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The regulation of crypto exchanges providing stablecoin services in South Africa: Should they be regulated as banks?

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Declaration

I, Megan Dyamond, hereby declare that the work on which this dissertation is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university. I authorise the University to reproduce for research either the whole or any portion of the contents in any manner whatsoever.

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Abstract

Crypto assets have been declared to be financial products in South Africa and crypto asset service providers ('CASPs') are required to seek a licence under the Financial Advisory and Intermediary Services Act 37 of 2002 ('FAIS Act') to provide advice or intermediary services in respect of stablecoins. Yet, certain events in the crypto asset industry in 2022 (namely, a global industry decline, bad practices, bankruptcies and fraud) raised the question of whether CASPs providing exchange services specifically in relation to stablecoins ('stablecoin CASPs') should be regulated as banks, and subjected to more rigorous regulatory requirements than those applicable under the FAIS Act. This forms the basis of the research question in this dissertation. The research is qualitative in nature and considers certain aspects of existing legislation and scholarly opinions in investigating the research question. The dissertation uses the European Union's Markets in Crypto Assets Regulation of 2023 ('MICAR') as a benchmark against which to consider the South African legal position.

After examining relevant legislation and considering MICAR's position on crypto assets, the dissertation argues that it is not appropriate to regulate stablecoin CASPs as banks in South Africa. However, the dissertation also finds that, in certain instances, some stablecoin CASPs may have to register as banks, based on the activities that they conduct. The dissertation also identifies certain significant gaps in the existing framework applicable to stablecoin CASPs as financial services providers. It is recommended that, in order to protect vulnerable consumers, a unified regulatory framework should be developed to apply particular standards to stablecoin CASPs; such standards are specifically tailored to stablecoins, and are not generic to traditional financial products. Looking beyond the research question posed, it is recommended that this framework should cover issuers of stablecoins in order to address the macroeconomic risks that they pose. The dissertation concludes that further research is needed to address other aspects of stablecoin CASP regulation that fall beyond the scope of this dissertation.

Abbreviations

AML	anti-money laundering
ART	asset-referenced token
CASP	crypto asset service provider
CBDC	central bank digital currency
COFI	Conduct of Financial Institutions Bill
DeFi	decentralised finance
ECB	European Central Bank
EBA	European Banking Authority
EMD	electronic money directive
EMI	electronic money institution
EMT	electronic money token
ESMA	European Securities and Markets Authority
EU	European Union
FAIS Act	Financial Advisory and Intermediary Services Act 37 of 2002
FICA	Financial Institutions Conduct Authority
FINMA	Swiss Financial Markets Supervisory Authority
FSCA	Financial Sector Conduct Authority
FSLAA	Financial Sector Laws Amendment Act
FSP	financial services provider
FSR Act	Financial Sector Regulation Act 9 of 2017

FTX	FTX Trading Ltd
GDPR	General Data Protection Regulation
ICO	initial coin offering
IFWG	Intergovernmental Fintech Working Group
KYC	know your client
MICAR	EU's Markets in Crypto Assets Regulation
MIFID II	Markets in Financial Instruments Directive II
NFT	non-fungible token
NPS Act	National Payment Systems Act 78 of 1998
PA	Prudential Authority
SAMOS	South African Multiple Option Settlement
SARB	South African Reserve Bank
SARS	South African Revenue Service
SBF	Sam Bankman-Fried
TCF	treating customers fairly
US	United States of America

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CHAPTER 1: INTRODUCTION

> People all over the world, and South Africans are no exception, are bewitched and fascinated by any idea or scheme promising, in most cases, instant wealth.[1]

1.1 General

This quote, used by De Wet AJ when giving judgment in a recent case relating to the liquidation of a company dealing in cryptocurrency,[2] comes from a 1999 report in terms of the Harmful Business Practices Act 71 of 1998, discussing Ponzi schemes. Twenty-five years later, this quote aptly describes the early excitement about crypto assets and the wariness of regulators with regard to this industry. Many crypto asset 'schemes' promise instant, or near instant, wealth; these promises often resulted in instances of abuse, as a result of which many regulators are increasingly taking steps to regulate this industry.

The *Oxford English Dictionary* defines cryptocurrency as '[a]ny of various digital payment systems operating independently of a central authority and employing cryptographic techniques to control and verify transactions in a unique unit of account; (also) the units of account of such a system, considered collectively'.[3] Conceptualised in its modern form by Satoshi Nakamoto (the pseudonym for an anonymous actor) in 2008, cryptocurrency has since then grown into a multi-billion dollar industry; its estimated worth was approximately USD 35 billion in 2022.[4]

The Financial Sector Conduct Authority ('FSCA') issued a notice on 19 October 2022 declaring crypto assets to be financial products (the '2022 Declaration').[5] This new status brings certain crypto assets within the scope of South African regulation, a change that has

[1] Business Practices Committee 'Report in Terms of Section 10(1) of the Harmful Business Practices Act, 1988 (Act No. 71 of 1988)' *Government Gazette* No. 20169 of 9 June 1999, 1.
[2] *Bester NO and Others v Mirror Trading International (Pty) Ltd (in liquidation) t/a MTI and Others* [2023] ZAWCHC 83 ('*Mirror Trading International*').
[3] Oxford English Dictionary *Cryptocurrency, n.* available at: https://www.oed.com/view/Entry/79224404 [last accessed 4 November 2023].
[4] 'Cryptocurrencies – Worldwide', *Statista*, available at: https://www.statista.com/outlook/dmo/fintech/digital-assets/cryptocurrencies/worldwide [last accessed 13 February 2023].
[5] 'Declaration of a Crypto Asset as a Financial Product under the Financial Advisory and Intermediary Services Act' *Government Gazette* No. 47334 of 19 October 2022, available at: https://www.gov.za/sites/default/files/gcis_document/202210/47334gen1350.pdf [last accessed 12 April 2023].

been welcomed by industry leaders[6] who view regulation as a means of advancing the industry. It should be noted that the 2022 Declaration excludes non-fungible tokens ('NFTs')[7] from its scope.

'Crypto assets' is a term that encompasses many different types of digital assets that are built on blockchain technology, as will be described in more detail in later chapters. Cryptocurrencies are such assets, and include 'stablecoins', a cryptocurrency whose value is pegged at a 1:1 ratio to a government-issued (or 'fiat') currency or to a particular asset or commodity. The crypto asset industry is well known as volatile, based primarily on consumer expectations (stablecoins being a notable exception, dealt with in more detail later) and supply-and-demand. There are various types of crypto assets: stablecoins, central bank digital currencies ('CBDCs'), NFTs and utility tokens. This list is by no means exhaustive, but includes some of the most prevalent crypto assets that are used by the larger consumer market. Chapter 2 will explain these types of crypto assets in further detail as they pertain to the research question.

The 2022 Declaration came shortly after a severe global decline in the crypto market in 2022 (described by some as a 'crypto winter'),[8] which was due, at least in part, to the unregulated and irresponsible practices of a few bad actors. This decline contributed to real-world economic consequences and saw consumers lose their lifetime savings, while a select few profited.[9] The decline in 2022 highlighted the lack of regulation of crypto assets and the difficulties faced by consumers in seeking relief in that environment.[10] The 2022 Declaration assists in resolving aspects of regulatory uncertainty in the industry, by clearly positioning advice and intermediary services relating to crypto assets under the authority of the FSCA and the Financial Advisory and Intermediary Services Act 37 of 2002 ('FAIS Act').

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[6] Team Luno 'Crypto is now classified as a financial product in South Africa' *Luno*, 21 October 2022, available at: https://discover.luno.com/crypto-is-now-classified-as-a-financial-product-in-south-africa/ [last accessed 5 February 2023].

[7] See section 2.1 below on NFTs.

[8] Julian Mark & Gerrit de Vynck '"Crypto winter" has come. And it's looking more like an ice age' *Washington Post*, 18 December 2022, available at: https://www.washingtonpost.com/business/2022/12/18/crypto-winter-ftx-collapse-bitcoin-prices/ [last accessed 9 April 2023].

[9] World Economic Forum 'The macroeconomic impact of cryptocurrency and stablecoin economics' 4 November 2022, available at: https://www.weforum.org/agenda/2022/11/the-macroeconomic-impact-of-cryptocurrency-and-stablecoin-economics/ [last accessed 5 February 2023].

[10] Bo Li, Nobuyasu Sugimoto 'Crypto contagion underscores why global regulators must act fast to stem risk' *IMF*, 18 January 2023, available at: https://www.imf.org/en/Blogs/Articles/2023/01/18/crypto-contagion-underscores-why-global-regulators-must-act-fast-to-stem-risk [last accessed 5 February 2023].

Since 2022 until the time of writing, apart from the 2022 Declaration, there has been little progress in crypto asset regulation that can precisely inform crypto asset service providers ('CASPs') of the standards to which they must adhere and that could effectively shape the industry into one of regulatory certainty and consumer confidence. Among these standards are both prudential and market conduct rules for CASPs, including disclosure, operational, marketing and reserves[11] requirements which pertain to crypto assets specifically. Further, given that, *prima facie*, the activity by CASPs of accepting fiat currency in exchange for stablecoins may constitute the taking of deposits, it remains to be seen if regulation under the FAIS Act is appropriate for these CASPs. A pertinent question is whether CASPs which provide exchange services in relation to stablecoins ('stablecoin CASPs') should be considered to be deposit-taking institutions and regulated under the Banks Act 94 of 1990, rather than the FAIS Act. This question forms the basis of the research question in this dissertation.

The dissertation provides an overview of crypto assets and its underlying technology, and considers the activities of stablecoin CASPs within the South African legal framework. Currently, the Markets in Crypto Assets Regulation ('MICAR'), a European Union ('EU') regulation, is one of the few comprehensive international frameworks regulating CASPs and issuers of crypto assets. As such, it is used as a benchmark to assess the suitability of the South African approach to crypto assets in an international context.

1.2 Research question

The research question in this dissertation is whether CASPs providing exchange services in relation to stablecoins should be deemed deposit-taking institutions requiring registration as banks. These CASPs will be referred to as 'stablecoin CASPs'.

This dissertation will examine the research question by comparing MICAR with the current approach to the regulation of crypto assets in South Africa. This comparison allows for an assessment as to whether any shortcomings in regulation are immediately apparent from a consumer protection perspective and what better measures might be adopted to address these, while avoiding stifling industry growth in South Africa.

[11] This refers to the proportion of assets that a service provider or issuer must keep available in relation to customer holdings with that service provider or of the crypto assets issued by the issuer, and to the manner of their keeping.

In addressing this research question, this dissertation considers a number of other factors that affect the regulatory status of crypto assets and CASPs in South Africa, including the state of the crypto asset market and the 2022 market decline in crypto assets; the nature of crypto assets and crypto asset technology; the crypto asset industry and the various industry stakeholders generally; the important regulatory requirements covered in MICAR; and the current South African legal framework within which crypto assets are regulated.

1.3 Purpose of the research question

The purpose of the research question is, firstly, to assess the approach taken by South African regulators to regulate stablecoin CASPs and, secondly, to consider whether the regulation of these CASPs under the Banks Act is perhaps not more appropriate. Research in this area is still developing, and the dissertation aims to explore and contribute new literature to this topic. The 2022 crypto asset industry decline highlighted issues such as the interconnectedness of actors in this industry and with the traditional financial market, lack of operational safeguards by CASPs, fraudulent practices, and the uncertainty for consumers in recovery processes during CASP liquidations. These issues led to greater scrutiny of the crypto asset industry and put pressure on regulators to control the industry.

In this dissertation, purchasers of cryptocurrencies or cryptocurrency-related services are referred to as 'consumers', who are often (but not always) equivalent to 'holders' of cryptocurrency. 'Holders' refers to persons using cryptocurrency or related services where those persons can directly access the relevant cryptocurrency, without an intermediary. The term 'user' is used generically to refer to a person who uses cryptocurrency or its underlying blockchain technology.

The research question is contextualised by using several case studies. The crash of Celsius Network, an over-the-counter crypto exchange[12] in the United States ('US'), is a crisp example of a number of issues that regulators may seek to address. The crash of this exchange in 2022 caused ripple effects across the cryptocurrency market and was partly the result of poor reserves, the misleading of investors, poor decision-making, insufficient safeguards and market manipulation.[13] The 'run on the bank [an exchange in this instance]' experienced by Celsius

[12] A CASP which accepts payments in fiat currency from customers to purchase crypto assets, as will be explained in subsequent chapters.
[13] Megan Dyamond 'The crypto crash of 2022', 15 July 2022, available at: https://www.dunster.co.za/blog/crypto-crash-2022/ [last accessed 12 April 2023].

when its users swiftly withdrew their crypto resulted in Celsius freezing user accounts, in an attempt to salvage what liquidity remained in the exchange. The damage was, however, already done. Celsius lacked adequate reserves to repay its customers their money and was accused of being a Ponzi scheme.[14] More troubling for the industry was the loss of confidence in major cryptocurrency tokens such as Bitcoin. The price of Bitcoin also declined during 2022, due to its interconnectedness with failed crypto asset exchanges such as Celsius. It should be pointed out that the Celsius crash did not occur in isolation. A number of crypto exchanges and private hedge funds were also overexposed to other volatile incidents in the market, such as the Terra/Luna crash, which contributed to the general decline of the market in 2022.

FTX Trading Ltd was the latest significant exchange to file for bankruptcy in 2022. FTX's crash appears, on a preliminary basis, to have been due to poor governance and fraud. In late 2022, seemingly secure FTX saw its value plummet almost overnight after an accounting discrepancy was discovered, showing that FTX was not as financially successful as its balance sheet had led people to believe.[15] The ensuing investigations demonstrated a clear lack of governance by the top decision-makers at FTX, Sam Bankman-Fried and his team. In a statement, Bankman-Fried said that compliance was not the top priority at FTX.[16] It became apparent that FTX lacked standards of governance and internal controls, leading to another crypto-exchange crash.[17]

Whether stablecoin CASPs such as FTX and Celsius should have been regulated as banks when operating in South Africa requires some consideration. Banks are strictly regulated, *inter alia* because they take deposits from the public as a regular feature of their business; therefore, many regulators internationally might consider applying similar regulation to CASPs, which also take 'crypto deposits' from the public. Therefore, this dissertation discusses whether these activities conducted by stablecoin CASPs meet the definition of 'the business of a bank'.[18]

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[14] Jonathan Stempel 'Lawsuit accuses troubled crypto lender Celsius Network of fraud' *Reuters*, 8 July 2022, available: https://www.reuters.com/technology/lawsuit-accuses-troubled-crypto-lender-celsius-network-fraud-2022-07-08/ [last accessed 7 February 2025].

[15] Matt Levine 'FTX's balance sheet was bad' *Bloomberg*, 14 November 2022, available at: https://www.bloomberg.com/opinion/articles/2022-11-14/ftx-s-balance-sheet-was-bad [last accessed 12 April 2023].

[16] R Vanderford 'Sam Bankman-Fried "wasn't even trying" to manage risk at FTX, he says' *Wall Street Journal*, 1 December 2022, available at: https://www.wsj.com/articles/sam-bankman-fried-wasnt-even-trying-to-manage-risk-at-ftx-he-says-11669930592 [last accessed 18 January 2025].

[17] Niha Masih and Julian Mark 'What to know about Sam Bankman-Fried and the FTX collapse' *The Washington Post*, 13 December 2022, available at: https://www.washingtonpost.com/business/2022/12/13/sam-bankman-fried-ftx-collapse-explained/ [last accessed 5 February 2023].

[18] In terms of s 1 of the Banks Act 94 of 1990.

Another central theme in the 2022 market decline of crypto assets was the recourse available to customers of bankrupt stablecoin CASPs. Given the representations often made to consumers by exchanges, many consumers who used exchange services were under the impression that the money they paid into the exchange for crypto assets was still theirs and could be withdrawn at any time – as they would withdraw money from a bank account. This is especially true where consumers use CASP services in relation to stablecoins. Stablecoins maintain a 1:1 ratio to the fiat currency to which they are pegged.[19] This feature likely led consumers to believe that if they held stablecoins with an exchange, they would be able to withdraw the equivalent amount in fiat at any time. This function bears a clear similarity to traditional bank deposits, but without the protection offered by banking regulation. When the regulation of CASPs is compared with the regulation of their financial institution counterparts, there is a clear void in the protection offered to consumers using crypto exchange services, which regulators will need to address. In addressing the research question, this dissertation also briefly considers the marketing standards applicable to stablecoin CASPs.[20]

Reserves are another theme that has emerged from the 2022 crypto industry decline, with several stablecoin CASPs being unable to honour customer redemptions, and thus facing liquidity issues. Liquidity issues in crypto exchanges are usually due to exchanges failing to keep a certain portion of the value of the crypto held on their exchange in reserve, in fiat currency.[21] This can easily be exacerbated where the crypto held by the exchange is locked away in long-term liquidity pools, which are usually used to generate a higher percentage yield than day-to-day trading.[22] Regulators may, and should, seek to impose reserve requirements (similar to those applied to banks) on crypto exchanges or crypto asset issuers to improve market confidence and reduce runs on exchanges where consumers all seek to withdraw their funds at the same time.

[19] Stablecoins can lose their peg in times of market distress, but this is mitigated where service providers keep reserves of stablecoins and take other precautionary measures.

[20] The Advertising Regulatory Board announced in February 2023 that certain standards of advertising in the Code of Advertising Practice will be applicable to crypto assets, requiring, *inter alia*, that service providers advise consumers in no uncertain terms of the risks of purchasing crypto assets.

[21] Guneet Kaur 'What is a liquidity crisis, and what does it mean for crypto investors?' *Cointelegraph*, 22 July 2023, available at: https://cointelegraph.com/trading-for-beginners/what-is-a-liquidity-crisis-and-what-does-it-mean-for-crypto-investors [last accessed 6 February 2023].

[22] Olga Kharif 'Liquidity risk is a side effect of Ethereum crypto upgrade' *Bloomberg*, 14 September 2022, available at: https://www.bloomberg.com/news/articles/2022-09-14/-illiquidity-risk-is-a-side-effect-of-ethereum-crypto-upgrade [last accessed 6 February 2023].

Other themes of the 2022 crypto decline are more familiar to regulators: misleading investors, negligence and fraud. For instance, the misleading statements made by Celsius CEO Alex Mashinsky that Celsius was not overly exposed to Terra were blatantly false and exacerbated Celsius' difficulties caused by its over-leveraged positions.[23] When commenting on the balance sheet discrepancy at FTX, Sam Bankman-Fried somewhat nonchalantly stated that compliance was not high on the agenda at FTX.[24]

It is also worth noting that the FSCA's declaration of crypto assets as a financial product comes after a number of multiple warnings to consumers regarding the volatility of crypto assets and at least two prominent cases that involved defrauding consumers using cryptocurrencies.[25]

The precise standards and regulations to be imposed on CASPs are vital to industry growth in South Africa. Miscalibrating these standards and regulations may hamper and stifle the growth of the industry, while getting them right will enhance growth and provide a better functioning industry with robust consumer protection. Blockchain and cryptocurrency are designed to be decentralised and to operate without the oversight of a central authority; these features may be incompatible with many regulatory practices. To apply strict, inflexible standards on stablecoin CASPs, or those which apply to traditional financial products and are not suitable for stablecoins, may result in the further decline of the industry and discourage South African stablecoin CASPs from conducting business. While many view crypto assets as empty, fictional creations without worth (a sham), one could argue that this also applies to many tangible assets. For instance, it may even be argued that gold has value only because the collective has deemed it to have value. Similarly, money in your bank account also has value only because we have deemed it to have value, the gold standard having long gone out of fashion. At present, crypto assets have value and the industry requires regulation in order to flourish.

[23] Jonathan Stempel 'New York sues Celsius network founder Mashinsky, alleges crypto fraud' *Reuters*, 6 January 2023, available at: https://www.reuters.com/technology/new-york-sues-celsius-network-founder-mashinsky-alleges-fraud-2023-01-05/ [last accessed 6 February 2023].
[24] Vanderford (note 16).
[25] Mirror Trading International and Africrypt allegedly defrauded investors of billions of rands. See Ciaran Ryan 'Africrypt "hack" of nearly R54bn dwarfs mirror trading' *Moneyweb*, 23 June 2021, available at: https://www.moneyweb.co.za/moneyweb-crypto/africrypt-hack-of-nearly-r54bn-dwarfs-mirror-trading/ [last accessed 12 April 2023].

1.4 Scope of the dissertation

This dissertation will discuss stablecoin CASPs. Stablecoins are a focal point of this study due to their role in the greater crypto asset ecosystem, their potential macroeconomic effect on monetary policy, and the impression created in consumers' minds that by using exchanges to deal in stablecoins, their capital is relatively stable in value and they may withdraw the equivalent fiat value at any time. Stablecoins are a common choice for consumers wishing to use crypto to pay for goods and services, precisely due to their stability. Stablecoins are also an important component of the crypto asset ecosystem, despite representing only about 10 per cent of the crypto asset market, due to their frequent use in the broader ecosystem in providing liquidity to decentralised finance and in market trading.[26]

It is beyond the scope of the dissertation to discuss the regulation of all types of CASPs in detail, which can vary depending on the consumer, the jurisdiction and services. This dissertation will also not discuss other cryptocurrencies, except in the context of considering South Africa's broader approach to stablecoins. Focusing on stablecoin CASPs means that CASPs with the most consumer-facing activity and largest stablecoin-related roles in the industry are covered. This dissertation mentions issuers of stablecoins in the context of the research question, insofar as they are relevant.

This dissertation evaluates whether the regulation of stablecoin CASPs under the market conduct authority in South Africa (the FSCA) is appropriate or whether they should rather be considered as deposit-taking institutions under the Prudential Authority's purview. The primary method by which this is evaluated is to study the EU's advanced framework on the subject and compare it with the South African position, while being mindful of the different context in which the South African market operates.

The EU's comprehensive MICAR entered into force on 29 June 2023[27], with Titles III and IV (pertaining to stablecoins) coming into effect on 30 June 2024,[28] making the EU one of the more advanced jurisdictions globally with regard to crypto asset regulation. The EU thus sets a useful standard for comparison with South African regulation. Both the EU and South Africa

[26] Mitsu Adachi et al 'Stablecoins' role in crypto and beyond: Functions, risks and policy' 11 July 2022, available at: https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202207_2~836f682ed7.en.html [last accessed 2 April 2023].
[27] MICAR, art 149.
[28] Ibid.

have recognised a need to close the gap between existing financial sector legislation insofar as crypto assets are concerned. South Africa and the EU are compared because South Africa's regulatory framework for crypto assets is in the early stages of development at the time of writing, while the EU provides a comprehensive framework against which to consider the current South African position.

MICAR recognises the impact of crypto assets in traditional markets and seeks to protect consumers from negligent, fraudulent and irresponsible practices by intermediary service providers and issuers of crypto assets. It does this by clarifying where certain crypto assets are already regulated by existing EU regulations, and by creating a framework governing the issue, sale and service provision of crypto assets. A number of areas under MICAR require further development and the publication of guidelines by the European Central Bank and/or the European Securities and Markets Authority. However, MICAR prioritises consumer protection and provides a firm foundation for guiding stablecoin CASPs with regard to the minimum requirements for doing business in the EU.

The argument that stablecoin CASPs should be treated as deposit-taking institutions is premised on the idea that, when purchasing stablecoins from a CASP, through a CASP or depositing them into a wallet with a stablecoin CASP, the consumer is expecting a return of an equal amount or any part thereof (against certain conditions).[29] This practice is also being conducted in the ordinary course of the exchange's business and may in some cases be advertised to the public. The combination of the above factors draws distinct similarities between the business of a bank (in the traditional understanding)[30] and that of many crypto exchanges dealing specifically in stablecoins. Moreover, it is argued that regulators have an interest in regulating stablecoins more closely than other financial products as they have the potential to affect the money market of the economy to which the fiat currency they are based on belongs.

1.5 Existing research on the issue

There is not an abundance of research on the issue being discussed in this dissertation. A number of papers deal with the appropriate tax regulation of crypto assets, which is not the focus of this dissertation. There is also published work on how best to classify cryptocurrencies

[29] This follows the definition of a 'deposit' in s 1 of the Banks Act.
[30] Banks Act, s 1.

within the existing legal framework, but much of this work is now somewhat out of date given the FSCA's October 2022 announcement that most crypto assets will be classified as financial products.

Gcaba's paper of 2018 reviews crypto asset regulation within the scope of banking law, considering whether crypto service providers (referred to as 'fintech companies') fall within the definition of a bank and concluding that they do not.[31] Gcaba opines that the activities of fintech companies do not fall within the definition of 'taking deposits' and therefore do not fall within the scope of the Banks Act.[32] In reaching this conclusion, Gcaba does not specifically consider stablecoins, how consumers interact with them, and stablecoins' correlation with fiat currency. Again, this paper was published before the FSCA's declaration of crypto as a financial product. Gcaba also considers the taxation of crypto assets and examines the appropriate taxation of crypto depending on its use;[33] the South African Revenue Service has been more active in addressing this issue, which is not the subject of this dissertation.

Reddy and Lawack, in their 2019 article, specifically exclude a detailed comparative analysis between the South African legal position and the regulatory position in other jurisdictions from the ambit of their work,[34] which was appropriate at the time of their writing, given the lack of regulation available for comparison. Reddy and Lawack recommend some measure of regulation for service providers within the cryptocurrency ecosystem – including, *inter alia*, licensing service providers; including cryptocurrency within the scope of existing regulation, specifically the National Payment Systems Act 78 of 1998 ('NPS Act'); implementing coordinated security protocols in the ecosystem; and implementing a valuation method linked to set monetary policy.[35] Bringing cryptocurrency within the existing legal framework will assist in protecting consumers against the vagaries of an otherwise unregulated market and provide more specific recourse than otherwise available in civil law, and indeed has been partially implemented with the 2022 Declaration. Reddy and Lawack note that the regulatory developments of the time, while a step in the right direction, do not adequately address consumer protection.[36] Reddy and Lawack consider the question of whether cryptocurrency

[31] P Gcaba *South African Banking Law and Cryptocurrencies* (LLM dissertation, University of Johannesburg, 2018).
[32] Ibid 26.
[33] Ibid.
[34] Eveshnie Reddy & Vivienne Lawack 'An overview of the regulatory developments in South Africa regarding the use of cryptocurrencies' (2019) 136 *South African Law Journal* 1–28.
[35] Ibid, 24–26.
[36] Ibid.

may constitute electronic money,[37] concluding that it does not, but they do not consider this in relation to stablecoins.

Lawack's book *Fintech Law and Regulation: An African Perspective* was published in 2023[38] and, *inter alia*, covers the nature of stablecoins as crypto assets seeking to maintain a stable value equal to an official fiat currency,[39] the potential risks posed by the widespread use of stablecoins, and the approaches adopted by various jurisdictions to regulate stablecoins (either introducing new regulations or adapting existing regulations).[40] This overview does not examine the requirements imposed by MICAR or compare South Africa's and the EU's approach to regulation, although it makes a valuable contribution to assessing global trends in regulation. *Fintech Law and Regulation* discusses South Africa's regulatory response to crypto assets and summarises the recommendations of the Intergovernmental Fintech Working Group ('IFWG'), an interdepartmental government group that researches and makes recommendations on crypto assets.[41] *Fintech Law and Regulation* also includes a chapter on an African stablecoin, focusing on a common digital currency for the African Union, rather than on stablecoin regulation in different African countries.[42] The book also has a useful chapter on the risks that crypto assets pose to consumers, highlighting the financial stability and impact of stablecoins in particular.[43] This dissertation will touch on these risks in chapter 2 and will consider them in relation to the research question of whether stablecoin CASPs should be regulated as deposit-taking institutions.

In late 2023, Lawack, Mupangavanhu and Olivier published an article dealing with some considerations for consumer protection in relation to CBDCs.[44] This article considers the risks posed to consumers by stablecoins. These relate to the stabilisation mechanisms of those tokens (by which they maintain a stable value), consumer sophistication, payment value and service provider conduct.[45] The article focuses primarily on CBDCs, not the regulation of stablecoins issued by non-central bank actors, which is the focus of this dissertation.

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[37] Ibid 18.
[38] V Lawack *Fintech Law and Regulation: An African Perspective* (2023).
[39] Ibid 235–237.
[40] Ibid 239–248.
[41] Ibid 249–252.
[42] Ibid 256–262.
[43] Ibid 315.
[44] V Lawack, BM Mupangavanhu & E Olivier 'The protection of consumers of retail central bank digital currency – Some considerations' (2023) 86(3) *Tydskrif vir Hedendaagse Romeins-Hollandse Reg* 285–306.
[45] Ibid 291.

Milne and Lawack released a working paper through the South African Reserve Bank in November 2024, dealing with crypto assets and the risks and benefits of their use in payments systems.[46] Some considerations relating to the stability of stablecoins which are mentioned in this working paper are relevant to this dissertation,[47] however the topics covered in this working paper largely fall outside the scope of the research question of this dissertation.

De Kock provides a more extensive review of the compatibility of cryptocurrencies with the South African legal framework.[48] His paper reviews the regulation of cryptocurrency with reference to economic policy. De Kock considers including cryptocurrencies in the Financial Intelligence Centre Act 38 of 2001 as well as the Financial Markets Act 19 of 2012 to address consumer protection in the crypto industry, and including crypto service providers within the term 'authorised dealer' for exchange control purposes.[49] De Kock suggests that cryptocurrency transactions could be considered foreign currency conversions when realising an economic value outside of South Africa, in order to bring service providers within the scope of authorised dealers under the Exchange Control Act and to provide adequate consumer protection in doing so.[50] De Kock does not consider the regulation of CASPs as deposit-taking institutions, which is the subject of this dissertation.

De Kock also argues that cryptocurrency payment solutions do not fall within the scope of the NPS Act because they are not legal tender and merchants are not required to accept payment in the form of cryptocurrencies.[51] While this issue is beyond the scope of this dissertation, the definition of a payment system refers to 'money' and not 'legal tender'. Money is broadly defined as a unit of account which can act as a store of value, a definition which stablecoins in particular can fulfil.[52]

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[46] A Milne & V Lawack 'Digital assets in payments and transaction banking' South African Reserve Bank Working Paper Series WP/24/2026, November 2024, available at: https://www.resbank.co.za/content/dam/sarb/publications/working-papers/2024/digital-assets-in-payments-and-transaction-banking.pdf [last accessed 18 January 2025]

[47] See chapter 4.

[48] William Chandler de Kock *Regulating Cryptocurrencies in South Africa* (Master's dissertation, University of Cape Town, 2021).

[49] Ibid, 41-42.

[50] Ibid, 39-40.

[51] Ibid, 43-44..

[52] See the discussion in section 2.1 below and chapter 2 note 11.

Researchers in foreign jurisdictions provide valuable insight into the rationale for European policy which influences MICAR, but they do not necessarily deal with the South African regulatory landscape, which is the subject of this dissertation.

1.6 Research methodology

This research was conducted by examining available information relevant to the research question and is based on relevant legislation, case law, text books, working papers, law journal articles, and LLM dissertations. There are limited sources available on the topic of the dissertation and therefore the dissertation will also analyse credible news articles and other media material on the topic and on blockchain as a whole. Reports of crypto intermediary financial health in the 2022 market decline are, similarly, limited to media reports and certain US bankruptcy filings concerning intermediaries which filed for bankruptcy in the US. The objective of the dissertation is to analyse the South African legal position regarding stablecoin CASPs, to consider whether they should be regulated as banks, and to compare the South African approach with the approach in the EU.

References to ongoing cases in the US involving bankruptcy filings of crypto exchanges are purely for illustrative purposes, and to show the international nature of this industry and the effects that such cases may have on South Africans.

1.7 Structure of the dissertation

This dissertation consists of five chapters.

Chapter 1 is the introductory chapter. It describes the background to the study, sets out the research question, the scope of the dissertation, and its limitations. The chapter also describes the research methodology used and anchors the research question within the applicable law.

Chapter 2 provides an overview of relevant aspects of crypto asset technology and describes different types of crypto assets in more detail to distinguish stablecoins from other tokens. The chapter provides case studies to illustrate challenges that regulators globally may seek to address, and provides a high-level overview of the macro- and micro-economic risks posed by stablecoins and stablecoin CASPs.

Chapter 3 discusses MICAR and the requirements it places on stablecoin CASPs, issuers and offerors of crypto assets, defining these actors and explaining the cross-over between these

roles. The chapter also contextualises MICAR's role within existing European financial regulations. MICAR does not apply to 'NFTs' or crypto assets representing non-fungible property (eg real estate), therefore the chapter does not include a discussion of NFTs.[53] Due to the limited scope of the dissertation, the chapter only covers aspects of MICAR that are relevant to the research question.

Chapter 4 compares MICAR with the current South African legal position and assesses whether the regulation of stablecoin CASPs under the FAIS Act, rather than the Banks Act, is indeed appropriate. This chapter considers the licensing process for stablecoin CASPs to conduct business in South Africa, and the requirements imposed on them. It notes that current compliance obligations for stablecoin CASPs to conduct business under the FAIS Act do not contain bespoke measures applicable to crypto assets. The chapter considers whether stablecoin CASPs conduct deposit-taking activities and require a banking licence.

Chapter 5 summarises the dissertation, reaches conclusions based on the research undertaken, and makes recommendations to address the research problem set out in this dissertation.

1.8 Period covered by the research

This dissertation considers relevant law and literature published up to 1 December 2024.

[53] As mentioned in section 1.1 above, the 2022 Declaration also excludes NFTs.

CHAPTER 2: CRYPTO ASSET INDUSTRY AND KEY RISKS

2.1 Relevant terminology and types of crypto assets

Definitions of different types of crypto assets are still developing globally. This dissertation applies definitions used by the Intergovernmental Fintech Working Group ('IFWG'), an interdepartmental regulatory advisory group, and by MICAR, which do not differ substantially, save for instances where MICAR provides more detail to its definitions.

The categorisation of crypto assets varies slightly between the European Union ('EU') and South Africa, but generally follows the theme of different types of cryptocurrencies used for transactional purposes (similar to fiat currencies, used as an exchange of value and for payment purposes) and crypto-assets which are not typically used for transactional purposes (such as NFTs or utility tokens). South Africa and the EU have, in the past, also referred to cryptocurrencies as 'virtual' or 'digital' currency,[1] terms that have shifted to 'crypto assets' with different sub-types of crypto assets.

Electronic money is the term used to refer to the electronic representation of fiat currency held in a consumer's bank account.[2] In South Africa, electronic money is defined more specifically as a monetary value representing a claim on the issuer of the electronic money.[3] Electronic money under South African law must be issued by a bank, although non-bank service providers may act as system operators or payment service providers in relation to electronic money.[4] This means that these service providers may not directly issue electronic money or perform settlement and clearing services (verifying banking information and performing interbank

[1] See SARB 'Position Paper on Virtual Currencies' Position Paper No 02/2014, 3 December 2014, available at: https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-surveillance/general-public/Virtual%20Currencies%20Position%20Paper%20%20Final_02of2014.pdf [last accessed 18 January 2025] and the European Parliament Resolution of 26 May 2016 on virtual currencies (2016/2007(INI)), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016IP0228&from=IT [last accessed 18 January 2025].

[2] European Central Bank 'Electronic money' 15 December 2022, available at: https://www.ecb.europa.eu/stats/money_credit_banking/electronic_money/html/index.en.html [last accessed 27 March 2023].

[3] SARB 'Paper on Electronic Money 01/2009' Position Paper NPS 01/2009, November 2009, 7, available at: https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-surveillance/general-public/PP2009_01.pdf [last accessed 20 January 2025] 3.

[4] Ibid, 7.

transfers to settle transactions[5]), but may operate payments systems or act as providers between consumers and banks. Electronic money is relevant to this dissertation when considering the nature of stablecoins and whether they may be considered electronic money in South Africa, as will be discussed further in chapter 4.

The term 'fiat currency' refers to a central bank-backed currency, for example, rands or dollars. Stablecoins are cryptocurrencies whose values are pegged to fiat currencies, commodities or other crypto assets, also referred to as 'asset-referenced tokens' ('ARTs') or 'electronic money tokens' ('EMTs').[6] Central bank digital currencies ('CBDCs') are cryptocurrencies issued by central banks (reserve banks) which are designed to represent a digital value of the physical fiat currency in circulation by that particular central bank (eg an electronic rand).[7] NFTs are unique crypto assets of which no two are the same.[8] NFTs may be used to represent ownership of other assets, as a type of unique digital certificate, or otherwise may themselves be collected due to their uniqueness, for example, where NFTs contain a digital image, as a form of collectible digital art. The non-fungibility of NFTs means that NFTs cannot be exchanged for each other on a 1:1 basis, and therefore they are not convenient as a means of payment.[9] Utility tokens are crypto assets that act as a type of certificate in allowing the bearer access to a good or a service from the issuer of the token.[10] The regulation of cryptocurrencies must take a function over form approach given that some cryptocurrencies blur the lines between the categories mentioned above, depending on their use.[11] For example, NFTs may be used to signify that the bearer is entitled to a particular service (eg entrance to a concert or redemption

[5] Bank for International Settlements 'Payment, clearing and settlement systems in the CPSS countries' vol 2, 26 November 2012, 380.

[6] See the EU's definitions of these tokens in 'Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto Assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937' ('MICAR'), art 3. See also the IFWG Position Paper at note 10 below for the South African definition of stablecoins which reflects the European position, to an extent. This shall be discussed further in Chapters 3 and 4 below.

[7] V Lawack, BM Mupangavanhu & E Olivier 'The protection of consumers of retail central bank digital currency – Some considerations' (2023) 86(3) *Tydskrif vir Hedendaagse Romeins-Hollandse Reg* 285–306 at 288.

[8] C Kerrigan *Crypto and Digital Assets: Law and Regulation* (2024) 6.

[9] Ibid.

[10] Parma Bains, Arif Ismail, Fabiana Melo & Nobuyasu Sugimoto 'Regulating the crypto ecosystem: The case of unbacked crypto assets' *IMF*, 26 September 2022, available at: https://www.imf.org/en/Publications/fintech-notes/Issues/2022/09/26/Regulating-the-Crypto-Ecosystem-The-Case-of-Unbacked-Crypto assets-523715 [last accessed 5 February 2023].

[11] The IFWG's position paper notes that a flexible regulatory approach must be taken and the regulation of crypto assets must be applied on a practical case-by-case basis, according to the underlying activity of different types of crypto assets. See South African Reserve Bank (SARB) 'IFWG CAR Working Group Position Paper on Crypto Assets', available at: https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2021/IFWG-CAR-Working-Group-position-paper-on-crypto-assets [last accessed 27 February 2023].

of a voucher at a store), which brings this NFT within the scope of function of a utility token. This possibility of some crypto assets taking on a function of other types of crypto assets and the scope for fluidity in the nature of these assets is important for regulators to consider.

Economically, the term 'money' can refer to a means of payment bearing several functions, including a unit of exchange, store of value, or unit of account.[12] In the strict legal sense, 'money' refers to 'all chattels which are issued under the authority of the State of issue and which, in terms of that law, are denominated with reference to a unit of account and serve as a universal means of exchange in that State'.[13] In South Africa, only bank notes and coins fulfil this definition, and funds held with a banking institution and electronic money do not qualify as 'money', although the latter two perform the function of a medium of exchange.[14] Stablecoins bear many features of money in acting as a unit of exchange or a store of value; however, without recognition by the South African Reserve Bank ('SARB'), they remain without status as legal tender.[15]

Indeed, as with South Africa,[16] few jurisdictions globally recognise cryptocurrency as legal tender.[17] While not legal tender, cryptocurrencies can be accepted as a means of payment and in South Africa have been incorporated into at least one major retailer's accepted payment methods.[18] CBDCs should, in time, be considered legal tender by the state issuing them as

[12] Economist Carl Menger defines money in terms of several characteristics, foremost among which is acting as a medium of exchange through which goods and services can be purchased. See C Menger *Principles of Economics* (1976) 257–260.
[13] Robert Sharrock (ed) *The Law of Banking and Payment in South Africa* (2016) 197.
[14] Ibid 198.
[15] A form of payment which must be universally accepted in a given country. See K Sono 'Legal tender: A notion associated with payment' in International Monetary Fund *Current Developments in Monetary and Financial Law* vol 2 (20 October 2003).
[16] SARB 'IFWG Position Paper' (chapter 2 note 11) 12.
[17] For example, El Salvador recognised Bitcoin as legal tender in 2021 and has been the only nation to do so thus far. See BIS 'The crypto ecosystem: Key elements and risks' Report submitted to the G20 Finance Ministers and Central Bank Governors, July 2023, 5, available at: https://www.bis.org/publ/othp72.pdf [last accessed 24 December 2024].
[18] Btc Casey 'South African retail giant Pick-n-Pay now accepts bitcoin payments at all locations' 1 February 2023, available at: https://www.nasdaq.com/articles/south-african-retail-giant-pick-n-pay-now-accepts-bitcoin-payments-at-all-locations [last accessed 26 March 2023].

CBDCs are backed by the central bank of their issuing state and are part of that jurisdiction's monetary system.[19] CBDCs fall outside the scope of the research question in this dissertation.[20]

The crypto asset industry comprises several actors: issuers, miners, consumers, custodians, hedge funds, brokers and exchanges, to name a few. Exchanges perform an important function of providing, *inter alia*, exchange services to consumers. This means that they accept fiat currency payments in return for crypto assets. Exchanges may perform a number of other services but, in principle, the service of purchasing and selling crypto assets for fiat currency is their primary purpose.[21] The decline in the crypto market of 2022 highlighted the influence of exchanges on the market and their importance in the regulatory landscape.

2.2 Overview of blockchain technology and ecosystem

2.2.1 Introduction

It is beyond the scope of this dissertation to provide an in-depth technical review of the blockchain technology upon which stablecoin cryptocurrencies are built. A brief overview of blockchain technology and the ecosystem is provided to better understand the industry and the key risks of this space. The terms used below incorporate both local and internationally accepted definitions of blockchain and cryptocurrency.[22] 'Token' and 'cryptocurrency' are used interchangeably in this discussion, referring to a sub-type of crypto asset which is commonly used for transactional purposes. South African legal definitions relating to cryptocurrency are not comprehensive. The IFWG's position paper on crypto assets provides recommendations in this respect, acknowledging that terminology differs internationally. The position paper cites the United Kingdom's Financial Conduct Authority when recommending

[19] This assumes that, should the issuing central bank issue a CBDC, it would make the appropriate amendments to governing legislation to ensure that the recognition of CBDCs as legal tender is clear. In South Africa, this would entail an amendment to the South African Reserve Bank Act 90 of 1989.

[20] For more information on CBDCs, see A Milne & V Lawack 'Digital assets in payments and transaction banking' South African Reserve Bank Working Paper Series WP/24/2026, November 2024, available at: https://www.resbank.co.za/content/dam/sarb/publications/working-papers/2024/digital-assets-in-payments-and-transaction-banking.pdf [last accessed 18 January 2025].

[21] Board of the International Organization of Securities Commissions 'Policy Recommendations for Crypto and Digital Asset Markets Final Report FR11/23' 16 November 2023, 16, available at: https://www.iosco.org/library/pubdocs/pdf/IOSCOPD747.pdf [last accessed 15 January 2025].

[22] A number of definitions are sourced from Kerrigan (note 7), who in turn references the United Kingdom Law Commission's report of 2023 ('Digital Assets Report'). These definitions are largely consistent with the terms used in SARB 'IFWG Position Paper' (note 11).

that the term ‘crypto assets’ be adopted; this term encompasses various types of cryptocurrencies and other types of tokens issued on blockchains.[23]

2.2.2 Blockchain

Blockchain is the technological infrastructure upon which cryptocurrencies operate.[24] Blockchains record information, also referred to as maintaining a digital ledger of transactions.[25] Blockchains can be characterised as either private and permissioned, or public and permissionless. Private, permissioned blockchains require a central administrator in order to authorise new participants to participate in those blockchains.[26] Public, permissionless blockchains, by contrast, do not have a central administrator and anyone can download the relevant software and participate in the blockchain.[27] Public, permissionless blockchains are the type of blockchain with which consumers will most frequently interact, for example, Bitcoin, Ethereum, Solana and Cardano. This dissertation is limited to discussions of public, permissionless blockchain technology.

Blockchain transactions are referred to as being ‘immutable’ and ‘decentralised’, which means that transactions are irreversible and not processed in a central place or by a central administrator.[28] With every new entry of information recorded on a blockchain in timestamped data (or ‘blocks’ of transactions), the blockchain lengthens, cryptographically linking each new entry of information to the previous entry in a chain.[29] New entries of information, or ‘transactions’, must be verified by nodes of that blockchain (individual computers running software particular to that blockchain),[30] which do so by solving complex mathematical algorithms to reach the same conclusion, adding the transaction to the ledger when they do so.[31] Blockchains are also regarded as ‘distributed’ as full copies of the digital ledger that they

[23] SARB ‘IFWG Position Paper’ (chapter 2 note 11).
[24] Kerrigan (note 7) 1.
[25] While the terminology refers to transactions occurring on blockchains, not all these transactions are financial in nature. These transactions can include the creation of artwork or the recording of information about an event on the blockchain, such as a vote or security information. See Henry S Zaytoun ‘Cyber pickpockets: Blockchain, cryptocurrency, and the law of theft comments’ (2019) 97(2) *North Carolina Law Review* 395–431.
[26] Kerrigan (note 7) 2.
[27] Ibid.
[28] This describes the state of major blockchains with which consumers frequently interact eg the Bitcoin blockchain. See Kerrigan (note 7) 2.
[29] Ibid 1.
[30] Ibid 23–28.
[31] Ibid.

facilitate and are held across a peer-to-peer network of nodes.[32] As mentioned above, nodes refer to individual connections on the blockchain network.[33] Essentially, nodes are the computers interacting on the blockchain, running software particular to that blockchain.

While several crypto assets can operate on a single blockchain, depending on the technical specifications of that blockchain, a blockchain will typically have its own cryptocurrency or 'native token'. For example, the Ethereum blockchain is host to its native cryptocurrency Ether.

Holders of these native tokens – persons who can directly access these tokens via their private keys (as will be discussed further below) – are typically able to participate in the governance of that blockchain and can vote on decisions taken in relation thereto.[34] For example, holders may be able to vote on a technological upgrade to a blockchain or on raising the cost of transactions. This is not necessarily a democratic process, as voting power is determined by the number of native tokens held, which raises concerns about the potential manipulation of this infrastructure. Holders which have a large amount of native tokens will also have influence over market perception of the price of those tokens, and mass sales can indicate lowering demand (decreasing price) or lack of confidence in the particular blockchain, triggering other holders to also sell their tokens.[35] As was seen from the crypto crisis of 2022, a relatively small number of major token holders exist within the crypto ecosystem.[36] This has been cited by many regulators with concern as market integrity cannot be guaranteed without imposing controls on blockchain governance, something which impending regulation seeks to achieve.[37]

Transaction validation occurs by two primary mechanisms ('consensus mechanisms'), depending on the blockchain in question: 'proof of work' and 'proof of stake'. Proof of work

[32] Chris Berg, Sinclair Davidson & Jason Potts *Understanding the Blockchain Economy: An Introduction to Institutional Cryptoeconomics* (2019), available at: https://www.elgaronline.com/display/9781788974998/9781788974998.xml.

[33] Bastien Buchwalter *The Economic Value of Volatility in Traditional and Crypto Asset Markets* (PhD, ESSEC Business School (France), 2020).

[34] Firat Cengiz 'Blockchain Governance and Governance via Blockchain: Decentralized Utopia or Centralized Dystopia?' *Taylor & Francis Group*, Policy design and practice 6, no. 4 (2023), 451.

[35] For further discussion on the effect of holders of large amounts of cryptocurrencies ('whales') on the crypto asset market, see Alan Chernoff & Julapa Jagtiani 'Beneath the crypto currents: The hidden effect of crypto "whales"' Working Papers, Federal Reserve Bank Philadelphia, available at: https://ssrn.com/abstract=4924078 [last accessed 22 December 2024].

[36] Radhika Patel & Jonathan Rose 'A retrospective on the crypto runs of 2022' Federal Reserve Bank of Chicago, May 2023, available at: https://www.chicagofed.org/publications/chicago-fed-letter/2023/479 [last accessed 1 January 2024].

[37] Sira Aramonte et al 'DeFi risks and the decentralisation illusion' *BIS*, December 2021, available: https://www.bis.org/publ/qtrpdf/r_qt2112b.pdf [last accessed 11 February 2025] 21.

validation relies on computational power, with validators ('miners') competing for the right to validate transactions and earning a reward for their contribution to the network.[38] Bitcoin is an example of a prominent blockchain using this type of consensus mechanism.[39] Proof of work is energy-intensive, and relies upon no individual controlling more than 50 per cent of computational power in the network, because an actor with more power than this would be able to compromise the blockchain's security and effectiveness.[40] Proof of stake relies not on computational power, but instead on the amount of tokens that the validator 'stakes' (puts up as a form of collateral for the validator's participation as a validator) against validation of transactions, such that a portion of its stake may be forfeited if its actions are malicious.[41] Ethereum is an example of a blockchain using the proof of stake consensus mechanism.[42] The security and effectiveness of proof of stake blockchains relies on a decentralised network of validators, and security will be compromised if a single actor controls more than 50 per cent of network tokens.[43] This overview of two significant consensus mechanisms is provided to briefly cover this key distinction between types of blockchain networks and to draw attention to security concerns at the operational level of these networks.

Public, permissionless blockchains are unlikely to be located within a specific jurisdiction in a legal sense, if they are sufficiently decentralised and their control spread across the globe, as is usually the case. The majority of nodes of a blockchain needed to verify a blockchain transaction and administer its operations are, certainly for prominent blockchains, not located in a single country.[44] While an interesting discussion can be had regarding the liability of persons who might have majority control over a blockchain, this topic falls beyond the scope of this dissertation. For the purposes of this discussion, the important point is that blockchains are not controlled or operated in a single place or by a single person.

[38] Igor Makarov & Antoinette Schoar 'Cryptocurrencies and decentralised finance (DeFi)' Bank of International Settlements, December 2022, 6.
[39] Ibid.
[40] Ibid.
[41] Ibid 9.
[42] Ibid.
[43] Ibid.
[44] See the discussion in *In re Tezos Sec. Litig.*, Case No. 17-cv-06779-RS (N.D. Cal. May. 25, 2018), a US case which considered the location of nodes when assessing jurisdictional questions, and Web3Labs 'Blockchain explained' for a description of Ethereum node distribution as an example, available at: https://www.web3labs.com/blockchain-explained-what-are-blockchain-nodes [last accessed 18 January 2025].

2.2.3 Access to cryptocurrencies

Crypto assets are accessed by cryptographically generated codes, or 'private keys'.[45] The function of private keys can be likened to a password to a digital wallet, allowing users to access and transact with the contents therein.[46] Public keys are the cryptographic codes used in tandem with private keys to transact using cryptocurrency. Public keys are publicly viewable, acting similarly to an account number.[47] Cryptocurrency users will not be able to transact with the funds associated with a public key, unless they have the private key associated with the public key, which can be used to decrypt the transaction and access the cryptocurrency therein.[48]

Consumers can interact with cryptocurrencies in a few ways. Foremost among these are through exchanges which offer exchange services to customers, allowing them to purchase cryptocurrencies in exchange for fiat currency, and to hold those cryptocurrencies through the exchange's digital platform. These exchanges will display the balance of crypto assets owing to each customer in a digital wallet. Typically, customers of exchanges will not access the private keys to the cryptocurrency displaying in their digital wallet. Instead, customers will submit instructions to buy and sell cryptocurrency through that exchange's user interface, which will be executed by the exchange using private keys to that cryptocurrency.

The control and security of crypto assets is an important consideration for regulators when assessing whether sufficient regulation is in place to protect consumers; the irreversible nature of crypto transactions, paired with the absolute loss of control of a wallet holder's funds should they lose their private keys, is problematic for consumer protection and limits remedies available to consumers.

2.3 Role players in the crypto industry

There are many role players in the crypto industry, including issuers, exchanges, custodians, developers, and, of course, consumers. Crypto asset service providers ('CASPs') generally refer to a host of different service providers to the industry which may provide intermediary

[45] For a detailed discussion on private keys, see A Hinkes 'Throw away the key, or the key holder? Coercive contempt for lost or forgotten cryptocurrency private keys, or obstinate holders' (2018) 16(4) *Northwestern Journal of Technology and Intellectual Property* 225–265.
[46] Ibid.
[47] Ibid.
[48] Kerrigan (note 7) 20.

and advisory services in relation to crypto assets. In MICAR, CASPs are defined as 'any person whose occupation or business is the provision of one or more crypto-asset services to third parties on a professional basis'.[49] Crypto asset services, in turn, are defined in a list of services or activities relating to crypto assets, including custody services, exchange services, providing advice on crypto assets, managing crypto assets on behalf of a third party, and placing orders for crypto assets.[50]

The 'issuer' of a cryptocurrency is a person who creates the cryptocurrency on its respective blockchain.[51] Cryptocurrency issuers will typically sell cryptocurrency through an initial coin offering ('ICO'), which will open the token to the market and allow it to be traded and sold.[52] Issuers may keep a reserve of other assets to support the value of the cryptocurrency that they issue and to ensure that consumers are able to sell this cryptocurrency for fiat currency when they choose to do so, supporting the liquidity of that cryptocurrency and its market confidence. This function of keeping reserves can also be fulfilled by stablecoin CASPs, and can possibly be considered a liquidity requirement in order for them to conduct business and meet redemption requests by customers redeeming stablecoins for fiat currencies.

A crypto asset exchange is a marketplace which facilitates the buying and selling of crypto assets and accepts fiat currency payments.[53] Exchanges frequently offer a custody solution to their customers in the form of a digital crypto asset wallet which displays their balances. In the past, exchanges were not explicitly subject to regulations relating to their conduct in providing this services, until fairly recent amendments to anti-money laundering ('AML') regulations internationally and growing tailored rules in various jurisdictions, as will be detailed further below.[54]

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[49] 'Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto Assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937' ('MICAR'), art 3, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R1114.

[50] MICAR, art 3.

[51] A person who 'issues' crypto assets, per MICAR art 3.

[52] Shaanan Cohney, David A Hoffman, Jeremy Sklaroff & David Wishnick 'Coin-operated capitalism' (2019) 119 *Columbia Law Review* 591.

[53] Board of the International Organization Of Securities Commissions 'Policy Recommendations for Crypto and Digital Asset Markets Final Report FR11/23' 16 November 2023, 16, available at: https://www.iosco.org/library/pubdocs/pdf/IOSCOPD747.pdf [last accessed 15 January 2025].

[54] For further discussion on recent amendments to the South African Financial Intelligence Centre Act 36 of 2001, see PT Ncube & R Kabwe 'The regulation of cryptocurrencies to combat money laundering in South African banking institutions' (2023) *De Jure Law Journal* 363.

Smart contracts are another mechanism whereby consumers may access and interact with cryptocurrencies. These are self-executing programs which automatically execute an action on receipt of a predefined input.[55] Users can send cryptocurrency to a smart contract public key, based on the expected output for that smart contract. For example, a lending protocol smart contract may accept cryptocurrency, lend it out to other users, and return the sum plus additional funds to the lender on the occurrence of a certain condition. Smart contracts are frequently used in decentralised finance ('DeFi') activities, which are peer-to-peer applications providing financial services on blockchains.[56]

Custodians are charged with safely storing clients' crypto assets, which is typically done by holding the private keys to those assets.[57] Custodial services are frequently offered by CASPs offering multiple services. Previously in South Africa, it was not an explicitly prohibited practice for CASPs to use cryptocurrency held in custody for their own trading activities, without specific disclosure to the customer. However, with the 2022 Declaration,[58] such a practice by non-bank CASPs is prohibited because financial products may only be handled in a manner consistent with the mandate of the CASP.[59]

Developers fulfil an important role in designing and implementing a blockchain. They are usually employed by an organisation which houses the particular blockchain on which they are engaged to work. Transparency of development milestones and the responsibility that these developers and issuers of crypto assets have towards consumers are issues which remain untested in jurisprudence. While the question of whether developers owe fiduciary duties to blockchain consumers has been raised in a recent case in the English courts,[60] this issue was not codified in MICAR or addressed in consultation papers on crypto assets in the United

[55] Kerrigan (note 7) 6.
[56] Ibid 9.
[57] Nipun Srivastava & Peter Smith 'A market overview of custody for digital assets: Digital Custodian White Paper', available at: https://www2.deloitte.com/content/dam/Deloitte/xe/Documents/finance/me_Digital-Custodian-Whitepaper.pdf.
[58] 'Declaration of a Crypto Asset as a Financial Product under the Financial Advisory and Intermediary Services Act' *Government Gazette* No. 47334 of 19 October 2022, available at: https://www.gov.za/sites/default/files/gcis_document/202210/47334gen1350.pdf [last accessed 12 April 2023].
[59] See BN 80 of 8 August 2003: General Code of Conduct for Authorised Financial Services Providers and Representatives (as amended), 10, for the code of conduct applicable to FSPs in relation to handling client funds.
[60] *Tulip Trading Limited (A Seychelles Company) v Bitcoin Association For BSV & Ors* [2023] EWCA Civ 83.

Kingdom at the time of writing.[61] This issue, while not irrelevant, is not addressed in this dissertation as individual developers are not considered CASPs under MICAR.

2.4 Selected case studies from the 2022 crypto market decline

Having provided an overview of the mechanics and layout of the crypto asset industry, the dissertation will now examine a number of cases from the 2022 crypto asset industry decline in order to highlight some of the risks posed by this industry which regulators have observed and sought to address.

These risks, specifically pertaining to stablecoins but applicable to other crypto assets as well, have been highlighted by Lawack and include the stabilisation of the crypto asset by the issuer, the backing mechanism linking the asset's value to reserves, the governance structure of the issuer or relevant entity, the issuing mechanism, the redemption mechanism, consumer sophistication, and CASPs.[62]

Many instances of CASP and cryptocurrency failings cumulatively created a general market decline or 'crypto winter' in 2022. Three prominent contributors to this decline were Terra/Luna, Celsius and FTX.[63]

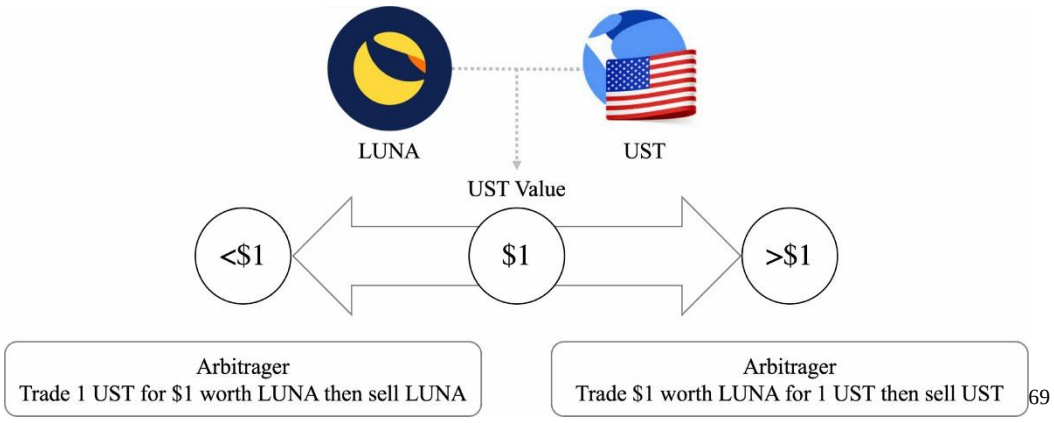
2.4.1 Terra/Luna

TerraUSD ('USTC') is an algorithmic cryptocurrency which was issued by Terraform Labs, a Singaporean technology startup which developed the Terra blockchain. USTC was designed as a stablecoin, intended to keep a 1:1 peg to the United States ('US') dollar.[64] Algorithmic cryptocurrencies depend on smart contracts[65] to maintain their peg, rather than on a reserve of

[61] HM Treasury 'Future financial services regulatory regime for cryptoassets' *GOV.UK*, 1 February 2023, available at: https://www.gov.uk/government/consultations/future-financial-services-regulatory-regime-for-cryptoassets [last accessed 13 November 2023].
[62] V Lawack *Fintech Law and Regulation: An African Perspective* (2023) 315.
[63] Anthony Clarke '7 biggest crypto collapses of 2022 the industry would like to forget' *Cointelegraph*, 26 December 2022, available at: https://cointelegraph.com/news/7-biggest-crypto-collapses-of-2022-the-industry-would-like-to-forget [last accessed 28 May 2023].
[64]Anthony Cuthbertson 'Crypto crash: What happened to Terra LUNA and UST and will they ever recover?' The Independent, 18 May 2022, available at: https://www.independent.co.uk/tech/terra-luna-ust-crypto-price-recovery-b2080241.html [last accessed 22 April 2023].
[65] Smart contracts are software which run on blockchain that execute on receipt of certain predefined inputs, as will be explained further below. See Nina Bambysheva & Steven Ehrlich 'What are algorithmic stablecoins?' *Forbes*, 10 March 2023, available at: https://www.forbes.com/sites/digital-assets/article/what-are-algorithmic-stablecoins/ [last accessed 22 April 2023].

collateral assets.[66] This can vary between cryptocurrencies and some may use a combination of smart contracts and collateral to maintain a peg. Collateral supports a peg by ensuring that the token can always be redeemed for the equivalent currency to which it is pegged, much like a bank honouring withdrawals. USTC maintained its peg through its dependence on its sister token, LUNA. LUNA is a token native to the Terra blockchain whose role was to keep USTC stable to the US dollar.[67] This was achieved by an arbitrage system where USTC and LUNA were exchanged for one another whenever the value of one was higher, creating demand for the more expensive coin which was bought with the less expensive coin.

The image below demonstrates the mechanism by which LUNA and USTC were exchanged to maintain USTC's peg to the US dollar.[68] When the price of USTC fluctuated above USD, arbitragers (those who bought and sold crypto tokens to take advantage of the price difference) could trade USD 1 of LUNA for 1 USTC and then sell their USTC. When the price of USTC fell below USD 1, arbitragers could instead sell 1 USTC for USD 1 of LUNA, which could then be sold. This certainty in the price of the closed market of LUNA for USTC increased and decreased demand for USTC as needed to maintain its value at USD 1 per 1 USTC.



[69]

Figure 1

Source: Seungju Lee, Jaewook Lee & Yunyoung Lee 'Dissecting the Terra-LUNA crash: Evidence from the spillover effect and information flow' (2023) 53 *Finance Research Letters* 103590

[66] This collateral would usually include a reserve of the fiat currency to which the stablecoin pegs its value.
[67] Seungju Lee, Jaewook Lee & Yunyoung Lee 'Dissecting the Terra-LUNA crash: Evidence from the spillover effect and information flow' (2023) 53 *Finance Research Letters* 103590.
[68] Ibid.
[69] Ibid.

The Terra ecosystem was overseen by the Luna Foundation Guard ('LFG'), a non-profit South Korean organisation.[70] The role of the LFG was to oversee development of the Terra blockchain and mitigate risks of volatility of USTC by stockpiling reserves (ie maintaining a steady amount of reserves sufficient to honour redemption requests by USTC users wishing to sell their USTC).[71] At one point, the LFG held USD 3.5 million worth of Bitcoin, ostensibly to support the liquidity of USTC should high volumes of trading demand it, so that USTC could be bought and sold without cash issues.

In 2022 USTC and LUNA experienced a catastrophic shock which destabilised both cryptocurrencies, causing USTC to lose its peg to the dollar, caused by a sudden destabilisation of a smart contract application known as the Anchor protocol ('Anchor'). This, in turn, lead to panic in the market as consumers quickly cut their losses and sold their USTC. As the value of USTC spiralled out of control, the effects were felt throughout the market, influencing the stability of crypto exchanges and other cryptocurrencies – particularly Bitcoin, which flooded the market when sold by the LFG, driving its price down.

The catastrophic shock referred to relates to the sudden withdrawal and sale of USTC from Anchor. Anchor offered high rewards to users who made long-term transfers of USTC to the smart contract. Anchor held almost 75 per cent of all USTC in circulation, which made the price of USTC dependent on the functioning of this application.[72] Rewards were generated by lending cryptocurrency from Anchor to other users, at a premium.

In early May 2022, almost USD 2 billion worth of USTC was withdrawn from Anchor.[73] This rapid decrease in demand for USTC caused its price to slip slightly off the USD peg, which meant that LUNA was now worth more than USTC. Arbitragers took advantage of this price difference, quickly buying LUNA with their USTC, causing the demand for USTC to drop.[74] The gap between the price of USTC and LUNA widened to a degree where the balance could

[70] Currently, the Terra blockchain is governed by the participation of its users, UST token holders, who are entitled to vote on governance proposals. See 'About Terra', available at: https://docs.terra.money/learn/protocol/ [last accessed 25 April 2023].
[71] Krisztian Sandor & Ekin Genç 'The fall of Terra: A timeline of the meteoric rise and crash of UST and LUNA' *Coindesk*, 1 June 2022, available at: https://www.coindesk.com/learn/the-fall-of-terra-a-timeline-of-the-meteoric-rise-and-crash-of-ust-and-luna/ [last accessed 22 April 2023].
[72] Antonio Briola et al 'Anatomy of a stablecoin's failure: The Terra-Luna case' (2023) 51 Finance Research Letters 103358, 2.
[73] Megan Dyamond 'The crypto crash of 2022' 15 July 2022, available at: https://www.dunster.co.za/blog/crypto-crash-2022/ [last accessed 5 February 2023].
[74] Antonio Briola et al 'Anatomy of a stablecoin's failure: The Terra-Luna case' (2023) 51 Finance Research Letters 103358, 2.

not be regained without intervention. The LFG intervened by purchasing USTC in an attempt to increase its price, using its Bitcoin reserves to do so.[75] This resulted in excess LUNA flooding the market.[76]

While a certain amount of blame can be laid at Terraform Labs' door for the use of an algorithmic peg, supported by Bitcoin reserves (a notoriously volatile cryptocurrency itself), the sudden withdrawal of almost USD 2 billion from Anchor was the catalyst for USTC's collapse. This withdrawal can be traced to a small number of wallets.[77] While analysts do not blame one attacker or hacker for the collapse, they do acknowledge the significant role that a handful of entities played in destabilising Terra due to their own investment decisions.[78] The unstable algorithmic peg, the lack of reserves, and the lack of withdrawal limits and oversight are three key issues that regulators can draw from the Terra collapse. What followed later in subsequent bankruptcy filings by CASPs demonstrated to regulators that the interconnectedness of the crypto market meant that Terra's collapse would have far-reaching consequences in 2022.

In April 2024, Terraform founder Do Kwon was found guilty by a US court of misleading investors about the stability of Terra by making continued public statements about the token's ability to stabilise itself.[79] At the time of Terra's destabilisation, there were limited regulations regarding risk disclosures by issuers and CASPs providing intermediary services in relation to Terra and Luna. These actors were not required under South African or European law to inform consumers about how Terra was pegged to the dollar, how reserves were managed, what risks were applicable to Terra's operations, or how crises would be managed.

2.4.2 Celsius Network LLC

Celsius Network LLC ('Celsius') is a CASP currently in liquidation proceedings in the US, which previously offered exchange services across the globe. Celsius maintained offices in five

[75] Cuthbertson (note 61).
[76] Ibid.
[77] Aurelie Barthere et al 'On-chain forensics: Demystifying TerraUSD de-peg' *Nansen*, 27 May 2022, available at: https://www.nansen.ai/research/on-chain-forensics-demystifying-terrausd-de-peg [last accessed 5 February 2023].
[78] Ibid.
[79] Jody Godoy 'Terraform Labs and founder Do Kwon found liable in US civil fraud trial' *Reuters*, 5 April 2024, available at: https://www.reuters.com/legal/terraform-labs-make-final-pitch-jury-civil-fraud-trial-wraps-2024-04-05/.

countries: the US, the United Kingdom ('UK'), Israel, Cyprus and Serbia.[80] However, while physical operations were limited to these locations, the nature of Celsius' operations was that its services were essentially offered to any customer globally – with exclusions pertaining to sanctioned countries and where regulation did not permit the offering of those services. This meant that, barring a few countries, Celsius was available to a vast number of potential customers. In June 2022, approximately a month after the collapse of USTC, Celsius paused all customer withdrawals and soon filed for bankruptcy in July 2022, citing 'extreme market conditions'.[81] These extreme market conditions included the rapid decline in the price of Bitcoin, which, as mentioned above, was partly due to the effects of the Terra crash.[82] Celsius held significant amounts of USTC which rapidly lost their value after the Terra crash, causing the company's value to quickly decrease. Celsius is a prime example of CASP bankruptcy and the limited remedies available to consumers under current regulations.

Celsius' primary service offerings were its exchange services, but it also provided crypto investment products offering high yields (up to 17 per cent) and loans to customers in cryptocurrency.[83] Customers of Celsius would typically register an account and either transfer existing cryptocurrency to this account or deposit fiat currency to purchase cryptocurrency through Celsius. These transactions are referred to as 'cryptocurrency deposits' for the purposes of this section. Customers could then use their crypto account balance to invest in Celsius' products, take out additional crypto loans, pool their funds (in order to stake and earn rewards), trade or make payments.

Celsius' terms and conditions of service are clear in disclaiming all liability for the volatility of crypto assets, stating in particular that:

> You grant Celsius … all right and title to such Eligible Digital Assets, including ownership rights, and the right, without further notice to you, to hold such Digital Assets in Celsius' own Virtual Wallet or elsewhere, and to pledge, re-pledge, hypothecate, rehypothecate, sell, lend, or otherwise transfer or use any amount of such Digital Assets, separately or together with other

[80] Celsius 'About us', available at: https://celsius.network/about-us [last accessed 26 November 2023].
[81] Wayne Duggan 'Celsius crypto meltdown: A crypto lender in crisis' *Forbes*, 4 October 2022, available at: https://www.forbes.com/advisor/investing/cryptocurrency/what-is-celsius/ [last accessed 28 April 2023].
[82] The price of Bitcoin fell primarily due to a combination of decreased confidence in the crypto market and rising interest rates in 2022. Confidence in the crypto market was directly linked to the crash of UST, along with issues of rising crime in the space. See Hannah Lang et al 'The crypto market bears the scars of FTX's collapse' *Reuters*, 3 October 2023, available at: https://www.reuters.com/technology/crypto-market-still-bears-scars-ftxs-collapse-2023-10-03/ [last accessed 20 November 2023].
[83] Duggan (note 77).

> property, with all attendant rights of ownership, and for any period of time, and without retaining in Celsius' possession and/or control a like amount of Digital Assets or any other monies or assets, and to use or invest such Digital Assets in Celsius' full discretion.[84]

These terms make it clear that the ownership of cryptocurrency deposits vests with Celsius and that customers' rights are limited to a claim against Celsius for the value of their deposits. While this is not dissimilar to traditional banking, traditional banking has safeguards in place to ensure the security of customer deposits – such as prudential oversight, a mandatory reserves threshold, operational safeguards, and, in many jurisdictions, deposit insurance.[85] It is evident that Celsius' activities appear to have strayed into the 'business of a bank' (by South African standards) in accepting deposits from the public with the promise or repayment of the same, or a particular portion of the deposit, in granting credit and interest and in advertising these services.[86]

Market conditions after Terra's collapse saw consumers fear for the value of their cryptocurrency, generating pressure on liquidity as consumers withdrew their crypto assets from CASPs industry-wide. This affected Celsius' position in a number of staked products[87] and it was unable to claw back value from these staked products to match customer deposits. This led customers to panic and started a wave of mass withdrawals from Celsius accounts, which Celsius (by its own admission) would have been unable to honour had it not frozen customer withdrawals in June 2022.[88]

Celsius filed for Chapter 11 bankruptcy[89] in July 2022. Celsius' bankruptcy filing shows a balance sheet deficit of almost USD 1.2 billion. Over USD 300 million in Celsius' outstanding loans to customers are considered 'bad debt' and will be written off. [90] Additionally, Celsius' CEO Alex Mashinsky made certain representations to the public regarding Celsius' financial health, almost up until the day on which customer withdrawals were made. In January 2023

[84] 'Terms of use', last updated 29 September 2022, available at: https://celsius.network/terms-of-use [last accessed 28 April 2023].
[85] Deposit insurance recently came into effect in South Africa in 2024; for more information, see A Matasane 'Appraising the regulatory framework of the new South African Deposit Insurance System' (2024) 57 *De Jure* 24–45.
[86] Banks Act 94 of 1990, s 1.
[87] These are crypto assets placed in a pool and used to validate network transactions in exchange for a return; they include staked Ether and the Anchor Protocol.
[88] Duggan (note 77).
[89] This is akin to business rescue proceedings in South Africa, where some restructuring is attempted in order to salvage the business.
[90] Dyamond (note 13).

Mashinsky was sued in a civil suit by the Attorney-General for New York, who alleged that Mashinksy had defrauded investors by intentionally misleading them.[91]

On 11 June (one day before customer withdrawals were frozen on 12 June) Mashinsky tweeted a response to a tweet alleging difficulties with Celsius withdrawals:

> Mike do you know even one person who has a problem withdrawing from Celsius?, why spread FUD [fear, uncertainty, and doubt] and misinformation If you are paid for this then let everyone know you are picking sides otherwise our job is to fight Tradfi together ...
>
> — Alex Mashinsky (@Mashinsky) June 11, 2022[92]

Mashinksy also tweeted that Celsius had limited exposure to USTC. This was not true, as analytics firm Nansen AI demonstrated;[93] in fact, Celsius' wallet was among the seven wallets identified as the catalysts for USTC's de-pegging, having made the largest withdrawals from Anchor within a short period of time.

These statements highlight that, in addition to not being registered as a bank or financial services provider, Celsius was not subject to regulation regarding the advertising of its products to clients. While Mashinsky's actions may be considered a breach of fiduciary duties, there was no specific regulation (in the US or the EU at the time)[94] dealing with the advertising of crypto assets during times of financial distress.

Celsius' primary difficulty was that it could not sustain customer withdrawals in times of market volatility when consumer confidence in crypto assets was low. It did not have the reserves or institutional safeguards in place to keep up with customer withdrawals, further depressing market confidence and contributing to the downward spiral of the industry in 2022.

[91] Jonathan Stempel 'New York sues Celsius Network founder Mashinsky, alleges crypto fraud' *Reuters*, 6 January 2023, available at: https://www.reuters.com/technology/new-york-sues-celsius-network-founder-mashinsky-alleges-fraud-2023-01-05/ [last accessed 6 February 2023].

[92] Sander Lutz 'Embattled Celsius CEO Alex Mashinsky breaks 3-day silence' *Decrypt*, 16 June 2022, available at: https://decrypt.co/103035/embattled-celsius-ceo-alex-mashinsky-breaks-3-day-silence/ [last accessed 28 April 2023].

[93] Barthere et al (note 73).

[94] These jurisdictions had at that point dealt with several issues on a case-by-case basis, or in early guidance notes related to the marketing of crypto assets, but had yet to adopt a formalised framework for dealing with the matter.

2.4.3 FTX Trading Limited

FTX Trading Limited ('FTX') was one of the more sensational cautionary tales of the crypto asset industry in 2022. FTX is a CASP which offered exchange services prior to filing for bankruptcy in the US. FTX was incorporated in 2019 by Sam Bankman-Fried ('SBF'), a 30-year-old Massachusetts Institute of Technology graduate with some success in crypto-based private equity behind him.[95] SBF's track record and success in the crypto space prior to FTX was in the founding of Alameda Research LLC ('Alameda'), a crypto hedge fund based in Hong Kong.[96] In November 2022 FTX faced major liquidity issues and filed for bankruptcy, an outcome which Alameda was instrumental in creating. The fall of FTX can be attributed to a combination of factors: poor corporate governance,[97] insufficient auditing and poor accounting practices,[98] insufficient reserves and insufficient market confidence.[99] Charges of fraud were brought against SBF and a number of his colleagues in Alameda and FTX. SBF was found guilty of seven counts of fraud in 2023.[100]

On 2 November 2022 Coindesk published an article which noted that Alameda and FTX were unusually close, even for companies within the same group.[101] Like many other crypto exchanges, FTX has a native token, 'FTT'. Alameda's primary asset was stated to be the FTT token; this was alarming for investors as the value of the hedge fund rested primarily on a volatile asset invented by Alameda's sister company.[102] Four days after the release of this article on 6 November 2022, Binance (the world's largest crypto exchange and a major industry

[95] Q.ai Group 'What happened to crypto giant FTX? A detailed summary of what we actually know so far' *Forbes*, 13 December 2022, available at: https://www.forbes.com/sites/qai/2022/12/13/what-happened-to-crypto-giant-ftx-a-detailed-summary-of-what-we-actually-know-here/ [last accessed 1 May 2023].
[96] Ibid.
[97] McCullough Robertson 'The FTX collapse: The governance red flags top-tier investors ignored' *Lexology*, 3 September 2023, available at: https://www.lexology.com/library/detail.aspx?g=1a762b93-0357-4741-9160-d20d1549599e [last accessed 28 November 2023].
[98] Alex Hern & Dan Milmo 'What do we know so far about collapse of crypto exchange FTX?' *The Guardian*, 18 November 2022, available at: https://www.theguardian.com/technology/2022/nov/18/how-did-crypto-firm-ftx-collapse.
[99] Telis Demos 'Crypto has reinvented bank runs' *WSJ*, 9 November 2022, available at: https://www.wsj.com/articles/crypto-has-reinvented-bank-runs-11668019310 [last accessed 28 November 2023].
[100] David Yaffe-Bellany, Matthew Goldstein & J Edward Moreno 'Sam Bankman-Fried is found guilty of 7 counts of fraud and conspiracy' *New York Times*, 2 November 2023, available at: https://www.nytimes.com/2023/11/02/technology/sam-bankman-fried-fraud-trial-ftx.html.
[101] Ian Allison 'Divisions in Sam Bankman-Fried's crypto empire blur on his trading titan Alameda's balance sheet' *Coindesk*, 2 November 2022, available at: https://www.coindesk.com/business/2022/11/02/divisions-in-sam-bankman-frieds-crypto-empire-blur-on-his-trading-titan-alamedas-balance-sheet/ [last accessed 2 May 2023].
[102] Yesha Yadav & Robert J Stark 'The Bankruptcy Court as Crypto Market Regulator' 2024, *Southern California law review* 96, no. 6, 1511.

leader[103]) liquidated its FTT assets, with CEO Changpeng Zhao citing recent revelations as the reason for this decision.[104] This shook consumer confidence in FTX and led to mass withdrawals, creating liquidity demands that FTX could not meet.[105] Shortly thereafter, on 8 November, Binance announced that negotiations were underway to purchase the distressed FTX. Negotiations fell through due to allegations of fraud and the mishandling of customer funds made against FTX, and FTX filed for bankruptcy on 11 November 2022.

At its peak, FTX was the second-largest crypto exchange in the world and was worth USD 32 billion.[106] The charges laid against FTX executives primarily related to the mishandling of customer funds and diverting these funds from FTX to Alameda without disclosure to FTX customers.[107] It became clear that Alameda received special treatment from FTX on the FTX exchange platform, with access to a 'virtually unlimited line of credit' funded by the exchange's retail customers.[108] This line of credit meant that FTX was issuing substantial loans to Alameda (primarily consisting of its retail customers' funds) without adequate security or disclosure to customers.[109] Alameda, in turn, would invest these borrowings in long positions,[110] illiquid FTT,[111] investments in other crypto funds and venture capital.[112] It is likely that Alameda's holdings suffered losses after the USTC debacle, as this market shock was

[103] Tom Wilson & Hannah Lang 'Factbox: Binance, world's top crypto exchange, at the center of US investigations' *Reuters*, 27 March 2023, available at: https://www.reuters.com/technology/binance-worlds-top-crypto-exchange-center-us-investigations-2023-03-27/ [last accessed 20 January 2025].

[104] Jesse Coughlan 'Binance to liquidate its entire FTX Token holdings after recent revelations' 7 November 2022, available at: https://cointelegraph.com/news/binance-to-liquidate-its-entire-ftx-token-holdings-after-recent-revelations [last accessed 5 February 2025].

[105] Ibid. FTX was faced with USD 6 billion withdrawal requests in the space of 72 hours and simply did not have the cash on hand to honour these requests.

[106] Mark Humphery-Jenner 'Why the collapse of FTX is worse than Enron' *UNSW Sites*, 24 November 2022, available at: https://www.unsw.edu.au/news/2022/11/why-the-collapse-of-ftx-is-worse-than-enron [last accessed 2 May 2023].

[107] US Securities and Exchange Commission 'SEC charges Samuel Bankman-Fried with defrauding investors in crypto asset trading platform FTX' *SEC.Gov*, 13 December 2022, available at: https://www.sec.gov/news/press-release/2022-219 [last accessed 2 May 2023].

[108] Ibid.

[109] Alameda, in some instances, allegedly put up FTT as security for these loans. This closing of the ecosystem, with Alameda borrowing substantial amounts and securing these loans with FTT (which was then held by FTX in various locked and unlocked positions), jeopardised the exchange's liquidity. See Paige Tortorelli & Kate Rooney 'Sam Bankman-Fried's Alameda quietly used FTX customer funds for trading, say sources' *CNBC*, 13 November 2022, available at: https://www.cnbc.com/2022/11/13/sam-bankman-frieds-alameda-quietly-used-ftx-customer-funds-without-raising-alarm-bells-say-sources.html [last accessed 3 May 2023].

[110] This refers to investing funds in long-term pools at a particular rate, 'betting' that the price will go up after the period elapses.

[111] FTT which was staked in long-term pools.

[112] Jeff Kauflin 'How did Sam Bankman-Fried's Alameda research lose so much money?' *Forbes*, 19 November 2022, available at: https://www.forbes.com/sites/jeffkauflin/2022/11/19/how-did-sam-bankman-frieds-alameda-research-lose-so-much-money/ [last accessed 3 May 2023].

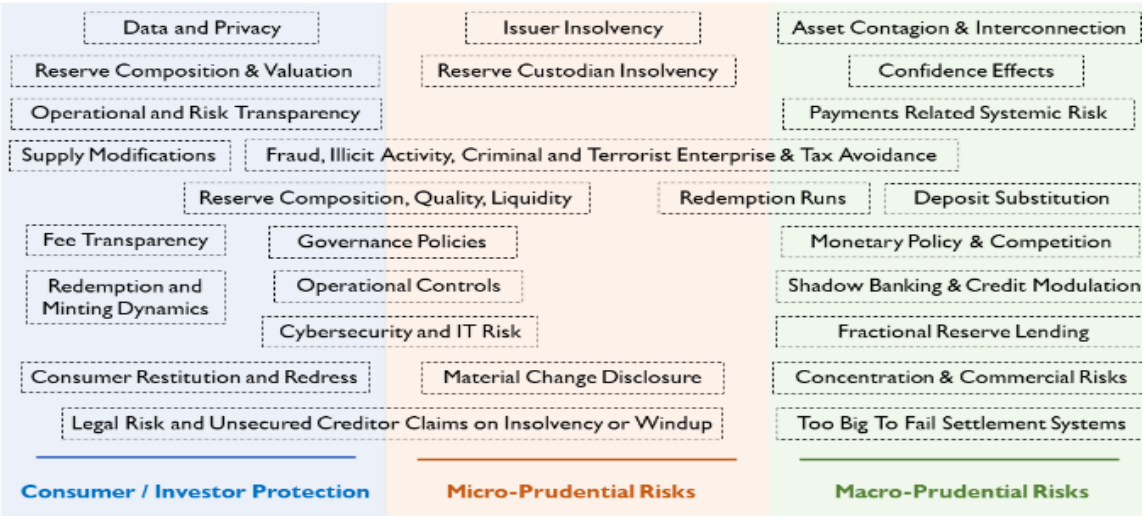
interconnected with long-term crypto pools.[113] FTX and Alameda also purchased a number of luxury homes for their executives in their personal names and funded their lavish lifestyles. The interconnectedness of Alameda and FTX did not stop at commingling FTX customer funds, limitless credit or shoddy bookkeeping; the executives of both entities lived together at times, with Alameda CEO Caroline Ellison and SBF having a romantic relationship at one stage.[114]

Commentators have described FTX as a complete failure of corporate controls and have stated that better governance may have prevented its bankruptcy.[115] FTX and Alameda were controlled by young and relatively inexperienced executives. Furthermore, they were not regulated by any stringent reporting standards which may have applied (particularly to FTX) if they had offered traditional finance products.

These cases are used to outline the various risks faced by the crypto asset industry. These risks are contextualised below within a macro-economic perspective which regulators should consider when imposing controls on the industry.

2.5 Identifying threats to the global economy

In his 2021 paper, Dr Ryan Clements provides a helpful chart, reproduced below, identifying the risks of stablecoins to the financial system on three levels: risks to individual consumers,



[113] This refers to long-term staking pools wherein users could pool their crypto assets in order to validate transactions on a blockchain. After the collapse of UST, the entire crypto industry contracted with customers seeking to unwind their positions. This included positions in staked (long-term) crypto assets whose price was adversely affected as a result.

[114] Gerrit de Vynck 'Caroline Ellison wanted to make a difference. Now she's facing prison' *Washington Post*, 2 January 2023, available at: https://www.washingtonpost.com/business/2023/01/02/caroline-ellison-ftx/.

[115] Mark Humphrey-Jenner (note 102).

micro-prudential risks (firm-level risks) and macro-prudential risks (system-wide risks).[116] This chart divides stablecoin risks into three categories: consumer or investor protection (risks to the end-customer); micro-prudential risks (risks on a firm level); and macro-prudential risks (risks to the economy at large).

While many overlapping risks are included on this chart, only a few core risks will be discussed below; these represent the greatest threats that regulators need to address when considering whether stablecoin CASPs should be regulated as deposit-taking institutions. These risks have received widespread attention in the wake of the 2022 crypto winter and regulators are now expected to protect consumers from the dangers that the crypto market presents. These core risks have been identified from the many dangers in the crypto market as they are the most public and perhaps the most obvious issues that regulators must consider before dealing with other, lesser, risks.

2.5.1 Lack of consumer and investor protection

In the wake of the 2022 crypto winter, many customers of bankrupt CASPs were left with minimal recourse or opportunity to recover their funds. Customers who held accounts with Celsius or FTX, for example, found themselves with a small unsecured claim on the bankrupt entity – meaning that they would be outranked by secured and preferential creditors before seeing any repayment of their lost funds, which repayment would be a small percentage of their original investment, at best. Should a repeat of the 2022 crypto winter occur on a grander scale (in the event that crypto becomes more widely used), there is a distinct possibility that there will be spillover effects – economies may even contract should a large consumer base find itself short of funds. Beyond the individual harm to consumers, the macro-economic consequences must be considered by the international regulatory community.

2.5.2 Micro-prudential risks

Micro-prudential risks posed by stablecoins occur at an immediate institutional level and encompass issues such as mismanagement, fraud, minimal or no reserve maintenance, poor corporate governance and inadequate operational standards, many of which are illustrated in

[116] Ryan Clements ‘Defining the regulatory perimeter for stablecoins in Canada’ (2022), available at: https://papers.ssrn.com/abstract=4134010 [last accessed 21 May 2023].

the case studies above.[117] Micro-prudential risks are managed at enterprise level through internal compliance, controls and oversight.

Many of these risks were well-illustrated by crashes in the 2022 crypto market, not least in the FTX/Alameda debacle and the unsustainable practices of SBF's teams. Without prudent oversight, and operational standards such as management and auditing procedures, consumers will be unable to trust that they are shielded from these risks.

Reserve maintenance – the keeping of sufficient reserves to maintain confidence in an exchange or the peg of a stablecoin – is integral to preventing future crypto contagions and safeguarding investor funds.

2.5.3 Macro-prudential risks

Macro-prudential risks refer to systemic threats posed by stablecoins.[118] These are risks which affect monetary policy and the broader financial system, including deposit substitution, contagions (that is, spillover from crypto-markets into traditional finance markets), and runs on exchanges or CASPs (ie loss of investor confidence causing mass withdrawals and a domino effect).[119] Government regulators will likely direct their attention to addressing these macro-risks in the long term to ensure overall system stability. CASPs that are forced to liquidate reserves to meet withdrawal demands may cause shocks to the financial system with a sudden demand for and influx of cash into the market, leading to commercial banks being placed under pressure to meet redemptions.[120] Deposit insurance in traditional banking and financial markets might provide some absorption of the shocks of runs, but this relief is not available to CASPs – an issue which consumers are now well aware of post-2022.

The macro-risks posed by stablecoins are magnified by their role in the decentralised finance system, providing leverage across the market to decentralised finance applications and acting as reserves themselves for other cryptocurrencies. Because of this overlap of use throughout the decentralised finance system, shocks to stablecoin markets may easily replicate across the system and even into traditional finance.

[117] Ibid.
[118] Ibid.
[119] Ibid.
[120] Ibid.

The widespread use of stablecoins and digital wallets, when chosen by consumers over traditional finance, is a form of 'deposit substitution'.[121] This means that consumers choose to hold their funds in the form of stablecoins in a digital wallet instead of in fiat currency in a traditional (commercial) bank. Substituting traditional fiat currency deposits with stablecoins and digital wallets may reduce bank deposits and profitability, which may reduce competition in traditional finance. This, in turn, is a risk for commercial banks, which rely on deposit-holding to generate an income. Commercial banks are, at present, still important for the stability of the financial system.

Regulators may also consider stablecoins a threat to monetary sovereignty, a nation's authority to control its currency – with all the threats that this may pose to monetary policy.[122] Interlinked with this is the possibility of developing nations becoming dependent on stablecoins pegged to stronger currencies, or (for example) 'dollarisation'.[123] 'Dollarisation' refers to the use of any foreign currency by a country, not necessarily only the US dollar. Dollarisation is frequently used in an unofficial capacity in countries that experience economic instability and high inflation.[124] Zimbabwe, for example, adopted the US dollar after experiencing hyper-inflation in 2009.[125] Dollarisation has its own set of benefits and drawbacks; one drawback is that central banks lose their powers as a lender of last resort when dollarisation is adopted,[126] deferring to an issuer of foreign currency when considering their own monetary policy.[127] The ability of governments to respond to emergencies is limited by dollarisation and they may not be able to guarantee deposits in times of economic distress.[128]

[121] Bank for International Settlements 'The crypto ecosystem: Key elements and risks' (2023) 27.
[122] Agata Ferreira 'The curious case of stablecoins—Balancing risks and rewards?' (2021) 24 *Journal of International Economic Law* 755–778.
[123] Ibid.
[124] Andrew Berg & Eduardo Borensztein 'Full dollarization' December 2000, available at: https://www.imf.org/external/pubs/ft/issues/issues24/ [last accessed 20 June 2023].
[125] Ray Ndlovu 'Rapid dollarization to stymie Zimbabwe's plan to drop greenback' *Bloomberg*, 19 October 2023, available at: https://www.bloomberg.com/news/articles/2023-10-19/zimbabwe-s-plan-to-drop-us-dollar-in-2025-seen-as-non-starter [last accessed 17 December 2023].
[126] Berg & Borensztein (note 124).
[127] See A Milne & V Lawack 'Digital assets in payments and transaction banking' South African Reserve Bank Working Paper Series WP/24/2026, November 2024, 54, available at: https://www.resbank.co.za/content/dam/sarb/publications/working-papers/2024/digital-assets-in-payments-and-transaction-banking.pdf [last accessed 18 January 2025].
[128] Ibid.

Not all these macro-risks will be considered for the purposes of the research question here, but they do create an important backdrop for regulators and should be considered in further research.

2.6 Meta's 'Libra' or 'Diem' coin

Meta's (formerly Facebook) Libra project of 2019 and 2020 illustrates certain regulators' reactions to a non-government-issued stablecoin envisioning widespread, global use. This project drew sudden and visceral reactions from regulators globally, who cited many of these micro- and macro-economic concerns when considering the licensing of the project. The Libra project envisioned a stablecoin 'Libra' built on the Libra blockchain, which itself was to be governed by the Libra Association. The Libra Association was a membership association of payments providers, technology, telecommunication, venture capital and non-profit companies. Libra was intended to act as a retail payments system for global users, including Facebook users (numbering more than 2.5 billion globally).[129] Libra and the Libra Association were rebranded 'Diem' amid copyright challenges in 2020 and in an attempt to move away from the Facebook brand owned by Meta. The Diem stablecoin was designed to be pegged to the US dollar, and secured with a basket of low-volatility reserves such as fiat US dollars and government bonds.

Diem sought regulatory opinion from several regulators during its early phases. US regulators expressed disapproval of the project and stated that it would not be permitted to operate in the US without, at least, applying for a full banking charter.[130] The Swiss Financial Markets Supervisory Authority ('FINMA') also advised that Diem would require licensing as a payments system, along with several other permissions in order to legally operate from Switzerland.[131] The project was ultimately closed and Diem's assets were sold to Silvergate Capital in early 2022.[132]

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[129] Russell Brandom 'Facebook's cryptocurrency has a trust problem' *The Verge*, 18 June 2019, available at: https://www.theverge.com/2019/6/18/18683867/facebook-cryptocurrency-libra-calibra-trust-banking [last accessed 2 July 2023].

[130] Elizabeth Dwoskin & Gerrit de Vynck 'Facebook's cryptocurrency failure came after internal conflict and regulatory pushback' *Washington Post*, 28 January 2022, available at: https://www.washingtonpost.com/technology/2022/01/28/facebook-cryptocurrency-diem/.

[131] Eidgenössische Finanzmarktaufsicht FINMA 'Diem withdraws licence application in Switzerland' 12 May 2021, available at: https://www.finma.ch/en/news/2021/05/20210512-mm-diem/ [last accessed 2 July 2023].

[132] Aditya Sharma 'Facebook's crypto project sold amid regulatory pressure' *dw.com*, 2 January 2022, available at: https://www.dw.com/en/facebook-backed-cryptocurrency-sold-amid-regulatory-pressure/a-60616823 [last accessed 18 June 2023].

This reaction was likely premature, given that crypto assets were not considered a systemic threat to payments systems at the time and, in subsequent years, regulators (at least, US regulators) have become less wary of the subject.[133] However, regulators' concerns seemed to stem largely from the fact that Meta is a 'big-tech' company and already has far-reaching powers in the consumer market. This included its extensive access to consumer information (which Meta is infamous for), its ability to influence global events through the dissemination of information (or misinformation), and its monopoly over social media. Adding a payments functionality to this, with Meta essentially operating its own central bank, would have conferred state-like sovereignty on Meta's digital kingdom. To permit a big-tech company to operate its own payments system would threaten nations' monetary sovereignty, a principle that was highlighted in regulators' statements at the time.[134] This reaction illustrates the historical position of some regulators with regard to licensing issuers of stablecoins. While the regulatory environment and market have evolved since, these considerations are relevant when creating policy on stablecoin regulation.

2.7 Concluding remarks

This chapter provided a brief overview of the technology underpinning the crypto asset industry, together with a summary of the pertinent role players. This summary included a description of custodians and crypto exchanges, as well as the types of CASPs, examined further in the next chapter in the context of MICAR. In order to illustrate the current regulatory gaps in the industry and risks to consumers, selected cases from the 2022 crypto market decline were discussed. These showed the interrelatedness of the crypto industry and its sensitivity to any sudden shock. Common problems identified were a lack of adequate corporate governance, insufficient reserves and blatant fraud. The chapter also examined the economic considerations that regulators may wish to consider when regulating the crypto industry. Lastly, Meta's Diem token was discussed to illustrate some regulators' macro-economic concerns.

Chapter 3 provides a breakdown of MICAR and its most critical requirements for stablecoin CASPs. It provides a benchmark against which to assess South Africa's current policy on crypto asset regulation and assists in answering the question of whether regulating stablecoin

[133] Hannah Lang 'Why PayPal's stablecoin is likely to succeed where Facebook's Libra failed' *Reuters*, 21 August 2023, available at: https://www.reuters.com/technology/why-paypals-stablecoin-is-likely-succeed-where-facebooks-libra-failed-2023-08-21/.
[134] Bjarke Smith-Meyer 'How Diem became crypto's sacrificial lamb' *POLITICO*, 30 January 2022, available at: https://www.politico.eu/article/diem-crypto-sacrificial-lamb/ [last accessed 17 December 2023].

CASPs as deposit-taking institutions is an appropriate alternative to their regulation as financial services providers.

CHAPTER 3: THE MARKETS IN CRYPTO ASSETS REGULATION

3.1 General introduction to MICAR

The Markets in Crypto Assets Regulation ('MICAR')[1] is the first comprehensive legislation for the regulation of crypto assets promulgated in the European Union ('EU').[2] Under EU law, a 'regulation' is a binding law that must be applied uniformly by member states.[3] A 'directive' is a law that must be applied by each member state individually, and which allows individual states to develop their own laws in order to comply with the directive.[4] MICAR is, as the name suggests, a binding regulation.

MICAR governs the regulation of crypto assets insofar as they do not fit into existing regulations, with the exception of non-fungible tokens ('NFTs'), central bank-issued digital currencies ('CBDCs') and decentralised crypto assets, which are currently beyond MICAR's scope.[5] MICAR references several regulations and directives, requiring compliance with those regulations and directives by crypto asset service providers ('CASPs'), issuers and offerors of crypto assets in certain circumstances. This contributes to the harmonisation of crypto asset regulation with existing laws, in that MICAR is not a standalone regulation but rather fits within the broader framework of EU law.

[1] Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto Assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, available at: https://eur-lex.europa.eu/eli/reg/2023/1114/oj [last accessed 28 December 2024] ('MICAR').

[2] Council of the European Union 'Digital finance: Council adopts new rules on markets in crypto-assets (MICAR)', 16 May 2023, available at: https://www.consilium.europa.eu/en/press/press-releases/2023/05/16/digital-finance-council-adopts-new-rules-on-markets-in-crypto-assets-mica/ [last accessed 16 May 2024].

[3] European Union 'Types of legislation', available at: https://european-union.europa.eu/institutions-law-budget/law/types-legislation_en [last accessed 16 May 2024].

[4] Ibid.

[5] MICAR, preamble para 10.

MICAR sets standards for CASPs to lawfully render their services to consumers in the EU.[6] Much like the General Data Protection Regulation,[7] MICAR applies to anyone who offers crypto assets to persons within the EU, or otherwise conducts crypto asset-related activity (that is, the issuing of crypto assets or offering services related to crypto assets).[8]

The proposal which pre-empted MICAR provided four general objectives of the regulation of crypto assets:

1. Providing legal clarity and certainty;
2. Supporting innovation and competition;
3. Ensuring consumer protection and market integrity; and
4. Addressing risks to financial stability and monetary policy risks.[9]

MICAR states at the outset that certain crypto assets fall within the scope of existing financial regulations and are thus not governed by MICAR,[10] which governs crypto assets currently unregulated by existing laws. In many instances, MICAR refers certain CASPs to other EU regulations and directives and directs those CASPs to comply with parts, or all, of those regulations and directives. For example, certain stablecoin issuers are required to comply with the Electronic Money Directive ('EMD').[11] This does not mean that MICAR delegates its authority over those issuers to another directive; rather, it incorporates some existing provisions in law to harmonise the approach to the types of services being rendered, gauged by assessing the effect of the services and their similarity to any existing activities.

[6] Regulations are peremptory rules applicable to EU member states, as opposed to directives which must first be transposed into each member state's national law before taking effect. MICAR was signed into law as a regulation on 31 May 2023; service providers whose activities fall within the scope of MICAR (including CASPs) were afforded between 12 and 18 months for compliance. See Mark Caruana Scicluna & James Debono 'MICAR – Landmark crypto regulation approved by EU Parliament' *Lexology*, 20 April 2023, available at: https://www.lexology.com/library/detail.aspx?g=152d8020-bc6e-47b9-b236-5b1f8c6b2b88 [last accessed 13 July 2023].

[7] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC ('GDPR').

[8] MICAR, art 2.

[9] European Union 'Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto Assets, and Amending Directive (EU) 2019/1937 2020', available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52020PC0593 [last accessed 23 December 2024].

[10] MICAR, preamble paras 3–4.

[11] Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC ('EMD'). See MICAR, art 48.

Crypto assets will not fall under MICAR's authority if they are merely window-dressing for an existing financial instrument – ie by 'tokenising' a financial instrument such as a share and selling it on a blockchain. If the underlying activity is already regulated, as trading in shares is by the Markets in Financial Instruments Regulation ('MiFID') II,[12] then that existing regulation will apply.

MICAR does not apply to NFTs or to crypto assets which represent non-fungible underlying assets or services.[13] This decision relates to the tradability of those assets. While NFTs are generally excluded from MICAR, to the degree that they can be made interchangeable and traded as a security, MiFID II may apply to these activities.[14] Similarly, where NFTs bear resemblances to asset-referenced tokens ('ARTs') and electronic money tokens ('EMTs'),[15] they will be subject to regulation in terms of MICAR's provisions on those tokens. Also excluded from the scope of MICAR are intra-group transactions by public organisations (eg the International Monetary Fund) and central bank activities, including CBDCs.[16]

MICAR is one of the few regulations globally which provides definitions of different types of crypto assets.[17] This is integral to providing legal clarity about the regulation of crypto assets, as crypto assets continue to evolve and present new challenges to the market. MICAR defines ARTs, EMTs and utility tokens, and has a catchall definition of crypto assets in general.[18] Stablecoins can be classified either as 'ARTs' or 'EMTs' in terms of MICAR.

ARTs are crypto assets that 'purport to maintain a stable value by referencing another value or right or a combination thereof, including one or more official currencies'.[19] While this definition may, for example, include USDT or any other stablecoin pegged to one official fiat currency, EU legislators have included a second definition to identify such stablecoins with EMTs. EMTs are crypto assets which 'purport to maintain a stable value by referencing the value of *one* official currency'.[20]

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[12] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU ('MIFID II').
[13] MICAR, preamble para 10.
[14] MICAR, preamble paras 3–4.
[15] Other types of crypto assets defined by MICAR, the former basing its value on various types of assets, and the latter basing its value on one government-issued fiat currency.
[16] MICAR, preamble para 12.
[17] For a discussion on discrepancy of various definitions used globally see the 2021 Position Paper, 15.
[18] MICAR, art 3.
[19] Ibid.
[20] Ibid (emphasis added).

MICAR also defines a third type of crypto asset, namely utility tokens, as 'a type of crypto asset that is only intended to provide access to a good or a service supplied by its issuer'.[21] Typically, these tokens are issued to provide the consumer with access to a product or a service and are redeemable in a particular context only, rather than being traded on a larger scale or used as a means of payment. This type of token is not, by definition, dependent on the value of a fiat currency and therefore falls outside the scope of the definition of a stablecoin. 'Crypto-assets' are defined as 'a digital representation of a value or of a right that is able to be transferred and stored electronically using distributed ledger technology or similar technology'.[22]

EMTs which reference an official currency of an EU member state are deemed to be electronic money in the EU. EMTs are, accordingly, governed by the EMD.[23] This subjects EMT issuers to the requirements of the EMD, which affect many stablecoin issuers. Key elements of the EMD which impact stablecoins under MICAR are discussed below.[24]

MICAR also introduces the concept of 'significant tokens'.[25] MICAR distinguishes between significant ARTs and EMTs based on their size, market capitalisation, volume of transaction and interconnectedness with the financial system.[26] These significant tokens are directly supervised by the European Banking Authority ('EBA').[27] Significant issuers are subject to additional obligations under art 45 of MICAR, including conducting regular liquidity stress testing to ensure liquidity requirements are met despite market pressures. Significant issuers must hold own funds of at least 3 per cent of reserve assets (increased from the 2 per cent which other issuers must hold).[28]

MICAR defines various role players in the crypto asset industry, including issuers, offerors, CASPs and crypto asset services.[29] An 'issuer' means the natural or legal person who issues the crypto asset (eg Tether, the company that issues USDT).[30] 'Offeror' refers to the entity that

[21] Ibid.
[22] Ibid.
[23] MICAR, art 48.
[24] See section 3.7 below.
[25] MICAR, arts 43 and 56.
[26] Ibid.
[27] Ibid.
[28] MICAR, art 45(5).
[29] MICAR, art 3.
[30] Krisztian Sandor 'What is tether? How USDT works and what backs its value' *Coindesk*, 7 February 2023, available at: https://www.coindesk.com/learn/what-is-tether-how-usdt-works-and-what-backs-its-value/ [last accessed 17 July 2023]. See MICAR, art 3.

offers crypto assets to the public.[31] A CASP under MICAR refers to an entity whose business is providing at least one crypto asset service to clients on a professional basis and who has been authorised to do so in terms of art 59 of MICAR.[32] A 'crypto asset service' is defined to include various services relating to crypto assets, including the provision of advice, providing custody services, operating a trading platform, providing exchange services and portfolio management – for which a license is required under MICAR.[33] These definitions leave room for interpretation insofar as some CASPs may also be considered 'offerors' of crypto assets; however, it is beyond the scope of this dissertation to address this issue in detail.

This dissertation focuses on stablecoin CASPs. While stablecoins can be defined as either ARTs or EMTs under MICAR, this dissertation concentrates on EMTs because they reference a single fiat currency and align with the research question more closely. Nevertheless, several parts of MICAR apply to ARTs and EMTs equally. The next section outlines the requirements that MICAR imposes on issuers, offerors and CASPs, and, more particularly, on CASPs providing services relating to ARTs or EMTs.

3.2 Key requirements under MICAR

MICAR prescribes several requirements for issuers, offerors and CASPs (or 'actors'), which vary depending on the crypto asset being sold. The issuance, offering and provision of services relating to ARTs and EMTs are also regulated by additional requirements compared to other types of tokens. The requirements imposed on issuers of EMTs and ARTs are discussed further below. While not the immediate subject of this dissertation's research question, which focuses on CASPs, the activities of issuers and the enforceability of consumers' rights against those issuers are relevant to CASPs dealing with those issuers and to end-consumers. There are two sides to addressing the risks posed by dealing in stablecoins from a policy perspective – the conduct of CASPs and the conduct of issuers. Covering both sides of these risks and considering their interaction is important for maintaining a comprehensive overview of this market's regulation. Further research, beyond the scope of this limited dissertation, is required to adequately investigate the appropriate all-encompassing regulation of issuers of stablecoins in South Africa. It is also worth noting that MICAR's provisions envisage a centralised service

[31] MICAR, art 3.
[32] Ibid.
[33] Ibid.

provider, offeror or issuer in relation to crypto assets, and do not cater for decentralised finance ('DeFi') activities.

Some of the key requirements imposed on CASPs under MICAR are set out next.[34]

Requirements for CASPs[35]

1. Registration and authorisation: CASPs must obtain the required registration and authorisation from competent authorities to operate within the EU.[36]
2. Operational standards: CASPs must maintain high operational standards, including effective management, proper knowledge and skills, certain own funds requirements,[37] and sound internal controls and policies – including a business continuity plan.[38]
3. Transparency and fairness: CASPs have a duty to act honestly and fairly, to make necessary disclosures to their clients, to provide clear information and to publicly disclose pricing policies.[39] This includes different information for different types of CASPs; for example, CASPs providing custody services must disclose the manner in which client assets are held.[40]
4. Client asset protection: CASPs must implement robust measures to safeguard client assets, including proper custody and clear procedures for the handling of client funds.[41]
5. Conflict of interest management: CASPs must identify, manage and disclose any conflicts of interest.[42]
6. Compliance monitoring: CASPs must ensure compliance with all regulatory requirements under MICAR.[43]

The key obligations upon issuers of crypto assets under MICAR are mentioned below for contextual purposes, as are the obligations on offerors of crypto assets.

[34] Ibid.
[35] MICAR, Title V generally.
[36] MICAR, arts 59 and 62.
[37] MICAR, Annex IV specifies different thresholds for different CASP providers.
[38] MICAR, art 62.
[39] MICAR, art 66.
[40] MICAR, art 75.
[41] MICAR, art 70.
[42] MICAR, art 72.
[43] MICAR, art 68.

Requirements for issuers[44]

1. General compliance: Issuers must comply with the EU's regulatory framework for crypto assets,[45] including anti-money laundering and counter-terrorist financing rules,[46] and other regulations which may already apply to the issuer.
2. Disclosure and transparency requirements: Issuers are required to provide detailed information about stabilisation mechanisms, investment policies of reserve assets, custody arrangements and the rights of holders.[47]
3. Asset-specific rules: Additional rules apply to issuers of ARTs and EMTs.[48]
4. Sustainability requirements: Issuers must disclose the environmental impacts related to the consensus mechanisms used and adopt environmentally-friendly solutions.[49]
5. Governance and risk management: Issuers must implement robust governance structures, manage risks effectively and ensure transparent organisational practices.[50]
6. Conflict of interest management: Issuers must identify, manage and disclose any conflicts of interest which they may have with purchasers of the crypto assets that they issue.[51]

Requirements for offerors

1. White paper requirements:[52] Offerors are required to draft and publish a crypto asset white paper detailing mandatory disclosures about the project, technology used, and associated risks.[53]

[44] The requirements for the issuers of ARTs can be found in Title III, Chapter 2 of MICAR, and the requirements for issuers of EMTS can be found in Title IV, Chapter 1 of MICAR. The requirements in relation to offers to the public of tokens other than ARTs or EMTs are dealt with in Title II of MICAR.
[45] MICAR, art 2.
[46] Where issuers offer crypto assets to the public, they must demonstrate to a competent authority that they have sufficient internal controls to ensure compliance with anti-money laundering regulations. Further, the authorisation of an issuer of ARTs may be withdrawn if its management body or shareholders contravene anti-money laundering regulations. See MICAR, art 18(2)(h) and art 24(4)(b) respectively.
[47] Issuers are required to publish a white paper in terms of art 19: see MICAR, arts 19 and 28.
[48] The requirements for issuers of ARTs can be found in Title III, Chapter 2 of MICAR, and the requirements for issuers of EMTS can be found in Title IV, Chapter 1 of MICAR
[49] White papers must contain this information per art 6(1)(j) of MICAR, which issuers must provide.
[50] Governance arrangements, risk management and risk management disclosure requirements in relation to ARTs are specified in arts 34, 45 and 25 of MICAR respectively. Risk management requirements in relation to EMTs are dealt with in art 58 of MICAR. Issuers of crypto assets other than ARTs and EMTs are covered by the provisions of Title II of MICAR and are obliged to make similar disclosures if they offer crypto assets to the public, and are otherwise bound by the obligations in art 14 of MICAR to act fairly and in accordance with the crypto assets white paper.
[51] Article 14 of MICAR, in relation to issuers of crypto assets other than ARTs and EMTS, and arts 32 and Annex III in relation to issuers of ARTs and EMTs respectively.
[52] See section 3.4 below for an explanation about white papers.
[53] MICAR, art 6.

2. Notification and approval of white papers and changes thereto: White papers must be approved by a competent authority,[54] and offerors must notify this authority of any significant changes to a crypto asset's white paper.[55]
3. Transparency and disclosure: Offerors must ensure that all information provided to prospective purchasers of crypto assets is clear, fair and not misleading.[56]
4. Marketing consistency: Offerors must ensure that marketing communications align with the information provided in the white paper.[57]
5. Conflict of interest management: Offerors must identify, manage and disclose any conflicts of interest.[58]

Several of these key requirements are discussed below in further detail. These are selected due to their importance to the purpose of MICAR generally, the newness of the requirement for the industry as a whole, or the similarity of the requirement with those in the traditional financial market.

3.3 Application for authorisation

MICAR prescribes a list of information which must be provided with an application to a competent authority for permission to offer CASP services, issue crypto assets, or offer crypto assets for trading. This includes identifying information about the applicant issuer; a legal opinion stating why the subject token falls within the definition of the token being applied for; proof that key executives and managers are in good standing; a description of how customer funds are segregated; a programme of operations (or business plan); a description of governance arrangements; a description of internal control mechanisms and risk management policies; and several other requirements that are intended to satisfy the authority that the issuer has appropriate governance measures in place to effectively administer the issued token.[59] The applicant must be a legal person registered in the EU or an appropriately authorised credit

[54] MICAR, arts 4 and 8.
[55] MICAR, art 12 in relation to tokens other than ARTs and EMTS, art 25 in relation to ARTs and art 51 in relation to EMTs.
[56] MICAR, art 6 in relation to the content of a white paper which offerors must provide; arts 7, 53 and 29 in relation to marketing communications; and art 14 in relation to the general conduct of offerors of crypto assets which are not ARTs or EMTs.
[57] MICAR, arts 7, 53 and 29 in relation to marketing communications.
[58] MICAR, arts 14 and 72. Article 72 deals with the disclosure of conflicts of interest in relation to CASPs, which may include offerors where those CASPs are offering crypto assets to the public, as is often the case.
[59] MICAR, art 62.

institution or other undertaking.[60] If an undertaking which is not incorporated as a legal person offers crypto asset services, it must be incorporated in such a way as to protect the interests of third parties, and it is subject to prudential supervision.[61]

After authorisation is granted to an issuer or CASP, it can be withdrawn by the competent authority in a number of circumstances, including: if the issuer indicates that it will no longer carry on business; if it has not used its authorisation for six months; or in circumstances where the authority issues an opinion that the ART poses a threat to the smooth operation of payment systems, monetary policy transmission or monetary sovereignty.[62]

Some financial entities which are authorised under MiFID II or which fall into the categories identified by art 60 of MICAR may follow a shorter procedure under art 60 to notify competent authorities of their intention to provide crypto asset services. This process entails providing supplementary information to competent authorities to cover crypto asset services which they are not yet authorised to conduct, but exempts these entities from conducting a full application for authorisation under MICAR.[63] This demonstrates MICAR's attempt to avoid duplicate authorisation procedures and harmonise with existing legislation. In principle, these entities will already be authorised under other financial regulations to provide their services and will need additional authorisation under MICAR only if their services differ from what their existing authorisation covers.

3.4 White papers

A crypto asset white paper is among the more transformative requirements for the crypto industry under MICAR. A white paper is a document which informs the public of key features of the crypto asset, of the issuer and its governance, and other key information when a crypto asset is first offered to the public in an initial coin offering, comparable with a prospectus in respect of initial public offerings of securities.[64] A white paper must be drawn up by an offeror

[60] Depending on the type of actor applying for authorisation, MICAR prescribes that different types of undertakings may apply for authorisation. For CASPs, these include investment firms, undertakings for collective investment in transferable securities management companies, or alternative managers. These undertakings are those which are already authorised to provide services relating to other types of assets under existing regulations, and they must apply for this additional authorisation to expand their services to crypto assets. See MICAR, art 62 read with art 59.
[61] MICAR, art 59.
[62] MICAR, art 64.
[63] MICAR, art 60(10).
[64] Christian Fisch *Initial Coin Offerings (ICOs) to Finance New Ventures* (2018), available at: https://papers.ssrn.com/abstract=3147521 [last accessed 17 December 2023].

of a crypto asset or any person seeking the admission of that asset to trading.[65] CASPs providing exchange services must provide their customers with links to the white papers of the crypto assets in which they deal.[66]

White papers must contain extensive information about the crypto asset, associated risks, who is offering the product (the identity of the offeror and/or issuer), the trading platform, underlying technology, environmental impacts, and rights and obligations attaching to the asset.[67] White papers must disclose that crypto assets may not always be liquid or transferable, may lose their value, may not be exchangeable against the good or service represented by the token, and are not covered by investor compensation or deposit guarantee schemes.[68] In addition to these statements and disclosures, white papers must contain various warnings and be drawn up in the language of its member state or in a language customary in international finance (English is generally accepted).[69]

Previously, crypto asset issuers offering tokens to the public in the EU were not required to make the defined set of disclosures prescribed by MICAR; as a result, white papers could vary greatly in focus and detail, making it difficult for prospective purchasers to assess different tokens. Prior to MICAR, there were no crypto asset-specific regulations requiring that mandatory minimum disclosures be made to purchasers.[70] In contrast, in traditional finance, the counterparts of crypto asset issuers are required to make certain disclosures when offering a financial product to the public for the first time (an initial product offering or 'IPO') and are governed by a strict set of rules to enforce transparency.[71] MICAR standardises the minimum content of white papers to ensure that consumers have key information and can make an informed decision when purchasing crypto assets.

[65] MICAR, art 4 (in respect of tokens other than ARTs and EMTs), art 18 in respect of issuers of ARTs and art 48 in respect of EMTs. Exemptions do exist for the requirement to draw up a white paper: see MICAR, art 4(2).
[66] MICAR, art 66.
[67] MICAR, art 6 (in relation to tokens other than ARTs and EMTs), art 19 (in relation to ARTs) and art 51 (in relation to EMTs).
[68] MICAR, art 6 (in relation to tokens other than ARTs and EMTs), art 19 (in relation to ARTs) and art 51 (in relation to EMTs).
[69] MICAR, Preamble para 25 read with art 6 (in relation to tokens other than ARTs and EMTs), art 19 (in relation to ARTs) and art 51 (in relation to EMTs).
[70] Carolina Camassa *Legal NLP Meets MICAR: Advancing the Analysis of Crypto White Papers* arXiv (2023), available at: http://arxiv.org/abs/2310.10333 [last accessed 17 December 2023].
[71] Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC. See Chapter III generally and art 16 in particular dealing with the disclosure of risk factors.

While local competent authorities will receive notification of white papers published by issuers, the European Securities and Markets Authority ('ESMA'), the EU body responsible for regulating financial markets,[72] will maintain a register of crypto asset white papers, issuers of ARTs, issuers of EMTs, and CASPs.[73] This will help consumers to avoid becoming victims of fraudulent activity, as they can search this register and check whether the crypto asset is duly issued in terms of MICAR.

For some older crypto assets, the issuer (or first offeror of the asset) is no longer discernible or active in the sale of that crypto asset, and therefore compliance with this provision for those existing crypto assets is not possible for that issuer. This burden will fall on new offerors currently offering that crypto asset to the public. This may pose a challenge for those offerors as there will likely be discrepancies in the information contained in different applications for authorisation, as later offerors would not have been involved in the sale of that crypto asset since its inception. Therefore, these offerors may not have information on the initial sale of those crypto assets which would customarily appear in the white paper. This will affect offerors of some very popular cryptocurrencies (such as Bitcoin and Ethereum) who may need to collaborate to ensure that all necessary information is accurately and consistently presented to authorities.

3.5 Transparency and disclosure

MICAR mandates that the marketing of crypto assets must be fair and not misleading, must be consistent with information in the crypto asset's white paper,[74] must indicate that a white paper for that crypto asset is published, and must contain other required statements (eg contact information and disclaimers).[75] Severe liability is imposed on issuers and their controlling executives for misleading, incomplete, unfair or unclear terms of a crypto white paper that cause any loss.[76] This liability cannot be excluded by contract, which will prevent issuers from using voluminous online terms to exclude liability.[77] Specific protection is afforded to EMT

[72] European Securities and Market Authority 'About ESMA', available at: https://www.esma.europa.eu/about-esma [last accessed 25 December 2023].
[73] MICAR, art 109.
[74] MICAR, art 7 in respect of tokens other than ARTs and EMTs; art 29 in respect of ARTs and art 53 in respect of EMTs.
[75] MICAR, art 7 in respect of tokens other than ARTs and EMTs; art 29 in respect of ARTs and art 53 in respect of EMTs.
[76] MICAR, arts 15, 26 and 52.
[77] MICAR, arts 15, 26 and 52.

holders, namely, a right of redemption against the issuer at any time and at par value.[78] Furthermore, notification of this right must be included in all marketing communications by the issuer.[79] MICAR provides retail holders of crypto assets (natural persons holding crypto assets in their individual capacities, outside of their profession (consumers)) with a14-day cooling off period within which they are entitled to withdraw from an agreement to purchase any crypto other than EMTs or ARTs.[80] Pricing and pricing mechanisms must be transparent and consumers must be able to understand how their orders for cryptocurrency are priced and the value of their assets.

Generally, the requirement for transparency and disclosure runs throughout MICAR and is an essential component of consumer protection in the regulation.

3.6 Conflict of interest management

Conflict of interest management is another strong feature of MICAR. MICAR states that certain actors (issuers, offerors and CASPs) must maintain policies designed to identify, mitigate and disclose potential conflicts of interest.[81] These conflicts may relate in the case of issuers to conflicts between the interests of their shareholders and their activities, including in the management of reserve assets.[82] Where conflicts of interest exist between CASPs, issuers and holders of a crypto asset in relation to the custody of reserve assets, these are permissible if the source of the potential conflict is disclosed and managed, and if the said custody is functionally separated from other sources of conflict.[83] Conflicts of interest must be disclosed in a prominent place on the specific actor's website and the steps taken to mitigate these conflicts must be explained.[84]

This addresses the issue of these actors holding multiple roles in consumer transactions, which is a common occurrence and frequently results in these actors taking decisions which may not

[78] MICAR, art 49.
[79] MICAR, art 53.
[80] MICAR, art 13.
[81] MICAR, arts 14, 32, 34, 72 and 79.
[82] MICAR, preamble para 50 provides context in relation to this example. Specific mention of dealing with conflicts of interests relating to shareholders is made in arts 32(1)(a) and 72(1)(a).
[83] This provision of art 37(9) of MICAR suggests that if there are sources of conflict other than those relating to custody, the parties must take steps in their operations to separate custody from those sources of conflict, both 'functionally' and 'hierarchically'.
[84] MICAR, arts 32 and 72.

be in the best interests of their customers.[85] For example, this may arise where a CASP engages in proprietary trading while also trading on behalf of its own customers, because its own interests may influence trading decisions that it makes on behalf of its customers.[86] MICAR's provisions require this CASP to disclose this conflict to customers so that they can make an informed decision when using the CASP's services, and to maintain a policy to monitor and mitigate this conflict of interest.[87] This protection of customers from conflicts of interest is in line with international recommendations for crypto asset regulation and with existing financial regulations.[88]

3.7 Financial requirements: Client asset protection and asset-specific rules

Issuers must, in addition to meeting standards as to the fitness and properness of its management, meet ongoing financial requirements. Issuers of ARTs are required at all times to have own funds equal to the higher of EUR 350 000, 2 per cent of the average amount of reserve assets needed to maintain sufficient liquidity,[89] or one-quarter of the fixed overheads for the preceding year.[90] CASPs are also required to meet certain prudential requirements. In short, CASPs (including stablecoin CASPs) must comply with a capital requirements regulation in the EU which sets out funds requirements for credit institutions, or hold an insurance policy to cover their activities, and they must always have up to EUR 150 000 (depending on their services)[91] or one-quarter of fixed overheads per year.[92]

Issuers of ARTs must maintain a reserve of assets at all times and legally separate these reserve assets so that the creditors of issuers cannot seek recourse against reserve assets in the event of insolvency.[93] Issuers must publish a policy detailing how ARTs are stabilised with reference to the specific underlying assets.[94] Reserve assets must be audited every six months by an

[85] Policy Recommendations for Crypto and Digital Asset Markets, Report of the Board of IOSCO, 16 November 2023, FR11/23, available at: https://www.iosco.org/library/pubdocs/pdf/IOSCOPD747.pdf [last accessed 20 May 2024].
[86] Ibid.
[87] MICAR, art 72.
[88] Policy Recommendations for Crypto and Digital Asset Markets (note 83).
[89] This is described in art 36 of MICAR as an amount which covers risks of redemption and liquidity, and which is calculated according to ECB and ESMA standards yet to be published.
[90] MICAR, art 35.
[91] These are specified in Annex IV of MICAR.
[92] MICAR, art 67.
[93] MICAR, art 36.
[94] MICAR, art 36(8).

independent auditor and issuers must notify the competent authority of the audit results.[95] Issuers are not permitted to pledge or encumber reserve assets at any time, and must always ensure that reserves are held in secure custody.[96] Reserve assets must be held in custody no later than five working days after the issue of the ART.[97]

Issuers are not permitted to pledge or encumber reserve assets at any time[98] and must always ensure that reserves are held in secure custody; this is a stark difference from practices during the 2022 crypto crisis.[99] Reserve assets may be invested, but only in highly liquid and low-risk financial instruments, presumably to ensure that customers can always redeem their tokens at market value.[100]

The regulatory body empowered by the European Commission to regulate banking in the EU, namely the European Banking Authority ('EBA'),[101] the authority responsible for managing the euro and implementing EU monetary policy, namely the European Central Bank ('ECB'), and ESMA must collaborate on technical standards for reserve assets, specifying liquidity requirements and risk-mitigation measures.[102] These standards are yet to be published at the time of writing, although several consultations have begun in this regard.[103]

As with EMTs, ART holders must always have a right of redemption against issuers in respect of the underlying reserve assets whenever the issuer is unable to redeem the ARTs for fiat currency.[104] CASPs providing services in relation to, and issuers of, ARTs and EMTs are prohibited from granting interest in relation to those tokens.[105] MICAR creates a further category of 'significant tokens'. These are defined as tokens exceeding a certain transaction

[95] MICAR, art 36(9).
[96] MICAR, art 37.
[97] Ibid.
[98] Ibid in relation to ARTs. Issuers of EMTs must comply with the EMD in relation to funds received in exchange for EMTs as per art 54 of MICAR.
[99] During the Terra Luna debacle it became apparent that reserves were both insufficient and poorly managed; this played a pivotal role in that stablecoin's decline. See Antonio Briola et al 'Anatomy of a stablecoin's failure: The Terra-Luna case' (2023) 51 *Finance Research Letters* 103358.
[100] MICAR, art 38.
[101] European Union 'European Central Bank (ECB)', available at: https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/search-all-eu-institutions-and-bodies/european-central-bank-ecb_en [last accessed 25 December 2023].
[102] MICAR, art 36.
[103] ESMA 'Consultation Paper on the Technical Standards Specifying Certain Requirements of MICAR (3rd Package)' 25 March 2023, available at: https://www.esma.europa.eu/document/consultation-paper-technical-standards-specifying-certain-requirements-mica-3rd-package [last accessed 25 May 2024].
[104] MICAR, art 39.
[105] MICAR, arts 40 and 50.

volume, number of holders, market capitalisation, permeation into the financial system, and where the issuer is also an issuer of another token and provides CASP services.[106] Additional requirements are imposed on significant token issuers, who are supervised by the EBA directly.[107] These include higher capital requirements, more frequent monitoring and stress testing, and additional governance and risk management policies.[108]

3.8 EMTs: Electronic money under MICAR and the Electronic Money Directive (EMD)

MICAR's requirements relating to the issue of EMTs and CASP services relating to EMTs are similar to those concerning ARTs, with a few key differences relating to the value of EMTs (which issuers strive to keep at a 1:1 ratio to the fiat currency that the EMT represents) and the redemption value when token holders sell these tokens. MICAR provides that EMT issuers are subject to the EMD and that EMTs are considered electronic money.[109] The EMD classifies electronic money in terms of the following characteristics: electronic storage, monetary value, representation of a claim against the issuer, issuance on receipt of funds, ability to make payments and acceptance by persons other than the issuer.[110] MICAR's declaration of EMTs as electronic money, combined with its other provisions clarifying the rights of holders against issuers, aligns EMTs squarely with the EMD's definition of electronic money.

Issuers of EMTs must issue tokens at par value on receipt of funds ie EMTs must be equal to the fiat currency that they represent.[111] Holders of these tokens have a claim against issuers of EMTs and these holders are entitled to redeem EMTs for funds at any time, which must be paid at par value. As with ARTs, interest may not be charged on services relating to EMTs or on the tokens themselves.[112] MICAR states that 'any remuneration or any other benefit related to the length of time during which a holder of an e-money token holds such e-money token shall be treated as interest'.[113] This provision bans issuers and CASPs from lending e-money tokens and charging interest, or from any other product offerings which incorporate an interest element.

[106] Ibid.
[107] Ibid.
[108] MICAR, arts 43 and 56.
[109] MICAR, art 48.
[110] EMD, art 2.
[111] MICAR, art 49.
[112] MICAR, art 50.
[113] Ibid.

EMT issuers do not require reserve assets, as other crypto asset issuers do under MICAR. EMT issuers are instead required to maintain at least 30 per cent of funds received in exchange for EMTs in accounts with registered credit institutions (banks), with any investments of these funds to be in liquid and low-risk investments.[114] As mentioned previously, EMT issuers must comply with the EMD. The EMD requires that Electronic Money Institutions ('EMIs')[115] comply with similar initial capital requirements (not less than EUR 350 000),[116] and own funds[117] requirements as are prescribed to issuers of ARTs under MICAR.

In a departure from the EMD's provision on safeguarding funds received in exchange for electronic money, significant EMT issuers must instead comply with the same reserves,[118] custody,[119] reserve asset investment[120] and additional[121] requirements which apply to issuers of ARTs.[122] This imposes a more stringent set of prudential rules on significant EMT issuers' conduct and aligns them with significant ART issuers.

E-money institutions, now including issuers of EMTs, are licensed under the EMD, which applications are approved by competent authorities at a national level. E-money institutions are authorised to provide payment services, grant limited credit services, and provide ancillary services to the issuing of electronic money or the provision of payment services.[123] E-money institutions may not take deposits or other repayable funds from the public,[124] offer interest on e-money,[125] or offer unrestricted credit in relation to payment services.[126]

Holding a licence as an e-money institution imposes lighter obligations than holding a licence as a credit institution (such as a bank), with a lower own funds threshold to meet, fewer reporting obligations, and supervision by a national competent authority.[127] E-money licences

[114] EMD, art 7.
[115] Institutions which are authorised to issue electronic money: see EMD, art 2.
[116] EMD, art 4.
[117] This varies and there are several methods of determining sufficient own funds under the EMD. This may include a portion of electronic money in circulation or a flat amount of EUR 350 000: see EMD, art 5.
[118] MICAR, art 36.
[119] MICAR, art 37.
[120] MICAR, art 38.
[121] MICAR, art 45(1).
[122] MICAR, art 58.
[123] EMD, art 6.
[124] Ibid.
[125] EMD, art 12.
[126] EMD, art 6.
[127] Maphuti D Tuba 'The regulation of electronic money institutions in the SADC region: Some lessons from the EU' (2014) 17 *Potchefstroom Electronic Law Journal* 2268–2312.

have proven popular in the EU in recent years, with many such institutions (such as Revolut[128]) becoming increasingly common.[129] As Tuba notes, the EMD was explicitly created to introduce a less cumbersome regime for e-money institutions than the regime applicable to credit institutions, with lighter prudential and licensing regulations.[130] In the EU, the ratio of reserves which traditional banks (or 'credit institutions') must hold in relation to specific liabilities on their balance sheet over a given period is 1 per cent.[131] Credit institutions will be authorised to conduct their activities only if they have own funds or where their initial capital is at least EUR 5 million.[132] While exemption may be granted to some institutions in respect of a lower initial capital, this cannot be lower than EUR 1 million, which is significantly higher than the own funds requirements of EUR 350 000 for issuers of ARTs and EMTs.[133] Credit institutions must, at all times, hold own funds in the following ratios: Common Equity Tier 1 capital ratio of 4.5 per cent, Tier 1 capital ratio of 6 per cent, and a total capital ratio of 8 per cent.[134] The different types of capital referred to are the forms in which own funds may exist and refer to high quality instruments that are resistant to losses.[135]

Traditional banks are also subject to additional reporting requirements, and must report on own funds, on certain financial information, on certain losses and exposures, leverage ratio, asset encumbrance and other financial points at varying degrees of frequency, some as short as monthly.[136]

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[128] 'How we keep your funds safe (UK)' *Revolut*, 14 March 2023, available at: https://www.revolut.com/blog/post/how-we-keep-your-money-safe/ [last accessed 25 May 2024].

[129] Stewart Davies 'Electronic money institutions – Leading by example?' *Temenos*, 23 February 2021, available at: https://www.temenos.com/news/2021/02/23/banking-electronic-money-institutions/ [last accessed 25 May 2024].

[130] Maphuti D Tuba 'The technology-neutral approach and electronic money regulation in the EU: Identifying the promises and challenges for future regulation in South Africa' (2014) 47(3) *Comparative and International Law Journal of Southern Africa* 385.

[131] This applies to customer deposits and debt securities with maturity of up to two years. See European Central Bank 'What are minimum reserve requirements?' 8 November 2023, available at: https://www.ecb.europa.eu/ecb-and-you/explainers/tell-me/html/minimum_reserve_req.en.html [last accessed 2 January 2025].

[132] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, art 12.

[133] Ibid.

[134] Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, art 92.

[135] For further information on these types of assets, see Bank for International Settlements 'Definition of capital in Basel III – Executive summary' 27 June 2019, available at: https://www.bis.org/fsi/fsisummaries/defcap_b3.pdf [last accessed 6 January 2025].

[136] Regulation (EU) No 575/2013 (note 132), arts 99, 394, 415, 416, 427 and 430. See a useful table of different reporting obligations and their frequency by the Commission de Surveillance du Secteur Financier (the

Thus, EMI licences may serve EMT issuers well due to the lighter regulatory burden compared to financial and traditional banking regulations, and may promote the creation of EMTs and foster innovation among EMT issuers. This will in turn support stablecoin CASPs which conduct services in relation to these EMTs.

3.9 Operational standards

Depending on the services provided, MICAR imposes specific operational requirements on different CASPs.[137] These are intended to safeguard the interests of consumers by ensuring that they have rights to underlying crypto assets,[138] are able to enforce these rights,[139] have sufficient information to make informed choices when purchasing crypto assets or using CASP services,[140] have a reasonable level of technological security[141] when using CASP services; and by seeking to protect the market at large by giving authorities oversight over key components of CASP services,[142] and offeror[143] and issuer[144] activities to protect consumer interests.

CASPs which hold crypto assets belonging to clients *or* holding the 'means' of access to such crypto assets must make arrangements to safeguard the ownership rights of clients,[145] including during such CASPs' insolvency.[146] These CASPs may not use customer funds for their own account.[147] These provisions ostensibly address the practices of exchanges during the 2022 industry decline, where clients of bankrupt exchanges could not withdraw their crypto assets.

CASPs must treat clients fairly and be sufficiently clear in their marketing.[148] CASPs are obliged to act in the interests of their clients and prospective clients and are prohibited from

Luxembourgish prudential authority) 22, available at: https://www.cssf.lu/wp-content/uploads/Reporting_requirements_final.pdf [last accessed 6 January 2025].

[137] See MICAR, Title V generally.

[138] MICAR, art 70.

[139] MICAR, art 70(1) with respect to customers' rights to crypto assets during a CASP's insolvency.

[140] MICAR, art 66 regarding CASPs' duties to act honestly and fairly, and to disclose necessary information in their marketing communications.

[141] MICAR, art 68.

[142] MICAR, art 63 regarding the authorisation of CASPs. See Title IV generally.

[143] MICAR, arts 4 and 14 regarding the requirements to be met before a person can offer crypto assets other than ARTs and EMTs to the public, and art 102 regarding further oversight by competent authorities where CASPs, offerors or issuers conduct irregular activities inconsistent with MICAR.

[144] MICAR, arts 18 and 48 regarding authorisation of ART and EMT issuers respectively. See MICAR, Titles III (ARTs) and IV (EMTs) generally.

[145] 'Means' of access will notionally include instances where CASPs act as an intermediary for customers to access their crypto-assets, even where those customers do not use their private keys directly, see MICAR, art 70(1).

[146] Ibid.

[147] Ibid.

[148] MICAR, art 66.

misleading clients in relation to the advantages of any crypto assets.[149] This clear obligation towards clients and responsible marketing addresses the risks highlighted in chapter 2: exchanges that did not act in their customers' best interests, made misleading statements and/or were irresponsible in their marketing practices. Further, CASPs may not make an offer to the public of any ARTs or EMTs that are not compliant with MICAR's provisions, including the provision of exchange services in respect of these assets.[150] This adds a further layer of protection to consumers in their interaction with CASPs which was not present during the 2022 crypto asset industry decline.

In addition to these rules relating to conduct of CASPs and their operations, as mentioned above, CASPs must hold funds up to EUR 150 000 at all times[151] or one-quarter of fixed overheads in a given year, whichever is higher.[152] Interestingly, all CASPs are required to either comply with arts 26 to 30 of the EU's Capital Requirements Regulation,[153] which regulate own funds requirements of credit institutions and investment firms, or hold an insurance policy or comparable guarantee covering the areas in the EU where the CASP operates.[154] At the time of writing, insurance providers are still reluctant to offer coverage for crypto asset-related activities,[155] leaving many CASPs to comply with own funds requirements or jump through many hoops to pay a high premium. The requirements of arts 26 to 30 of the Capital Requirements Regulation aim to decrease the likelihood that CASPs will go insolvent, treating these CASPs much like banks in this respect.[156] MICAR mandates that CASPs must also have a comprehensive insurance policy in place to provide cover in the event of their breach of legal and regulatory requirements.[157]

[149] Ibid.
[150] Titles III and IV of MICAR stipulate that, in order for ARTs and EMTs to be offered to the public, their offerors must comply with the respective Titles. This may include CASPs that are not issuers but make offers of those crypto assets to the public. ESMA confirmed this position in its 'Public statement on the provision of certain crypto-asset services in relation to non-MiCA compliant ARTs and EMTs of 17 January 2025', available at: https://www.esma.europa.eu/sites/default/files/2025-01/ESMA75-223375936-6099_Statement_on_stablecoins.pdf [last accessed 24 January 2025].
[151] This varies depending on the services provided, per Annex IV of MICAR.
[152] MICAR, art 67.
[153] Regulation (EU) No 575/2013 (note 132).
[154] MICAR, art 67.
[155] Raymond Zenkich & Matt Carey 'The potential of cryptocurrency insurance' 1 May 2023, available at: https://equarium.hannover-re.com/5065-the-potential-of-cryptocurrency-insurance [last accessed 25 May 2024].
[156] See the Capital Requirements Regulation (EU) No 575/2013 (note 134).
[157] MICAR, art 67.

The operational standards imposed on CASPs are complemented by those imposed on issuers, which are designed to safeguard the value and stability of EMT and ARTs.

Issuers must have a recovery plan in place specifying contingencies for the recovery of operations in the event that they fail to comply with reserve asset requirements.[158] Issuers must also draw up a redemption plan to support the 'orderly' redemption of ARTs in the case of insolvency or the withdrawal of the issuer's authorisation. The redemption plan must 'demonstrate the ability of the issuer of the asset-referenced token to carry out the redemption of the outstanding asset-referenced token issued without causing undue economic harm to its holders or to the stability of the markets of the reserve assets'.[159] The purpose of the redemption plan is to ensure that token holders (consumers) received the value of reserve assets should the issuer lose authorisation or become insolvent. These protections are clear lessons from the 2022 crisis and the many instances of exchanges failing to honour redemptions where a 'run on the bank [exchanges]' occurred. This supports stablecoin CASPs, which may rely on the issuer to honour redemption requests in such circumstances.

3.10 Implementation of MICAR

MICAR entered into force from 29 June 2023, with its provisions on ARTs and EMTs applying from 30 June 2024.[160] As at the time of writing, ESMA[161] and the EBA[162] have issued a finalised series of technical rules and guidelines in relation to the operation and market conduct of CASPs. A comprehensive assessment of these rules and guideline is beyond the scope of this dissertation, and as they have been finalised only recently, they have yet to be tested.

Initial reactions to MICAR were cautious as the crypto asset industry was wary of regulatory scrutiny;[163] however, since the publication of MICAR, the industry has seemingly accepted it

[158] MICAR, art 46 in relation to ARTs and art 55 in relation to EMTs.
[159] MICAR, art 47.
[160] MICAR, art 149.
[161] See the latest technical standards issued by ESMA at ESMA 'Markets in Crypto-Assets Regulation (MiCA)', 17 December 2024 available at: https://www.esma.europa.eu/esmas-activities/digital-finance-and-innovation/markets-crypto-assets-regulation-mica [last accessed 10 January 2025].
[162] EBA 'Technical Standards, Guidelines & Recommendations', available at: https://www.eba.europa.eu/regulation-and-policy/asset-referenced-and-e-money-tokens-micar [last accessed 10 January 2025].
[163] Jack Schickler 'Crypto world is cautious of finer details in EU's MICAR law' *Coindesk*, 1 July 2022, available at: https://www.coindesk.com/policy/2022/07/01/crypto-world-is-cautious-of-finer-details-in-eus-MICAR-law/ [last accessed 25 May 2024].

as a positive influence on the industry.[164] Jurisdictions with regulatory certainty in respect of crypto assets provide a better environment for the industry and encourage innovation.[165] By creating an environment with clear rules for crypto asset activities, MICAR poises the EU to become a global benchmark for crypto standards and a hub for crypto-investment.[166] The wide-reaching applicability of MICAR, applicable to any actor that provides regulated activities covered by MICAR in the EU, ensures blanket consumer protection across the EU and reduces the risk of instability (particularly caused by negative market perception) to the industry.

MICAR has been criticised for failing to regulate decentralised finance.[167] However, this is a branch of the crypto asset industry that is more mercurial than crypto asset intermediaries and service providers, often being governed by decentralised voting structures whose rules are executed via smart contract, rather than by persons.[168] Decentralised finance is more difficult for an ordinary consumer to access as it requires additional capabilities and aptitude, compared to accessing crypto assets through an exchange, which perhaps explains why regulators chose to wait to address this issue. The European Commission is meant to release a report on the risks of decentralised finance in December 2024, which will likely shed more light on any impending regulations that it may issue.[169]

3.11 Summary and conclusion

The goals and objects of MICAR clearly set consumer protection at the forefront of regulatory importance,[170] as MICAR introduces many rules to ensure that activities which would be

[164] Unchained 'What is MICAR and what does it mean for crypto users in Europe?' *Coindesk*, 11 January 2024, available at: https://www.coindesk.com/learn/what-is-MICAR-and-what-does-it-mean-for-crypto-users-in-europe/ [last accessed 25 May 2024].
[165] Ibid.
[166] Fariha Bajawrhi 'Why we need to treat MICAR as the crypto carrot, and not the stick' *Brave New Coin*, 9 May 2024, available at: https://bravenewcoin.com/insights/why-we-need-to-treat-mica-as-the-crypto-carrot-and-not-the-stick [last accessed 25 May 2024].
[167] Mike Sarvodaya 'MICAR: The good, the bad and the ugly of the EU's crypto rules' *Cointelegraph*, 30 August 2023, available at: https://cointelegraph.com/news/MICAR-good-bad-ugly-european-union-crypto-rules [last accessed 25 May 2024].
[168] The Economist Leaders 'The beguiling promise of decentralised finance' *The Economist*, 18 September 2021, available at: https://www.economist.com/leaders/2021/09/18/the-beguiling-promise-of-decentralised-finance.
[169] MICAR, art 142. This report was released later than the projected deadline, on 16 January 2025. ESMA 'Joint Report: Recent developments in crypto-assets (Article 142 of MiCAR)' 16 January 2025, available at: https://www.esma.europa.eu/sites/default/files/2025-01/ESMA75-453128700-1391_Joint_Report_on_recent_developments_in_crypto-assets__Art_142_MiCA_.pdf [last accessed 25 January 2025]
[170] Paragraphs 4, 29, 79, 80, 85, 89 and 109 of the preamble to MICAR set out the rationale for certain provisions of MICAR and highlight the importance of consumer protection throughout the text.

regulated under existing regulations are not circumvented merely because they are presented in crypto asset form. In other words, if the substance of the activity would usually fall under MiFID II or other existing financial markets regulations, MICAR makes it clear that these regulations will apply, despite the form of the activity or service provided being in crypto asset form. This includes banking activities and electronic money institution activities.

MICAR sets prudential and market conduct standards for stablecoin CASPs, requiring that they maintain certain mandatory own funds requirements, possess adequate skills and maintain other operational requirements, deal with their customers fairly and honestly,[171] and disclose requisite information; MICAR imposes penalties for breaches.[172] MICAR's rules cover stablecoins in the form of ARTs and EMTs, specifying that the EMD applies to EMTs. The EMD imposes lighter regulatory requirements on issuers of electronic money than those applicable to credit institutions, with credit institutions needing to comply with a higher own funds threshold, requiring more regular and detailed reporting requirements, and being subjected to more stringent oversight.[173]

This adaptation of the EMD to include EMTs within the definition of electronic money grants issuers of EMTs a more accessible licensing process than if they were required to register as credit institutions (ie as banks). Similarly, stablecoin CASPs are not required to be licensed as credit institutions but must seek a licence under MICAR or, if they are already a regulated entity, must be appropriately authorised under their existing licence to conduct CASP activities.[174] As mentioned above, CASPs must comply with prudential and conduct requirements, but these are less rigorous than those applicable to credit institutions.[175] In short, stablecoin CASPs do not need to register as banks in the EU and the provision of exchange services falls within MICAR's scope.

MICAR's rules regulate both stablecoin CASPs and the issuers of stablecoins. These rules cover the separate risks posed by each type of actor. For example, if we consider the case studies examined in chapter 2, under MICAR's provisions, the issuer of Terra/Luna would need to draw up white papers for Terra and Luna, apply for authorisation to issue Terra and Luna,

[171] MICAR, art 66.
[172] Article 111 of MICAR refers to the powers of national competent authorities to impose administrative penalties for infringements of MICAR, in addition to any criminal penalties that may apply.
[173] See section 3.21 above.
[174] MICAR, art 59.
[175] MICAR, art 67.

disclose all risks associated with Terra and Luna, and comply with other ongoing requirements under MICAR and the EMD (own funds not less than EUR 350 000 or a portion of the EMTs in circulation). Stablecoin CASPs providing services relating to Terra would need to provide links to these white papers, apply for authorisation under MICAR (making all relevant disclosures in their applications), comply with all other ongoing requirements (eg operational requirements concerning internal controls and policies), maintain the required minimum capital, and treat customers honestly and fairly.

The EU's regulatory policy towards crypto assets and the promulgation of MICAR have an advantage in that they adapt existing regulations relating to the issuing of electronic money, managing associated risks with the EMD while providing a more accessible licensing regime for EMT issuers than if they were required to obtain a licence as a bank, as they are in South Africa.[176] CASPs providing services in relation to EMTs and ARTs (encompassing all forms of stablecoins, with EMTs representing the more significant type) are subject to MICAR's prudential and conduct requirements. On the face of it, this does not differ dramatically from South Africa's approach to regulating CASPs as financial services providers, and not as banks. However, as will be discussed further below, MICAR is more transparent and detailed concerning the specific requirements applicable to different types of CASPs, which is understandable given that it is a framework specifically designed to harmonise crypto asset regulation with existing EU legislation. This detailed framework, combined with its effects in clarifying EMT issuers' obligations in terms of the EMD, is significant in reducing consumer risk while maintaining proportionate regulation and not requiring stablecoin CASPs to register as banks. The next chapter examines the South African approach and considers the differences between the South African approach and the EU approach relating to stablecoins.

[176] SARB 'Position Paper on Electronic Money' Position Paper NPS 01/2009, November 2009, available at: https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-surveillance/general-public/PP2009_01.pdf [last accessed 20 December 2025].

CHAPTER 4: REGULATION OF CRYPTO ASSETS IN SOUTH AFRICA

4.1 A brief overview of the financial and banking regulatory landscape

South African regulators monitor financial institutions and their conduct through the 'Twin Peaks' model.[1] This is structured by the Financial Sector Regulation Act 9 of 2017 ('FSR Act'). The FSR Act establishes the Prudential Authority ('PA') and the Financial Sector Conduct Authority ('FSCA'). The purpose of this Act is to preserve and enhance financial stability.[2] Crypto asset service providers ('CASPs') are regulated primarily by the FSCA, however this can vary depending on the activity conducted CASPs.

The PA regulates and supervises financial institutions and market infrastructures, and cooperates with a number of other regulatory bodies to promote a safe and efficient financial market.[3] The PA operates as an arm of the South African Reserve Bank ('SARB') and is guided in its activities by a strategy set forward by the Prudential Committee.[4] The landscape of the PA's regulatory mandate is encapsulated below in a table provided by the SARB.[5]

Banks	Insurance	Market Infrastructures	Mutual banks	Co-operative financial institutions (CFIs) and co-operative banks
• Banks Act 94 of 1990 (Banks Act) • Banks regulations • Basel Committee on Banking Supervision – 29 Core Principles (Basel II, Basel 2.5 and Basel III Frameworks) • Resolution Framework • Companies Act 71 of 2008 (Companies Act)	• Insurance Act 18 of 2017 • Insurance standards • International Association of Insurance Supervisors – Core Principles • Solvency II (SAM) • Companies Act	• Financial Markets Act 19 of 2012 (FMA) • FMA Regulations • Committee Principles for Financial Market Infrastructures • Companies Act	• Mutual Banks Act 124 of 1993 (Mutual Banks Act) • Prudential standards for Mutual banks – to be developed • Companies Act	• Co-operative Banks Act 40 of 2007 (Co-operative Banks Act) • Transitional arrangements for CFIs • Transitional standard for co-operative banks • Co-operatives Act 14 of 2005

[1] South African Reserve Bank 'Prudential Regulation', available at: https://www.resbank.co.za/en/home/what-we-do/Prudentialregulation [last accessed 7 June 2024].
[2] J Moorcroft & ML Vessio *Banking Law and Practice* (2024) 39 - 24.
[3] Ibid.
[4] South African Reserve Bank 'Prudential Regulation' (note 1).
[5] Ibid.

The FSCA is the market conduct regulator in South Africa and is responsible for enhancing the integrity and efficiency of financial markets, providing financial education to consumers, protecting financial consumers and assisting in maintaining financial stability.[6]

The Financial Intelligence Centre ('FIC') has oversight of CASP activities from an anti-money laundering and counter-terrorist financing perspective.[7]

The Consumer Protection Act 68 of 2008 ('CPA') does not apply to a financial service which is subject to the authority of the FSCA and which is regulated by the FSR Act. Lawack and others suggest that since the Conduct of Financial Institutions Bill ('COFI Bill')[8] is not yet in force, the market conduct provisions of the CPA will apply to the financial sector insofar as those provisions are not covered by existing financial sector regulations.[9] The COFI Bill is a draft Bill which forms part of broader regulatory reform in the financial sector, reform which includes the FSR Act.[10] The COFI Bill intends to replace and streamline market conduct regulation under a single legal framework for financial institutions.[11] It is also unclear if the current version of the COFI Bill will become the final Act; this is discussed in more detail below. The scope of this dissertation is limited to a discussion of the regulation of crypto assets as financial products under the Financial Advisory and Intermediary Services Act 37 of 2002 ('FAIS Act'). Therefore, possible gaps between the FAIS Act and the COFI Bill, where the CPA may apply to fill this void, will not be analysed at this time.

4.2 Regulatory development to date

South Africa's regulation of crypto assets began over a decade ago. The National Treasury issued warnings to consumers as early as 2014, cautioning them about using 'virtual assets' (now called 'crypto assets') and advising them about the lack of recourse for any losses

[6] FSCA 'About us', available at: https://www.fsca.co.za/Pages/About-Us.aspx [last accessed 7 June 2024].
[7] 2022 Declaration (chapter 1 note 5).
[8] Conduct of Financial Institutions Bill, Draft of September 2020, available at: https://www.treasury.gov.za/twinpeaks/Conduct%20of%20Financial%20Institutions%20Bill.pdf [last accessed 4 January 2025].
[9] V Lawack, BM Mupangavanhu & E Olivier 'The protection of consumers of retail central bank digital currency – Some considerations' (2023) 86(3) *Tydskrif vir Hedendaagse Romeins-Hollandse Reg* 285–306 at 300.
[10] For more information on the policy behind COFI, see the Explanatory Policy Paper accompanying the Conduct of Financial Institutions Bill, available at: https://www.treasury.gov.za/twinpeaks/cofi%20bill%20policy%20paper.pdf [last accessed 27 January 2025].
[11] Ibid 8.

suffered.[12] It was not until 2021 that the Intergovernmental Fintech Working Group ('IFWG') announced the intention to incorporate crypto assets within the South African regulatory framework, publishing a position paper in 2021 ('IFWG Position Paper') setting out a roadmap for this framework.[13] In 2022, the FSCA announced that crypto assets were to be defined as financial products (in accordance with the IFWG Position Paper) and would be subject to regulation under the FSR Act and the FAIS Act.[14] Crypto assets, therefore, also fall within the ambit of the COFI Bill and will be subject to its regulation once it is enacted.[15]

During the period 2014 to 2022, other key clarifications were made regarding certain legal aspects of crypto assets in South Africa. Among these was the inclusion of CASPs in the list of accountable institutions subject to the Financial Intelligence Centre Act 38 of 2001 ('FICA').[16] This inclusion brought CASPs under the regulation of the FIC insofar as anti-money laundering and counter-terrorist financing measures were concerned.[17] The FIC issued a draft directive in April 2024 setting out guidelines for CASPs to provide certain know-your-client ('KYC') information when facilitating cryptocurrency transactions domestically and abroad.[18] This draft directive was issued following recommendations made by the Financial Action Task Force to address compliance deficiencies in South Africa's 'mutual evaluation', which is a report analysing the robustness of a country's anti-money laundering and counter-terrorist-financing measures.[19] These compliance deficiencies contributed to South Africa's

[12] National Treasury 'User alert monitoring of virtual currencies' 8 September 2014, available at: https://www.treasury.gov.za/comm_media/press/2014/2014091801%20-%20user%20alert%20virtual%20currencies.pdf [last accessed 7 February 2025], 1–4.

[13] South African Reserve Bank (SARB) 'IFWG CAR Working Group Position Paper on Crypto Assets', available at: https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2021/IFWG-CAR-Working-Group-position-paper-on-crypto-assets [last accessed 27 February 2023].

[14] The definition of financial product per s 1 of FAIS has been amended: 'Declaration of a Crypto Asset as a Financial Product under the Financial Advisory and Intermediary Services Act' *Government Gazette* No. 47334 of 19 October 2022, available at: https://www.gov.za/sites/default/files/gcis_document/202210/47334gen1350.pdf [last accessed 12 April 2023].

[15] FSCA 'Policy document supporting the declaration of crypto assets as a financial product' 19 October 2022.

[16] See National Treasury GN 2800, *GG* 47596 of 29 November 2022.

[17] For more information on anti-money laundering measures relating to cryptocurrency, see PT Ncube & R Kabwe 'The regulation of cryptocurrencies to combat money laundering in South African banking institutions' (2023) *De Jure* 354–375.

[18] Financial Intelligence Centre 'Consultation paper on the implementation of the travel rule for those accountable institutions that engage in crypto asset transfers' 18 April 2024, available at: https://www.fic.gov.za/wp-content/uploads/2024/04/Consultation-paper-Draft-Directive-9-on-the-travel-rule-relating-to-crypto-asset-transfers.pdf [last accessed 28 January 2025].

[19] Financial Action Task Force 'Anti-money laundering and counter-terrorist financing measures in South Africa: Mutual Evaluation Report' October 2021, available at: https://www.fatf-gafi.org/content/dam/fatf-gafi/mer/Mutual-Evaluation-Report-South-Africa.pdf html [last accessed 15 June 2024]. See Financial Action Task Force 'South Africa's progress in strengthening measures to tackle money laundering and terrorist

'grey-listing' (being placed under increased monitoring for money-laundering and terrorist-financing transactions) in 2023.[20]

The position of crypto-assets has also been clarified with respect to taxation. The South African Revenue Service ('SARS') issued a statement in 2018 to clarify that taxpayers are obliged to declare cryptocurrencies as part of their taxable income.[21] SARS is one of the many governmental groups that form part of the IFWG, and its stance is reflected in the IFWG Position Paper on crypto assets.[22]

4.3 The IFWG Position Paper on crypto assets

The Position Paper[23] defines three types of crypto assets that are subject to recommendations for regulation:

> (i) Exchange or payment token: These are tokens designed to be used as a means of exchange or payment for buying goods and services. Some users also utilise it for investment purposes. ii) Security token: These tokens provide rights such as ownership, the repayment of a specific sum of money, or entitlement to a share in future profits. iii) Utility token: These tokens can be redeemed for access to a specific product or service that is typically provided using a DLT [distributed ledger technology] platform.[24]

These categories loosely capture some characteristics of crypto assets regulated by MICAR in its definitions of asset-referenced tokens ('ARTs'), electronic money tokens ('EMTs') and utility tokens. Exchange or payment tokens bear similarities to ARTs and EMTs, but do not capture the complexity of a token referencing a single asset or multiple types of assets. Security tokens have some features of ARTs, but fundamentally do not fall within this definition in MICAR, which makes it clear that security tokens are a separate category to be regulated by existing securities regulations in the EU. Utility tokens are not covered under MICAR at

financing', available at: https://www.fatf-gafi.org/en/publications/Mutualevaluations/south-africa-fur-2023.html [last accessed 15 June 2024].

[20] 'Jurisdictions under increased monitoring – 24 February 2023', available at: https://www.fatf-gafi.org/en/publications/High-risk-and-other-monitored-jurisdictions/Increased-monitoring-february-2023.html#South-Africa [last accessed 15 June 2024].

[21] South African Revenue Service 'SARS's stance on the tax treatment of cryptocurrencies' 6 April 2018, available at: https://www.sars.gov.za/media-release/6-april-2018-sarss-stance-on-the-tax-treatment-of-cryptocurrencies/ [last accessed 28 January 2025].

[22] See 2018 SARS Statement and SARB 'IFWG Position Paper' (chapter 2 note 11) 22, regarding the risk of tax evasion using crypto assets.

[23] SARB 'IFWG Position Paper' (chapter 2 note 11).

[24] Ibid 15.

present. The Position Paper discusses the various uses of these crypto assets as broadly falling into four categories: tokens with characteristics of securities with an income-generating component and potential rights; transactional tokens which are used as a store of value or unit of account; tokens representing real-world assets; and tokens which are used for supporting services or functionalities in a distributed ledger technology ('DLT') platform.

Based on these potential use cases, the Position Paper makes a number of recommendations for the regulation of crypto assets in South Africa, including:[25]

i) Providing definitions for different CASPs and issuers.[26]
ii) Adding CASPs to the list of accountable institutions regulated under the FIC Act (now already implemented) and supervised by the FIC.[27]
iii) Crypto assets should remain without legal tender status and should not be recognised as electronic money.[28]
iv) Crypto assets should not be a permitted method of settlement under the South African Multiple Option Settlement ('SAMOS') system. This recommendation[29] states that crypto assets should not be incorporated within the existing financial market infrastructure until comprehensive regulations are in place to govern this coexistence.
v) The FSCA and other relevant stakeholders should increase their digital literacy programmes and campaigns.[30]
vi) The FSCA should be responsible for supervising and licensing CASP activities.[31]
vii) Exchange control regulations should be modified to explicitly include crypto assets.[32]
viii) Collective investment schemes and pension funds should not be permitted to include crypto assets in their portfolios.[33]
ix) Issuers of payment and utility tokens (as described by the Position Paper) should be accommodated under the COFI Bill and the FSR Act as a financial service and licensed accordingly. The Position Paper contemplates that issuers of these tokens, as part of the initial offering of these tokens to the public, should prepare a white paper setting out

[25] This is a non-exhaustive list; for the full list, see SARB 'IFWG Position Paper' (chapter 2 note 11) 30–40.
[26] SARB 'IFWG Position Paper' (chapter 2 note 11) 30.
[27] Ibid 33.
[28] Ibid 35.
[29] Ibid.
[30] Ibid.
[31] Ibid.
[32] Ibid 37.
[33] Ibid 38.

specific requirements and disclosures for the issuer, governance arrangements, legal agreements, audits and reports to regulators.[34]

The Position Paper ranked its recommendations based on their short-, medium- and long-term urgency. The declaration of crypto assets as a financial product under the FAIS Act was a short-term recommendation and has already been implemented.

4.4 Current status of crypto assets

The 2022 Declaration was accompanied by a policy document outlining the rationale for the decision and providing responses to the public comments received.[35] The policy document explains the transitional arrangements[36] which were in place relating to the declaration of October 2022, which temporarily exempted service providers from having a licence, provided they submitted their applications between June and November 2023 and immediately complied with related codes of conduct and fit and proper requirements.[37] This transitional period has now lapsed and stablecoin CASPs are required to apply for licences under the FAIS Act to conduct their activities.

The policy document further clarifies that not all crypto asset activities will fall within the ambit of the declaration. For instance, nodes are excluded from the declaration as they pose low consumer risk, operating without a customer-facing role and working instead to support the blockchain infrastructure. Similarly, because non-fungible tokens ('NFTs') are not typically used in the manner of a financial product which the FSCA seeks to regulate, they are excluded from the declaration and are not considered financial products at this time.[38] The Position Paper noted that this could change, depending on how the NFT is used, but that

[34] Ibid 38.
[35] FSCA 'Policy document supporting the declaration of crypto assets as a financial product' 19 October 2022, available at: https://www.fsca.co.za/Regulatory%20Frameworks/Temp/Policy%20Document%20supporting%20the%20Declaration%20of%20crypto%20assets%20as%20a%20financial%20product.pdf [last accessed 2 June 2023].
[36] See the temporary exemption granted by the FSCA for CASPs in operation during the transitional period per FAIS Notice 90 of 2022 'Exemption of Persons Rendering Financial Services in Relation to Crypto Assets from Section 7(1) of the Financial Advisory and Intermediary Services Act, 2022', available at: https://www.fsca.co.za/Notices/General%20Notice%201350%20of%202022%20and%20FSCA%20FAIS%20Notice%2090%20of%202022.zip [last accessed 3 January 2025].
[37] FSCA 'Policy document supporting the declaration of crypto assets as a financial product' (note 35).
[38] There are, of course, exceptions here, such as where NFTs are used to represent other types of financial products, such as shares. See SARB 'IFWG Position Paper' (chapter 2 note 11) 9.

typically the market uses NFTs for the sale of digital art and the South African NFT market is in its infancy.

With the 2022 Declaration, CASPs fell under the FSCA's supervision. However, if a CASP offers services within the PA's regulatory mandate (such as taking deposits), then naturally those services will be subject to the relevant legislation and will fall under the PA's supervision, despite the use of crypto assets to provide these services.

In April 2024, the FSCA licensed 75 institutions as CASPs,[39] including Luno, and since then it has approved a further 63 institutions.[40]

4.5 Crypto assets under the FAIS Act

The declaration of crypto assets as financial products requires that anyone providing intermediary services, advice and investment management in relation to crypto assets must be licensed under the FAIS Act.[41] Financial services providers ('FSPs') operating before the inclusion of crypto assets within the definition of financial products also had to apply for a licence to provide their services in relation to crypto assets.[42]

The FAIS Act regulates the market conduct of CASPs, and how they interact with end customers in providing advice and/or intermediary services. 'Advice' is defined in the FAIS Act as 'subject to subsection (3)(a), any recommendation, guidance or proposal of a financial nature furnished, by any means or medium, to any client or group of clients' in respect of a financial product.[43] 'Intermediary services' are defined as

> subject to subsection 3(6), any act other than the furnishing of advice, performed by a person for or on behalf of a client or product supplier a) the result of which is that a client may enter into, offers to enter into or enters into any transaction in respect of a financial product with a

[39] FSCA 'Press release: FSCA confirms list of currently approved crypto asset service providers' 22 April 2024, available at: https://www.fsca.co.za/News%20Documents/FSCA%20Press%20Release%20-%20FSCA%20confirms%20list%20of%20currently%20approved%20crypto%20asset%20service%20providers.pdf [last accessed 21 September 2024].

[40] FSCA 'Press release: FSCA update on approved crypto asset service providers' 2 July 2024, available at: https://www.fsca.co.za/News%20Documents/FSCA%20Press%20Release%20-%20FSCA%20update%20on%20approved%20Crypto%20Asset%20Service%20Providers%20%2002%20July%202024.pdf [last accessed 21 September 2024].

[41] FAIS Act, ss 7 and 8.

[42] See Board Notice 194 of 15 December 2017, *GG* 41321, ch 3, which describes licensing and competence requirements which must be fulfilled for each financial product dealt with by an FSP.

[43] FAIS Act, s 1.

product supplier; or b) …[managing, administering, maintaining, providing custody services, collecting premiums in respect of, processing claims in respect of financial products].

The FAIS Act defines five categories of FSPs rendering advice and intermediary services.[44] These categories dictate the applicable licence to which the provider is subject. Category 1 is a catchall category of FSPs which render financial services other than those detailed in subsequent categories. These service providers do not have discretion to choose investments on behalf of clients. Category II FSPs render intermediary services of a discretionary nature regarding the choice of the financial product, but they do not do so through 'bulking'.[45] Category IIA FSPs provide discretionary services[46] specifically in relation to hedge funds (pooled client investments managed and traded by an intermediary). Category III FSPs provide services in relation to the administration of collective investment schemes, excluding discretionary services. Category IV FSPs offer assistance business policies such as funeral or micro-insurance.

CASPs have acquired Category I, II and IIA licences in South Africa.[47] The choice of licence will depend on CASPs' business cases. Luno (which provides exchange services for stablecoins, and is a stablecoin CASP) is authorised by its Category I licence to offer intermediary services, advice and investment management services in relation to crypto assets. This category of licence would not permit Luno to use customer funds to crypto assets without the customer making the choice of crypto asset purchased or sold. This aligns with the business model for many stablecoin CASPs which permit users to select and purchase crypto assets themselves through the CASP's platform.

Different licence categories of FSPs must comply with different thresholds of operational[48] and conduct requirements, maintaining certain levels of liquidity, having key individuals with certain experience, and meeting certain reporting obligations.[49] For example, Category I FSPs which hold, control or access client assets, or receive funds in respect of a financial product, require fewer liquid assets than Category II FSPs.[50] For all FSPs, working capital (funds to

[44] Board Notice 194 (note 42) ch 3.
[45] That is, aggregating (or pooling) client funds to achieve attractive returns.
[46] Meaning that the FSP can render services of a discretionary nature as regards the choice of financial product. Board Notice 163 of 2010, *GG* 33730, 4 November 2010, available at: https://www.gov.za/sites/default/files/gcis_document/201409/33730163.pdf [last accessed 8 January 2025].
[47] FSCA 'Press release: FSCA update on approved crypto asset service providers' (note 40).
[48] This includes financial soundness requirements under ch 5 of Board Notice 194 (note 42).
[49] Board Notice 194 (note 42).
[50] Ibid Table B, 399.

cover daily expenses) must exceed liabilities.[51] Category IIA and Category III FSPs must have an addition R3 million in assets.[52]

It is noteworthy that FSP licence application forms published by the FSCA[53] are limited in the information that they require regarding the content of applications, failing to specify, for example, exactly what a conflict of interest policy should include for CASPs. This may lead to CASPs failing to disclose essential information that is particular to crypto assets, and not generic to other types of FSPs. For example, a CASP may have a conflict of interest if that CASP is a majority token holder of a stablecoin it offers to the public and has influence over its consensus mechanism.[54]

Section 8 of the FAIS Act requires that prospective FSPs (CASPs, in this instance) demonstrate that they are fit and proper before they can be authorised to conduct any financial services. 'Fit and proper' requirements are honesty and integrity, financial soundness and the operational competence of the FSP.[55] Generally, to be considered competent means to 'have adequate, appropriate and relevant skills, knowledge and expertise in respect of the financial services, financial products and functions that it performs'.[56] Competence is determined by 'adequate experience' of the FSP in relation to the specific financial product for which a licence is sought.[57] FSPs and the key individuals representing FSPs must fulfil criteria based on their training on the particular financial product, including training on the nature and features of the product, the complexities of the product, risks associated with the product, macro-economic factors affecting the product, the liquidity of the product, the identity of the product supplier, and so forth.[58]

FSPs must demonstrate sound operational ability to provide the financial services for which they are authorised.[59] This is detailed in the regulations as including, for instance, maintaining appropriate governance and oversight; keeping adequate human, technical and technological

[51] Ibid.
[52] Ibid.
[53] FSCA 'Form FSP 7', available at: https://www.fsca.co.za/Regulated%20Entities/Regulated%20Entities%20Documents/FSP7.pdf [last accessed 18 January 2025].
[54] While unlikely, this is possible. See the discussion on consensus mechanisms in section 2.3 above.
[55] Board Notice 194 (note 42) para 4.
[56] Ibid para 12.
[57] Ibid para 12.
[58] Ibid para 29.
[59] Ibid ch 5.

resources; having a fixed physical address from which the business is controlled; and having a bank account with a registered bank.[60]

The FSCA's FAIS Notice 29 of 2023[61] updated the application forms applicable to FSPs, providing for the inclusion of crypto assets. It requires detailed information about the applicant's experience in providing advice and/or intermediary services in relation to crypto assets, if a licence is sought to provide these services. An additional section requests that applicants:

> [d]emonstrate whether the applicant has adequate, appropriate and relevant skills, knowledge and expertise (general competence requirement) to perform the function in respect of crypto assets as required in terms of the fit and proper requirements determined under section 6A of the Act.

This, presumably, is meant to give applicants an opportunity to show adequate experience in financial products similar to crypto assets, since many of them will not have years of experience in a financial product which has only relatively recently become regulated under the FAIS Act.

Demonstrating operational ability requires, *inter alia*, the following documents:

a) Business plan
b) Risk management policy
c) Governance structures
d) Remuneration policies
e) Resolution plan
f) Financial recovery plan
g) Disaster recovery plan
h) Compliance management framework
i) Business continuity policy
j) Conflict of interest policy
k) Complaints management framework

[60] Ibid ch 5.
[61] FSCA 'FAIS Notice 29 of 2023: Application by Financial Services Providers for Authorisation, 2023', available at https://www.fsca.co.za/Notices/FSCA%20FAIS%20Notice%2029%20of%202023.pdf [last accessed 18 January 2025].

l) Other policies or procedures that demonstrate compliance with the operational ability requirements.[62]

These requirements bear clear similarities to licence application and conduct requirements under MICAR,[63] but the particular content of these requirements in relation to different types of cryptocurrencies is not codified in sufficient detail to allow for comparison.

Considering the issue of adequate reserves which was highlighted by the 2022 crypto asset industry decline, stablecoin issuers should be required to keep reserves to support redemption requests for stablecoins in South Africa. This position is not explicit in relation to issuers. While alluded to in the IFWG Position Paper in considering the application of the COFI Bill to crypto assets, reserves are not explicitly mentioned.[64] South African regulators should address this issue in order to clarify the obligations on issuers of stablecoins in South Africa and safeguard against bad practice in the market, stablecoins which cannot maintain their value, and the possibility of issuers being unable to honour the redemption requests of holders of stablecoins.

Depending on the business plans of stablecoin CASPs, the requirement to maintain adequate reserves may be construed as part of a stablecoin CASP's existing obligation for appropriate resources to meet the operational requirements under the FAIS Act.[65] Consider, for example, a stablecoin CASP offering an exchange platform on which customers can freely interact with a digital wallet: this stablecoin CASP will need to keep a certain amount of funds in reserve to ensure that it can meet redemption requests. This CASP's customers must be able to access their digital wallet on that CASP's platform and transact with their crypto assets, since the solution being offered is self-custodial in nature and customers expect unhindered access to their wallets. Without the safeguard of sufficient liquidity to honour redemption requests, this stablecoin CASP will not operate effectively according to its own business plan and may not be considered financially sound.[66] An argument can be made that certain CASPs (again, depending on the business plan of the CASP) hold stablecoins on behalf of their customers and

[62] These documents are detailed by the FSCA's application process, in Form 7, available at: https://www.fsca.co.za/Regulated%20Entities/Regulated%20Entities%20Documents/FSP7.pdf [last accessed 26 October 2024].
[63] See sections 3.2, 3.3, 3.4, 3.5 and 3.6 above, which describe CASPs' obligations to disclose similar information when applying for a licence, to include critical information in white papers, maintain transparency and include operational safeguards (such as recovery management).
[64] SARB 'IFWG Position Paper' (chapter 2 note 11) 38.
[65] See Board Notice 194 (note 42) paras 36 and 44.
[66] As required by Board Notice 194 (note 42) para 44.

may not have an obligation to keep reserves if their agreement specifies no guarantee of redemption of those stablecoins for fiat currency. Further regulations governing this issue and clarifying reserve amounts for CASPs are yet to be published in South Africa. Such clarification would assist in unifying industry practice on this issue, would create greater certainty for CASPs complying with the FAIS Act, and would protect consumers from inadequate reserves.

The current requirements under the FAIS Act will in all likelihood be augmented by the COFI Bill once it is enacted.

4.6 Crypto assets and the COFI Bill

The COFI Bill is draft legislation which, once promulgated, will replace the FAIS Act, along with a number of other laws in the financial sector.[67] A second draft of the COFI Bill was published in September 2020 and may undergo further revisions, with the FSCA's three-year regulatory plan demonstrating ongoing work to support the COFI Bill's transition and preparing supporting regulations extending into 2025.[68] Since the Bill is awaiting enactment into law, it would be remiss not to mention it in the context of crypto asset regulation.

The COFI Bill aims to harmonise market conduct regulation across various sectors in the financial industry.[69] Within market conduct principles, the Bill has a specific focus on treating customers fairly ('TCF'), an existing principle in other financial sector regulation.[70] A proportional approach to regulation does not imply a less rigorous set of rules; instead, the COFI Bill aims to differentiate rules for different entities based on the conduct-risks that they pose and to apply its rules based on these risks.[71] Principles for the provision of financial products and services are set out in the COFI Bill. These include that when providing financial products and services, financial institutions or representatives (including FSPs as currently defined in the FAIS Act) must ensure that these products and services are appropriate for the

[67] See the Conduct of Financial Institutions Bill, Draft of September 2020 (note 8) Chapter 12 Part 1.
[68] 2024 FSCA 3-Year Regulation Plan (1 April 2024–31 March 2027) [Following the 2023/2024 Review of the Regulation Plan], available at: https://www.fsca.co.za/Regulatory%20Frameworks/Regulatory%20Frameworks%20Documents/2024%20FSCA%203-year%20Regulation%20Plan.pdf [last accessed 20 December 2024].
[69] Explanatory Policy Paper accompanying the Conduct of Financial Institutions Bill (note 10) 8.
[70] Lynette Visagie-Swart & Vivienne Lawack 'An overview of the first draft of the Conduct of Financial Institutions Bill and the potential impact on the National Payment System in South Africa' (2020) 32(1) *SA Mercantile Law Journal* 132.
[71] S Nadasen 'Preliminary observations: The principle or proportionality and the phrase "… the nature, size, scale and complexity of …" in the conduct of Financial Institutions Bill' (2019) 34(2) *ITJ*.

customer for whom they are intended, are provided in an objective manner, and are provided in such a way to support delivery of the appropriate products to these customers.[72] Financial products and services must conform to the expectation created in the minds of customers by the offering institution. The COFI Bill also includes provisions similar to those in the FAIS Act relating to the usual risk management and identification, operational ability and the management of conflicts of interests.[73]

The COFI Bill is expected to result in changes to compliance processes to address the more robust consumer protection in the Bill, and will require that FSPs maintain higher working capital compared to the current requirements under the FAIS Act, although these figures are not yet clear.[74] This may serve to address the issue of adequate reserves mentioned above, although further information is yet to be released.

The COFI Bill also deals with the marketing of financial products, requiring that marketing be fair, unambiguous, clear, not misleading or fraudulent.[75] Customers must receive sufficient information before purchasing a financial product and throughout their relationship with the FSP.[76]

Lawack et al note that, while it constitutes a market conduct regulation, the COFI Bill touches upon prudential regulation by requiring that FSPs maintain resources of sufficient quality and quantity to render their services.[77] This is similar to the current regime applicable to FSPs and entails adhering to robust processes, strategies and systems to ensure the sufficiency of FSP resources, which may include liquidity requirements.[78] This will have implications for stablecoin CASPs and issuers in due course, who will need to consider this prudential element of the COFI Bill when rendering their services or issuing tokens.

While the aims of the COFI Bill are generally positive for consumer protection and industry reform, they are still unclear in their practical application and any changes to the Bill that follow from the FSCA's three-year regulation plan are also unknown. Thus, until the COFI Bill has

[72] COFI Bill, cl 26.
[73] COFI Bill, cls 21, 27 and 42.
[74] Hayley Brown 'What financial advisers need to know about the CoFI Bill' *Financial Regulation Journal*, 6 April 2023, available at: https://financialregulationjournal.co.za/2023/04/06/what-financial-advisers-need-to-know-about-the-cofi-bill/.
[75] COFI Bill, cl 29(1).
[76] COFI Bill, cl 29(2).
[77] Lawack et al (note 9) 304.
[78] COFI Bill, cl 44(3) and (4).

been enacted and further guidelines have been published, the differences between the FAIS Act and the COFI Bill's effects on CASPs cannot be determined.

4.7 Crypto assets and the Banks Act

The declaration of crypto assets as financial products does not confine crypto asset service providers to a single licence in terms of the FAIS Act. Rather, in keeping with the substance-over-form approach, the IFWG Position Paper outlines (similar to the approach taken in MICAR), that CASPs are also subject to other industry regulation. In particular, where CASPs engage in the business of a bank, they will be required to seek authorisation and/or registration in terms of the Banks Act to do so.

The 'business of a bank' is defined in the Banks Act to include, *inter alia*, accepting deposits from the general public as a regular feature of one's business, or soliciting or advertising for deposits.[79] The definition also includes the use of deposits or interest thereon to grant loans to other persons, make investments by any person, or finance any business activity. The 'business of a bank' may include any activity which the PA or its predecessor has, after consultation with the Governor of the SARB, declared to be the business of a bank by publishing a notice in the *Government Gazette*.[80] Obtaining funds through the sale of an asset subject to an agreement to purchase the asset or any other asset from the buyer at a later date is also included in the definition. 'Soliciting or advertising' for deposits has been interpreted to include 'soliciting of [actively seeking], or advertising [making a public communication] for, directly or indirectly, money and/or persons for introduction into or participation in a business practice [concerned with accepting money from the public as a regular feature of business]'.[81]

A 'deposit' is defined by the Banks Act as an amount of money paid by one person to another person pursuant to an agreement in terms of which an equal amount or part thereof will be repaid according to certain conditions.[82] These conditions include that no interest will be paid on the amount, or that the interest will be repaid at specified intervals or otherwise. The definition of a deposit excludes advances or pre-payments in terms of a contract for property or services, payments as security for the performance of a contract, payments which are not at

[79] Banks Act, s 1.
[80] Banks Act, s 1.
[81] *Registrar of Banks v Net Income Solutions CC* [2016] JOL 37103 (WCC) para 24. 'Soliciting or advertising' was held by Yekiso J to include advertising an 'income opportunity' on a website that allowed users to pay money to the site operator in exchange for purchasing points from the website, which generated a return.
[82] Banks Act, s 1.

arm's length,[83] payments of premiums to long- and short-term insurers, and payments to a pension or benefit fund (as defined by the respective legislation).

At first glance, stablecoin CASPs appear to meet the definition of taking deposits as they accept an amount of money from a customer and agree to repay it, or part thereof, to that customer at a later stage when the customer redeems stablecoins purchased for payment in that fiat currency. This agreement to repay the money accepted by a stablecoin CASP can be derived from the stable value of the stablecoin and the custodial nature of these CASP's services. In sending fiat currency to a stablecoin CASP and purchasing stablecoins on this stablecoin CASP's platform, a customer reasonably expects that, should they sell these stablecoins, they will receive their fiat payment back.

This will not hold true for all stablecoin CASPs where the terms applicable to their agreement with customers do not include repaying any portion of funds paid to CASPs and instead deliver the stablecoin to the customer. This means that the customer receives an asset for their payment, and while they may access this asset from a stablecoin CASP's platform, the customer may choose to send this asset to another stablecoin CASP or use it for another purpose outside of the stablecoin CASP's control. While deeming the activities of stablecoin CASPs to constitute deposit-taking may bring additional protections and benefits to their customers, this is not necessarily appropriate when considering the business of stablecoin CASPs and their common key differences from banks.

Milne and Lawack suggest that, given the code-based nature of stablecoins, the value of stablecoins is not guaranteed to be equal to the fiat currencies to which they are pegged.[84] According to Milne and Lawack, due to this slight fluctuation in value, stablecoins are not comparable with bank deposits.[85] While this may be true for many stablecoins, it is not necessarily true for all. Some stablecoins which hold reserves on a 1:1 basis to issued currency may achieve equal value to the fiat currency to which they are pegged. Moreover, this does not necessarily change the perception in consumers' minds relating to their expectation of a return of an equal fiat value to that purchased in stablecoin when using stablecoin CASP services, nor

[83] Including payments by a company to its subsidiary or other related entity, or payments to relatives or executives by the company of which the person is an executive.

[84] A Milne & V Lawack 'Digital assets in payments and transaction banking' South African Reserve Bank Working Paper Series WP/24/20, 26 November 2024, 20, available at: https://www.resbank.co.za/content/dam/sarb/publications/working-papers/2024/digital-assets-in-payments-and-transaction-banking.pdf [last accessed 18 January 2025].

[85] Ibid.

would it change the marketing of such services to consumers. Further, it is worth noting that where fluctuations in value between the fiat currency to which the stablecoin is pegged and the stablecoin occur, these are often in the 100 000th decimal point and extremely minor.[86]

Many exchanges in South Africa offer their services primarily in the form of a platform through which customers retain control of their funds.[87] Unlike funds in the traditional banking model, funds paid to an exchange are not necessarily commingled with the exchange's own funds and the exchange cannot use them to grant credit to any other person without a banking licence.

For example, funds paid to the exchange Luno (a popular cryptocurrency exchange in South Africa)[88] are owned by the customers after they are reflected in customer Luno accounts and are held separate from Luno funds.[89] Luno's terms and conditions clearly state that in the unlikely event of insolvency proceedings, neither Luno nor its third-party creditors shall have a claim against cryptocurrency held by Luno on behalf of its customers.[90]

While stablecoins are not money,[91] the payment of R100 for 100 ZARP tokens (a stablecoin pegged to the rand)[92] to an exchange may be regarded as a payment subject to an agreement, because if the customer withdraws their 100 ZARP, they will receive R100 back. This notionally fulfils the first part of a definition of a deposit – the payment of money subject to an agreement for future repayment. This may also fulfil another component of the definition of the business of a bank – the sale of an asset (ZARP) against an agreement where the purchaser undertakes to repurchase the asset later; however, this depends on the terms of the exchange and it will be rare that it undertakes to repurchase a stablecoin.

Notwithstanding this additional component, the substance of many stablecoin CASP activities falls outside of the Banks Act as payments to exchanges do not place these funds at the exchange's own disposal. In the course of providing their services, stablecoin CASPs and most exchanges receive funds from clients against an instruction to purchase crypto assets.

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[86] See CoinmarketCap's chart on USDC value, available at: https://coinmarketcap.com/currencies/usd-coin/ [last accessed 25 January 2025].
[87] P Gcaba *South African Banking Law and Cryptocurrencies* (LLM dissertation, University of Johannesburg, 2018) 26.
[88] Renée Bonorchis 'How Luno plans to make crypto mainstream' *BusinessLIVE*, 18 July 2024, available at: https://www.businesslive.co.za/fm/money-and-investing/2024-07-18-how-luno-plans-to-make-crypto-mainstream/ [last accessed 11 November 2024].
[89] 'Legal' *Luno*, available at: https://www.luno.com/en/legal/terms-of-use-za [last accessed 11 November 2024].
[90] Ibid.
[91] See section 2.1 above.
[92] 'ZARP Stablecoin', available at: https://zarpstablecoin.com/ [last accessed 17 November 2024].

Depending on the nature of the platform and its custody solution, these CASPs enable customers to exercise a degree of control or issue real-time instructions over crypto assets held on the CASP's platform. For example, a stablecoin CASP which receives R100 for 100 ZARP will typically perform this exchange on the client's instruction, and display the balance of 100 ZARP in the client's account. As long as the exchange does not use this 100 ZARP to leverage its other activities or trade for its own account, instead keeping customer accounts legally segregated and accessible by the customer, the definition of a deposit will not be met in this respect.[93] This distinction is not always a clear one, and will to a large extent depend on the marketing decisions made by that stablecoin CASP, the steps that it takes to segregate customer assets, and the degree of control that customers have over their crypto assets.

Stablecoin CASPs may also distance themselves from falling within the business of a bank by clearly indicating that cryptocurrencies, even stablecoins, may be volatile in nature and no guarantees regarding their value can be made. This assists in avoiding the practice of soliciting for or advertising for deposits, because no promise of repayment is made. In short, stablecoin CASPs will not require registration as banks as long as they separate client assets from their own assets; make no promise of repayment of the asset in a specific amount; do not advertise for deposits; and do not conduct any other activity falling within the business of a bank (eg the granting of certain loans).[94]

The Code of Advertising Practice, administered by the Advertising Regulatory Board,[95] applies to broadcasting[96] in South Africa.[97] The Code was amended following the 2022 Declaration to include advertising regulations for crypto assets.[98] These regulations state that advertisements must include a prominent warning that investments in crypto assets may result in a loss of capital; must explain the relevant product or service in an understandable way; must give a balanced message and adequate information about the product or service's risks and benefits;

[93] See Gcaba's brief discussion on whether CASPs conduct deposit-taking: Gcaba (note 87) 26.
[94] Banks Act, s 1.
[95] Advertising Regulatory Board 'Codes', available at: https://www.arb.org.za/index.html#codes [last accessed 17 January 2025].
[96] The unidirectional transmission of information to the public by electronic means: see Electronic Communications Act 36 of 2005 ('ECTA'), s 1.
[97] ECTA, s 55.
[98] Advertising Regulatory Board 'Codes', Section III Specific Categories of Advertising, available at: https://www.arb.org.za/assets/l3.-section-iii-specific-categories-of-advertising-v2023.1.pdf [last accessed 18 January 2025] ('Section III of the Code').

must include information as to how returns are calculated; and must make it clear that past performance is no indication of future performance.[99]

In a recent development in South Africa, banks are now subject to a deposit insurance framework under the Financial Sector Laws Amendment Act 23 of 2021 ('FSLAA'). This framework became operational in April 2024.[100] Under this framework, deposits held by customers of a bank are insured[101] and these customers will be reimbursed in the event of the liquidation of the bank that holds their deposits.[102] If stablecoin CASPs were deemed to be taking deposits, their customers would be entitled to this protection. However, this would not apply if stablecoins were deemed electronic money as electronic money products are excluded from deposit protection insurance under the Deposit Insurance Regulations, as are products where the principal amount owing to the customer is not repayable at par value.[103] A lengthy discussion of this point relating to deposit insurance falls beyond the scope of this dissertation, but it is mentioned to provide background to the regulatory landscape and opportunities for consumer protection under the Banks Act.

Related to this research question is whether stablecoin CASPs providing payment services using stablecoins could be regulated under the National Payment Systems Act 78 of 1998 ('NPS Act'). These services are not included within the scope of the NPS Act, but the IFWG has recommended that the NPS Act be reviewed to consider including crypto assets as a payment instrument.[104] Further discussion of this point is beyond the scope of this dissertation, but the issue warrants further research.[105]

The issuing of electronic money is defined in the SARB's 2014 Position Paper on Virtual Currencies as forming part of the business of a bank, and therefore also requires a banking

[99] Section III of the Code, para 17.
[100] SARB 'The Corporation for Deposit Insurance is South Africa's Deposit Insurance Scheme', available at: https://www.resbank.co.za/en/home/what-we-do/Deposit-insurance [last accessed 22 December 2024].
[101] Up to an amount of R100 000: see the Deposit Insurance Regulations GN 4532, *Government Gazette* 50311 of 22 March 2024.
[102] A Matasane 'Appraising the regulatory framework of the new South African Deposit Insurance System' (2024) 57 *De Jure* 24–45 at 37.
[103] Deposit Insurance Regulations (note 101).
[104] SARB 'IFWG Position Paper' (chapter 2 note 11) 37.
[105] In late 2024, Milne and Lawack published a SARB Working Paper on the use of digital assets for payments and transaction banking. See Milne & Lawack (note 84).

licence.[106] This may have implications for stablecoin regulation, as investigated further in the following sections.

4.8 CASPs and electronic money in South Africa

Electronic money in South Africa is treated differently to its counterpart in the EU. Electronic money in South Africa is defined as 'electronically stored monetary value issued on receipt of funds and represented by a claim on the issuer'.[107]

In South Africa, the SARB declared in a 2009 position paper[108] that electronic money should be issued only by banks. This position has not yet been expressly changed. Issuers of electronic money are required to comply with ordinary prudential requirements pertaining to a bank.[109] Hypothetically, if issuers of stablecoins in South Africa were considered electronic money issuers, they would also require a banking licence and would have to comply with the prudential requirements applicable to banks. This, however, is not the case at the time of writing. In such circumstances, stablecoin CASPs may act as system operators if they are not licensed banks themselves but partner with a licensed bank.[110]

The position paper published by the SARB in 2014[111] notes the following in relation to cryptocurrencies in the context of electronic money regulation:

> Therefore, there is a clear distinction between DCVCs [decentralised virtual currencies] and E-Money as DCVCs are tradable for cash while E-Money is redeemable for physical cash or a deposit into a bank account on demand.

This statement was made about cryptocurrencies ('decentralised virtual currencies' or 'DCVCs', as they were then called) generally, and at an early stage in crypto asset regulation, and does not consider stablecoins backed by reserves of sufficient liquidity. Stablecoins which

[106] See SARB 'Position Paper on Virtual Currencies' Position Paper No 02/2014, 3 December 2014, 5, available at: https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-surveillance/general-public/Virtual%20Currencies%20Position%20Paper%20%20Final_02of2014.pdf [last accessed 26 January 2025].
[107] See the discussion regarding the definition of money in section 2.1 above. Also see SARB 'Position Paper on Virtual Currencies' (note 106).
[108] SARB 'Position Paper on Electronic Money' Position Paper NPS 01/2009, November 2009, available at: https://www.resbank.co.za/content/dam/sarb/what-we-do/financial-surveillance/general-public/PP2009_01.pdf [last accessed 20 December 2025].
[109] Vivienne Lawack-Davids 'The legal and regulatory framework of mobile banking and mobile payments in South Africa' (2012) 7(4) *Journal of International Commercial Law and Technology* 323.
[110] See note 108, 7.
[111] SARB 'Position Paper on Virtual Currencies' (note 106).

are backed by reserves of sufficient liquidity,[112] and can be redeemed for fiat currency, would substantially fulfil the redemption qualities of electronic money described above – save that physical cash would rarely be included and the redemption would take the form of an electronic money payment to the redeemer's bank account. The primary difference between stablecoins and electronic money under this position seems to be the status of the issuer as a licensed bank.

The IFWG's position on electronic money *vis-à-vis* crypto assets is that crypto assets should not be recognised as electronic money and should remain without legal tender status in South Africa.[113]

In the EU, electronic money institutions are licensed under the Electronic Money Directive ('EMD') and are distinguished from traditional banks. As discussed previously, EMT stablecoin issuers and CASPs dealing in EMT stablecoins are regulated by the EMD according to the provisions of MICAR.[114] Electronic money in the EU is governed by the EMD and is defined therein as an electronically stored monetary value, represented by a claim against the issuer, issued for the purpose of making transactions, and which is accepted as payment by a party other than its issuer.[115] This definition is not constrained to the issuing of electronic money by banks alone, in contrast to the South African approach to electronic money.

While stablecoins do not necessarily require recognition as legal tender in South Africa in order to be effectively used as payment, the existence of a specific framework to address the risks to consumers and establish compliance procedures would be useful in accelerating South Africa's regulation of the crypto asset industry. In the current circumstances, without the option to require stablecoin issuers to follow a legal framework governing electronic money, regulators will need to develop a separate set of rules for stablecoin issuers. The regulation of stablecoin CASPs is one side of the industry, and the regulation of stablecoin issuers is another. Both require development in order to effectively protect consumers from the risks apparent on both sides. This recommendation is discussed further in chapter 5 below.

The South African approach, limiting electronic money issuance to banks, subjects electronic money issuers to stringent licensing and compliance requirements, and extensive supervision.

[112] For example, USDC is a stablecoin pegged to the US dollar and is backed by reserves on a 1:1 basis. USDC claims to always be redeemable on a 1:1 basis for US dollars. See Circle 'Transparency & Stability', available at: https://www.circle.com/transparency [last accessed 19 January 2025].
[113] SARB 'IFWG Position Paper' (chapter 2 note 11) 35.
[114] See section 3.8 above.
[115] See section 3.8 above.

This, in turn, guarantees a high degree of consumer protection oversight. However, this leaves policymakers without the option of regulating stablecoin issuers under a separate electronic money regulation which provides sufficient protective provisions for consumers, yet is less onerous than a licence under the Banks Act. This in turn means that the regulatory development of an appropriately calibrated framework for stablecoin issuers (to protect consumers while fostering industry growth) will take time. This places South Africa at a disadvantage compared to jurisdictions such as the EU, where such frameworks are already available. It may even discourage stablecoin issuers and CASPs that perceive South Africa as a risk, given regulatory uncertainty and slow regulatory development, from entering or operating in the industry in South Africa.

4.9 Summary and conclusions

There are some similarities between the approach adopted in MICAR and that adopted in declaring crypto assets as financial products in South Africa. Both regimes have a clear focus on regulating the market conduct of CASPs; they require the disclosure of similar information to consumers, adherence to standards of conduct, the management of consumer assets according to a strict set of rules, and operations with certain safeguards in place. Both regimes place certain prudential safeguards on CASPs, requiring them to meet certain own funds requirements. However, neither regime considers stablecoin CASPs to be conducting the business of a bank.

In South Africa, stablecoin CASPs do not meet the definition of taking deposits insofar as they do not commingle client assets and do not advertise for deposits. There may be some benefit to declaring stablecoin CASP activities as ‘deposit-taking’, such as protection through deposit insurance, more stringent oversight and the higher operational safeguards placed on banks, however this would not accord with the approach taken in MICAR. This is not necessarily undesirable; however, it would place higher regulatory burdens on stablecoin CASPs which may discourage their operation in South Africa. Furthermore, additional safeguards can be introduced by regulating stablecoin issuers in South Africa as done under MICAR.

A significant difference between MICAR and the South African regulatory approach to stablecoin CASPs lies in the classification of certain stablecoins as EMTs and the application of the existing EMD to EMT issuers in the EU. EMT issuers are thus subject to certain prudential requirements which are similar to those imposed on banks, although they are less

onerous. In contrast, South Africa neither considers stablecoins as electronic money nor has a separate electronic money regulation which could apply to stablecoins. It is important that issuers of stablecoins be included in the overarching regulatory framework in South Africa in order to safeguard against certain risks apparent in the activities of issuers. This could entail, for example, requiring the publication of an accurate white paper by issuers and disclosing technological features of the stablecoin itself. Since the legal landscape is different, South Africa cannot apply an existing electronic money legal framework to stablecoin issuers, and the development of such a framework may take time.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the research

This dissertation has covered many relevant points relating to crypto assets, dedicating a section to introducing this technology and highlighting the historical risks posed by the industry. These risks include, *inter alia*, industry conduct issues such as fraud, mismanagement, inadequate operational safeguards (including poor reserves management issues) – all of which are fuelled in environments without regulatory clarity about the status of crypto asset service provider ('CASP') activities and the rights of consumers. The dissertation examined various case studies that demonstrated these risks. These included instances where stablecoin CASPs were unable to honour redemption requests by their customers; where customers' recourse against CASPs was limited to recourse in bankruptcy proceedings; where a stablecoin itself was not, in fact, stable and lost its peg to the fiat currency referenced; and where stablecoin CASPs allegedly made fraudulent statements and mismanaged their customers' assets.

The dissertation examined the position taken by the EU regarding stablecoin CASPs, using this as a benchmark against which to consider the current South African position. The EU's approach to mitigating the risks of this industry to consumers, as identified, has been to focus mainly on bridging the gap between existing regulations and the characteristics of crypto assets and crypto asset services. In the EU, MICAR acknowledges that many CASPs may be subject to existing financial services regulations under MiFID II, providing explicit reference to these regulations in the context of CASPs and clarifying that these CASPs must indeed comply with existing rules. MICAR provides clarity about the status of certain crypto assets, defining various types of tokens, and directing issuers and CASPs of these tokens to existing regulation. Chief among these is the Electronic Money Directive ('EMD'), which applies to issuers of electronic money tokens ('EMTs') and CASPs seeking to trade EMTs. While the regulation of stablecoin issuers is not the subject of the research question of this dissertation *per se*, the regulation of issuers of stablecoins is important for the regulation of stablecoin CASPs. This is because of the role of issuers in the crypto asset industry and the asset-specific risks which regulators can most effectively address by regulating issuers. Issuers have access to information in relation to the stablecoin that they issue which CASPs will not necessarily have access to. Moreover, issuers will have certain functional capabilities (depending on the technological

aspects of the stablecoin in question) which support the effective operation of the stablecoin that they issue. It is thus important, when considering the risks being addressed by the regulation of stablecoin CASPs, to consider the role of issuers in the industry and how the regulation of issuers can assist in addressing these risks.

MICAR requires, *inter alia*, that issuers of EMTs and asset-referenced tokens (ARTs) publish a white paper; fulfil disclosure requirements; manage conflicts of interests; be of sufficient financial health; and fulfil operational requirements to safeguard their customers' funds. Additionally, MICAR and the EMD (applicable to EMTs) require that issuers of ARTs and EMTs fulfil certain prudential safeguards relating to own funds requirements and reserves management.

In South Africa there are fewer opportunities to adapt existing regulations to stablecoins in the same manner as in the EU, because, for instance, South Africa does not have a separate framework governing electronic money. Regardless, stablecoins are not considered electronic money in South Africa and their issuance is expected to be covered by regulations under the COFI Bill, once in effect.[1]

Stablecoins are considered financial products in South Africa pursuant to the 2022 Declaration. As discussed above, this places stablecoin CASPs under the supervision of the Financial Sector Conduct Authority ('FSCA') and they must apply for licences as financial services providers ('FSPs') in order to conduct business in South Africa.[2] This means that stablecoin CASPs must be able to demonstrate their operational ability to conduct their business; they must be financially sound in terms of the FAIS Act; they must treat customers fairly and honestly; they must make necessary disclosures; and they must advertise their services fairly and with the appropriate warnings.

The research considered the possible application of the Banks Act, in particular, the possible application of the definition of 'deposit-taking' to the operations of stablecoin CASPs. The pertinent research question was whether CASPs providing exchange services in relation to stablecoins are deposit-taking institutions requiring registration as banks. The conclusions in this regard are set out below.

[1] See the discussion in sections 4.8 and 4.6 above.
[2] See the discussion in section 4.5 above.

5.2 Conclusions

The research considered the definition of 'deposit-taking' activity and found that, while the business practices of many stablecoin CASPs fall outside the normal business of a bank, it is possible that stablecoin CASP activity, in certain instances, may be considered 'deposit-taking'. This is because, in accepting customer payments for the purpose of purchasing stablecoins, stablecoin CASPs may be seen as agreeing to repay the funds or a portion thereof to the customer at a later date. This portion may be 100 per cent in the case of stablecoins, which maintain a fixed value (when operating correctly) in respect of a fiat currency. Indeed, this is an expectation which consumers may reasonably hold in relation to stablecoins, ie that their value will be repaid in full. However, whether a stablecoin CASP's conduct constitutes deposit-taking activity depends largely on the agreement between the stablecoin CASP and its clients. Specifically disclaiming any obligation to repay clients may distance stablecoin CASPs from falling within the scope of the Banks Act and requiring registration as banks. The manner in which a stablecoin CASP markets its services will have a bearing on whether that CASP's services fall within 'deposit-taking' activity. The marketing of services with a clear promise of repayment of the fiat currency paid to the CASP will support the argument that the CASP takes deposits from the public. However, making appropriate disclaimers and avoiding promises of repayment, coupled with customers' ability to manage their assets themselves, avoids such a finding and distances CASPs from deposit-taking activity.

As was seen in the crypto crash of 2022, ARTs and EMTs form a significant component of the crypto asset ecosystem. There is a clear demand for this type of product (stablecoins) and the benefits that the public perceives them as having, namely the ease and convenience of such a crypto asset with the stability of fiat currency, as well as their value in underpinning reserves in the crypto asset ecosystem. Consumers are seeking a cheap, secure and stable method of payment, which stablecoins can offer, if operated effectively and without following the example of Terra.[3] MICAR's provisions relating to stablecoin CASPs are specifically designed to coexist with its provisions relating to stablecoin issuers. Many prudential and conduct standards (ie own funds, reserves, disclosures relating to the stablecoin itself, internal control mechanisms) imposed on issuers are important for consumer protection in the industry.

[3] Tobias Adrian & Tommaso Mancini-Griffoli 'Digital currencies: The rise of stablecoins' *IMF*, 19 September 2019, available at: https://www.imf.org/en/Blogs/Articles/2019/09/19/blog-digital-currencies-the-rise-of-stablecoins [last accessed 18 June 2023].

Unfortunately, South Africa does not, at present, impose such detailed standards on stablecoin issuers, leaving a void in the current framework.

Currently, in South Africa, stablecoin CASPs are regulated as FSPs under the FAIS Act. The current framework for FSP licensing under the FAIS Act has not yet been adapted specifically for stablecoins and the risks that they may pose to consumers. Specifically, reserve requirements are not expressly dealt with as a feature of the operational ability and financial soundness requirements under the FAIS Act. To highlight a few shortcomings: the operational requirements are not detailed enough to cover risks specific to stablecoin CASPs (eg storage of stablecoins and the security thereof), and specific disclosures particular to stablecoins (eg whether the stablecoin is backed by fiat currency reserves or is an algorithmic stablecoin) are not required. These shortfalls may lead to licences being granted to stablecoin CASPs based on different types of information being provided to the FSCA, yielding uneven results in the conduct of CASPs in the South African market and creating regulatory uncertainty for stablecoin CASPs seeking licences.

The absence of clearer, precise requirements to demonstrate, in particular, operational ability and transparency may be beneficial in allowing flexibility in the FSCA's assessment of different CASPs seeking licensing. However, this approach may also see inconsistencies in the licensing of CASPs and uncertainty among prospective CASPs, and may result in licensed CASPs being unable to effectively fulfil their services to their customers. This risk may remain when the COFI Bill is enacted, especially given its principles-based approach, unless the FSCA develops a specific framework for crypto assets in conjunction with the COFI Bill; the FSCA itself noted the void in its 2023 market study on crypto assets as an area likely to develop in the future.[4]

In conclusion, the regulation of stablecoin CASPs providing stablecoin services as deposit-taking institutions is not appropriate if their role is limited to that of advisory or intermediary services providers. However, if stablecoin CASPs offer additional services that fall within the business of a bank, for example, issue electronic money, advertise for deposits or offer certain loans, this may trigger the application of the Banks Act and they may have to seek the appropriate licence to operate as banks. It is thus possible, depending on their agreement with customers, that some stablecoin CASPs will in fact meet the definition of deposit-taking, and

[4] FSCA 'South Africa's crypto asset market study' 20 November 2023, 9, available at: https://www.fsca.co.za/Documents/Crypto%20Market%20Study.pdf [accessed 3 November 2024].

under the Banks Act should apply for registration as a bank. However, the matter is not fully resolved yet and may require further clarification from the South African Reserve Bank ('SARB').

5.3 Recommendations

A number of recommendations are made based on the outcome of the research conducted in this dissertation. They are as follows:

a) The SARB should issue a declaration clarifying whether stablecoin CASP activities fall within the scope of the Banks Act, or the legislature should amend the Banks Act accordingly, or the SARB should publish an exemption to that effect in the *Government Gazette*. This will assist the industry by providing regulatory certainty on the issue.
b) If the ultimate decision is that stablecoin CASPs should be exempted from registration as banks, then further research should be conducted to determine whether stablecoin issuers should also be exempted.
c) The SARB and/or the legislator should further consider declaring EMT stablecoins to be electronic money in South Africa, and should publish accompanying detailed documentation relating to its decision. Without such further guidance, the current position indicates that stablecoin issuers will be regulated under the COFI Bill, but with very little direction being provided in this regard. MICAR's declaration of EMTs as electronic money subjects EMT issuers to regulations which are similar to banking regulations, but are less onerous than those for banks. The EU's approach in this regard is welcomed and may provide a more workable solution in South Africa as well. There is no room in the current South African legal framework for such an approach, although issuers perform important functions in this industry and should be subject to strict prudential and market conduct requirements. However, before an approach similar to the EU's can be adopted in South African law, further research is required. For the time being, it appears that the end result is that EMT issuers should be regulated as banks in South Africa, with stablecoin CASPs potentially fulfilling a role as system operators.
d) Regardless of how issuers of stablecoins are regulated, whether under the COFI Bill once promulgated (as has been the intention expressed by the IFWG) or under the Banks Act, the crux of the matter is that these issuers should be regulated. More research is required in this regard, before a final decision is made. However, based on the approach taken in MICAR and the risks identified herein relating to stablecoins themselves, it is

recommended that issuers be required to at least comply with mandatory own funds, disclosure, reserves and registration requirements.

e) A detailed framework for stablecoin CASPs' compliance with the FAIS Act's FSP requirements should be developed to provide uniform rules for CASP applications for various categories of FSP licences. This should include, in particular, the reserves and/or working capital that different FSPs must hold in order to satisfy minimum operational requirements, based on the stablecoins with which they deal and the associated risks. For example, if stablecoin CASPs offer services in relation to a stablecoin where high-quality reserves held by the issuer are not guaranteed in order to fulfil redemption requests, then that CASP should hold those reserves itself. Such a framework should tailor existing FSP requirements to stablecoins, and deal with features of stablecoins which are not present in traditional financial products – such as methods of stablecoin custody. Stablecoin CASPs should be required to disclose white papers relating to the crypto assets with which they deal to their customers (consumers), and should disclose all aspects of their business which may materially affect customers' interests.
f) It is recommended that the best approach, ultimately, may be to simply create a single bespoke piece of legislation to consolidate and address crypto asset regulation in South Africa, as was done in the case of MICAR. Doing so will increase regulatory certainty about the precise aspects of stablecoins to be regulated by separate legislation and resolve unsettled aspects in the existing legislation.
g) Lastly, it is recommended that any regulatory framework should ultimately address the operational risks specific to crypto assets from a security, disclosure and reserves perspective in particular. Crypto assets differ from traditional financial instruments, in that the transactions cannot be undone or reversed once made, and users of crypto assets in certain marketplaces provided by CASPs (eg peer-to-peer marketplaces or self-custody exchanges) may need to be more fully informed about the risks before transacting in crypto assets. This is already largely incorporated by risk disclosure principles under the FAIS Act, but ongoing vigilance is required as the industry develops and new types of crypto assets or crypto asset services become available.

While the services of stablecoin CASPs may not necessarily require these CASPs to register as banks under the Banks Act, the protection of consumers from risks in this industry[5] can

[5] See the risks identified in chapter 2.

notionally be achieved under the FAIS Act and the COFI Bill (once promulgated). The core research question that had to be answered in this dissertation was whether or not stablecoin CASPs are deposit-taking institutions requiring registration as banks. This dissertation answered this question. However, due to the limited scope of this dissertation and the auxiliary questions arising from the research highlighted here, more research on the issue is required before a definitive position can be adopted on the regulation of stablecoin CASPs and their possible registration as banks. Thus, further research, with a focus on amending the current framework to cater specifically for the features of stablecoins, will certainly contribute further to consumer protection in this space, and will hopefully lead to the growth of this industry in South Africa.

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