% or 20% based on the taxpayer’s taxable income (Koinly, 2022d). No capital gains tax is payable in the 2022 year of assessment if a taxpayer’s earnings, including capital gains, is less than \$41 676 (this threshold will vary annually based on the brackets of the tax rate scale). The maximum tax rate applicable decreases to 20%, in comparison to 37% applicable to short-term capital gains (Leech, 2022; Koinly, 2022d).

When the cost of the crypto asset exceeds the proceeds received, a capital loss is derived. This capital loss can be offset against gains of a similar nature, that is, short term versus long term as explained above (Koinly, 2022d). If a taxpayer is in a net loss position after setting off losses against capital gains, the net loss can be applied against income at the lesser of \$3 000 or the taxpayer’s total net capital loss. The remaining excess capital loss can be carried forward to subsequent tax years to be set off against capital gains or income (IRS, 2022).

Events that result in income tax payable on cryptocurrency are as a general rule when the taxpayer is deemed to be “earning” cryptocurrency (Koinly, 2022d). These events include crypto mining income, interest earned on crypto assets held on deposit, transaction fees earned or receiving cryptocurrency as payment for work performed (Leech, 2022).

Interestingly, in September 2016 the US Treasury Inspector General for Tax Administration (TIGTA) issued an additional report titled *As the use of Virtual Currencies in Taxable Transaction Becomes More Common, Additional Actions Are Needed to Ensure Taxpayer Compliance*. In summary, this report included three recommendations from TIGTA to which IRS responded. The three recommendations were that a comprehensive virtual currency strategy should be developed, updated guidance should be provided which reflects documentary requirements and tax treatments for the various virtual currency transactions,

and third-party reporting requirements should be updated to identify the amounts of virtual currency used in taxable transactions (TIGTA, 2016:8-16). In addition, in November 2016 the federal court in the Northern District of California approved the issuance of “John Doe summonses” on Coinbase, a company operating a virtual currency wallet. The aim of the summonses was to obtain information on possible tax violations from taxpayers who had transactions with convertible virtual currencies during the period 2013 to 2015 (Bal, 2018). Cryptocurrency transactions in the USA are tracked by the IRS mainly through Know Your Customer (KYC) checks that cryptocurrency exchanges are required to perform as well as through access to banking information when fiat currency is exchanged for cryptocurrency (Koinly, 2022d).

2.9.1 Tax treatment based on the cryptocurrency life cycle

The tax treatment is triggered by the various stages in the life cycle of cryptocurrency as explained under section 2.5 and illustrated in Figure 4. The tax treatment in the different stages are discussed below for the USA.

Cryptocurrency Mining

Receipts from the mining process is treated as ordinary income at the fair value of the cryptocurrency (Vumazonke, 2021:27).

Exchanging cryptocurrency

Cryptocurrency exchanged for fiat currency or cryptocurrency exchanged for another cryptocurrency follows the basis on which the asset is held as determined with reference to the above principles. Capital gains unless a business is carried on are then treated as trading stock and receipts are revenue in nature (IRS, 2014).

Cryptocurrency stored

The IRS has not issued specific guidance relating to the storage of cryptocurrency and whether this stage in the life cycle would have any tax consequences.

2.10. CONCLUSION

The principles laid out through the South African case law, as described in the judgements set out in 2.6 above, clearly indicate that a taxpayer's intention is imperative in determining whether a crypto asset should be classified and taxed as a capital asset using CGT principles provided in the Eighth Schedule to the ITA or whether crypto asset disposals should be regarded as trading stock and income earned included in a taxpayer's gross income. The normal principles apply in relation to changes in intention, and where a taxpayer merely realises crypto assets to its best advantage, it cannot be deemed to have crossed the Rubicon into a scheme of profit-making (*Natal Estates Ltd v SIR 1975, 4 SA 177 (A) 202-203*). Where this is the case, the current classification in the ITR 12, where taxpayers are required to declare their crypto asset disposals as capital gains or losses, is appropriate. This treatment is in line with the principles applied in Australia. In Switzerland, contrary to South Africa and Australia, private investors will not be liable for CGT on the sale of crypto assets. This is in line with their CGT principles relating to securities trading and are not specific cryptocurrency tax incentives. Switzerland is known to have favourable tax regimes in general, and this tax break for private investors is not indicative of unfair or incorrect taxing regimes applied in South Africa. The tax treatment of cryptocurrency in the USA is aligned with the treatment in South Africa and Australia. When crypto assets are held for longer than a year, in other words, held with a long-term intention, the asset is treated favourably as a "long-term" capital asset, resulting in a lower tax liability.

It is clear from the above that neither Australia nor Switzerland or the USA have completely different tax treatments for cryptocurrency transactions compared to their normal tax principles but treat them similarly to shares or securities, and therefore the South African tax principles are aligned with the principles applied by the aforementioned countries.

CHAPTER 3: DATA ANALYSIS AND RESULTS

3.1. INTRODUCTION

The aim of this chapter is to analyse the data collected through the open-ended questionnaire. As stated in the research design, a thematic analysis will be performed on the responses to the questionnaire. Themes will be identified in the responses based on the understanding obtained through the literature review in Chapter 2. This will enable the researcher to determine the appropriateness of the current tax treatment of cryptocurrency transactions in South Africa. Guest, MacQueen and Namey (2012:7) explain a thematic analysis and state that the design of a qualitative data analysis is driven by the “analytic purpose”. The purpose of this study is to identify the impact of the current tax treatment of cryptocurrency transactions on the South African tax revenue and to determine whether the current classification of cryptocurrency as an asset is appropriate. The two approaches of a thematic analysis for qualitative data are exploratory and confirmatory. A confirmatory approach is hypothesis-driven, and commonly uses existing data (Guest *et al.*, 2012:7). On the other hand, an exploratory analysis is the more common approach and is content-driven and based on data generated for purposes of the study as opposed to using existing data. An exploratory approach is often applied where purposive sampling is used to obtain the data and does not use predetermined analytic categories. As explained in Chapter 1, a purposive sampling approach was used in this study where tax specialists with an understanding of cryptocurrency transactions were specifically identified as participants for the study. Research theories are developed using deductive, inductive, abductive or retroductive approaches (Saunders, Lewis and Thornhill, 2019:128). An inductive approach uses data collected to “explore a phenomenon, identify themes and patterns and create a conceptual framework” (Saunders *et al.*, 2019:153). In this Chapter an inductive exploratory approach is applied, and themes identified from the questionnaire are discussed in comparison to the current tax classification of cryptocurrency transactions in South Africa, Australia, Switzerland and the USA as explained in detail in Chapter 2.

3.2. DATA GATHERING

Participants were purposively selected through a process where the researchers approached work colleagues, family and friends to identify individuals who understand the current tax treatment of cryptocurrency transactions. After obtaining confirmation of their understanding of the topic the individuals identified were asked if they would be willing to participate in a study by completing a questionnaire that is approximated to take 60 minutes to complete. The questionnaire was then distributed to the relevant tax specialists by sending a link to a Google Form via email to an address provided by the participants. There were no further qualifying criteria such as gender, race or industry in which the participant specialises given the fact that the research area is relatively new and unexplored and as a result, eligible participants are limited.

The aim of the study was to obtain 20 responses to the questionnaire. A small population was deemed appropriate as the questionnaire was open-ended and focussed on tax specialists who would be able to provide detailed and useable data (Hancock, Ockleford & Windridge, 2009:7). As such, it was not necessary to build into the sample size the consideration that irrelevant responses would be obtained that need to be discarded. In the end, only 17 responses were obtained and although this was slightly less than originally anticipated, it was deemed sufficient to continue with the study.

3.3. STRUCTURE OF THE QUESTIONNAIRE

As previously stated, this mini-dissertation is part of a bigger research project and addresses only one of four objectives set to address the research question. As a result, the questionnaire distributed to tax specialists included general questions relevant to all objectives and specific questions relevant to the specific objectives. Questions 1 to 5 in the questionnaire attached as **Appendix B** are the general questions used to confirm consent and determine the extent of the participants' understanding of cryptocurrency transactions in South Africa. These questions are relevant to all four objectives. Hereafter these questions are referred to as the "contextualisation questions". The specific questions relevant to this mini-dissertation, on which the Thematic Analysis will be performed, are questions 6, 7 and 8.

3.4. CONTEXTUALISATION QUESTIONS

Question 1 confirms that the participants are completing the questionnaire on a voluntary basis and that they have read and understood the University of Pretoria's consent form regarding questionnaire-based research. Question 2 is a qualifying question asking whether the participants have an understanding of cryptocurrency transactions in South Africa. This question was included to confirm the purposive sampling approach used where only tax specialists who have an understanding of cryptocurrency were identified and approached to participate in this study. Unfortunately, although the participants were purposively selected and the fact that question 2 is a qualifying question was clearly communicated to the participants when the link to the questionnaire was distributed, two participants answered "no" to the question. As a result, the responses from these two participants were excluded from the study and only 15 of the 17 responses were used in the data analysis.

Questions 3 to 5 were included to identify the type of cryptocurrency transactions dealt with by the participants. These questions provide insight into the context from which the participant is answering, being a theoretical understanding of the tax treatment of cryptocurrency or a theoretical understanding supplemented by practical experience relating to the current tax treatment of cryptocurrency in a South African context. These three questions also provide insight into the limitations of the study and opportunities for future research discussed in more detail in Chapter 4. A 5-point Likert scale was used to obtain responses to the three contextualisation questions and the feedback is visualised in the graph below.

Figure 6: Responses to contextualisation questions

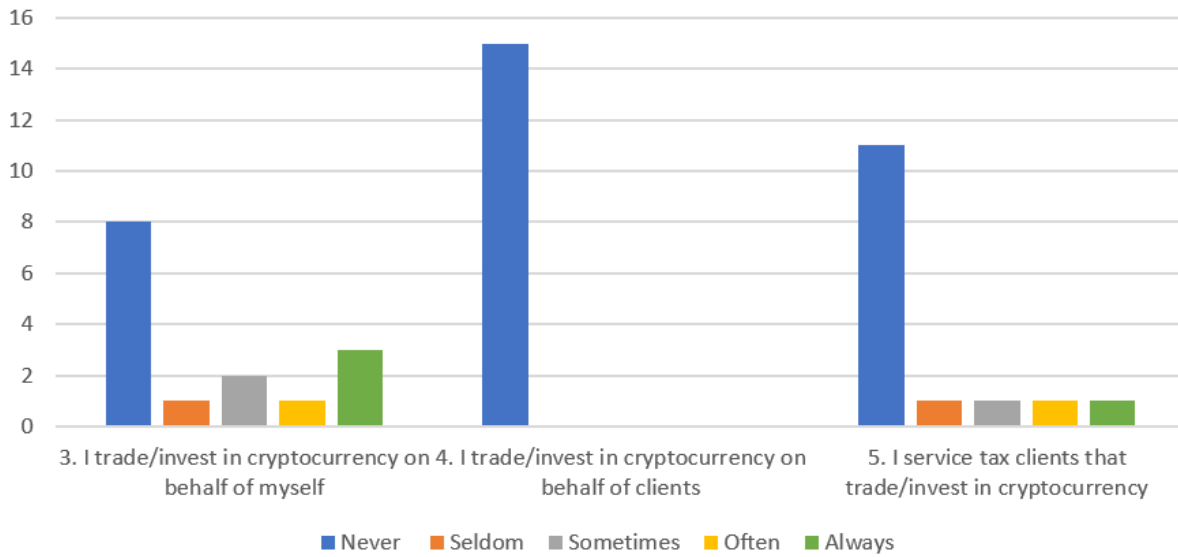


Table 2: Question 3 “I trade/invest in cryptocurrency on behalf of myself”

Response	Quantum
Never	8
Seldom	1
Sometimes	2
Often	1
Always	3

It is clear from question 3 that a variety of individuals participated in the study. Although the majority do not trade or invest in cryptocurrency on their own behalf and their understanding of cryptocurrency is therefore purely theoretical, the population did include a few individuals who not only theoretically understand cryptocurrency transactions in South Africa but are also actively involved in the practical implications and tax consequences of the resultant income/gains earned and expenditure/losses incurred. Refer to Chapter 4 for limitations and recommendations regarding future studies.

Question 4 “I trade/invest in cryptocurrency on behalf of clients”

None of the participants is involved in cryptocurrency trading on behalf of clients. This response falls within the expectation taking into account the population selected. The participants purposively selected are tax specialists and as such would rather be involved in an advisory capacity than trading on behalf of clients; however, the question was included as the participants may be involved in crypto trading as a secondary occupation in anticipation of combining this skill with their tax occupation in future. Refer to Chapter 4 for recommendations regarding future studies.

Question 5 “I service tax clients that trade/invest in cryptocurrency”

Of the 15 participants, 13 confirmed that they do not service clients involved in cryptocurrency trading or investment. The remaining four participants' responses varied from seldom servicing clients that trade/invest in cryptocurrency to always servicing clients that trade/invest in cryptocurrency. It is therefore accepted that although limited, the data analysed does contain the perspective of tax specialists involved in the practical challenges of cryptocurrency trading and the questions asked by taxpayers in relation to income/gains earned and expenditure/losses incurred.

The limited participation of individuals with practical experience to substantiate their theoretical understanding is identified as a limitation and recommendations regarding future studies are discussed in greater detail in Chapter 4.

Conclusion on the context of the participants

Based on the responses from the contextualisation questions it is accepted that the majority of the information analysed below is from the perspective of tax specialists whose understanding of cryptocurrency is purely theoretical/academic. Their feedback can be regarded as information that mainly describes the perspective of the legislator since the tax specialists' opinions are centred around their understanding of tax legislation, and therefore it is assumed that their perspective is focussed on effectively taxing cryptocurrency in favour of the fiscus rather than the perspective of maximising the benefit for their tax-paying clients.

Since this is an exploratory study on a relatively new topic for which in-depth academic research not yet exists, the fact that the analysis is limited and centred around effective legislation is not unexpected.

3.5. THEMATIC ANALYSIS OF SPECIFIC QUESTIONS

Braun and Clarke (2006:86) provide guidance to perform a thematic analysis and note that generally the analysis consists of six phases:

Phase 1. Researcher familiarises themselves with the data – phase 1 was performed by reading the responses obtained from the open-ended questionnaire first at a high level and re-reading the responses in a more detailed manner another few times to understand the responses and identify where new concepts, not originally identified in the literature review, were raised. In the instance where new concepts were identified the literature review in Chapter 2 was revisited and a preliminary understanding of the concept was introduced in the literature review.

Phase 2. Generating initial codes – while working through the 15 responses as part of phase 1, keywords were identified which occurred in more than one response.

Phase 3. Searching for themes – drawing from the keywords, themes were identified in relation to the current understanding of the legislative position regarding cryptocurrency transactions as identified and explained as part of the literature review in Chapter 2.

Phase 4. Reviewing themes – the responses to the questionnaires were more explicit and direct than anticipated. The identification of themes was therefore relatively straight-forward, and a re-review was not necessary in this study.

Phase 5. Defining and naming themes – based on the keywords, with reference to the legislative understanding from Chapter 2, the themes were defined using the concepts known in the environment of taxation.

Phase 6. Producing the report – the responses were summarised in this Chapter and conclusions were drawn in Chapter 4.

3.5.1 Participants' understanding of the current classification and tax treatment

The first question specifically included for the purposes of this mini-dissertation is question 6, which reads as follows: "What is your understanding of the current classification and tax treatment of cryptocurrency transactions in South Africa?" All participants provided a response to this question and as such 15 responses are considered in the analysis below.

Keywords used by the participants in their responses were "financial instrument", "investment", "capital in nature", "trading", "revenue in nature", "current/normal tax principles".

The main theme identified in the responses to this question is the concept of income being either revenue or capital in nature based on whether assets are held with an investment intention versus assets held for short-term gains which is usually characterised as trading stock. These concepts were introduced in section 2.6.3 of the literature review and can be seen as the "normal tax principles" referred to in the participants' responses. This is in line with the SARS guidance provided in 2018. Two of the participants referred to the life cycle of cryptocurrency (refer section 2.5 for details) and noted that the tax treatment stems from the type of cryptocurrency transaction giving rise to the income. One of the participants specified that in their opinion, receipts would be included in gross income when received from mining, in the course of a business carried on or received as consideration for services rendered. However, it was stated that cryptocurrency is not a currency. With the current stance of legislation in South Africa the probability of cryptocurrency being received in the course of business or as consideration for services provided is relatively low since cryptocurrency does not have legal tender status, as explained in Chapter 2. However, between willing parties cryptocurrency can be used as means of payment (IFWG, n.d.).

From the above it can be deduced that the participants' understanding of cryptocurrency is relevant and in line with the researcher's expectation based on the research performed and the understanding obtained through the literature review in Chapter 2.

An interesting response to question 6 reads as follows: “Taxed on a case-by-case basis. Most likely revenue in nature if considered in full”. This concept is supported by an old court case, ITC 1525 discussed in detail below, mentioned by another participant, which has the ability to shed light on the uncertainty in relation to the classification of cryptocurrency.

One of the participants mentioned the relevance of *ITC 1525, 1991 (54 SATC 209) (C)*. In this case a taxpayer purchased Krugerrands over a 12-16 year period whenever the taxpayer had excess cash or reserves available. He stated that he purchased the Krugerrands as a method of investment to accumulate funds for old age and to secure his cash in assets as he was a recovering alcoholic and his auditor advised that excess cash in his account could be a temptation. The taxpayer sold the Krugerrands approximately 12-16 years later to fund a new business venture despite the fact that he also had a substantial sum of money in a fixed deposit account. The court decided that the proceeds from the sale of these coins were revenue in nature and not capital in nature. The main arguments for treating the income as revenue in nature instead of capital in nature was the fact that the Krugerrands did not have an income-producing capacity which capital assets usually have (refer to the fruit and the tree analogy explained in section 2.6.2), and it was argued that the taxpayer did not have the intention of keeping the Krugerrands permanently. It was further held that Krugerrands can only produce income when the coin is sold and that the intention would have been that it would be sold at a profit. The court was therefore not satisfied that the taxpayer’s intention was not “a scheme of profit making”, which led to the decision that the income earned was revenue in nature.

Based on the above court case and the participants’ opinions regarding the fact that cryptocurrency should possibly not be considered capital assets but rather a “scheme of profit making” and therefore trading stock, it could be said that the current classification of cryptocurrency transactions in South Africa as well as Australia, Switzerland and the USA might be flawed.

Reitz (1999), however, reconfirms the original ambiguity by comparing the ITC 1525 case to the case of *Commissioner of Inland Revenue v Nel, 1997 (4) SA 310 (T) (59 SATC 349)*. In this case a taxpayer purchased Krugerrands with an intention to hold the Krugerrands as an investment to be inherited by his children in future. Eleven years after purchasing the

Krugerrands the taxpayer had to sell some of these Krugerrands to purchase a car for his wife. The Commissioner treated the income as revenue in nature, to which the taxpayer objected and after failing at his objection he appealed both to the Special Board (now the Tax Board) and the Special Court (now the Tax Court) and both found in his favour. The Commissioner then appealed to the High Court, which also found in the taxpayer's favour. Reitz (1999) states that there have been numerous cases on Krugerrands which were decided both ways (revenue and capital in nature, respectively). The swaying factor seems to be actions that support intention: where the sale of Krugerrands was necessitated by unexpected circumstances the sale of the asset was not seen as a sale with a profit-making incentive.

This case and its decision are of particular importance to cryptocurrency transactions and a valuable contribution to the study provided by the participant. Krugerrands are gold coins that would be expected to fall under the definition of an asset for the purposes of the Eighth Schedule to the ITA as set out in section 2.6.2. The definition states that an asset excludes currency but includes "any coin made of gold". Krugerrands have legal tender status in South Africa and are traded on one of the Johannesburg Stock Exchange's (JSE) secondary markets. Krugerrands' value is based on the price of gold at the time of sale of the Krugerrand and no interest or dividends are earned from investments in Krugerrands (Tardi, 2021). As such, cryptocurrency can be compared to the nature ascertained to Krugerrands in the ITC 1525 case. Cryptocurrency is not an "income-earning structure" as a capital asset would usually be, and the only way to derive income from cryptocurrency is through sale. Although the ITA has defined cryptocurrency as a "crypto asset" under the definition of financial instrument and currently provides for the gains/losses from cryptocurrency to be disclosed in the asset section of income tax returns, the question arises as to whether cryptocurrency transactions should be considered revenue in nature irrespective of the intention of the taxpayer holding the crypto asset based on the inherent nature of cryptocurrency.

However, Reitz (1999) concludes as follows, which is relevant not only to Krugerrands but also other non-income producing capital assets such as cryptocurrency. *"To sum up: taxpayers who decide to invest in hard assets like Krugerrands or diamonds, in fact any asset that does not produce income, must be careful to record the reasons for their decisions*

to invest in these assets. Their subsequent actions must then always support the stated intention. Failure to do so may make it difficult, if not impossible to discharge the onus of showing why any proceeds should not be taxed”.

It is clear from the responses to question 6 that tax specialists are aware that “the normal rules apply”. However, there is a need for specific guidance to clarify the classification of income earned between capital and revenue in nature due to the uncertainty in the very nature of the new phenomenon: cryptocurrency.

3.5.2 Participants’ opinion on the current method of taxation

Following from question 6, the second question specifically relating to the objective addressed in this mini-dissertation was question 7, which reads as follows: “What is your opinion on the current method of taxing cryptocurrency transactions in South Africa?” One of the participants merely referred to the answer provided in question 6, while 14 of the participants provided a response to this question. The responses obtained were informative with various views presented.

Keywords used in the responses were the following: “current treatment correct”, “not currency”, “normal rules too vague”, “need clear guidance”, “no tracking/tracing”, “reliance on taxpayers ineffective”, “current rules not sufficient”.

From the keywords presented above, it is clear that the views differ regarding the appropriateness of the current tax treatment, which is a clear indication that there are conflicting views and uncertainty amongst tax specialists, and it can therefore be accepted that the same uncertainty exists for normal taxpayers whom the fiscus relies on to submit accurate tax returns.

Four main themes arose from the analysis of the responses to this question. These themes were:

1. Current tax treatment is appropriate, cannot be treated as a currency.
2. Insufficient guidance exists on the normal tax principles, taxpayer is left to make the determination.

3. Anonymity of cryptocurrency transactions poses a threat to the application of tax rules.
4. Current rules are not sufficient.

Theme 1: Current tax treatment is appropriate, cannot be treated as a currency

Five of the participants indicated that they agree with the current tax treatment, which is based on applying the current principles mainly derived from case law and which is dependent on taxpayers' intention to determine whether cryptocurrency is capital assets or trading stock and the income earned from cryptocurrency transactions therefore capital or revenue in nature. These participants clearly indicated that, in their opinion, not treating cryptocurrency as a currency is correct. This is mainly due to the volatility of cryptocurrency and the fact that in its nature it is different to cash or normal currency. Another factor taken into account is the limited acceptability, especially in developing countries. Acceptability is one of the main requirements for a currency as a currency should be an accepted medium of exchange. This only occurs once a medium of exchange or currency is declared legal tender. Once legal tender, an obligation exists for the item to be accepted as a means of payment (IFWG, n.d.). As mentioned in section 2.3, cryptocurrency, although not legal tender, can be accepted as means of payment for goods or services if both parties are willing to take the risk. However, although certain cryptocurrencies were created with the intention of being an alternative payment method it is not widely accepted as a means of payment yet. The acceptability will unfortunately remain limited, especially in developing countries, as a result of the advanced technology involved in the transaction process. Figure 3 in Chapter 2 illustrates the interaction between public and private keys when transactions occur, while section 2.5 explains how the exchange platforms and cryptocurrency wallets operate.

Theme 2: Current treatment correct, insufficient guidance exists

Interestingly, this theme builds on a response provided under question 6 where taxpayers' frustrations with the limited amount of guidance available is made evident. Three of the participants have indicated in their responses to question 7 that, in their opinion, applying the current principles is not incorrect, and quoting the words of one participant "*the method*

in theory can be effective". However, it is made clear that additional guidance is necessary to specify how the current principles should be applied to cryptocurrency due to it being something new and different to other assets and financial instruments to which the current case law refers.

Drawing from the responses provided in questions 6 and 7 it is evident that a lack of guidance exists relating to the accounting treatment of cryptocurrency transactions, and to date SARS has not issued an interpretation note as guidance on the tax treatment of cryptocurrency transactions.

The accounting treatment forms the basis of tax adjustments and is therefore an important aspect for which tax practitioners need clarity. The OECD (2020:15) supports this opinion where it is stated that *"The characterisation of crypto-assets is of foundational importance for understanding how they fit within existing tax systems"*.

It is common knowledge that, as was held in the case of *Commissioner for SARS v Marshall NO, 2017 (1) SA 114 (SCA)*, *"interpretation notes, though not binding on the courts or a taxpayer, constitute persuasive explanations in relation to the interpretation and application of the statutory provisions in question"*. Interpretation notes are specifically included in the definition of a "practice generally prevailing" in section 1 of the Tax Administration Act (28/2011) (TAA). Section 5 of the TAA states that *"a practice generally prevailing is a practice set out in an official publication regarding the application or interpretation of a tax Act"*. As such, although it is not the only form of guidance that can be issued by SARS, official guidance in the form of an interpretation note is an important measure that SARS should consider in their regulatory response to the uncertainty and frustration of taxpayers. Guidance on how the general principles apply to the classification of cryptocurrency as either assets or trading stock should be provided, and it can include example scenarios to which taxpayers can compare their situation to assist with this classification. The guidance provided by the USA's IRS and the ATO includes examples which simplify cryptocurrency transactions and illustrates basic principles that taxpayers can apply in their own classification and tax declarations.

Theme 3: Anonymity of cryptocurrency transactions poses a threat to the application of tax rules

In addition to the above, two participants stated that reliance on taxpayers to correctly classify their cryptocurrency and in fact to declare cryptocurrency transactions at all is a risky approach. As shown in Figure 1, cryptocurrency is a fast growing trend which has the ability to severely impact the economy as it directly affects payment systems, investments and capital raising schemes (IFWG, 2021b:4). Although the onus being on taxpayers to adequately declare their dealings is the general approach taken by SARS on all tax matters, the anonymity and decentralised nature of cryptocurrency poses a threat to the current tax system, which relies on self-declaration. Normal transactions using traditional payments through the banking system are regulated and monitored by SARS in accordance with sections 26 and 179 of the TAA read with Government Gazette No. 35090 (Notice No 173), which requires banks to submit financial information to SARS. In addition to the disclosure by banks, there are information exchange agreements such as the OECD Common Reporting Standards (CRS) and the US Foreign Account Tax Compliance Act (FATCA) which has been domestically legislated and enacted through section 3(1) and section 3(3) of the TAA. These measures enable SARS to spontaneously or on request provide information obtained through its sources to other jurisdictions and similarly receive information from other jurisdictions. The elimination of the “middleman” and with that regulation by a central authority essentially opens cryptocurrency up for use in illegal activities such as money-laundering and creates a platform for untraceable and therefore untaxable transactions (SARB, 2014:5).

Theme 4: Current rules not sufficient

Lastly, three participants indicated that they disagree with the current tax treatment. They noted that the old legislation is not appropriate to tax cryptocurrency transactions. One participant stated that in their opinion the current tax treatment is “terrible”, and it should be treated as a currency with no tax consequences. Another stated that treating cryptocurrency as gross income would not be appropriate. No detailed reasoning was provided for the statement made. Alternative classifications are discussed in section 3.5.3.

A final theme introduced in the responses to question 7, which will be analysed in detail in section 3.5.3, is the suggestion that a separate section in the ITA should be introduced to regulate cryptocurrency transactions.

3.5.3 Alternative classification for cryptocurrency transactions

The last question specifically relating to this mini-dissertation was question 8, which reads as follows: “Can you suggest an alternative classification of cryptocurrency transactions for tax purposes?” Unfortunately the responses to this question were limited. Three participants merely said that they have no comment on alternative classifications and one participant reiterated that they agree with the current tax treatment.

The main theme identified in the responses to question 8, which was also introduced in a response in question 7, was the possible introduction of a specific section relating to the tax treatment of cryptocurrency transactions in the ITA. Reference was made to sections such as section 31 of the ITA, which deals specifically with international transactions between connected parties that are required to be at arm’s length, section 36 dealing with capital expenditure for mining operations, sections 40 to 47 dealing with corporate roll-over relief and section 9C (see below) of the ITA. All of the aforementioned sections deal with transactions that have specific characteristics, and even though it could be taxed using normal tax principles, SARS identified that due to the uniqueness of the circumstances within which those transactions arose, specific legislative guidance was needed to provide clarity as to the correct tax treatment. One of the sections mentioned in both questions 7 and 8, which deals with situations that are the most closely aligned to cryptocurrency transactions is section 9C of the ITA. Section 9C deals specifically with the disposal of shares held as trading stock. As explained in section 2.6, cryptocurrency and shares are similar in nature and therefore a separate section in the ITA with tax treatment similar to section 9C should be considered by SARS.

Section 9C deals with shares held as trading stock where the gains and losses on disposals would be included in gross income and expenditure incurred treated as deductible expenditure. If these shares are held for a period exceeding three years before disposal the gains or losses on disposal will be deemed to be of a capital nature, although the original

intention was to hold the shares as trading stock. Any expenditure deducted under the general deduction formula as set out in section 11(a) of the ITA being “*expenditure and losses actually incurred in the production of income, provided such expenditure and losses are not of a capital nature*” should be added back in the year of assessment when the shares are disposed of as the assets are now deemed to be capital assets and resultingly expenditure incurred is not considered to meet the requirements of section 11(a).

Treatment similar to that set out in section 9C would be especially relevant to cryptocurrency transactions if a view is taken similar to the view expressed in the ITC 1525 case explained in section 3.5.1. The view taken in this case deemed income earned or expenditure incurred in relation to non-income producing assets as revenue in nature irrespective of the intention with which the assets were held. If a section similar to section 9C of the ITA is introduced in relation to cryptocurrency, irrespective of the fact that crypto assets are mostly non-income generating, when these assets are held for a specified period, such as three years, any income and expenditure in relation thereto would be deemed capital in nature. This legislative provision will then override the general principles based on case law as explained earlier. The aforementioned cannot necessarily be seen as an alternative classification but rather as a more regulated classification which links up with the theme identified under 3.5.2 where participants are calling for clearer guidance.

One of the participants suggested a classification linked to the use of the cryptocurrency and its life cycle. This reiterates a suggestion made in question 6. This participant classified the taxation of the life cycles as follows: income earned, and expenditure incurred as part of cryptocurrency mining should be taxed as gross income and expenditure incurred should be deductible. Applying the “normal rules” as explained in Chapter 2, a similar conclusion could be reached if cryptocurrency mining is seen as the taxpayer’s trade. Where a taxpayer is involved in cryptocurrency mining as a hobby, the classification between trading and investing becomes a grey area and then specific legislation relating to the life cycle stages would be beneficial to definitively classify the income as revenue or capital in nature and the resulting crypto asset between capital assets or trading stock. Where cryptocurrency is used as a payment method the crypto asset should be classified as a monetary item and the foreign exchange gains or losses treated in accordance with section 24I of the ITA. The last

classification referred to by the participant is active or passive trading on platforms which should follow the normal tax principles in their opinion.

Another participant suggested that cryptocurrency trading, when one cryptocurrency is exchanged for another, should remain tax free. The first tax event should be triggered once the cryptocurrency is exchanged for either fiat currency or another benefit in kind (other than an alternative virtual currency). The tax event will then either be classified as a disposal event for CGT as set out in the Eighth Schedule to the ITA or a disposal of a revenue nature in accordance with the normal tax principles as discussed previously. This approach appears to be in the interest of taxpayers and might possibly promote trading in cryptocurrency. On the contrary, the record keeping and practicality of this suggestion might be challenging. The fiscus might lose on untaxed taxable gains if this approach is implemented. In conclusion, this approach will also be contrary to the taxation guidelines applicable to the disposal of shares.

This is an extension of the principle identified in *Commissioner Inland Revenue v Nel* (refer section 3.5.1) where the courts held the disposal of Krugerrands were capital in nature when the disposal was necessitated by an unexpected event and one capital asset was exchanged for another. In this suggestion, cryptocurrency trading when a taxpayer exchanges one type of cryptocurrency for another will be a tax-free event and will neither be seen as disposal of trading stock or as a capital asset. The actual disposal event will then follow the normal rules depending on a taxpayer's intention.

A final classification recommended was a separate digital tax where cryptocurrency is taxed using different percentages on a variable scale, for example not applying normal principles and not applying the normal classification as assets or trading stock. Such a classification would need a whole new set of tax legislation. In order to effect this suggestion, as an introductory measure the OECD can include general recommendations as part of their Pillar One tax review revolving around tax challenges arising from digitalisation which can become a minimum standard for member countries and countries with observer status such as South Africa.

3.6. CONCLUSION

The use of a questionnaire as research method proved to be insightful. It is clear from the responses that tax specialists generally have the correct theoretical understanding based on the literature review performed. Although the population was small, additional insight into existing guidance for taxing cryptocurrency was obtained. The results of this study highlighted the uniqueness of cryptocurrency transactions, whereafter participants suggested the introduction of a specific section in the ITA providing clear guidance on the tax treatment thereof.

CHAPTER 4: CONCLUSION

4.1. INTRODUCTION

Chapter 4 concludes the study undertaken to investigate the current tax classification of cryptocurrency transactions on the tax revenue in South Africa. It explains how the research question was answered and how the research objective was achieved. This Chapter further discusses the limitations of the study and makes recommendations for future studies.

4.2. SUMMARY OF FINDINGS AND CONCLUSION

The research objective addressed in this mini-dissertation was to determine whether the current classification of cryptocurrency as an asset in South Africa is appropriate. In addition, the research question, being the impact of cryptocurrency transactions on the tax revenue in South Africa, was addressed. The classification of cryptocurrency transactions was deemed to be an important aspect since the classification of crypto assets as either capital assets or trading stock drives the classification of the receipts. The classification of the receipts in turn determines whether expenditure incurred in producing the receipts are deductible and whether any exemptions apply resulting in cryptocurrency transactions being tax free. Lastly, the classification of cryptocurrency transactions drives the percentage of tax applied. All the aforementioned aspects have a direct impact on the tax revenue received by SARS.

Current literature on taxing cryptocurrency transactions is limited, not only in South Africa but globally. Cryptocurrency is still in its development phase, evolving rapidly and as such it appears that legislators are cautious to specify tax treatments which could be to their own disadvantage. The result is that the lack of guidance creates uncertainty from the perspective of taxpayers and tax advisors, which could dissuade local and foreign investors from investing in cryptocurrency in South Africa.

The current tax treatment appears to be beneficial for the fiscus and “comfortable” in the sense that reliance on the principles as they stand means a new set of rules does not have

to be analysed, approved and mastered in order for tax specialists to provide tax advice and for both taxpayers and the fiscus to ensure tax compliance. However, it is clear from the responses to the questionnaire that there are tax specialists who recognise that the phenomenon of cryptocurrency does not fall within the ambit of the legislation as it stands, and its unique characteristics warrant a separately identifiable tax treatment. As a minimum, if SARS is not ready to commit to a specialised alternative classification due to the evolving nature of cryptocurrency and the fact that the digitalisation of the global economy is still in its growth phase, guidance could be issued to assist not only taxpayers but tax specialists to accurately apply the current principles of classification to cryptocurrency transactions.

The tax treatment of cryptocurrency transactions in Australia and the USA currently follows existing tax legislation which is similar to the position in South Africa. However, it appears that the guidance issued by the tax authorities of those jurisdictions is more tailored specifically to cryptocurrency, as their revenue services have included examples in the guidance issued. In Australia, cryptocurrency is not specifically excluded from personal-use assets as in South Africa. As such, if not held for investment, used as part of a profit-making scheme or used in the course of a trade carried on, cryptocurrency transactions can be tax free. Switzerland has provided the most detailed and tailored guidance of the jurisdictions analysed and as such has set a basis upon which South Africa and other jurisdictions can build. None of the jurisdictions analysed in this mini-dissertation have produced specific taxing regimes for cryptocurrency transactions and it will be interesting to see if any specific regimes follow in the near future as revenue authorities and global taxation bodies such as the OECD become more comfortable with the virtual currency concept. It is, however, clear that a thorough understanding of cryptocurrency transactions, specifically the different stages of its life cycle as well as the different types of cryptocurrencies (utility tokens, security tokens and payment tokens), is essential to accurately classify and tax cryptocurrency transactions. It can also be concluded that the different types of cryptocurrency might all need their own taxing regimes as the classification thereof might vary.

4.3. LIMITATIONS

As stated in Chapter 3, one of the biggest limitations of this study is the fact that the participants mainly consisted of individuals who were not actively involved in cryptocurrency

trading on their own behalf, nor did they service clients who trade/invest in cryptocurrency or provide advice to taxpayers involved in cryptocurrency trading. As such, the responses obtained and analysed in this mini-dissertation are purely theoretical or academic in nature.

As tax specialists were purposively selected, the perspective of other individuals involved in cryptocurrency transactions was not considered. These individuals might have an interesting perspective on the taxation of cryptocurrency transactions, especially on alternative classifications, since their aim is accepted to be the most tax efficient treatment in favour of the taxpayer rather than the fiscus.

The sample size and the time available for the research to be conducted were also limitations. Although the aim was to obtain in-depth responses from 20 tax specialists, only 17 responses were obtained, while only 15 responses met the qualifying criteria. Many of the participants also did not answer all the questions in detail and referred to responses provided under previous questions. In an interview-styled research method participants could have been probed to expand, which would have ensured that responses were obtained for all questions posed.

4.4. FUTURE RESEARCH

Firstly, future research on the tax treatment of cryptocurrency transactions in South Africa can focus on tax specialists trading or investing in cryptocurrency on their own behalf or the behalf of clients and tax specialists actively involved in providing tax advice to clients trading/investing in cryptocurrency. This will provide information from the perspective of a specialist seeking the most tax-efficient regime.

Secondly, future research on the tax treatment of cryptocurrency transactions in South Africa can focus on individuals from different walks of life (occupations other than tax specialists) to obtain an opinion of the tax treatment of cryptocurrency transactions from the perspective of the taxpayer rather than the legislator as was the case in this mini-dissertation that focussed on tax specialists.

Lastly, Makhoba and Zungu (2021:113) note the importance of foreign direct investment (FDI) into South Africa. There is a causal link between FDI and economic growth which results in increased job opportunities, addressing one of the major socio-economic issues in South Africa (Statistics South Africa, 2022). Future research can focus on identifying tax regimes which make investment in cryptocurrency tax in South Africa lucrative for foreign investors, which will promote FDI.

4.5. CONCLUDING REMARKS

To an extent, based on the jurisdictions analysed in this mini-dissertation, different jurisdictions are treating cryptocurrency transactions similarly. Most countries classify crypto assets as capital assets subject to CGT when cryptocurrency is held for investment purposes. Generally, CGT events are taxed at reduced rates compared to transactions of a revenue nature, which results in a reduced tax liability for taxpayers. Some countries even leave cryptocurrency transactions untaxed when cryptocurrency investments are held over the long term and qualify for CGT exemptions. An exemption, whether partial or in full, specifically tailored to cryptocurrency transactions in South Africa could be used as an incentive to promote local and foreign cryptocurrency investments in South Africa.

LIST OF REFERENCES

Akhtar, I. 2016. *Research Design*. [Online] Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2862445 [Accessed: 2022-05-22].

Albayati, H., Kim, S.K. & Rho, J.J. 2021. A study on the use of cryptocurrency wallets from a user experience perspective. *Human Behavior and Emerging Technologies*, 3(5), pp.720-738. [Online] Available from: <https://onlinelibrary.wiley.com/doi/epdf/10.1002/hbe2.313> [Accessed: 2022-06-24].

Australian Taxation Office (ATO). 2022a. *Crypto asset transactions*. [Online] Available from: [Crypto asset transactions | Australian Taxation Office \(ato.gov.au\)](https://www.ato.gov.au/individuals/Investments-and-assets/crypto-asset-transactions/) [Accessed: 2022-27-2].

Australian Taxation Office (ATO). 2022b. *Crypto asset used in business*. [Online] Available from: [Crypto assets used in business | Australian Taxation Office \(ato.gov.au\)](https://www.ato.gov.au/individuals/Investments-and-assets/crypto-assets-used-in-business/)

Australian Taxation Office (ATO). 2022c. *Crypto as a personal use asset*. [Online] Available from: <https://www.ato.gov.au/individuals/Investments-and-assets/crypto-asset-investments/crypto-as-a-personal-use-asset/> [Accessed: 2022-07-09].

Bal, A. 2018. *Taxation, virtual currency and blockchain*. Series on International Taxation. Kluwer Law International BV. [Online] Available from: https://books.google.co.za/books?hl=en&lr=&id=Jo6WDwAAQBAJ&oi=fnd&pg=PT13&dq=Taxation+of+virtual+currency&ots=4nO_0XdTu7&sig=L-omCLvQwoX1ldKkLW7JcKqPSIE&redir_esc=y#v=onepage&q=Taxation%20of%20virtual%20currency&f=false [Accessed: 2022-06-16].

Basson, R. 2020. An analysis of issues relating to the taxation of cryptocurrencies as a financial instrument. *Journal of Economic and Financial Sciences*, 13(1):1-9.

Berger, L.L. 2016. *Bitcoin exchange transactions: Income tax implications to consider within the South African environment*. Unpublished master's dissertation. Potchefstroom: North-West University. [Online] Available from:

http://repository.nwu.ac.za/bitstream/handle/10394/17630/Berger_LL_2016.pdf?sequence=1 [Accessed: 2022-02-20].

Bhandari, P. 2020. *What is Qualitative Research? | Method & Examples*. [Online] Available from: [What is Qualitative Research? | Methods & Examples \(scribbr.com\)](#) [Accessed: 2022-03-03].

Binance Academy. n.d. *Welcome to cryptocurrency*. [Online] Available from: https://academy.binance.com/en/start-here?utm_campaign=googleleadsxacademy&utm_source=googleadwords_int&utm_medium=cpc&gclid=CjwKCAiAx8KQBhAGEiwAD3EiP6ysXUEoLr8gpxlikAY8-CDRI4kujknxP0T1yTSx74dD-Eac700q1hoCpvsQAvD_BwE [Accessed: 2022-02-19].

Braun, V. & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2):77-101.

Burri, M. & Stoecklin, J. 2022. *Taxation of cryptocurrencies: update of the SFTA Working Paper*. [Online] Available from: <https://www.pwc.ch/en/insights/tax/taxation-of-cryptocurrencies-update-of-the-sfta-working-paper.html> [Accessed: 2022-06-18].

Business Insider. 2022. *Top 10 largest economies in the world*. [Online] Available from: <https://www.businessinsider.in/top-10-largest-economies-in-the-world/articleshow/70547252.cms> [Accessed: 2022-06-10].

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D. and Walker, K. 2020. Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8):652-661.

Coinbase. n.d. *What is Cryptography?* [Online] Available from: <https://www.coinbase.com/learn/crypto-basics/what-is-cryptography> [Accessed: 2022-06-06].

Commissioner for Inland Revenue v Nel, 1997 (4) SA 310 (T) (59 SATC 349).

Commissioner for Inland Revenue v Visser, 1937 (8 SATC 271).

Commissioner for SARS v Marshall NO, 2017 (1) SA 114 (SCA).

Conway, L. 2022. *Best bitcoin wallets*. [Online] Available from: <https://www.investopedia.com/best-bitcoin-wallets-5070283> [Accessed: 2022-06-24].

Davis Tax Committee (DTC). 2016. *Summary of the DTC report on Action 1: Address the tax challenges of the digital economy*. [Online] Available from: https://www.taxcom.org.za/docs/New_Folder3/3%20BEPS%20Final%20Report%20-%20Action%201.pdf [Accessed: 2022-05-22].

Deloitte. 2019. *Are token assets the securities of tomorrow?* [Online] Available from: <https://www2.deloitte.com/lu/en/pages/technology/articles/are-token-assets-securities-tomorrow.html> [Accessed: 2022-05-27].

Deloitte. 2021. *Cryptocurrency under the microscope*. [Online] Available from: <https://www.taxathand.com/article/18946/Australia/2021/Cryptocurrency-under-the-microscope> [Accessed: 2022-03-03].

Elliott, J. 2022. *Exodus vs. Coinbase*. [Online] Available from: <https://www.investopedia.com/exodus-vs-coinbase-5191437#:~:text=Users%20maintain%20full%20control%20over,ownership%20of%20their%20private%20keys> [Accessed: 2022-06-2022].

Exodus. n.d. *Exodus Bitcoin & Cryptocurrency wallet*. [Online] Available from: <https://www.exodus.com/> [Accessed: 2022-06-24].

Explanatory Memorandum on the Taxation Laws Amendment Bill, 2018.

Explanatory Memorandum on the Taxation Laws Amendment Bill, 2021.

Favre, O., Houdrouge, T., Tribolet, G. & Elsener, F. 2021. *The virtual currency regulation review: Switzerland*. [Online] Available from: <https://thelawreviews.co.uk/title/the-virtual-currency-regulation-review/switzerland> [Accessed: 2022-06-18].

Fennimore, E. 2022. *Do crypto-to-crypto transactions have tax Implications?* [Online] Available from: <https://taxbit.com/blog/do-crypto-to-crypto-transactions-have-tax-implications> [Accessed: 2022-02-28].

Financial Action Task Force (FATF). 2014. *Virtual currencies key definitions and potential AML/CFT risks*. [Online] Available from: <https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf> [Accessed: 2022-02-12].

Financial Action Task Force (FATF). 2022. *International standards on combating money laundering and the financing of terrorism and proliferation*. [Online] Available from: <http://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF%20Recommendations%202012.pdf> [Accessed: 2022-05-27].

Floyd, D. 2022. *How do you mine litecoin (LTC)?* [Online] Available from: <https://www.investopedia.com/tech/how-do-you-mine-litecoin/> [Accessed: 2022-05-24].

Fombad, T. 2018. *The emergence of cryptocurrency and the attendant international tax threats*. Unpublished master's dissertation. Pretoria: University of Pretoria. [Online] Available from <https://repository.up.ac.za/handle/2263/70091> [Accessed: 2022-03-02].

Georgiou, G.C. 2020. Cryptocurrency challenges sovereign currency. *World Economics*, 21(1):117-141.

Guest, G., MacQueen, K.M. & Namey, E.E. 2012. *Applied thematic analysis*. Los Angeles: Sage Publications. [Online] Available from: <https://methods-sagepub-com.uplib.idm.oclc.org/book/applied-thematic-analysis> [Accessed: 2022-06-11].

Haerberli, D., Oesterhelt, S. & Wherlock, A. 2022. *Blockchain & cryptocurrency laws and regulations 2022 Switzerland*. [Online] Available from: <https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/switzerland> [Accessed: 2022-03-05].

Hancock, B., Ockleford, E. & Windridge, K. 2009. An introduction to qualitative research. [Online] Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1365-2648.1998.00692.x> [Accessed: 2022-06-12].

Hsieh, A. 2019. The faceless coin: achieving a modern tax policy in the changing landscape of cryptocurrency. *Illinois Law Review*, 2019(3): 1080-1115.

Huang, R. 2019. *Seven countries where cryptocurrency investments are not taxed*. [Online] Available from: <https://www.forbes.com/sites/rogerhuang/2019/06/24/seven-countries-where-cryptocurrency-investments-are-not-taxed/> [Accessed: 2022-03-05].

IG. n.d. *What is cryptocurrency trading and how does it work?* [online] Available from: <https://www.ig.com/za/cryptocurrency-trading/what-is-cryptocurrency-trading-how-does-it-work> [Accessed: 2022-02-19].

Intergovernmental Fintech Working Group (IFWG). 2019. *Consultation paper on policy proposals for crypto assets*. [Online] Available from: <https://www.ifwg.co.za/Reports/IFWG%20Consultation%20Paper%20on%20Policy%20Proposals%20for%20Crypto%20Assets.pdf#search=consultation%20paper> [Accessed: 2022-02-27].

Intergovernmental Fintech Working Group (IFWG). 2021a. *IFWG: CAR WG Position Paper on Crypto Assets*. [Online] Available from: http://www.treasury.gov.za/comm_media/press/2021/IFWG_CAR%20WG_Position%20paper%20on%20crypto%20assets_Final.pdf [Accessed: 2022-02-27].

Intergovernmental Fintech Working Group (IFWG). 2021b. *Frequently asked questions about crypto assets*. [Online] Available from:

http://www.treasury.gov.za/comm_media/press/2021/IFWG_CAR%20WG_Crypto%20assets%20FAQs_Final.pdf [Accessed: 2022-02-19].

Intergovernmental Fintech Working Group (IFWG). n.d. *IFWG About us*. [Online] Available from: <https://www.ifwg.co.za/Pages/About-Us.aspx> [Accessed: 2022-02-27].

Internal Revenue Services (IRS). 2014. *Notice 2014-21*. [Online] Available from: [Notice 2014-21 \(irs.gov\)](https://www.irs.gov/notice/2014-21) [Accessed: 2022-02-25].

Internal Revenue Service (IRS). 2022. *Topic No. 409 Capital Gains and Losses*. [Online] Available from: <https://www.irs.gov/taxtopics/tc409>. [Accessed: 2022-06-26].

ITC 1510, 1989 (54 SATC 30 at 36).

ITC 1525, 1991 (54 SATC 209)(C).

Jäggi, O. & Klipfer, U. 2022. *Taxation of Cryptocurrencies – Staking and Asset Tokens with equity rights*. [Online] Available from: <https://taxpartner.ch/en/taxation-of-cryptocurrencies-staking-and-asset-tokens-with-equity-rights/> [Accessed: 2022-06-18].

Jamshed, S. 2014. Qualitative research method-interviewing and observation. *Journal of basic and clinical pharmacy*, 5(4): 87-88.

Jevons, W.S. 1896. *Money and the mechanism of exchange*. New York, NY. The international scientific series. Vol. XVII. [Online] Available from: https://www.econlib.org/library/YPDBooks/Jevons/jvnMME.html?chapter_num=4#book-reader [Accessed: 2022-06-26].

Joye, D., Eiselé, Q., & Visinand, H. 2021. *Cryptocurrencies: Swiss tax treatment and associated risks*. [Online] Available from: <https://www.mazars.ch/Home/Insights/Newsletters/Swiss-Tax-Newsletter/Swiss-Tax-e-newsletter-June-2021/Cryptocurrencies-Swiss-tax-treatment-and-risks> [Accessed: 2022-02-28].

Kelly, S.E. 2010. Qualitative interviewing techniques and styles. In: Bourgeault, I., Dingwall, R. and de Vries, R. (eds.). *The SAGE handbook of qualitative methods in health research*. Thousand Oaks: Sage Publications.

Koinly. 2022a. *Australia Crypto Tax Guide 2022*. [Online] Available from: <https://koinly.io/guides/crypto-tax-australia/> [Accessed: 2022-03-02].

Koinly. 2022b. *Crypto Tax Switzerland: 2022 Guide*. [Online] Available from: <https://koinly.io/guides/switzerland-crypto-tax-guide/> [Accessed: 2022-03-03].

Koinly. 2022c. *South African Cryptocurrency Tax Guide 2021*. [Online] Available from: <https://koinly.io/guides/crypto-tax-south-africa/> [Accessed: 2022-05-26].

Koinly. 2022d. *The Ultimate USA Crypto Tax Guide 2022*. [Online] Available from: <https://koinly.io/cryptocurrency-taxes/> [Accessed: 2022-06-26].

Krafft, P.M., Penna, N.D. & Pentland, A.S. 2018. *An experimental study of cryptocurrency market dynamics*. [Online] Available from: [An Experimental Study of Cryptocurrency Market Dynamics \(acm.org\)](https://arxiv.org/abs/1808.07234) [Accessed: 2022-02-19].

Leech, O. 2022. *US Crypto Tax Guide 2022*. [Online] Available from: [US Crypto Tax Guide 2022 - A Complete Guide to US Cryptocurrency Taxes \(coindesk.com\)](https://coindesk.com/guides/us-crypto-tax-guide-2022/) [Accessed: 2022-05-28].

Little, K. 2022. *Want to buy crypto? Here's what to look for in a crypto exchange*. [Online] Available from: <https://time.com/nextadvisor/investing/cryptocurrency/what-are-cryptocurrency-exchanges/#:~:text=A%20crypto%20exchange%20is%20a,of%20the%20cryptocurrencies%20they%20offer>. [Accessed: 2022-06-23].

Makhoba, B.P. & Zungu, L.T. 2021. Foreign direct investment and economic growth in South Africa: Is there a mutually beneficial relationship? *African Journal of Business and Economic Research*, 16(4):101–115. [Online] Available from: [https://journals-co-za.uplib.idm.oclc.org/doi/epdf/10.31920/1750-4562/2021/v16n4a5](https://journals-co.za.uplib.idm.oclc.org/doi/epdf/10.31920/1750-4562/2021/v16n4a5) [Accessed: 2022-08-02].

Marr, B. 2017. *A short history of bitcoin and crypto currency everyone should read*. [Online] Available from: <https://www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read> [Accessed: 2022-02-09].

McClelland, S.B. 1994. Training needs assessment data-gathering methods. *Journal of European Industrial Training*, 18(2):27–31. [Online] Available from: <https://www-emerald-com.uplib.idm.oclc.org/insight/content/doi/10.1108/03090599410055640/full/pdf?title=training-needs-assessment-datagathering-methods-part-2-individualinterviews>. [Accessed: 2022-06-12].

McClure, Z. 2021. *Crypto taxes in South Africa*. [Online] Available from: <https://tokentax.co/guides/crypto-taxes-in-south-africa/> [Accessed: 2022-02-18].

Merriam-Webster. 2002. Merriam-Webster. [Online] Available from: <https://www.merriam-webster.com/> [Accessed: 2022-05-22].

Milutinovic, M. 2018. Cryptocurrency. *Journal for Economic Theory and Practice and Social Issues*, 64(1):105-122.

Mint. 2022. *This country adopts bitcoin as legal currency. Detail here*. [Online] Available from: <https://www.livemint.com/market/stock-market-news/this-country-adopts-bitcoin-as-legal-currency-details-here-11651153008675.html> [Accessed: 2022-07-08].

Nakamoto, S. n.d. *Bitcoin: A peer-to-peer electronic cash system*. [Online] Available from: <https://bitcoin.org/bitcoin.pdf>. [Accessed: 2022-06-16].

Natal Estates v Secretary for Inland Revenue, 1975 (4) SA 117 (A) (37 SATC 193).

National Treasury. 2014. *USER ALERT Monitoring of virtual currencies*. [Online] Available from: http://www.treasury.gov.za/comm_media/press/2014/2014091801%20-%20User%20Alert%20Virtual%20currencies.pdf [Accessed: 2022-02-26]

Ndemo, B. 2022. *The role of cryptocurrencies in sub-Saharan Africa*. [Online] Available from: <https://www.brookings.edu/blog/africa-in-focus/2022/03/16/the-role-of-cryptocurrencies-in-sub-saharan-africa/#:~:text=In%20fact%2C%20a%20recent%20report,percent%20from%20the%20year%20before>. [Accessed: 2022-08-03].

OECD. 2015. *Addressing the tax challenges of the digital economy, Action 1 - 2015 Final Report*. [Online] Available from: *Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report | en | OECD* [Accessed: 2022-02-26].

OECD. 2020. *Taxing Virtual Currencies: An overview of tax treatments and emerging tax policy issues*. [Online] Available from: www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emergingtax-policy-issues.htm [Accessed: 2022-03-05].

OECD. 2022. *Taxing wages*. [Online] Available from: <https://www.oecd.org/ctp/tax-policy/taxing-wages-switzerland.pdf> [Accessed: 2022-08-01].

Olivier, L. 2012. Capital versus revenue: Some guidance. *De Jure Law Journal*, 45(1):173-178.

Parsons, S. 2014. What is bitcoin? The potential tax consequences of transacting in virtual currency in South Africa. *Proceedings of the 2014 SAAA regional conference*, 8. [Online] Available from: https://www.researchgate.net/publication/275028745_What_is_Bitcoin_The_potential_tax_consequences_of_transacting_in_virtual_currency_in_South_Africa/link/552f8bb50cf2acd38cbc01eb/download [Accessed: 2022-06-10].

Pravdiuk, M. 2021. International experience of cryptocurrency regulation. *Norwegian Journal of Development of the International Science*, 53:31-37. [Online] Available from: [INTERNATIONAL_EXPERIENCE_OF_CRYPTOCURRENCY_REGULATION_\(cyberleninka.ru\)](http://INTERNATIONAL_EXPERIENCE_OF_CRYPTOCURRENCY_REGULATION_(cyberleninka.ru)) [Accessed: 2022-02-28].

PWC. 2021a. *Tax considerations for cryptocurrency*. [Online] Available from: [cryptocurrency-tax-considerations-jun18.pdf \(pwc.com.au\)](https://www.pwc.com/au/tax/cryptocurrency-tax-considerations-jun18.pdf) [Accessed on: 2022-03-05].

PWC. 2021b. *Annual Global Crypto Tax Report 2021*. [Online] Available from: [PwC Annual Global Crypto Tax Report 2021](https://www.pwc.com/au/tax/global-crypto-tax-report-2021) [Accessed: 2022-03-05].

PWC. 2022. *Switzerland - Individual - Other taxes*. [Online] Available from: <https://taxsummaries.pwc.com/switzerland/individual/other-taxes> [Accessed: 2022-02-28].

Quimbayo, C.V. & Broby, D. 2021. *The regulation of Initial Coin Offerings, Virtual Assets and Virtual Asset Service Providers*. [Online] Available from: https://strathprints.strath.ac.uk/75972/1/Quimbayo_Broby_2021_The_regulation_of_initial_coin_offerings_virtual_assets_and_virtual_asset_service_providers.pdf [Accessed: 2022-06-23].

Rahi, S. 2017. Research design and methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics and Management Sciences*, 6(2):1-5.

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

Reitz, D. 1999. 662. *Krugerrands*. [Online] Available from: https://www.saica.co.za/integritax/1999/662_Krugerrands.htm. [Accessed: 2022-06-17].

Saunders, M.N.K., Lewis, P. & Thornhill, A. 2019 *Research methods for business students*. Eighth ed. Harlow, United Kingdom: Pearson.

Schlumpf, P. 2021. *Crypto Taxes in Switzerland*. [Online] Available from: <https://www.bdo.ch/en-gb/insights/crypto-taxes-in-switzerland> [Accessed: 2022-02-2].

Schwab, K. 2016. *The Fourth Industrial Revolution: what it means, how to respond*. [Online] Available from: <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/> [Accessed: 2022-02-20].

South Africa. 1962. Income Tax Act, No. 58 of 1962.

South Africa. 1989. South African Reserve Bank Act, No 90 of 1989.

South Africa. 2011. Tax Administration Act, No. 28 of 2011.

South Africa. 2018. Taxation Laws Amendment Act, No. 23 of 2018.

South African Reserve Bank (SARB). 2014. Position paper on virtual currencies. Position Paper published 3 December 2014. [Online] Available from: <https://www.resbank.co.za>. [Accessed: 2022-02-12]

South African Revenue Service (SARS). 2012. Notice to reporting institutions to furnish bi-annual returns of investment and interest with effect from the 2013 year of assessment. *Government Gazette*, 35090:3, 29 February.

South African Revenue Service (SARS). 2018. *SARS's stance on the tax treatment of cryptocurrencies*. [Online] Available from: <https://www.sars.gov.za/media-release/6-april-2018-sarss-stance-on-the-tax-treatment-of-cryptocurrencies/> [Accessed: 2022-02-07].

South African Revenue Service (SARS). 2022. *Crypto Assets & Tax*. [Online] Available from: <https://www.sars.gov.za/individuals/crypto-assets-tax/> [Accessed: 2022-02-16].

Spitz, D. 2021. *Cryptocurrency: tax treatment in Switzerland*. [Online] Available from: <https://www.rsm.global/switzerland/en/news/cryptocurrency-tax-treatment-switzerland> [Accessed: 2022-03-03].

Statista. n.d. *Overall cryptocurrency market capitalization per week from July 2010 to April 2022 (in billion U.S. dollars)*. [Online] Available from: <https://www.statista.com/statistics/730876/cryptocurrency-maket-value/> [Accessed: 2022-04-09].

Statistics South Africa. 2022. *South Africa's youth continues to bear the burden of unemployment*. [Online] Available from: <https://www.statssa.gov.za/?p=15407#:~:text=According%20to%20the%20Quarterly%20Labour,stands%20at%2034%2C5%25>. [Accessed: 2022-08-02].

Sukamolson, S. 2007. Fundamentals of quantitative research. *Language Institute Chulalongkorn University*, 1(3):1-20.

T v COT, 1972 R (34 SATC 15).

Tardi, C. 2021. *Krugerrands*. [Online] Available from: <https://www.investopedia.com/terms/k/krugerrand-gold-coin.asp> [Accessed: 2022-06-15].

US Treasury Inspector General for Tax Administration (TIGTA). 2016. *As the use of virtual currencies in taxable transaction becomes more common, additional actions are needed to ensure Taxpayer Compliance*. [Online] Available from: <https://www.treasury.gov/tigta/auditreports/2016reports/201630083fr.pdf> [Accessed: 2022-06-16].

Van Schalkwyk, E. & Warneke, D. 2021. *Crypto assets: How you are taxed*. [Online] Available from: <https://www.bdo.co.za/en-za/insights/2021/tax/crypto-assets-how-you-are-taxed> [Accessed: 2022-02-26].

VLČEK, F. 2019. *Virtual Currencies: A new challenge for tax law and monetary law*. Unpublished Master's Thesis. Czech Republic: Masaryk University.

Vumazonke, N. 2021. *Investigating the ability of taxpayers to determine the income tax consequences of cryptocurrency transactions in South Africa*. Published Master's thesis. Cape Town: University of Cape Town. [Online] Available from: <https://open.uct.ac.za/handle/11427/36207> [Accessed: 2022-06-24].

Williams, C. 2007. Research methods. *Journal of Business & Economic Research*, 5(3):65-72.

Xu, M., David, J.M. & Kim S.H. 2018. The Fourth Industrial Revolution: Opportunities and challenges. *International Journal of Financial Research*, 9(2):90-91.

Zhai, S., Yang, Y., Li, J., Qiu, C. & Zhao, J. 2019. Research on the application of cryptography on the Blockchain. *Journal of Physics: Conference Series*, 1168(3):2.

Zulauf, R. & Ingold, T. 2022. *Swiss tax authorities provide additional clarity on crypto-taxation*. [Online] Available from: <https://www.internationaltaxreview.com/article/2a6aafin5m44mse0zz9xd/swiss-tax-authorities-provide-additional-clarity-on-crypto-taxation> [Accessed: 2022-06-18].

APPENDIX A:
Declaration of plagiarism



DEPARTMENT OF TAXATION

Declaration Regarding Plagiarism

The Department of Taxation emphasises integrity and ethical behaviour with regard to the preparation of all written assignments. Although the lecturer will provide you with information regarding reference techniques, as well as ways to avoid plagiarism (see the "Guidelines on Referencing" document), you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecturer concerned before submitting an assignment.

You are guilty of plagiarism when you extract information from a book, article, web page or any other information source without acknowledging the source and pretend that it is your own work. This does not only apply to cases where you quote the source directly, but also when you present someone else's work in a somewhat amended (paraphrased) format or when you use someone else's arguments or ideas without the necessary acknowledgement. You are also guilty of plagiarism if you copy and paste information directly from an electronic source (e.g., a web site, e-mail message, electronic journal article or CD-ROM) without paraphrasing it or placing it in quotation marks, even if you acknowledge the source.

You are not allowed to submit another student's previous work as your own. You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own.

Students who are guilty of plagiarism will forfeit all credits for the work concerned. In addition, the matter will be referred to the Committee for Discipline (Students) for a ruling. Plagiarism is considered a serious violation of the University's regulations and may lead to your suspension from the University. The University's policy regarding plagiarism is available on the Internet at <http://www.library.up.ac.za/plagiarism/index.htm>.

For the period that you are a student at the Department of Taxation, the following declaration must accompany all written work that is submitted for evaluation. No written work will be accepted unless the declaration has been completed and is included in the particular assignment.

	Student
I (full names & surname):	Elani Meyer
Student number:	13025636

Declare the following:

1. I understand what plagiarism entails and am aware of the University's policy in this regard.
2. I declare that this assignment is my own, original work. Where someone else's work was used (whether from a printed source, the Internet or any other source) due acknowledgement was given and reference was made according to departmental requirements.
3. I did not copy and paste any information directly from an electronic source (e.g., a web page, electronic journal article or CD ROM) into this document.
4. I did not make use of another student's previous work and submitted it as my own.
5. I did not allow and will not allow anyone to copy my work with the intention of presenting it as his/her own work.

E Meyer

Signature

APPENDIX B: OPEN-ENDED QUESTIONNAIRE

Questions for Questionnaire:



Combined Letter of Introduction and Informed Consent

Dept. of Taxation

Title of the study

A critical evaluation of the tax treatment of cryptocurrency transactions in the South African context

Research conducted by:

Ayesha Ahmed Ally
Zainab Khan
Elani Meyer
Larissa Zanne Kotzee

Dear Participant

You are invited to participate in an academic research study conducted by Elani Meyer, Zainab Khan, Ayesha Ahmed Ally, and Larissa Zanne Kotzee Master students at the Faculty of Economic and Management Sciences at the University of Pretoria.

The purpose of the study is to critically evaluate the impact of cryptocurrency transactions on the tax revenue of South Africa and to determine if cryptocurrency transactions are currently taxed appropriately.

Please note the following:

- This is an anonymous open-ended questionnaire as your name will not appear on the questionnaire. The answers you give will be treated as strictly confidential as you cannot be identified in person based on the answers you give.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.

- Please answer the questions in the attached questionnaire as completely and honestly as possible.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- If there is any uncertainty regarding a question, please feel free to contact the participants to discuss further.
- The estimated time to complete the questionnaire will be approximately 60 minutes.

Consent:

1. Please confirm that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

Yes	No
-----	----

General questions:

2. Do you have an understanding of cryptocurrency transactions in South Africa?

Yes	No
-----	----

Please answer questions 3 to 5 on the 5-point Likert scale.

	<u>Never</u>	<u>Seldom</u>	<u>Sometimes</u>	<u>Often</u>	<u>Always</u>
3. I trade/invest in cryptocurrency on behalf of myself.					
4. I trade/invest in cryptocurrency on behalf of clients.					

5. I service tax clients that trade/invest in cryptocurrency.					
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6. What is your understanding of the current classification and tax treatment of cryptocurrency transactions in South Africa?
7. What is your opinion on the current method of taxing cryptocurrency transactions in South Africa?
8. Can you suggest an alternative classification of cryptocurrency transactions for tax purposes?
9. When cryptocurrency is received as payment and classified as income, how should the monetary value be determined?
10. When cryptocurrency is received as payment and classified as income, how will you determine the timing of the taxable event?
11. In your opinion, what alternative methods can be used to tax cryptocurrency transactions? Briefly explain your answer.
12. At what level do you think tax on cryptocurrency transactions should be disclosed and paid over to SARS? For example, the level of cryptocurrency platforms, banks, crypto traders et cetera. Please provide reasons for your response.
13. Depending on your answer in question 12, what measures should SARS implement to ensure tax compliance through the accurate completion of returns, traceability, and visibility of crypto transactions?

If any response to the question(s) is unclear, may we contact you for further information?
 If you agree, please provide your contact number or email address.