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The Regulation Paradox of the Crypto-Asset Industry

A Critical Analysis on How the European Union is Going to Resolve the Conflicts of Interest and Regulatory Challenges When Integrating the New Asset Class to the Scope of Regulation

Jonathan Mainz

University of Helsinki

Faculty of Law

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Supervisor: Professor Mika Hemmo

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Tiivistelmä – Referat – Abstract <p>The crypto-asset market has grown exponentially in recent years, creating a whole new sub-industry to the financial sector. Following this rapid growth, the interest of regulators towards the industry has naturally increased around the world. Indeed, in autumn 2020, the European Commission published its first draft on the Regulation on Markets in Crypto-Assets (COM (2020) 593 final) (“MiCA”). The proposal is part of the EU's digital finance package, which states to create an innovation-friendly environment for market participants while simultaneously ensuring financial stability and investor protection in the markets.</p> <p>This thesis examines the regulation of the crypto-asset markets from a critical perspective. The main focus stands on the question of how to simultaneously enable innovation, market access, free competition and operational efficiency for market participants, while simultaneously ensuring adequate investor protection, market reliability and legal certainty for individual investors in the EU. As the EU has appeared to take quite a similar approach to regulate the industry with the existing MiFID II legislation in traditional finance, comparing the current and upcoming legislation is a natural approach to assess and give some context to the subject in some parts. Due to the cross-border nature of the phenomenon, the review will focus on the EU area's regulation as a whole, and the legislation of individual Member States will not be examined in greater detail. On the other hand, international legislative solutions and regulatory proposals have been covered to some extent, as the market for crypto-assets is focused mainly outside the EU.</p> <p>The thesis concludes that the objectives of the planned legislation are most likely to remain theoretical. Furthermore, the examination indicates that neither the EU legislators nor the proposed regulation would promote innovation or free competition in the markets. Instead, it appears that the regulatory future is most likely going to create barriers for new companies' market entrance while at the same time alleviating the market access to the crypto-asset industry for the major traditional finance market participants. Therefore, implementing the Regulation in its current form is likely to cause more harm than good to the industry. Although investor protection would improve in some parts with the entry into force of MiCA, the new Regulation would also increase the fragmentation of industry regulation, create opportunities for regulatory arbitrage and leave many critical regulatory issues unresolved.</p> <p>Regarding the preparatory work of MiCA, it is particularly striking that the regulators seem to have a great ambition to structure the whole phenomenon to fit within the existing regulatory framework, without even questioning whether it is the most appropriate and effective solution or not. In addition, only the leading market participants and different banking authorities from traditional finance have been consulted and even required to give their opinions in the preparation stage. In contrast, the actual largest market participants in the crypto-asset industry, to whom the Regulation is going to affect the most, have not been heard comprehensively enough. Instead, the measures have been limited to open consultation, which the EU legislators have not even actively tried to market to these market participants. Therefore, it is pretty evident that regardless of the final decisions the regulators are going to make and the form that the Regulation will end up in, the current way of preparing the MiCA makes the Regulation very susceptible to questioning and criticism.</p>			
Avainsanat – Nyckelord – Keywords Contract Law, Financial Regulation, Digital Finance, Markets in Crypto-Assets, Investor Protection, Decentralised Finance, Blockchain			



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Työn nimi – Arbetets titel – Title		
Kryptovarojen markkinoiden muodostaman toimialan sääntelyparadoksi – kriittinen analyysi siitä, kuinka Euroopan unioni aikoo ratkaista uuden omaisuusluokan sääntelyhaasteet ja sääntelyyn liittyvät intressiristiriidat, kun uusi omaisuusluokka integroidaan lainsäädännön alle		
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<p>Kryptovarojen markkinat ovat kasvaneet viimeisten vuosien aikana räjähdysmäisesti, ja tämän uuden ilmiön ympärille on kehittynyt kokonaan uusi rahoitusalan alatoimiala. Kasvun myötä myös lainsäätäjien kiinnostus kryptovarojen sääntelyä kohtaan on kasvanut laaja-alaisesti ympäri maailmaa. Syksyllä 2020 Euroopan komissio julkaisikin ensimmäisen luonnoksen asetusehdotuksestaan kryptovarojen markkinoista (COM(2020) 593 final) ("MiCA"). Asetusehdotus on osa EU:n digitaalisen rahoituksen pakettia, jolla pyritään sekä yhtäältä luomaan lainsäädännön puolesta innovaatiomyönteiset markkinat, että toisaalta myös turvaamaan rahoitusvakaus ja sijoittajien suoja.</p> <p>Tutkielmassa tarkastellaan kryptovarojen markkinoiden sääntelyä kriittisestä näkökulmasta. Tutkielman tutkimusongelmana tarkastellaan erityisesti sitä, kuinka mahdollistaa samanaikaisesti yhtäältä innovointi, vapaa kilpailu, tehokas markkinoille pääsy ja toiminnan tehokkuus alan eri toimijoille, sekä toisaalta varmistaa riittävä sijoittajansuoja, markkinoiden luotettavuus ja oikeusvarmuus yksittäisille sijoittajille EU:n alueella. Koska EU on vaikuttanut ottavat valmisteilla oleva lainsäädännön osalta monin paikoin rakenteellisesti yhtenevän lähestymistavan jo perinteisen rahoitusmaailman puolella voimassa olevan MiFID II -lainsäädännön kanssa, noudattaa tutkielma myös monin paikoin olemassa olevaan sääntelyyn perustuvaa analogista vertailua. Kryptovarojen rajat ylittävän luonteen vuoksi tarkastelu painottuu EU:n alueelle kokonaisuudessaan, eikä yksittäisten jäsenvaltioiden lainsäädäntöä tarkastella seikkaperäisesti. Toisaalta myös kansainvälisiä lainsäädäntöratkaisuja tai -ehdotuksia on sivuttu jonkin verran, sillä kryptovarojen markkinat painottuvat merkittävilä osin EU-alueen ulkopuolelle.</p> <p>Tutkielmassa päädytään esittämään, että suunnitellun sääntelyn tavoitteet tulevat jäämään mitä todennäköisimmin teoreettisiksi. Tarkastelu osoittaa, että liioin EU-lainsäätäjät, saati valmisteilla oleva sääntely tulisi nykyisessä muodossaan edistämään innovaatioita tai vapaata kilpailua markkinoilla. Vaikuttaakin siltä, että toimialan sääntely tulee todennäköisesti luomaan esteitä uusien yritysten pääsulle markkinoille, kun samanaikaisesti suurten perinteisten rahoitusmarkkinoiden toimijoiden pääsyä kryptovarojen markkinoille. Asetuksen toteutumisen nykymuodossaan tulisikin todennäköisesti aiheuttamaan toimialalle enemmän haittaa, kun hyötyä. Vaikka sijoittajansuoja MiCA:n voimaantulon myötä paransikin paikoitellen, kasvattaisi uusi sääntely toimialan regulaation fragmentoitumista, loisi potentiaalisen mahdollisuuden regulatoriseen arbitraasiin ja jättäisi ennen kaikkea monia kriittisiä sääntelyyn liittyviä kysymyksiä ratkaisematta.</p> <p>Asetusehdotuksen valmisteluaineiston osalta erityisen silmiin pistävää on se, että DLT-teknologian myötä syntyneet kryptovarojen markkinat yritetään istuttaa automaattisesti jo olemassa olevan lainsäädännön raameihin, kyseenalaistamatta lainkaan sitä, onko tämä itseasiassa sittenkään asianmukaisin ja paras ratkaisu. Lisäksi valmistelussa on kuultu ainoastaan perinteisen rahoituksen merkittävimpiä toimijoita, joista osaa on jopa vaadittu kommentaarien esittämiseen. Samanaikaisesti itse sääntelyn piiriin tulevia toimijoita ei ole kuultu riittävän kattavasti, vaan toimenpiteet ovat rajoittuneet vain avoimeen kuulemiseen, jota EU-lainsäätäjät eivät ole edes yrittäneet markkinoida aktiivisesti kyseisille toimijoille. Tutkielmassa päädytäänkin esittämään, että riippumatta varsinaisista lainsäätäjän lopullisista ratkaisuista, MiCA:n nykyinen valmistelutapa asettaa asetuksen hyvin alttiiksi kyseenalaistamiselle ja kritiikille.</p>		
Avainsanat – Nyckelord – Keywords		
Sopimusoikeus, Finanssialan sääntely, Digitaalinen rahoitus, Kryptovarojen markkinat, Sijoittajansuoja, Hajautettu rahoitus, Lohkoketju		

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ABBREVIATIONS

AIF	Alternative Investment Fund
AML	Anti-Money Laundering
AMLD5	Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU.
ART	Asset-Referenced Token
Art.	Article
ATM	Automatic Teller Machine
BaFin	The German Federal Financial Supervisory Authority (“Bundesanstalt für Finanzdienstleistungsaufsicht”)
CAI	Crypto-Asset Issuer
CAO	Crypto-Asset Offeror
CASP	Crypto-Asset Service Provider
CBDC	Central Bank Digital Currency
CeFi	Centralised Finance
CJEU	Court of Justice of the European Union
DAO	Decentralised Anonymous Organisation
DeFi	Decentralised Finance
DFS	Distance Financial Services
DLT	Distributed Ledger Technology

EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EEA	European Economic Area
EMT	E-Money Token
EP	European Parliament
ESA	European Supervisory Authority
ESMA	European Securities and Markets Authority
EU	European Union
EUCO	Council of the European Union
FATF	Financial Action Task Force (on Money Laundering)
FIN-FSA	The Finnish Financial Supervisory Authority (“Finanssivalvonta”)
FinTech	Financial Technology
IMF	International Monetary Fund
INATBA	International Association for Trusted Blockchain Applications
IOSCO	International Organization of Securities Commissions
MiCA	Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937 - Mandate for negotiations with the European Parliament. Brussels 19 November 2021, 2020/0265(COD).
MiFID II	Directive 2014/65/EU of the European Parliament and of the Council, on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.

MiFIR	Regulation (EU) no 600/2014 of the European Parliament and of the Council on markets in financial instruments and amending Regulation (EU) No 648/2012.
NCA	National Competent Authority
NCB	National Central Bank
NFT	Non-Fungible Token
OTC	Over – The – Counter
SEC	U.S. Securities and Exchange Commission
SME	small and medium enterprises
U.S.	United States of America
USD	U.S. Dollar
UCITS	Undertakings for the Collective Investment in Transferable Securities

1. Introduction

1.1. Markets in Crypto-Assets

1.1.1. Background

During the past couple of years, the whole crypto-asset industry has experienced a stage of rapid growth and evolution. Just as a minor example, since Bitcoin halving¹ in May 2020, more institutional actors and private individuals have invested in this asset class during this period than ever before, making the total market capitalisation grow from roughly 2,5 billion to 2,7 trillion in USD.² As the popularity of cryptocurrencies has increased rapidly, it has resulted in more intense discussion about the regulation of the industry. Furthermore, different regulatory approaches towards the asset class have been taken around the world, some of which might differ significantly. While some have taken the approach that this new asset class will revolutionise the economics we know today, others have taken a very denial approach. For instance, El Salvador has passed a law to declare Bitcoin as legal tender,³ while at the same time China has initiated a mining crackdown and India has even cleared cryptocurrencies to be completely illegal.⁴

Alongside other countries and regulatory areas, the legal position of CASPs and the regulation regarding the industry has been an essential question in the EU. During 2017, after the total market capitalisation of crypto-assets had experienced a significant surge, the EC mandated EBA and ESMA to assess the applicability and suitability of the existing EU financial services regulatory framework to crypto-assets. In addition to this, after European lawmakers and politicians had raised concerns regarding the AML related risks with crypto-assets, the EU took its first steps to regulate CASPs by including them in the scope of the AMLD5,⁵ which presented new obligations to the service providers in the crypto-asset field.

¹ Bitcoin halving means an occurrence taking place after every 210,000 blocks have been mined in the Bitcoin blockchain (roughly every four years), after which the block reward given to Bitcoin miners for processing transactions is cut in half. This also means that the rate at which new bitcoins are released into circulation is split in half. For more information, see: *Investopedia*, 2021a.

² Based on the data published by Coinmarketcap on 3 November 2021: <https://coinmarketcap.com/charts/>.

³ BBC 2021a.

⁴ BBC 2021b & Reuters 2021a.

⁵ Art. 4 AMLD5. Member States were obligated to bring into force the laws, regulations, and administrative provisions necessary to comply with the Directive by 10 January 2020.

The advice by EBA and ESMA, published in January 2019, argued that while some crypto-assets could fall within the scope of the existing EU legislation, the question of effectively applying laws and regulations to these assets is not always straightforward.⁶ At the same time, the authorities underlined that: “in addition to the EU legislation aimed at combating money laundering and terrorism financing, most crypto-assets fall outside the scope of EU financial services legislation and therefore are not subject to provisions on consumer and investor protection and market integrity, among others, although they give rise to these risks”.⁷ In addition, several Member States have already issued their laws related to crypto-assets, leading to market and legal fragmentation inside the EU.

In addition to the discussion concerning AML legislation and regulation of the operating environment, one common topic that has been widely under discussion among those involved in the crypto-asset industry, especially among the EC and other authorities, is the protection of investors.⁸ While the first mentioned has been a large impactor in holding traditional investment companies away from the industry, the latter has probably been the main reason for raising questions or concerns among private individuals and regulators, especially those not unfamiliar with the phenomenon. So as a natural continuum to the measures in earlier years, on 24 September 2020 the EC introduced the MiCA Regulation Proposal⁹ and thus took an unprecedented step towards regulating the new asset class as a whole. Furthermore, on 24 November 2021, the EUCO reached an agreement on the Regulation proposal, which will form the EUCO’s mandate for the tripartite negotiation with the EP.¹⁰ MiCA represents a comprehensive and ambitious Regulation initiative, with the aim of establishing a formal status for crypto-assets from a regulatory standpoint while creating disclosure and compliance regimes for CAIs, CAOs and CASPs. In addition, the initiative aims to prevent illicit activities connected to crypto-asset issuance, custody, and trading.¹¹

⁶ EBA 2019, pp. 14-15; and ESMA 2019, pp. 36-37.

⁷ EBA 2019, pp. 5 & 40.

⁸ IOSCO 2020b, p. 6.

⁹ Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, COM(2020) 593 final. Brussels, 24.9.2020.

¹⁰ EUCO 2021.

¹¹ See Art. 1 COM(2020) 593 final.

1.1.2. The Necessity for the Research

In addition to the international discussion, there has also been a debate on the regulation of cryptocurrencies in different Member States. For instance, after the EU published the AMLD5, Finland has implemented the Directive's requirements nationally with the Act on Virtual Currency Providers (572/2019). According to the regulation, operators in Finland covered by the Act have been required to be registered and therefore supervised by the FIN-FSA since 2019. However, although the law has brought AML legislation to the industry, the regulation has not affected investor protection or other virtual currency risks. These risks include, among others, severe and sudden fluctuations in value, security threats to exchanges and custodian service providers, and the speculative nature of several crypto-assets. Furthermore, according to the current legal state, there are no requirements regarding risk management, nor are there any capital requirements for crypto-assets service providers in place.

As the fragmentation of current legislation inside the Union, and the proposal of a new EU Regulation show, the outlook for the future regulatory circumstances is subject to comprehensive, wide-effecting changes. Therefore, it needs to be examined more closely. As stated by the EU legislators themselves, MiCA aims to harmonise the legislation on crypto-assets in the EU, safeguard market stability, protect consumers, and enable innovation and development in the sector.¹² However, these objectives can be easily contradictory, leaving the changes to the future regulatory status brought by the extensive (460 pages) Regulation proposal unclear. Therefore, it is necessary to take a closer look at the content of the proposed Regulation and determine whether the draft is such that it would achieve the objectives set for it in practice.

1.2. Approach

1.2.1. Research Objective

The debate on the regulation of crypto-assets has been the subject of numerous different opinions and views in recent years. One congruent problem concerning the regulation-related discussion has been the term used for this asset class and the exact legal definition for such a concept. Up to date, different authorities, policymakers, and jurisdictions may

¹² MiCA, p. 10.

have different definitions, requirements and rules that can vary quite a bit from each other, making the industry exposed to significant uncertainty.¹³ For the avoidance of doubt, in this thesis, the legal term ‘*crypto-assets*’ is used to cover all forms of crypto-assets, virtual assets, cryptocurrencies, digital assets, or virtual currencies regardless of the context in which they are brought up or a term that is used, excluding direct references from public sources. The same applies to the service providers in the industry, which all are referred to as ‘*crypto-asset service providers*’ (*CASP(s)*).

As mentioned above, in Finland, CASPs are required to register with the FIN-FSA to operate in the country. According to Section 1(2) of the Virtual Currency Providers Act, CASPs are defined as 1) crypto-asset exchange services; 2) custodian wallet providers; and 3) issuers of crypto-assets. Furthermore, the Act defines crypto-assets as: “*value in digital form, which a) is not issued by a central bank or other public authority and is not a legal tender; b) can be used as a means of payment; and c) can be transmitted, stored and traded electronically*”.

According to the FIN-FSA, the aim for the registration process is to ensure that all entities are complying with statutory requirements regarding: 1) reliability; 2) measures followed when holding and protecting client funds, including segregation of client assets from the company’s assets; 3) measures concerning the marketing of its services, primarily if any marketing is targeted for consumers; and 4) compliance of AML/CFT regulations.¹⁴ Up to date, four companies in Finland have met the current qualifications and have been registered as CASPs.¹⁵ New providers in Finland may not start providing their services before the FIN-FSA has approved their registration application. Should the virtual currency provider not meet the requirements, its activities will not be allowed, and the FIN-FSA can impose a fine on the provider should it continue to offer its services. However, despite the new legislation in place, many have continued to argue that the characteristics and risks related to investments of virtual currencies have remained unchanged. According to *Hanna Heiskanen*, a Senior Digitalisation Specialist of the FIN-FSA, “*Despite the registration obligation and*

¹³ EP 2018, p. 20-24. For example, EBC and IMF have categorised cryptocurrencies as “*a subset of virtual currencies*”, while others, like CPMI and WB have used the term of “*digital currencies*”.

¹⁴ FIN-FSA 2019b.

¹⁵ These companies include: Localbitcoins Oy, Northcrypto Oy, Coinmotion Oy (former Prastos), and Tesseract Group Oy. Coinmotion also holds another registration under the name of Prastos Cash Management Oy. For more information, see: FIN-FSA 2019a.

*the regulation that has now entered into force, virtual currencies are still, in many ways, high-risk investments”.*¹⁶

As regulatory gaps in the sector have been identified nationally and internationally, the pressure to develop legislation has naturally increased as the industry grows and develops. Legislative projects on cryptocurrencies have been launched worldwide, and the EU’s ambitious legislative initiative, which differs significantly from others, has received widespread international attention. When a regulation that would impact the whole EU is planned, with the intent to cover the primary law of the entire crypto-asset industry, its effects should be considered even before the regulation enters into force.

1.2.2. Research Questions and Delimitations

The thesis aims to examine and analyse the regulatory challenges related to the regulation of the crypto-asset industry. The main focus will be on how 1) should CASPs be regulated and what kind of operational requirements such entities should meet, and 2) to promote innovation and competition in the markets while ensuring investor protection in the industry.

In this thesis, the topic is approached with the following research question:

How to enable innovation, market access and operational efficiency for different operators when regulating the crypto-asset industry; while simultaneously guaranteeing adequate investor protection, market reliability and legal certainty for individual investors?

As the EU legislators have already taken the first steps towards regulating the industry, the approach will mainly focus on the objectives¹⁷ assigned to EU legislation in preparation. Thus, the approach aims to examine how well the EU is going to fulfil those targets,

¹⁶ FIN-FSA 2019a.

¹⁷ Title XI, Legislative Financial Statement 1(1.4) MiCA. The objectives are divided into (i) four general and (ii) four specific objectives. (i) the general objectives are: 1) legal certainty; 2) support of innovation; 3) instilling appropriate levels of consumer and investor protection and market integrity; and 4) ensuring financial stability. (ii) the specific objectives are: 1) Removing regulatory obstacles to the issuance, trading and post-trading of crypto-assets that qualify as financial instruments, while respecting the principle of technological neutrality; 2) Increasing the sources of funding for companies through increased Initial Coin Offerings and Securities Token Offerings; Limiting the risks of fraud and illicit practices in the crypto-asset markets; and 4) Allowing EU consumers and investors to access new investment opportunities or new types of payment instruments in particular for cross-border situations.

intending to point out potential issues and their possible effects on the markets of crypto-assets.

Due to the extensive nature of MiCA and the whole crypto-asset industry, certain limitations for the thesis are necessary to achieve optimal results. First, this study only covers the EU's regulatory approach from the perspective set out above. This means that the main focus will be a) in provisions concerning investor and consumer protection, b) in provisions affecting the market participants and innovation, and c) in general provisions affecting the whole initiative. Second, the thesis does not detail all the provisions regarding stablecoins¹⁸, but rather focuses on the operational requirements from the market participants' point of view. Although the regulation of stablecoins is a fundamental question for the industry, it would be too challenging to cover all of those provisions in greater detail due to the limited scope of the thesis. To some extent, it may also be worth noting that the significant attention stablecoins have received in MiCA may indicate more about pushing a political agenda than about the ambition actually to regulate the industry.¹⁹ Third, and last, the thesis excludes security tokens²⁰ from its scope. Although the regulatory questions of these tokens are as equally relevant as for all other tokens, they can be seen to form an independent set of topics, the detailed solution of which requires such a wide-ranging study that it is not possible in this thesis.²¹

As the research problem is limited to the EU area, it is only natural that the main focus of the thesis will be limited to that regulatory area. However, regulatory solutions and approaches presented in third countries are also necessary to cover to some extent so that the thesis can comprehensively cover the issue, and alternative solutions can be proposed if justified. Furthermore, due to the limitations of the subject, it is worth noting that it is not possible to address the legislation comprehensively in force in all Member States on cryptocurrencies. In addition, neither the tax, cyber security-, nor data protection-related

¹⁸ Stablecoins are digital assets attempting to stabilise their volatility by typically pegging themselves to a stable asset, such as the U.S. Dollar or gold. In this thesis, the term 'stablecoin(s)' is used to cover both ARTs and EMTs as defined in MiCA.

¹⁹ *Zetzsche et al. 2020*, p. 4.

²⁰ Security tokens can be described as digital financial assets, which represents fractions of any asset that already has value, like, for instance, real estate, a car, or corporate stock.

²¹ More about the regulatory challenges of security tokens, see *Marjosola 2021*.

issues regarding crypto-assets can be addressed in this thesis and are therefore excluded from its scope.

1.3. Methodology and Implementation

1.3.1. *The Background and Relevance of Legal Research*

As the current legal status regarding crypto-assets is somewhat unclear, it is justified to start the examination of the methodology on the basics of legal research. In this regard, jurisprudence, or legal dogmatics, is perhaps the most traditional area of legal research, focusing on structuring and construing the legal system. The judicial system and legal order, in turn, can be perceived as a social construction, which is formed by legal norms, constructing a state order of coercion.²² Furthermore, the rule of law includes the rules and principles that individuals should act within the state. Given the continuously developing nature of modern-day society, it should be although noted that the rule of law is subject to constant change and development.²³ *Aarnio*, for example, has summed up the task of legal dogmatics “[to] produce as certain information as possible about the content of the legal system”.²⁴ This statement leads naturally to a repeated thesis that jurisprudence interprets and systematises the existing law.²⁵ Thus, at the heart of legal dogmatics is the sources of law that make up the content of the legal system.²⁶

In addition to legal dogmatics, legal research has traditionally been seen to include other separate areas. For example, already more than 40 years ago, *Aarnio* believed that in addition to legal dogmatics, legal research could be divided into a) examining the structuring and construing of the legal system, b) evaluating existing regulations and institutions, or c) examining problems related to law-drafting, traditionally known as legal policy research.²⁷ Thus, there has been a reasonably clear division in Finnish law between dogmatic legal research, focusing on the content of existing law, i.e. jurisprudence (*de lege lata*) and legal

²² See, e.g., *Aarnio* 2011, pp. 11 & 29. Thus, in legal dogmatics, the object of research is not the existing reality, at least in the same manner as in natural sciences. Furthermore, in legal dogmatics, it is more a question of the humanities of interpretive science. However, legal science has also been considered as a social science. See *Siltala* 2004, p. 509.

²³ *Laakso* 2012, p. 219.

²⁴ *Aarnio* 2011, p. 12.

²⁵ *Aarnio* 1978, p. 52–53. *Aarnio* mentions the systematization and interpretation of legal provisions as a traditional task of legal dogmatics. See also: *Minkkinen* 2017, p. 909.

²⁶ *Kaisto* 2005, p. 150.

²⁷ *Aarnio* 1978, pp. 52–53.

policy research (*de lege ferenda*).²⁸ In addition, the research may also be prepared *de sententia ferenda*, which refers to a proposal addressed to a court or other authority as to how a particular case should be resolved.²⁹

Although the above division has long been considered to work in principle, it has also been exposed to criticism, mainly because modern-day society is perhaps developing and evolving faster than ever. The way we perceive the world might not work to all innovations and inventions. As this has led, inter alia, to the fact that the boundaries between research methods have been lowering in recent years, the distribution can be seen as less absolute than in the past.³⁰

1.3.2. Regulation Theory – How Does Economics Impact Legal Research?

A close connection with an economic aspect in legal research raises a relevant question of whether such a link could transform the research into something other than legal research, even if the rules and principles of legal research dominate the research. According to the most orthodox requirements of analytical jurisprudence, for example, ‘financial interest’ can never have a place in identifying legal problems.³¹ However, the identification of legal issues must be distinguished from the method used to clarify and confirm the recommendation for interpretation or to assess the impact of legislation, which may also have economic effects. The subject of legal research is the applicable law with its various sources, and certain principles of the doctrine of the sources of law guide the use of these sources. Because the pursuit of legal knowledge follows otherwise prescribed methodological rules and regulations, the researcher’s values may be involved in the legal reasoning. Thus, the objectives of a study always express some particular interest in the aim it pursues.³²

Indeed, in addition to the traditional legal dogmatics, legal research can also be done using other research methods, such as the regulation theory. By definition, this method refers to

²⁸ Timonen 1997, pp. 105–106 with references.

²⁹ More about *de sententia ferenda* -concept, see e.g., Vedenkannas 2007, p. 7; and Ross 1966, pp. 51–65 & 421–422.

³⁰ From a study combining *de lege lata* and *de lege ferenda* research approaches, see, e.g., Hupli 2004. Hupli believes that traditional jurisprudence and *de lege ferenda* research approaches are merging into an approach that emphasizes the content of the law, within which the weight of the aforementioned perspectives varies.

³¹ See: Zitting 1952, p. 391.

³² Aarnio has approached the legal adherence of legal-dogmatic interpretations by speaking of a “weakly legal-positivist background assumption.” It is a kind of legal positivist minimum assumption that is part of all legal dogmatics. See: Aarnio 1989, pp. 59–60.

research that serves the preparation of legislation and the critical analysis of legislation, utilising economic theory and empirical research results in economics.³³ Regulatory theory must serve some societal information interests either directly or indirectly.³⁴ Immediately, regulatory theory satisfies these information interests if the level of individual legislation, and thus of the legal system as a whole, improves.³⁵ The regulation theory emphasises the instrumental nature of law as a tool for controlling social or economic activity.³⁶

Regarding the connection between economics and law, criticism has been expressed in the legal literature that the drafting of legislation does not always sufficiently problematise the regulatory options that could be considered in each case to achieve the objectives of the law.³⁷ After all, what is the purpose of establishing a legal system for covering economic transactions if the legislation does not consider the economic standpoint in the preparation stage? For instance, *Ogus* has argued that the most basic need for establishing a system of government, in which the law always plays a crucial role, is to enable the enforcement of economic arrangements.³⁸ This, on the other hand, can be linked to the perception mentioned above of the legal system to be perceived as a social construction.

From the researcher's point of view, regulation theory in practice means that he/she thinks the research is intended to serve some societal information interests such as law drafting. Therefore, conducting regulatory theoretical research requires a critique of the chosen regulatory model and the ability to outline alternatives to it. However, dogmatic legal research and regulation theory are not automatically mutually exclusive, but the regulation theory can be used to solve legal problems structured by lawful means. Indeed, bringing the teachings of economics into legal thinking also brings practice from the court and authority level to where it can be studied and examined in greater detail.³⁹ To use the ever-changing property law concepts of a dynamic capital market as part of legal research, the use of economic tools is essential. It would not be possible to understand the actual risk positions, overall arrangements, and roles of different actors and operating environments without the

³³ *Määttä* 1999, p. 23 with references.

³⁴ *Määttä* 2002, p. 132.

³⁵ *Ibid.* Indirectly, information interests are served when developing the theoretical basis of regulation theory.

³⁶ *Määttä* 2005, p. 23.

³⁷ *Määttä* 2008 p. 125.

³⁸ *Ogus* 2004, p. 16.

³⁹ *Lauriala* 2001, p. 17.

means provided by economics.⁴⁰ On the other side, “according to the public interest theory, regulation is [even] to be justified as a corrective to perceived deficiencies in the operation of the market”.⁴¹

1.3.3. *Concrete Method*

As this thesis concerns a finance-related topic, it is important to understand the underlying principles and theories of such regulation. Furthermore, as the regulation of the financial system is primarily built to serve the effective functioning of the system, it is necessary to apply “[the] analytic tools of economics to determine the legal and regulatory framework best suited to correcting the failures of a financial system”.⁴² Therefore, it is only natural that the law and economics-related regulation theory is used as the main method in the research. The method is used to locate different interpretive options, such as real arguments and, in general, objectives influencing the background of the regulation of crypto-assets. As the regulation theory has been primarily influenced by economics, the thesis utilises both economic theories and, in some places, empirical research results.⁴³ Moreover, as the legislation in the field under study is dynamic and, due to technology, in a state of constant change, focusing purely on interpretation might not be the most effective approach, as recommendations for interpretation become rapidly obsolete.⁴⁴ Therefore, the regulation theory also appears in the study as a critical analysis of the applicability of different regulatory solutions to the industry of crypto-assets.

Concerning the interpretation of the regulation to the crypto-asset industry, in addition to regulation theory, the thesis emphasises teleological, and *de lege ferenda* interpretation, as the objectives of regulating the industry are dealt with on a large scale. In many places, the interpretation is based on the promotion of regulatory objectives. Emphasis on teleological interpretation instead of literal interpretation is justified in some areas in the thesis, as the legislation applicable to the subject under study does not in many cases provide a direct

⁴⁰ More about the concepts of the risk positions, overall arrangements, roles of different actors and operating environments, see *Karhu* 1997 pp. 539–560; and *Karhu* 2000 pp. 27–28. Lauriala has argued that when financial law research, in addition to economic means, emphasizes situation-specific legal reflection and abandons classification, it approaches real legal professionalism. *Lauriala* 2001, p. 18.

⁴¹ *Ogus* 2004, p. 15.

⁴² *Armour et al.* 2016, p. 51.

⁴³ More about the relationship between regulation theory and economics, see: *Määttä* 2002, pp. 137-138, and regulatory-theoretical legal divisions based on economics, *den Hertog* 2012.

⁴⁴ *Määttä* 2002, p. 141.

answer to the problems at hand. In addition, teleological interpretation enables the objectives of legislation to be achieved in a constantly changing operating environment due to technological developments. Concerning regulatory objectives affecting EU law, the regulation of crypto-assets is particularly aiming to promote innovation, economic efficiency, and investor protection.

Last of all, it should also be noted that many parts of the thesis are concerning upcoming EU regulation, due to which it is only natural that it is of European law by its nature. Consequently, the thesis is mainly based on the content of EU law, as the norms of EU law take precedence over national law (*lex superior derogat legi inferiori*).⁴⁵ However, as the regulation of crypto-assets is still at a preparation stage and is not yet in force, the principles of procedural autonomy related to EU law are not examined in great detail in the thesis. Instead, the thesis seeks to take into account the *sui generis* nature of EU law, in which the objectives, principles and interpretation methodology typical of EU law distinguish it from national legal systems.⁴⁶

1.3.4. References and Outline

As the whole topic of the thesis is built around potentially upcoming EU regulation, it is natural that the approach is built mainly around the proposal. Moreover, references, articles, commentaries, and notes published by national and EU-level authorities and operators in the field are used to gain a deeper understanding from different perspectives. According to *Wuolijoki*, the doctrine of the sources of law in the financial sector can be considered vague, and the legal situation in the financial sector can no longer be clarified using traditional sources of law alone.⁴⁷ However, from the doctrine of the sources of law and normative theory, recommendations issued by different authorities can be problematic. The problematic nature in the study of financial regulation is reflected in the thesis as a focus on soft law, as the guidelines of ESMA, FATF and other authorities play a significant role in interpreting regulation in the crypto-asset industry. While the whole industry is relatively

⁴⁵ *Hirvonen* 2011, p. 41; *Posner* 1998, pp. 14–17; and *Timonen* 1997 p. 108. However, the theory has also been criticized. For example, Hemmo has considered that the problem with both forms of law and economics theory is to obtain sufficiently reliable and exact financial information. He believes that an even greater weakness of the normative, “Posnerian” law and economics -concept is that the premise ignores all other goals in its pursuit of economic efficiency. *Hemmo* 1996, pp. 25-27.

⁴⁶ *Raitio – Tuominen* 2020, p. XXIV.

⁴⁷ *Wuolijoki* 2016, p. 6.

new and regulatory frameworks quite fragmented and uncertain, some comparison to the traditional financial markets is required. However, the majority of the source material of the thesis consists of comprehensive official EU material, as issues related to cryptocurrencies are currently of interest to the EU legislator. Data on the new topic are appearing at a rapid pace, and in this thesis, the follow-up of the material related to the subject has had to be limited until the beginning of December 2021. Concerning legal literature, particular emphasis has been placed on German and other Middle-European countries literature and other material, which is natural given the significant size of their market. In Europe, the largest market for virtual currencies is in Middle-Europe, and due to Brexit, the weight of the United Kingdom in the paper is lower. Outside the EU area, U.S. and Australian sources have also been utilised in the study, as the market for cryptocurrencies in these countries is a much larger and more studied phenomenon than in the EU. Except for the introduction and Chapter 2, the thesis sources have mainly been limited to English material, as there is little material available in Finnish on crypto-assets.

The thesis consists of six main chapters, the first providing a background on the topic, presenting the research questions and a description of the methodology, source material, and the structure of the thesis. The second chapter moves on to the regulation of investor protection in traditional financial markets. The background supports the regulatory interpretation presented in later chapters.

After the first two chapters, the approach is to examine the MiCA regulation initiative affecting the activities of market participants chronologically. Thus, the review begins with the third chapter, which covers digitalisation in the financial industry, serving as a general introduction and explaining the regulatory background behind the initiative. After this, the concept of crypto-assets, the scope of the regulation, general obligations affecting all CASPs, and investor protection are covered in the fourth chapter. This goes on to examine the obligations from the point of view of each different market participant in the sector, which the fifth chapter seeks to describe comprehensively. Finally, the sixth chapter summarises the issues addressed and aims to provide conclusions to the research questions raised, propose potential alternative approaches and solutions if applicable, and summarise relevant questions for future research.

2. Customer and Investor Protection in Traditional Finance

2.1. Introduction

The *freedom of contract* has traditionally been considered a prevailing principle in the EU's contract law regime, including Finland. This means that the contract parties can supersede the norms of laws by contractual terms. Therefore, the principle of party autonomy prevails as a presumptive legal principle. The parties have total freedom to decide whether to conclude a contract (*right to conclude a contract*), with whom to enter into a contractual relationship (*freedom to choose a contracting party*) and the freedom to decide the content of the contract. In addition, the freedom to decide on the termination of the contract has been generally considered a separate but yet a vital part of the contractual freedom.⁴⁸ In addition to the freedom of contract principle, the doctrine of *pacta sunt servanda* ("agreements must be met") also plays a crucial role in our legal system. For instance, in Finland, the principle can be inferred normatively from Section 1 of the Finnish Contracts Act (228/1929).⁴⁹

Different sanction mechanisms make it necessary to comply with agreements since the other contracting party has the possibility to enforce the agreement or claim damages through our legal system. The courts' case law also shows that the binding nature of agreements is a followed principle, without which our modern-day society would not function properly.⁵⁰ However, the presumption on which the party autonomy approach lies, namely that parties in principle can be regarded to have equal bargaining power, has proven to be sometimes unrealistic: consumers neither possess the economic power nor the necessary knowledge to negotiate with businesses on an equal footing.⁵¹ Therefore, the overarching reason to regulate contractual freedom between businesses and consumers is the inequality in bargaining power, which may lead to the exploitation of the vulnerabilities of individuals.⁵² In financial relationships, the vulnerability of consumers can be seen as even more pressing. This has to do with the more significant information inequality between consumers and the

⁴⁸ Hemmo 2003, pp. 69, 72, & 75–77.

⁴⁹ According to Section 1(1) of the Finnish Contracts Act: "An offer to conclude a contract and the acceptance of such an offer shall bind the offeror and the acceptor as provided for below in this chapter."

⁵⁰ Hemmo 2003, p. 14; Saarnilehto 2009, pp. 161–163.

⁵¹ Haentjens – de Gioia Carabellese 2020, p. 84.

⁵² Haentjens – de Gioia Carabellese 2020, p. 84.

suppliers of financial instruments.⁵³ Financial instruments are often characterised with high complexity, whilst consumers tend to be financially illiterate.⁵⁴

2.2. General Background – the Unfair Terms Directive

A general set of EU rules on investor protection can be found in the Unfair Terms Directive.⁵⁵ The aim of this Directive is to harmonise “the laws, regulations and administrative provisions of the Member States relating to unfair terms in contracts concluded between a seller or supplier and a consumer”.⁵⁶ According to its scope, the Directive applies to all types of contracts, including financial contracts, i.e. agreements concluded between consumers and financial institutions such as banks, investment firms and insurance companies. However, the Directive is limited in its scope, defining a consumer as a “natural person who [...] is acting for purposes that are outside his trade, business, or profession”.⁵⁷ The legal consequence of an unfair term is that the term does not bind the consumer, although the contract can remain in force without the unfair term.⁵⁸

The legal protection of the consumer provided by the Unfair Terms Directive is primarily achieved through the Art. 3 of the Directive. In this respect, the primary concern of the EU legislator has been that a consumer may be unduly and detrimentally affected, in the relevant contracts, by terms that have not been individually negotiated.⁵⁹ Put simply, these terms are not the outcome of a specific pre-contractual discussion with the seller or provider. Still, they may be a consequence of the pressure the party with a higher bargaining power can exert on the other. Art. 3(2) Unfair Terms Directive clarifies the specific circumstances under which a term shall be regarded as “not individually negotiated” and therefore possibly unfair. Especially, this refers to circumstances where the term “has been drafted in advance and the consumer has therefore not been able to influence the substance of the term, particularly in the context of a preformulated standard contract”. Thus, the Unfair Terms Directive’s scope is limited to pre-formulated standard contracts concluded with consumers.

⁵³ *Haentjens – de Gioia Carabellese* 2020, p. 84.

⁵⁴ See *Armour et al.* 2016, p. 207. For instance, there is evidence that only a third of the U.S. population understands credit card agreement terms on how compound charges are calculated.

⁵⁵ Council Directive 93/13/EEC on unfair terms in consumer contracts.

⁵⁶ Art. 1(1) Unfair Terms Directive. A brief description of the Directive under discussion can be found in *Hemetsberger et al.* 2006, p. 151; see also *Gkoutzinis* 2006, pp. 191 & 193.

⁵⁷ Art. 2(b) Unfair Terms Directive. See also *Cranston* 1999.

⁵⁸ Art. 6 Unfair Terms Directive.

⁵⁹ Art. 3(1) Unfair Terms Directive.

2.3. Markets in Financial Instruments

2.3.1. Introduction

As mentioned earlier above, the information inequality between consumers and the suppliers of financial instruments and the consequent inequality in bargaining power make consumers particularly vulnerable in financial relationships, especially where it regards investment services. Due to this and the limited scope of the Unfair Terms Directive, the EU legislator has seen it necessary to enact another body of EU law that would strengthen investor protection where it regards the provision of investment services.⁶⁰ Thus, in the EU, investment firms and the provision of investment services have been regulated since 2018 by the MiFID II Regulations. The requirements in MiFID II are divided into a regulation (MiFIR)⁶¹ and Directive (MiFID II)⁶². The MiFID II focuses mainly on procedures, while MiFIR regulates issues related to market structures.⁶³ These acts repealed the previous Markets in Financial Instruments Directive (MiFID I)⁶⁴, which entered into force in 2007.⁶⁵

Both the previous MiFID I and the current MiFID II regulation are based on the so-called Lamfalussy process, which divides regulation into four levels. At the first level are regulations and directives, such as MiFID II, which regulates key principles. These principles reflect the political choices made by the EP and EC.⁶⁶ At the second level, there is binding regulation of a technical nature by the EC, such as delegated and implementing regulations and regulatory technical standards (RTS and ITS) developed by the supervisory authorities and adopted by the EC.⁶⁷ The second level is strongly dependent on the first level, as the first level should clearly specify the nature and scope of technical regulation.⁶⁸ At the

⁶⁰ *Haentjens – de Gioia Carabellese* 2020, p. 92.

⁶¹ Regulation (EU) no 600/2014 of the European Parliament and of the Council on markets in financial instruments and amending Regulation (EU) No 648/2012.

⁶² Directive 2014/65/EU of the European Parliament and of the Council, on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.

⁶³ HE 151/2017 vp, p. 10.

⁶⁴ Directive 2004/39/EC of the European Parliament and of the Council on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC.

⁶⁵ The reform of MiFID II, driven by the 2008 global financial crisis, was part of an effort to create a safer, more stable, transparent, and accountable financial system in the aftermath of the financial crisis. MiFID II has been therefore described even by the term “post-crisis measure”, see e.g. *Lannoo* 2018, p. 1. However, Wallinga emphasizes that MiFID II regulation is much more than a crisis measure, cf. *Wallinga* 2020, p.52.

⁶⁶ *Final Lamfalussy Report* 2001, pp. 19 & 22.

⁶⁷ Regulatory Technical Standards (RTS) and Implementing Technical Standards (ITS), see Art. 10 and Art. 15 of the ESMA Regulation.

⁶⁸ *Final Lamfalussy Report* 2001, p. 23.

third level, ESMA may issue non-binding guidelines and other recommendations, often based on the so-called “comply or explain” principle.⁶⁹ In addition, ESMA may also adopt other non-binding rules in accordance with Art. 29 of the ESMA Regulation. The main purpose of the third level is to ensure the uniform implementation and application of the two upper levels in all member states.⁷⁰ Finally, the fourth level focuses on monitoring the proper implementation of the first two levels, mainly carried out by the EC.⁷¹ As the whole financial supervisory framework is a relatively complex and vast topic, it is not covered further in this thesis. However, in general, the framework can be outlined according to the chart set forth below:

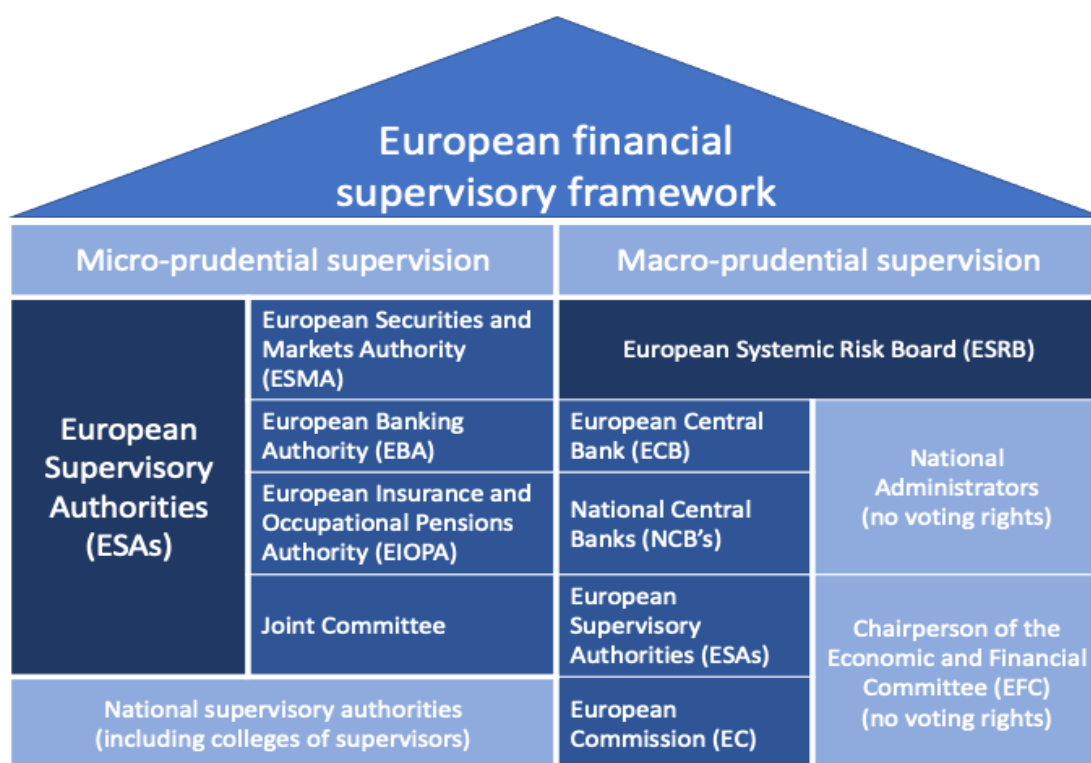


Chart 1: European financial supervisory framework.⁷²

2.3.2. *Activities and Services – Scope of the Legislation*

According to Art. 1(1) of the MiFID II, the legislation applies to “investment firms, market operators, data reporting services providers, and third-country firms providing investment services or performing investment activities through the establishment of a branch in the

⁶⁹ Art. 16 ESMA Regulation.

⁷⁰ *Final Lamfalussy Report 2001*, p. 37.

⁷¹ *Final Lamfalussy Report 2001*, p. 40.

⁷² *Wuolijoki – Hemmo 2013*, p. 61. Initial chart published by the FIN-FSA.

Union”.⁷³ Furthermore, investment firms are defined as “legal person whose regular occupation or business is the provision of one or more investment services to third parties and/or the performance of one or more investment activities on a professional basis”.⁷⁴ In this context, it is also worth mentioning that while the traditional banking business was limited to bank products such as the offering of deposits and the extension of loans, globalisation, increased competition, and technological advances have resulted in a situation where banks are now also participating to the financial markets acting as investment firms, i.e. offering both banking and investment services. Thus, investment services tend to be provided not only by specialised investment firms but also by banks, although it should be recognised that they must be authorised explicitly by their supervisory authority to do so.⁷⁵ Therefore, the applicability of the MiFID II legislation is primarily based on the activities which the business provides, which must either qualify as an “investment service” or as an “investment activity”, as defined in MiFID II.⁷⁶

2.3.3. Client Classification

The MiFID legislation categorises various clients of investment firms, which is based on the following distinction: (i) professional clients; (ii) retail clients; and (iii) eligible counterparties. Different rules apply, depending on how the client is categorised. For example, retail clients generally have the highest degree of statutory protection, whereas counterparties classified as eligible counterparties are the least protected.

The category of professional clients consists of those who possess “the experience, knowledge and expertise to make its own investment decisions and properly assess the risks that it incurs”.⁷⁷ This category includes, among others: credit institutions, investment firms, pension funds, undertakings, central banks, but also large undertakings not necessarily

⁷³ For more specific scope and about the exemptions of the MiFID Regulation, see Art. 1 & 2 MiFID II.

⁷⁴ Art. 4(1) No. 1 MiFID II.

⁷⁵ *Haentjens – de Gioia Carabellese* 2020, p. 92.

⁷⁶ The MiFID II distinguishes between investment services, investment activities, and ancillary activities. Investment services and activities are listed in Section A of Annex I MiFID II. To fall within the scope of the MiFID II Regulation, it thus is essential that the services and investment activities relate to “financial instruments”, as listed in Section C of Annex I. Financial instruments in this definition include instruments such as transferable securities, units in collective investment undertakings, and derivatives. Moreover, the services and investment activities must be carried out in the course of a profession or trade. In addition, according to the Art. 4(1)(1), the investment services must be undertaken for a third party.

⁷⁷ Annex II MiFID II.

involved with financial business.⁷⁸ These entities are considered capable of assessing the risks and any other relevant factors in connection with a specific financial product.⁷⁹

Retail clients represent a class of clients who, being neither professional nor eligible counterparties, enjoy the maximum level of protection available. Although the retail client is typically an individual, the category may also include an entity that does not meet the definition of a “professional client”, i.e. smaller businesses. This contrasts utterly compared to the body of EU consumer protection law discussed previously, where the customers are always individuals. Retail clients may also include those classified as “elective”, i.e. those who would otherwise qualify as professional clients but have chosen to enjoy maximum protection.⁸⁰

Finally, the MiFID II classifies the category of “eligible counterparties”. which include a limited circle of entities somehow connected with the financial sector. More specifically, these entities include: “investment firms, credit institutions, insurance companies, UCITS and their management companies, pension funds and their management companies, other financial institutions [...], national governments and their corresponding offices including public bodies that deal with public debt at a national level, central banks and supranational organisations”.⁸¹ In case of investment services with an “eligible counterparty”, some rules of conduct under the MiFID II do not apply.⁸² Nonetheless, when dealing with eligible counterparties under MiFID II, Member States must ensure that fundamental principles of

⁷⁸ According to Annex II(1)(2) MiFID, the undertaking shall meet two of the following criteria: (i) a balance sheet total of at least EUR 20,000,000; (ii) a net turnover of EUR 40,000,000; (iii) own funds of at least EUR 2,000,000.

⁷⁹ The specific definition of “professional client” is detailed in the Annex II MiFID II. Moreover, the classification is divided into two categories as follows: (I) “Categories of client who are considered to be professionals”, and (II) “Clients who may be treated professionals on request”. Regarding the professional categorisation upon request, the waiver of being categorised as retail clients means that such party must be treated as professional clients only upon their own request, rather than as a result of any regulatory categorisation. A retail client can thus opt out of his statutory protection and, therefore, be re-categorised as “professional”, but the onus lies with the investment firm to assess beforehand whether this client has the necessary expertise, experience, and knowledge. In the absence of an adequate judgement, the investor shall remain classified as a retail investor. The waiver must be in writing, and the investment firm must give “a clear written warning of the protections and investor compensation rights they may lose”, while the clients “must state in writing, in a separate document from the contract, that they are aware of the consequences of losing such protections”.

⁸⁰ Remarkably, a client shall be treated as “eligible” exclusively in relation to certain kind of investment services, such as dealing for its own account the execution of orders, and certain other arrangements. More about the topic, see *Proctor* 2010, p. 45.

⁸¹ Art. 30(2) MiFID II.

⁸² Art. 30(1) MiFID II. Among these exceptions: (a) Art. 24 (“General principles and information to clients”) – except for paragraphs 4 and 5 of Art. 24; (b) Art. 25 (“Assessment of suitability and appropriateness and reporting to clients”) – except for paragraph 6; and Art. 28(1) (“Client order handling rules”).

investor protection are complied with, such as honesty, fairness and professionalism in the way the investment firm liaises with the eligible counterparty. Additionally, fairness, clarity and punctuality in the information provided must be adhered to.⁸³ In this respect, the first duty is to provide clear and faithful information, which is not misleading to the client.

2.3.4. Investor Protection – Procedural Requirements for Market Participants

The client classification explained above defines the specific rules an investment firm is bound to follow when offering its services to clients. These rules of conduct can generally be classified as duties of information, reporting and execution. Regardless of the categorisation of the client, all investment firms are required to “act honestly, fairly, and professionally in accordance with the best interest of its clients”.⁸⁴ Indeed, the fundamental purpose of the whole MiFID legislation has been argued to be the investment firms’ information duty, which is fully addressed to all customers, with the aim of improving investor protection by correcting the information asymmetry between the parties, as described in Chapter 2.1. above.⁸⁵ The information duty is complemented by a suitability and appropriateness assessment to ensure that the investor does not invest in a product unsuitable for their financial situation and risk-taking capacity.⁸⁶ Concerning investment advice, the importance of suitability assessment in investor protection has been emphasised and can even be considered as a procedural obligation that protects investors the most.⁸⁷ In addition to the general conduct of business rules, investment firms have an obligation to take measures to prevent and manage conflicts of interest. However, if the conflict is simply unavoidable, it must be notified and to the customer and the nature of the conflict must be explained and clarified to the customer.⁸⁸

Besides the distinctions between client categories, the MiFID rules of conduct are tailored

⁸³ Art. 30(1)(2) MiFID II.

⁸⁴ Art. 24(1) MiFID II.

⁸⁵ Luukkonen 2018, pp. 58–59; Armour *et al.* 2016, p. 230. From the outset, financial market legislation has been designed to address market failures due to information asymmetries between private investors and professional market participants and the associated risks and costs. The aim of minimising information asymmetry is to make the market more efficient. However, at the same time, the functioning of an efficient market requires investors’ confidence in the market. Thus, information duty and other procedural obligations serve, in principle, the same conclusion, so that there is no need to make a choice between market efficiency and weaker protection in a law and economics legal analysis. More about the topic, see Wuolijoki 2009, p. 124; Kaisanlahti 1998, pp. 29–30; and Luukkonen 2018, p. 60.

⁸⁶ Luukkonen 2018, pp. 59–60.

⁸⁷ Ringe – Ruof 2018, p. 30 & ESMA 2018, p. 2.

⁸⁸ Art. 23 MiFID II.

to the type of investment service provided. In other words, the general duty to act honestly, fairly and professionally is contextualised for the three specific types of investment services introduced above in Chapter 2.3.3. : (i) duties imposed upon “execution-only” services; (ii) duties upon the provision of investment advice; and (iii) duties imposed upon the provision of portfolio management.⁸⁹ Understandably, the duties of the investment firm and the corresponding level of investor protection are dependable on the services provided. For instance, execution-only services are not subject to as extensive obligations as portfolio management.⁹⁰

Regarding execution-only services, investment firms must obtain “the best possible result for their clients taking into account price, costs, speed, likelihood of execution and settlement, size, nature or any other consideration relevant to the execution of the order”.⁹¹ To enable the investment firm to assess whether the investment service or product is appropriate for the client, investment firms face an obligation to require certain information from the client, especially concerning the person’s “[knowledge] and experience in the investment field relevant to the specific type of product or service offered or demanded”.⁹² In respect of both investment advice and portfolio management, Art. 25(2) MiFID II states that the investment firm must “obtain the necessary information regarding the client’s or potential client’s knowledge and experience in the investment field relevant to the specific type of product or service, that person’s financial situation including his ability to bear losses, and his investment objectives including his risk tolerance to enable the investment firm to recommend to the client or potential client the investment services and financial instruments that are suitable for him and, in particular, are under his risk tolerance and ability to bear losses”, which is also commonly referred to as the Know Your Customer (KYC) duty.

Ultimately, the client must understand the risks, the transaction must satisfy the client’s investment objectives, and the client must be able to bear the financial risks implied in the transaction. Indeed, Art. 25(1) of the MiFID II specifies that “Member States shall require investment firms to ensure and demonstrate to competent authorities on request that natural persons giving investment advice or information about financial instruments, investment

⁸⁹ Haentjens – de Gioia Carabellese 2020, p. 97.

⁹⁰ Ibid.

⁹¹ Art. 27(1) MiFID II.

⁹² Art. 25(3) MiFID II

services or ancillary services to clients on behalf of the investment firm possess the necessary knowledge and competence to fulfil their obligations”.

All in all, as the MiFID II is a directive, the obligations that aim to protect investors as described are enforced by national supervisory authorities through administrative sanctions.⁹³ However, several Member States have witnessed multiple civil law litigations despite these sanction mechanisms in the last decade. In these cases, investors have held their investment firms liable for financial losses, frequently referring to MiFID obligations that may or may not have been violated. Until now, the CJEU has been restrictive and held that it is for the Member States to determine the consequences of MiFID under their privacy laws.⁹⁴

2.4. Distance Financial Services

Many contracts are concluded online in today’s global markets, enabling parties to enter into agreements without being physically present. However, while technological development can be seen as undoubtedly beneficial from the logistical aspect of contract negotiations, it has also been argued to increase risks for consumers.⁹⁵ Moreover, it has been even argued that without European rules, consumers would not “have access without discrimination to the widest possible range of financial services available”.⁹⁶

In the context of distance contracts, the following EU legislation can be seen as the most important ones: (i) the Consumer Rights Directive,⁹⁷ (ii) the Directive on Electronic Commerce,⁹⁸ in which distance contracts are considered in a general way, and (iii) the DFS Directive.⁹⁹ Naturally, when discussing financial markets, the last-mentioned can be seen as the most important one. However, the scope of the Directive is limited to “distance

⁹³ Art. 70(1) MiFID II.

⁹⁴ See, e.g. C-51/13 (*Nationale Nederlanden v Van Leeuwen*), C-604/11 (*Genil 48 v Bankinter*) and C-174/12 (*Hermann v Immofinanz*).

⁹⁵ *Haentjens – de Gioia Carabellese* 2020, p. 88.

⁹⁶ Rec. (3) DFS Directive. See also *Haentjens – de Gioia Carabellese* 2020, p. 87.

⁹⁷ Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council.

⁹⁸ Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market.

⁹⁹ European Parliament and Council Directive 2002/65/EC of 23 September 2002 concerning the distance marketing of consumer services and amending Council Directive 90/619/EEC and Directives 97/7/EC and 98/27/EC.

contracts”, which are defined as “any contract concerning financial services concluded between a supplier and a consumer under an organised distance sales or service-provision scheme run by the supplier, who, for the purpose of that contract, makes exclusive use of one or more means of distance communication up to and including the time at which the contract is concluded.”¹⁰⁰ Further, “financial services” are defined as “any service of a banking, credit, insurance, personal pension, investment or payment nature”.¹⁰¹

The structure of how the DFS Directive provides customer and investor protection can be divided into three separate categories: (i) information duty prior to the conclusion of the contract,¹⁰² (ii) requirements of the communication form,¹⁰³ and (iii) the right of withdrawal.¹⁰⁴ Regarding the information duty, the list of the required information that must be sent to the customer in advance is relatively extensive: in addition to the information of the supplier and its characteristics, the requirement also includes the main characteristics and risks of the financial service, and the distance contract, particularly the right of withdrawal. The second category sets forth that the supplier is required to communicate to the consumer “all the contractual terms and conditions and the information” connected with the contract and the relevant financial product, “on paper or another durable medium available and accessible to the consumer in good time before the consumer is bound by any distance contract or offer”. Finally, the DFS Directive prescribes that Member States “shall ensure that the consumer shall have a period of 14 calendar days to withdraw from the contract without penalty and without giving a reason”. This period is a minimum, and the Member States are allowed to fix a longer period of withdrawal.¹⁰⁵

¹⁰⁰ Art. 2(a) DFS Directive.

¹⁰¹ Art. 2(a) DFS Directive. Some researchers and authors have argued that it would have been a better approach if the legislator had adopted similar terminology as in the MiFID legislation, to achieve consistency. See e.g. *Haentjens – de Gioia Carabellese* 2020, p. 88, fn. 20.

¹⁰² Art. 3 DFS Directive.

¹⁰³ Art. 5 DFS Directive.

¹⁰⁴ Art. 6 DFS Directive.

¹⁰⁵ However, some restrictions are also made in the Art. 6(2) DFS Directive. For example, the right of withdrawal shall not apply to “financial services whose price depends on fluctuations in the financial market outside the suppliers’ control, which may occur during the withdrawal period”. Other exclusions are those relating to “travel and baggage insurance policies or similar short-term insurance policies of less than one month’s duration” and “contracts whose performance has been fully completed by both parties at the consumer’s express request before the consumer exercises his right of withdrawal.”

3. Digital Finance

3.1. Impact of Digitalisation

When it comes to crypto-assets, it must be understood that the industry is driven by an even wider social phenomenon: digitalisation. Digitisation has long been on the surface in all disciplines around the world and is therefore difficult to avoid in today's daily life, economy, politics, or almost in any aspect of life. In general, digitalisation has become an overarching concept that refers to the increasing use of information and communication technologies in various parts of life and the societal change brought by these technologies.¹⁰⁶ Digitisation has brought several innovations to the world, of which the ones that have taken place in the financial industry are naturally more relevant for this thesis. These include, e.g. artificial intelligence to control securities trading; complex computer algorithms that drive contract operations¹⁰⁷; and blockchain technology and the markets of crypto-assets enabled by this technology.

Digitalisation has had a significant impact on the sector's development in the financial markets, and various financial services technologies have appeared on the market more and more. In addition to technological developments, the impact can be seen in the fact that companies are constantly demanding more innovative solutions in finance, while consumers, in turn, are demanding easy-to-use and efficient, but at the same time reliable services from the service providers in the industry.¹⁰⁸ However, there is still a long way before all the various technologies can be fully utilised in the financial markets. This is since new technologies are often subject to ignorance and uncertainty, and regulation of technologies is often fragmented, incomplete or even non-existent, and nearly always lagging technological developments.¹⁰⁹

Due to the problem mentioned above, regulators should adapt to the rapid changes in modern-day society and develop new approaches and solutions to address these problems and keep pace with technological developments. In this way, the various technologies could be used as efficiently as possible. Furthermore, in this way, the advantages and disadvantages of innovations could be balanced as much as possible, enabling the objectives

¹⁰⁶ Koulu 2018, pp. 840 & 843, and Timo Alasoini 2015, pp. 26–37.

¹⁰⁷ Mähönen 7–8/2018 p. 934.

¹⁰⁸ Gomber et al. 2017, p. 538.

¹⁰⁹ Kallio – Vuola 2018, p. 356 & Hautamäki et al. 2019, p. 12.

of protecting consumers and ensuring market integrity, which both play a crucial role in the legislation development.¹¹⁰

3.2. Digital Finance as a Phenomenon

Digital finance is challenging traditional finance that has dominated the market for a long time. At the heart of traditional financing, banks have been the most dominant players for centuries, playing a significant role in the industry.¹¹¹ However, even traditional finance is experiencing the change brought by digitalisation. For instance, banking, in which the customer physically does business at the bank via paper documents, has declined and been replaced by online banking. Today, customers can handle almost all their banking transactions via internet. In addition, as mentioned in Chapter 2.3.2, banks have expanded their scope of activities from the traditional banking business, which has been considered to include taking deposits and granting loans.¹¹² Today, many banks are competing with investment firms, offering investment services to their clients in addition to the traditional ones.¹¹³ Indeed, digital finance describes the digitalisation of the financial sector at a general level, encompassing all digital services and products used and provided in the financial sector. These include, among others, debit cards, electronic exchange platforms, online banking, telephone applications and, most recently, crypto-assets.

The financial sector is most likely the largest user of digital technologies and plays an essential role in driving digital change in our economy and society.¹¹⁴ Indeed, various innovations have been emerging in the financial sector for some time, and investments in technology have increased at an accelerating pace in recent years while boosting innovation in the market. FinTech solutions are continuously utilised, e.g., digital identification, mobile applications, cloud services, mass data analysis, artificial intelligence, blockchain, and DLT technology.¹¹⁵ Due to its easily scalable nature, digital finance has the potential to reach consumers and investors from a wider geographical area and a wider social perspective, as

¹¹⁰ *Zetzsche et al.* 2017, p. 34.

¹¹¹ Banks have managed cash and commodity flows for centuries, while enabling the functionality of the exchange economy and business. See *Mähönen* 2018, p. 140.

¹¹² *Haentjens – de Gioia Carabellese* 2020, p. 92.

¹¹³ *Ibid.* However, it must be noted that when offering investment services, banks need to have a specific authorisation from their national FSA to do so.

¹¹⁴ COM(2018) 109, p. 1.

¹¹⁵ COM(2018) 109, p. 2.

it is implemented entirely online.¹¹⁶ Access to finance would then no longer be entirely dependent on banks, nor states could impose restrictions upon it.

However, FinTech also comes with risks, concerning, for instance, cyber security, data protection, consumer protection, investor protection and market integrity.¹¹⁷ Cyber risks are significant whenever it comes to digital solutions, and it can be complicated to control and implement them. Furthermore, cyber risks undermine consumer and market confidence in the stability of the financial system. These risks become more acute as digitalisation develops, and the threat they pose becomes more pronounced.¹¹⁸ Due to the risks posed by digital finance, related regulation has become a relevant issue. The regulation of digital finance is not self-evident and raises many difficult questions for the legislators.

As the regulation of digital finance has significant impacts on an international level, it is not very useful to assess it from one Member State's standpoint alone. For this reason, regulation at the European Union level and, in this context, the EU 2020 digital finance strategy¹¹⁹, which will have a significant impact on the regulation of cryptocurrencies in the future, are discussed below.

3.3. EU's Digital Finance Strategy

In its digital finance strategy, the EC has stated that the future of finance will be in digital form. Furthermore, Commission President Ursula von der Leyen has emphasised the need for Europe to lead the transition to a cleaner and new digital world in her political guidelines.¹²⁰ As digital finance knows no borders but is purely international, it has the potential to enhance economic market integration in the Banking Union as well as in the Capital Markets Union.¹²¹ Therefore, supporting digital finance and its development in the EU is one of the EC's key objectives. The FinTech Action Plan created in 2018, and, e.g. ESMA's and EBA's statements and guidance on the subject have contributed to this goal its

¹¹⁶ Blockchain technology has the potential to promote efficiency and simplicity in financial markets, to develop new processes and to create new infrastructure. See *Kallio – Vuola* 2018, p. 356.

¹¹⁷ COM(2018) 109, p. 3.

¹¹⁸ *Ibid.*

¹¹⁹ Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions on a Digital Finance Strategy for the EU, 23 September 2020, COM(2020) 591.

¹²⁰ COM(2020) 67 final, p. 1.

¹²¹ COM(2020) 591, p. 3.

implementation. The goal of the 2018 plan was to create more competitive and innovative financial markets at the EU level. Furthermore, the plan is intended to enable financial market participants to adopt new digital solutions, such as blockchain technology and thus crypto-assets.¹²²

Central to the EU's digital finance strategy is promoting and supporting digital finance's opportunities to foster innovation and competition while mitigating the risks associated with it.¹²³ In order to make the most of this digital trend and the benefits and opportunities of digital development in the EU, the economic sector must accept and embrace these changes. Convergent regulation at the EU level would therefore contribute to the development and role of European market players in international financial markets while bringing benefits to all European consumers and businesses.¹²⁴

As the above mentioned arguments indicate, crypto-assets and related blockchain technology can bring significant opportunities to financial markets. These can lead to cheaper and faster payments, especially in cross-border transactions, and increase access to finance for SMEs as well as the efficiency of capital markets.¹²⁵ Naturally, this also inevitably involves risks that need to be addressed in an efficient and secure way in regulation.¹²⁶ However, it is difficult to draw a line between how precisely innovation in the financial markets should be regulated and how comprehensive investor protection should be. New technologies, such as the blockchain and crypto-assets, do not fit fully into the existing legislative framework. Therefore, it may not be fitting to regulate them in the same way as traditional financial instruments in all cases. However, they pose equally, if not more, risks to investors and the market. That is why it would be necessary for the EU regulators to create an effective legislative framework to enable healthy competition and foster innovation while protecting investors and safeguarding market integrity at the same time.

¹²² COM(2018) 109, p. 1.

¹²³ COM(2020) 591, p. 1.

¹²⁴ COM(2020) 591, p. 3. The Covid-19 pandemic has further increased the need for digital funding. People have worked remotely, and online transactions and transfers need to be more reliable, secure, and usable than ever for anyone around the world to be able to access them. See also Deloitte 2021a, p. 2.

¹²⁵ COM(2020) 591, p. 9

¹²⁶ The most significant risks related to crypto-assets are considered to be money laundering, terrorist financing, investor protection, tax evasion and market integrity. See e.g. EBA 2013 & EBA 2014, ESMA 2017 & 2019 and IOSCO 2021b.

4. MiCA – A General Overview to the Regulation Initiative

4.1. Introduction

4.1.1. *What are crypto-assets? The Approach Under MiCA*

“[Bitcoin] is a remarkable cryptographic achievement, and the ability to create something that is not duplicable in the digital world has enormous value.”

– Eric Schmidt, former CEO of Google, 2014.

The concept of digital currency or crypto-asset is not a new invention. Back in the 1980s, there were multiple initiatives to create a currency in digital form. However, the world seemed not ready for such an invention back then, leading all those initiatives to fail.¹²⁷ A couple decades later, in 2008, it all changed after the publication of the Bitcoin whitepaper by *Satoshi Nakamoto*.¹²⁸ The whitepaper presented a peer-to-peer electronic cash system, which is fully decentralised and utilises the concept of blockchain.¹²⁹ The most remarkable part of this innovation was the solution for the so-called double spending problem by combining the idea of blockchain with a consensus mechanism called *proof of work*^{130, 131}. As described by *Nakamoto*: “The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work.”¹³² By this solution, the concept resolved the critical issue relating to digital assets by eliminating the ability to duplicate or re-spend them. In

¹²⁷ *Harvey et al.* 2021, p. 12.

¹²⁸ *Nakamoto* 2008.

¹²⁹ *Nakamoto* 2008, p. 1. Fundamentally, blockchains can be described as “software protocols that allow multiple parties to operate under shared assumptions and data without trusting each other. *Harvey et al.* 2021, p. 18. Furthermore, these protocols can be divided into two parts: (i) a block, and (ii) the chain formed from the blocks. According to the technical definition, an individual block in the blockchain can be compared to an accounting book in which all transactions in a given period are recorded. The digital ledger then acts as an open and distributed database containing the data stored in the block. The data entered in the block can be anything, such as data containing location or destination information, items in a supply chain, or code executed by a smart contract. Once transactions, such as money transfers, have been recorded and the ledger has been closed, it can be linked to previous ledgers. In this way, a chain of parts is formed from the blocks, called a blockchain.

¹³⁰ The concept of proof of work was originally represented by Adam Back in 2002. For more information about the topic, see *Back* 2002.

¹³¹ *Nakamoto* 2008, p. 1.

¹³² *Ibid.*

addition, the solution can provide features that have never been simultaneously present in a single asset, such as (i) cryptographic scarcity, (ii) censorship resistance and user sovereignty, and (iii) portability.¹³³ As *Eric Schmidt* has described, these abilities can make an innovation immensely valuable in the digital world.¹³⁴

While Bitcoin has been the most recognised and dominant crypto-asset by market share ever since its launch in 2008, thousands of other currencies, tokens, products and projects have entered the market.¹³⁵ In recent years, market interest has especially moved towards newer blockchains and crypto-assets that utilise smart contracts.¹³⁶ These assets and technology aim to resolve the challenges of earlier blockchains by introducing features to ensure scalability, interoperability, and sustainability.¹³⁷ Indeed, Bitcoin's market share has declined over 25 per cent only during 2021, falling from nearly 70 per cent to just above 40.¹³⁸ This indicates that the whole industry has developed quite a bit, and a whole new ecosystem is being built around this technology.

As the industry is so new and constantly developing, it is hardly surprising that in the current draft Regulation of MiCA, crypto-assets have been defined as “a digital representation of value or rights which may be transferred and stored electronically, using distributed ledger technology or similar technology”.¹³⁹ Furthermore, EC has argued that “Any legislation adopted in the field of crypto-assets should be specific, future-proof and be able to keep pace with innovation and technological developments [...] and should therefore be defined as widely as possible to capture all types of crypto-assets which currently fall outside the scope of Union legislation on financial services”.¹⁴⁰

In the MiCA initiative, crypto-assets applicable to the Regulation are classified into three different sub-categories: (i) ARTs, (ii) EMTs, and (iii) crypto-assets other than ARTs or

¹³³ *Harvey et al.* 2021, p. 12.

¹³⁴ *newsbtc* 2014.

¹³⁵ According to IMF's data, more than 16,000 tokens have been listed on various exchanges over time, and around 9,000 exist today. IMF 2021, p. 45.

¹³⁶ The development of smart contracts is based on the theory of American cryptographer Nick Szabo. Szabo defined smart contracts as machine-readable transaction protocols that execute the terms of a contract when pre-defined conditions are met. Szabo further clarified its definition by stating that a smart contract is a set of digitally defined contract terms (set of Promises) that includes the transaction protocols within which the parties perform these contract terms. More about smart contracts, see *Szabo* 1994.

¹³⁷ IMF 2021, p. 42.

¹³⁸ *Ibid.*

¹³⁹ Art. 3(2) MiCA.

¹⁴⁰ Rec. (8) COM(2020) 593 final.

EMTs.¹⁴¹ The first mentioned sub-category includes crypto-assets which are not EMTs and “purport to maintain a stable value by referring to any other value or right or a combination thereof, including one or several official currencies of a country”¹⁴², such as DGX¹⁴³, other commodity tokens¹⁴⁴, or fiat¹⁴⁵- or crypto-backed assets. Notably, while the EC has taken the approach that algorithmically controlled stablecoins¹⁴⁶ should not be considered ARTs since “[they] do not aim at stabilising their value by referencing one or several other assets”,¹⁴⁷ The EUCA has taken a different approach. According to them, the categorisation should be dependable “[of] how the issuer intends to design the crypto-asset, including the mechanisms to maintain a stable value”.¹⁴⁸

The second sub-category, EMTs, is defined even more precisely and with stricter requirements than ARTs. First of all, while ARTs can be used for many purposes, EMTs have the exact requirement to be used as a means of exchange. Second, the requirement for the asset to be backed by something is even stricter than with ARTs: the value of an EMT needs to be backed by a single fiat currency that is *an official currency of a country*.¹⁴⁹ Examples of crypto-assets that would fall under the category of EMTs under MiCA are e.g. Tether, USD Coin, and Diem. However, despite the differences in the legal definitions of EMTs and ARTs, both are commonly referred to as *stablecoins* in the industry. Notably, the EC had initially referred to fiat currencies regarding stablecoins in its proposal, but the EUCO has taken a different approach. This is probably due to the influence of the ECB, as it has stated that instead of fiat currencies, “the proposed regulation should refer to ‘official currencies’, of which legal tenders are expressions”.¹⁵⁰

¹⁴¹ Rec. (9) MiCA.

¹⁴² Art. 3(3) MiCA.

¹⁴³ DGX is a token which represents the value of gold, i.e. each coin’s value is linked to one gram of the commodity. The value of the token is backed by gold bars in a secure vault. See *Digix’s Whitepaper* 2016.

¹⁴⁴ In general, commodity tokens represent a commodity, utility, or a contract in the real- or virtual-world through exclusive tokens on a blockchain network.

¹⁴⁵ For example, euros and dollars are fiat currencies. The term Fiat comes from the Latin word fiat, which means “let it be done”. The value of Fiat money is based on laws and the fact that people trust its value. See *Hautamäki et al.* 2019, p. 5.

¹⁴⁶ A crypto-asset can use an algorithm that attempts to mimic monetary policy. For instance, the stablecoin may employ an algorithm to achieve specific crypto-asset-monetary targets by adjusting the supply of tokens to match demand. See IOSCO 2020a, pp. 3–4.

¹⁴⁷ Rec. 26 COM(2020) 593.

¹⁴⁸ Rec (26) MiCA.

¹⁴⁹ Art. 3(1)(4) MiCA. Usually, these tokens are based on the US dollar and hold their value fixed at a 1:1 ratio.

¹⁵⁰ Section 2.5. ECB 2021.

Third and last, MiCA categorises the rest of the crypto-assets falling under the scope of the Regulation as any other crypto-assets than ARTs or EMTs. By referring to the current crypto-assets market, most crypto-assets would fall under this sub-category, including assets such as Bitcoin and Ethereum. Albeit MiCA seeks to set a broad, catch-all definition to avoid any crypto-assets falling outside the scope of EU legislation, the Regulation initiative has been criticised for the categorisation it uses. These problems, especially regarding the offering of crypto-assets, shall be covered in Chapter 5.4 in greater detail.

4.2. Structure and Scope

4.2.1. General Structure and Main Emphasis

As mentioned above, the MiCA proposal is quite extensive in its scope and aims to cover all existing crypto assets and tokens. Furthermore, as MiCA is a Regulation proposal and not a Directive, it will be directly applicable throughout the EU, and all Member States are obligated to abide by its provisions. The EC has argued that a Regulation was chosen over a Directive “[to] lay down a single set of immediately applicable rules throughout the Single Market.”¹⁵¹

The extensive nature of the Regulation initiative can be shown only by its length: 460 pages. MiCA consists of nine titles, each of them covering separate topics as follows: (i) subject matter, scope and definitions; (ii) offerings and marketing to the public of crypto-assets other than ARTs and EMTs; (iii) – (iv) ARTs and EMTs in great detail, describing the general and specific obligations, requirements for authorisation, issuance of these crypto-assets, acquisition rules, and sets out the criteria whether an ART or EMT qualifies as significant¹⁵² under the Regulation; (v) provisions on authorisation and operating conditions of crypto-asset service providers, (vi) prohibitions and requirements to prevent market abuse, (vii) details on the powers of NCAs, the EBA and ESMA, administrative sanctions and measures that competent authorities can impose, and detailed provisions on the EBA’s powers and competences under the Regulation; (viii) exercise of the delegation with a view to adopt

¹⁵¹ COM(2020) 593, p. 5.

¹⁵² Significant stablecoins (ARTs & EMTs) under MiCA face even stricter requirements and supervision. See e.g. Art. 39, 41, 50, & 51 MiCA.

EC's delegated acts; and (ix) transitional and final provisions, including the obligation for the EC to produce a report evaluating the impact of the Regulation.

As the outline shows, to achieve the answers to the research questions set for this thesis, the main focus of the Regulation will be on titles (i) – (vi), especially emphasising titles (i), (v), and (vi). In addition, titles (ii) – (iv) will be covered in Chapter 5.4.

4.2.2. *Scope of Application*

MiCA will primarily create a new European licensing regime for CAIs, CAOs and CASPs.¹⁵³ However, some limitations to the scope have been made. First of all, MiCA states that the Regulation shall only apply to *persons and undertakings*. While at first glance, this would seem like a standard and appropriate approach in regulation drafting, it may cause some problems to the industry. The core problem can be summed up in one word: decentralisation.¹⁵⁴

While MiCA does not define the exact concept of 'undertaking', the current EU regulatory regime recognises two types of persons: (i) natural persons, i.e. private individuals, and (ii) legal persons, described under the EU law as "a legal entity other than a natural person but having the normal rights and duties of an individual, such as the ability to sue or to be sued (a general legal capacity of its own)."¹⁵⁵ The fundamental problem in the crypto-asset industry with this approach is that several projects, platforms, applications, and organisations in the DeFi space would not qualify to either of those categories. Furthermore, the regulatory difficulties associated with DeFi are especially based on the fact that effective regulatory action typically requires an object identified by law on which an obligation or a right can be imposed. This is primitively quite sensible because the approach gives the legitimacy in the legal system we know to date and therefore increases enforceability when people trust the system and recognise the actions of the regulators and law enforcement as justified. In DeFi, however, everything that happens in a network or an organisation is fully automated and based on open-source computer programming code that can be viewed and used by anyone while at the same time being fully immutable and censorship-resistant.¹⁵⁶ While in such a

¹⁵³ Art. 2(1) MiCA.

¹⁵⁴ See Chapter 0.

¹⁵⁵ Annex I Regulation (EU) 2018/1874.

¹⁵⁶ *Harvey et al.* 2021, p. XII.

system, it becomes almost impossible to determine who would be the actual subject of a right or obligation, it also inevitably leads to an end result where it would be impossible to justify or enforce the right or obligation to an object identified by the law.¹⁵⁷ In addition to this, for instance, the world's largest crypto-asset Bitcoin has no central issuer; instead, the peer-to-peer network regulates all transactions and issuance of the tokens according to consensus in network software. Indeed, the fore-mentioned uncertainty regarding the legal position of many current and future crypto-assets, as well as DeFi projects, has raised some concerns among the industry. For instance, 49 per cent of the INATBA respondents strongly believe that MiCA does not facilitate sufficiently certain emerging crypto sub-industries, such as DeFi.¹⁵⁸

In the first Regulation initiative published by the EC, no clarifications had been made regarding the applicability of the Regulation to the DeFi industry. However, the EUCA has taken the first steps towards clarifying the matter. According to MiCA, “Where crypto-assets have no offeror and are not traded in trading platform which is considered to be operated by a service provider the provisions of Title II do not apply”.¹⁵⁹ On the other hand, the EUCO has stated that any services falling under the scope of the Regulation provided for such crypto-assets should be subject to the Regulation.¹⁶⁰ Therefore, if any of such crypto-assets would be traded in a platform qualified as a trading platform, i.e. by a CASP, under the Regulation, or offered by a person, i.e. a CAO, the requirements of MiCA would apply to such person.¹⁶¹ Thus, it seems that while the EU legislators would leave the DeFi industry out of MiCA's scope, they share a common ambition to regulate the endpoints as efficiently as possible.

Going further, MiCA would only apply to persons and undertakings “[that] are engaged in the issuance, offer to the public and the admission to trading of crypto-assets or provide services related to crypto-assets in the Union and to any transaction, order or behaviour associated to crypto-assets, concerning market abuse rules.”¹⁶² What comes to the issuance of crypto-assets, MiCA does not define the term in specific. However, some clarifications have been made. For instance, the definition for CAI is set forth as a “[natural] or legal

¹⁵⁷ INATBA 2021, pp. 32-33.

¹⁵⁸ *Ibid.*

¹⁵⁹ Rec. (12a) MiCA.

¹⁶⁰ *Ibid.*

¹⁶¹ *Ibid.*

¹⁶² Art. 2(1) MiCA.

person or undertaking who issues the crypto-assets”¹⁶³. Furthermore, the ‘offer to the public’ means “[a] communication to persons in any form and by any means, presenting sufficient information on the terms of the offer and the crypto-assets to be offered, so as to enable potential holders to decide whether to purchase those crypto-assets”.¹⁶⁴ However, some have criticised the absence of “issuance” in the definitions of the Regulation since the term is not self-explanatory, neither does it belong to the established terms of EU financial law.¹⁶⁵ The complication here comes with the fact that in crypto-asset offerings, several organisations or entities may operate the DLT on which the crypto-asset is running,¹⁶⁶ or the crypto-asset may be issued by a DAO or other DeFi project. In such a case, it would not be clear which participants of the project would be considered to be issuing the asset, causing significant regulatory uncertainty. However, the EUCO has brought some clarity to the matter. While in the first draft by EC, the scope of the Regulation had been limited to CAIs and CASPs only; the updated version now identifies and defines CAOs, and even more importantly, separates those from CAIs.¹⁶⁷

What comes to providing crypto-asset related services, MiCA defines CASP as “[any] person whose occupation or business is the provision of one or more crypto-asset services to third parties on a professional basis”.¹⁶⁸ This will naturally lead to the question of what the crypto-asset services are qualified to be in the scope of the Regulation. Art. 3(1) No. 9 MiCA defines “crypto-asset service” as: (a) custody and administration on behalf of third parties; (b) operation of a trading platform; (c) exchange of crypto-assets for funds; (d) exchange of crypto-assets for other crypto-assets; (e) execution of orders for crypto-assets on behalf of third parties; (f) placing of crypto-assets; (g) reception and transmission of orders on behalf of third parties; (h) providing advice on crypto-assets; and (i) providing portfolio management for crypto-assets.¹⁶⁹ Furthermore, with the exception of credit institutions¹⁷⁰ and investment firms¹⁷¹, all CASPs are required to obtain authorisation from an NCA in an EU/EEA Member State prior to providing crypto-asset services and have a

¹⁶³ Art. 3(1) No. 6 MiCA.

¹⁶⁴ Art. 3(1) No. 7 MiCA.

¹⁶⁵ *Zetzsche et al.* 2020, pp. 24-25.

¹⁶⁶ *Ibid.* The same issue has also been under discussion in the U.S., where the terms ‘issuer’ and ‘issuance’ have created significant legal uncertainty in the context of the U.S. Securities Act. See SEC 2018.

¹⁶⁷ See Art. 3(1) No. 6-7a MiCA. See also Chapter 5.4, in which the matter is covered more specifically.

¹⁶⁸ Art. 3(1) No. 8 MiCA.

¹⁶⁹ Precise definitions listed in Art. 3(1) No. 10-17 MiCA.

¹⁷⁰ Credit institutions authorised under Directive 2013/36/EU. Cf. Art. 2(5) MiCA.

¹⁷¹ Investment firms authorised under MiFID II and abiding all other requirements set out in that Directive. Cf. Art. 2(6) MiCA.

registered office in that Member State.¹⁷² However, it should be noted that citizens are not restricted from using services provided outside the EU when such service is provided at the own initiative of a person established in the EU. Therefore, it will remain completely legal to use such service providers not authorised under MiCA. On the other hand, such CASPs are not allowed to solicit clients or market their services in the EU area without an authorisation under the Regulation.¹⁷³

While the approach for CASPs and crypto-asset services seems to follow the same approach with the MiFID II regime regarding investment services¹⁷⁴, it also misses some critical points from the crypto-asset industry's standpoint. For instance, the definition of crypto-asset services does not include the exchange of crypto-assets for financial instruments or vice versa.¹⁷⁵ In addition to this, neither lending is included in the scope of the Regulation.¹⁷⁶ Notably, the initial proposal missed even portfolio management¹⁷⁷, but it appears that the EUCO has identified the shortcoming and included it in the scope.¹⁷⁸ However, regardless of the EU aiming to achieve consistency with the MiFID II approach, some have criticised it for being inconsistent and thus failing to meet its objectives.¹⁷⁹

Last of all, some further limitations to the scope of the Regulation have been made. First, as already mentioned in Chapter 4.1.1., financial instruments and securities are excluded and remain in the scope of MiFID II.¹⁸⁰ Additionally, neither pension schemes, pension products, nor NFTs fall under the scope of MiCA.¹⁸¹ Furthermore, the Regulation does not apply to certain authorities, such as to the ECB, NCBs (when acting in their capacity as a monetary authority or other public authorities), EIB, EFSF and ESM, or public international organisations.¹⁸² One of the reasons behind these exclusions may lie in the EU's ambition to set out a proper regulatory structure for CBDCs.¹⁸³ However, the general rationale behind

¹⁷² Art. 55 MiCA.

¹⁷³ Rec. (51) MiCA.

¹⁷⁴ See Annex I.A. MiFID II. See also Chapter 2.3.2.

¹⁷⁵ See also *Zetzsche et al.* 2020, p. 18.

¹⁷⁶ Rec. (63e) MiCA. The topic of crypto lending and credit markets is covered in Chapter 5.5.1. in greater detail.

¹⁷⁷ See Art.

¹⁷⁸ Art. 3(1) No. 9(h) MiCA.

¹⁷⁹ Cf. *Zetzsche et al.* 2020, p. 18, where the full adoption of MiFID II Annex I.A. is recommended.

¹⁸⁰ Art. 2(2) MiCA.

¹⁸¹ Art. 2(2) & 2(2a) MiCA.

¹⁸² Art. 2(3) MiCA.

¹⁸³ ECB 2021b. However, one major problem with the current exemptions is that it would not apply to intermediaries acting in the issuance of CBDCs or providing services to CBDCs, leading into obstructing the

such exemptions is that it is more efficient to ensure crucial monetary functions than subjecting those participants to general financial legislation.¹⁸⁴ In addition, it is with noting that the exemptions are in line with the general approach of the EU financial law relating to central bank functions, including the systemically important payments infrastructure and public currency systems.¹⁸⁵

4.3. General Obligations for All Crypto-Asset Service Providers

The obligations that all CASPs shall follow under MiCA, if accepted in its current form, are divided into two different chapters, which contain: a) requirements regarding registration, and b) general requirements for operational activities. First of all, legal persons intending to provide services under the scope of the Regulation are required to seek authorisation from the NCA of the Member State where they have their registered office.¹⁸⁶ Noticeably, such companies already registered with their NCA before the Regulation entrance under any EU Directive or national legislation to provide crypto-asset related services would be exempted from the obligation to provide any information already delivered to the NCA prior to the entry into force of this Regulation.¹⁸⁷ In this case, the EC seems to have achieved the objective to support innovation and operational efficiency, given that the requirement to start the registration and application process from scratch would be burdensome and have considerable time- and resource costs, especially for SMEs and early-stage startups already operating in the field. Additionally, the new regulatory regime would allow CASPs to provide their services throughout the EEA without needing to have a physical presence in the territory of a host Member State, i.e. passporting would become available for CASPs.¹⁸⁸ Although it is very challenging to prohibit any person from accessing crypto-asset services, since all that transactions require is the installation of wallet software and a device connected to the internet, the planned passporting ability would provide more clarity to the industry and enable MiCA-licensed CASPs to provide their services inside the whole EEA.

development of a Digital Euro or other European CBDC strategy. See also *Zetsche et al.* 2020, pp. 25-26 with references.

¹⁸⁴ *Zetsche et al.* 2020, p. 26.

¹⁸⁵ *Ibid.*

¹⁸⁶ Art. 54. The exact list of the required contents of the application, see Art. 54(2) MiCA.

¹⁸⁷ Art. 54(3) MiCA.

¹⁸⁸ Art. 53(3) MiCA. The right is based either to the right of establishment, including through a branch, or through the freedom to provide services.

The operational requirements, on the other hand, can be divided into eight different categories, which are quite similar compared to the MiFID II regime.¹⁸⁹ For instance, all CASPs face the obligation to (i) act honestly, fairly and professionally in the best interest of clients and provide fair, clear and not misleading information to clients,¹⁹⁰ (ii) ensure the safekeeping of their clients' crypto-assets and funds,¹⁹¹ (iii) have effective and transparent client complaint procedures in place,¹⁹² and (iv) take measures to prevent and manage conflicts of interest.¹⁹³ Additionally, MiCA sets out capital requirements for CASPs and extends the fit and proper test for managers, already established under national law in some Member States¹⁹⁴, to the MiCA regime.¹⁹⁵ CASPs must also submit reports to the NCAs and take reasonable steps to avoid additional operational risks when outsourcing operational functions.¹⁹⁶

The requirements set out above would certainly exclude unprofessional operators from the sector and bring much-needed regulatory certainty to the reliability of the market participants in the industry. However, some concerns have also been raised. For instance, in Germany, structuring measures under corporate law, internal modernisation measures and the purchase of services from third parties are already covered by the national supervisory law, which places considerable compliance demands on companies.¹⁹⁷ Furthermore, if MiCA were established into force as it currently stands, it would bring many additional and even

¹⁸⁹ Cf. Chapter 2.3.4.

¹⁹⁰ Art. 59 MiCA. This requirement includes the obligation to warn clients of risks associated with purchasing crypto-assets as well as transparent pricing policies that are publicly available. Cf. Art. 24(1) MiFID II.

¹⁹¹ Art. 63 MiCA. Regarding crypto-assets, the requirement includes safeguarding clients' ownership rights, especially in the event of the crypto-asset service provider's insolvency, and preventing the use of clients' crypto-assets for their own account except with the client's express consent. Additionally, client funds are required to be held with a central bank or a credit institution in an account or accounts that is/are separately identifiable.

¹⁹² Art. 64 MiCA. CASPs need to ensure that their clients can file complaints free of charge. In addition, clients need to be informed about the possibility to file complaints, and there shall be a complaint template available for the clients. Furthermore, CASPs shall have a record of all complaints received in place. Finally, any measures need to be taken in response, all complaints investigated and the outcome communicated to the clients in a timely and fair manner.

¹⁹³ Art. 65 MiCA. Cf. Art. 23 MiFID II.

¹⁹⁴ For instance, the requirement is already in place in Finland and Germany. See Finnish Act on Virtual Currency Service Providers ("Laki Virtuaalivaluutan Tarjoajista (572/2019)"), German Banking Act ("Kreditwesengesetz in der Fassung der Bekanntmachung vom 9. September 1998, BGBl. I S. 2776, das zuletzt durch Artikel 90 des Gesetzes vom 10. August 2021 (BGBl. I S. 3436) geändert worden ist"), and the German Act on the Implementation of the Amendment Directive to the Fourth EU Money Laundering Directive ("Gesetz zur Umsetzung der Änderungsrichtlinie zur Vierten EU-Geldwäscherichtlinie, G. v. 12.12.2019 BGBl. I S. 2602 (Nr. 50)").

¹⁹⁵ Art. 60 & 61 MiCA.

¹⁹⁶ Art. 62, & 66 MiCA.

¹⁹⁷ CMS Germany 2020, p. 11.

overlapping requirements, e.g. regarding outsourcing. This would lead to a situation where all planned actions needed to be evaluated on a case-by-case basis in order “to prevent a legal infringement that might lead to BaFin action, fines against the company and its managers personally or, in the worst case, even the initiation of criminal proceedings.”

Furthermore, if supposed that compliance costs would significantly rise due to these requirements, in addition to the planned minimum capital requirements, the Regulation could potentially create barriers for market entrance for new potential market participants and potentially reduce innovation. If that would be the outcome, the winners would most likely be those with extensive financial recourses and experience that would enable them to adopt the new requirements and thus benefit from the new regulatory framework. For example, from the traditional financial market participants point of view, the framework offered by MiCA would likely be a welcome development. This can be explicitly supported with the fact that authorised credit institutions, investment firms, market operators, e-money institutions, management companies of UCITS and AIF managers would be allowed to provide certain services, without being subject to the registration requirements of the Regulation, by notifying their NCAs at least forty days prior to providing those services.¹⁹⁸ While it can be argued that operators from an already heavily regulated sector (traditional financial markets) should not have to comply with all MiCA requirements that are broadly in line with MIFID II legislation, the approach now chosen would not promote competition and innovation, which on the other hand have been listed as one of the key objectives of the upcoming regulation.

4.4. Consumer and Investor Protection

As already mentioned in the very beginning of the thesis, one of MiCA’s explicit objectives is “to instill appropriate levels of consumer and investor protection and market integrity, given that crypto-assets not covered by existing financial services legislation present many of the same risks as more familiar financial instruments.”¹⁹⁹ As the analysis so far shows, the Regulation proposal succeeds in that objective in many places by imposing different requirements on CASPs and CAIs, which would inevitably also have a protective effect on consumers and investors by increasing the sector's credibility. Furthermore, it should also be

¹⁹⁸ Art. 53a MiCA. The exact information to be provided to the NCAs, see paragraph 6.

¹⁹⁹ Art. 1(d) MiCA.

mentioned that the consumer protection provisions of MiCA are not intended to create a new, separate consumer protection system, but the purpose of the legislator is to complement the already existing consumer protection provisions in the EU, such as those covered in Chapter 2, all of which continue to apply. In addition to the general obligations for all CASPs, MiCA proposes new consumer protection-related rights and obligations specific to the crypto-asset market, with the aim to extend the protection on the field. In the current version of the regulation initiative, all clients of CASPs are going to have: (a) the right to be informed about the characteristics and risks of crypto-assets and asset-referenced tokens; (b) the right to non-discrimination in terms of how consumers are treated by CAIs, CAOs and CASPs; and (c) the right to withdraw from a purchase of crypto-asset (excluding ARTs and EMTs) during a limited period of time after their acquisition.²⁰⁰

In addition to the general requirements, there are also specific requirements regarding certain crypto-asset services. For instance, all CASPs that are authorised to provide advice on crypto-assets or portfolio management of crypto-assets, either at the request of a third party or their initiative, are required to make a preliminary assessment of their clients' experience, knowledge, and objectives, including the clients risk tolerance and financial situation, and the ability to bear losses to ensure consumer protection.²⁰¹ Notably, while the first version of the Regulation was quite similar to the same requirements outlined in the MiFID II²⁰², the EUCO appears to have taken a lot stricter approach. For instance, all CASPs authorised to provide advice on crypto-assets are required to review the client assessment at least every year after the initial assessment and need to provide their clients with a report on their suitability, specifying (i) the advice given and (ii) how that advice meets the preferences, objectives and other characteristics of the client. Additionally, those CASPs shall “establish, maintain and implement policies and procedures to enable them to collect and assess all information necessary to conduct this assessment for each client [and] take reasonable steps to ensure that the information collected about their clients or potential clients is reliable.”²⁰³ Accordingly, CASPs providing portfolio management services are obligated to provide every three months with a report containing all activities carried out on behalf of that client.²⁰⁴ Correspondingly, the same general obligation in MiFID II for investment firms is

²⁰⁰ Art. 5, 12, 26, 41, & 69 MiCA. See also INATBA 2021, p. 25–26.

²⁰¹ Art. 73(1) MiCA.

²⁰² Cf. Art. 73 COM(2020) 593 & Art. 25 MiFID II.

²⁰³ Art. 73(4) MiCA.

²⁰⁴ Art. 73(8) MiCA.

set out as they shall prepare “adequate reports on the service provided in a durable medium”²⁰⁵, and there are no requirements for annually reviewing the client assessments.

The differences between these two regulatory regimes will naturally raise some questions, given that the approach of MiCA is so similar compared to the MiFID II legislation. As there is no doubt that it is essential to ensure CASPs take adequate measures to ensure consumer and investor protection, it should also be as important to ensure that the extended requirements mentioned above would be properly justified and explained. For instance, as already discovered in Chapter 4.3 above, if MiCA would already allow some investment firms to provide their services without being subject to the provisions mentioned above, it would put different market participants into unequal positions. Furthermore, that would endanger not only innovation and equal market access but also the consumer and investor protection, given that other market participants would face different rules.

Going further, one essential addition in MiCA to ensure consumers and investors protection and market confidence is the prohibition of market abuse.²⁰⁶ The market manipulation can “[lead] to relatively fast financial gains for its initiators and is relatively common on unregulated and even regulated crypto exchanges”.²⁰⁷ Some of the practices are even implemented by the crypto-asset exchanges themselves by creating an appearance of liquidity with artificially increased trading volumes.²⁰⁸ Others are primarily triggered by significant holders of crypto-assets, who, in coordinated behaviour with other holders (or even independently, if the amount of crypto-assets they possess is large enough), temporarily manipulate the price of traded crypto-assets.²⁰⁹ In this respect, the ambition of the regulators is to prohibit various behaviours that would essentially lead to insider trading, unlawful disclosure of insider information and market manipulation. Thus, MiCA requires CASPs to have systems, procedures and arrangements to monitor and detect market abuse in place.²¹⁰ Whilst this would be a crucial step for the industry, MiCA does not define the exact measures

²⁰⁵ Art. 25(6) MiFID II.

²⁰⁶ Title VI MiCA.

²⁰⁷ Deloitte 2021b, p. 3.

²⁰⁸ Reuters 2021b.

²⁰⁹ Notably, the wealth distribution of some crypto-assets is quite unequal. For instance, 0.01 % of bitcoin holders worldwide controls 27 % of the currency in circulation. See Wall Street Journal 2021. The other form of influencing the market prices of certain crypto-assets is to use influential power. For instance, Elon Musk, the CEO of Tesla, has been accused many times of bumping the price of Dogecoin. See e.g. Rahman Ravelli 2021.

²¹⁰ Art. 61(9) MiCA.

of how CASPs should fulfil this requirement. Therefore, it remains to be seen how and how effectively the prohibited behaviour will be monitored, identified, and enforced by NCAs in practice.

On the other hand, one concern that has been raised regarding the consumer protection provisions in MiCA is the vagueness and inadequacy of certain rights or obligations.²¹¹ For example, the Regulation lacks establishing consumer protection investment thresholds and maximum issuance amounts. One reason to justify this is the direct access of retail investors to the offering and trading. However, the risk disclosure has been argued not to be sufficient enough because, generally, the risks related to crypto-assets can be seen even higher than in the capital markets of traditional finance. In contrast, those markets provide more robust protection of investors, for instance, through intermediation, quantitative and qualitative limitations. As the genuine purpose for establishing consumer protection legislation in the first place has been argued to be justified due to the inequality in bargaining power between consumers and financial service providers, the vulnerability of consumers can be seen as even more pressing in the crypto-asset industry. This might be caused by the fact that while the information inequality between consumers and the suppliers of financial instruments may be significant, the gap may be even more comprehensive in the crypto-asset industry, given the complexity and novelty of the phenomenon. Indeed, the market participants have requested that more concrete and detailed guidance should be provided on what the envisaged rights and obligations for the market participants mean in practice so that they would be able to provide better services to their customers.²¹²

However, the most extensive problems creating uncertainty related to the investor protection regime most likely concern the crypto-asset classifications MiCA sets forth and the lack of regulation regarding some sub-industries. As described in Chapter 4.1.1., the current sub-categorisation MiCA sets forth might be vulnerable to regulatory arbitrage or uncertainty about whether an asset should be considered a security under MiFID II or a crypto-asset under MiCA. In a worst-case scenario, this could lead to customers being misled about a crypto-assets true nature in the markets. The other problem relates to the fact that, as the EUCO has assessed, DeFi, lending and borrowing of crypto-assets are excluded from the

²¹¹ INATBA 2021, p. 26.

²¹² INATBA 2021, p. 26.

scope of the Regulation.²¹³ While the DeFi is an entire topic on its own that has challenged regulators all around the world,²¹⁴ it could be seen as a bit of a surprise that the crypto-asset credit markets have been completely excluded as well, given that it has been argued to be one of the riskiest areas in the industry, especially regarding lenders targeting consumers not very familiar with crypto-assets by offering high rates for deposits.²¹⁵ In either way, at the moment, it seems that regulation applicable to the lending industry is still years away.²¹⁶

²¹³ Rec. (12a) & (63e) MiCA.

²¹⁴ *Avgouleas – Kiayias 2020*, p. 13.

²¹⁵ *Ledger Insights 2021*.

²¹⁶ Art. 122a MiCA. If the Regulation were entered into force in its current form, the EC would present a report which would include an assessment about lending and borrowing of crypto-assets only after 18 months after the Regulation has entered into force.

5. Effects of MiCA on Different Market Participants

Compared to traditional financial markets with fiat currencies, where banks act as intermediaries and guarantee the value of the currency, and where securities are accepted by authorities in the stock market, cryptocurrencies operate quite differently when no single party controls the system.²¹⁷ In addition, since the industry is so newly born, quite complex, and constantly developing, a more detailed examination of the expected effects on different market participants in the industry is needed.

5.1. On-Ramps and Off-Ramps

When a person wants to enter the crypto-asset industry, the first step will require a trade of fiat currencies, or as the EUCO calls them, ‘official currency of a country’ to crypto-assets. These services offered by different market participants in the industry are usually referred to as an on-ramp.²¹⁸ On the contrary, if a person wishes to exchange the same assets vice versa, the service is called an off-ramp. The most common CASPs to offer such services are probably crypto-asset exchanges, or so-called ‘trading platforms’, which is not surprising given the nature of their primary service. If the main business provided by a company is offering a marketplace for crypto-assets, it is only natural that such companies want to be able to provide a service that enables their clients to enter the market in the first place. However, it is also possible that these exchanges provide the services by using an outsourced service provider, giving them more time to focus on their primary businesses.²¹⁹ In addition to those traditional trading platforms, there are also OTC markets where users trade directly with each other. In these markets, the market participants agree upon prices, and they might not match the exact market prices indicated by the exchanges. However, OTC markets are more commonly used by institutional market participants for large purchases or sales.²²⁰

One last commonly appearing on-ramps are crypto-asset ATMs, which function the same way as the traditional ones, with the exception that the deposits are made in cash for

²¹⁷ *Adhami et al.* 2018, p. 65. Blockchain technology also makes it possible to protect the integrity of data from ex-post manipulation, in contrast to the traditional centralized management system, where individuals, banks and public actors can subsequently make changes to agreed arrangements. See *Mähönen* 2018, p. 142.

²¹⁸ Cointelegraph 2020.

²¹⁹ However, on such occasions it should be noted that such CASPs would be subject to the provisions concerning outsourcing. See Art. 66 MiCA.

²²⁰ Cointelegraph 2020.

receiving crypto-assets in return.²²¹ Notably, in the beginning, when the ATMs hit the market in 2014, all the deposits and withdrawals could be made entirely anonymously. However, more or less surprisingly, this was not something that pleased the regulators. Thus, after the AMLD5 came into force in 2019 in the EU, all the companies providing these ATM service providers have been required to identify their users. In addition, for instance in Finland, the all-time combined limit for depositing or withdrawing any assets from the ATMs with bank identifiers has been curbed to EUR 10.000 per client. After this, a registration process for creating a user account is required to continue using the ATM.²²²

In addition to the existing AML-legislation, MiCA would bring additional requirements for the above service providers. For instance, according to Art. 69 of MiCA, all CASPs providing the service of exchanging crypto-assets against funds or crypto-assets against other crypto-assets shall prepare a non-discriminatory commercial policy, indicating, in particular, the type of clients the CASP accepts to transact with and the conditions that clients shall meet. Furthermore, they are required to determine the price of the crypto-assets (or a method for determining the price) they propose for exchange against funds or other crypto-assets and a limit to the amount to be exchanged (if applicable). Additionally, the CASPs providing these services have obligations to execute orders from the clients at the prices displayed when the order is defined as final and publish the details of the transactions concluded by them, including transaction volumes and prices.²²³ However, it should be noted that when a CAI or a CAO would offer such service, it would not be considered as a crypto-asset service under the Regulation.²²⁴ All in all, the approach would seem reasonable, given that otherwise, the CAI or CAO would be subject to the registration process as a CASP under MiCA and would therefore create unnecessary barriers for issuing new assets to the market.

The primary reason why on-ramps and off-ramps are essential for the crypto-asset market is that they bring new users and money to this new market. In addition, they have been argued to be the bridge between the crypto-asset and traditional financial industries. Naturally, the ability to go to an exchange and buy crypto-assets with a debit or credit card makes the markets more accessible for most people. In the same way, fairly easily turning

²²¹ Ibid.

²²² Bittiraha 2019.

²²³ Art. 69 MiCA.

²²⁴ Rec. (61c) MiCA.

cryptocurrency back into fiat currencies also makes acquainting in crypto-assets more attractive to new users, as the possibility to exit from the markets is set much lower. This type of flexibility might demystify the asset class, making crypto-assets seem more like any tradable commodity.²²⁵ On a larger scale, having more accessible OTC markets means that more prominent “[institutions] can have the same confidence in their ability to buy and sell cryptocurrency with sufficient liquidity”²²⁶. To get more funds flowing into the crypto-asset industry, these paths are a must, as “[exchanges] could struggle with the volume of institutional purchases, and the effect of a single order on the market prices could be substantial”.²²⁷ Therefore, it seems adequate that MiCA would not place too burdensome obligations for these services.

5.2. Trading Platforms

The regulation of crypto-asset trading platforms can probably be considered one of the primary objectives of MiCA, given their impact on the whole industry.²²⁸ Moreover, the absence of such regulations has been considered to leave potential investors and other market participants exposed to risks, especially in situations where the existing consumer protection rules do not cover such activities.

The exact definition for a trading platform under MiCA is set forth as “[a] multilateral system, which brings together or facilitates the bringing together of multiple third-party buying and selling interests for crypto-assets – in the system and in accordance with its rules - in a way that results in a contract, either by exchanging one crypto-asset for another or a crypto-asset for funds”.²²⁹ Therefore, it should not come as a surprise that the operational requirements for CASPs authorised for operating a trading platform are rather similar compared to the existing MiFID II regime for regulated markets.²³⁰ For instance, MiCA sets forth the requirements for creating, maintaining and implementing “clear and transparent operating rules for the trading platform.”²³¹ These requirements include, among others, due diligence and approval processes for admitting assets to the trading platform, exclusion

²²⁵ Cointelegraph 2020.

²²⁶ Ibid.

²²⁷ Ibid.

²²⁸ Rec. (3a) & (11) MiCA.

²²⁹ Art. 3(1) No. 11 MiCA.

²³⁰ Cf. Art. 68 MiCA vs Title III MiFID II.

²³¹ Art. 68(1) MiCA. The exact requirements these rules shall include are listed in the sub-paragraphs (a)-(h).

categories, defined and transparent fee structure, non-discriminatory rules for participation in the trading activities, and conditions for keeping the assets available for trading.²³² On the other hand, CASPs operating trading platforms also face operational obligations regarding their trading systems similar to MiFID II.²³³ First of all, Art. 64(1) MiCA requires that CASPs authorised to operate a trading platform have sufficient capacity to deal with peak order and message volumes and the ability to a) ensure trading under severe market stress and b) reject orders exceeding volume and price thresholds or being clearly erroneous. Additionally, the trading platforms need to be tested to fulfil the aforementioned requirements, have adequate business continuity arrangements (including backup facilities for reporting to their NCAs), and detect market abuse. Last of all, CASPs must also post any pre-trade and post-trade transparency data executed on their platforms and provide such data to their NCA upon request. The information shall be made publicly available free of charge, no later than 15 minutes after the publication in a readable format, and be kept available at least for two years. The EUCO has also proposed that ESMA should be authorised to issue guidelines specifying the pre-trade and post-trade transparency data requirements after the Regulation has entered into force.²³⁴

Since efficient financial markets require market integrity and -confidence,²³⁵ it is understandable that the CASPs authorised to operate a trading platform would become subject to these obligations mentioned above. However, while most of the operational and procedural requirements can be held as a standard approach, at least when comparing them against the regulation of traditional financial markets, the matter of detecting market abuse may cause some problems. This is primarily caused by the lack of guidance about the exact measures of how CASPs should fulfil these duties in practice. Furthermore, since there are no specifications to the implementation, there are no guarantees of how effectively the prohibited behaviour will be monitored, identified, and enforced by NCAs in the different Member States. Given that market abuse has a lessening impact on public confidence and harms the markets' integrity,²³⁶ it should be a critical target for the EU legislators to ensure that the Regulation gets implemented as effectively as possible.

²³² Cf. Art. 68 MiCA vs Art. 44 MiFID II.

²³³ Cf. Art. 68(4) MiCA vs Art. 48 MiFID II.

²³⁴ Art. 68 MiCA.

²³⁵ *Haentjens – de Gioia Carabellese* 2020, p. 64.

²³⁶ *Ibid.*

Besides the operational requirements concerning CASPs authorised to operate a trading platform, one standout topic affecting the operations is the question concerning the admission of tokens to the trading platform. Notably, the answer to this question depends on the qualification of the crypto-asset at hand, what the company form of the CAI is, and where it is established. However, some joint obligations can be identified. For instance, all crypto-assets are subject to the requirements where a crypto-asset whitepaper²³⁷ must be produced, notified to the NCA and published. While the differences shall be covered in greater detail in Chapter 5.4, this chapter will focus on how these requirements relate to CASPs operating trading platforms and what liabilities or concerns they might raise.

As defined in Art. 68(1) MiCA, the premise is that no crypto-asset shall be admitted to trading before a whitepaper is published that meets the requirements set out in the Regulation. Additionally, CASPs shall always evaluate whether the crypto-asset complies with the platform's operating rules and is considered suitable in terms of the Regulation and the CASPs own principles. In the evaluation, “[the trading platform shall evaluate in particular the reliability of the solutions used and the potential association to illicit or fraudulent activities, taking into account the experience, track record and reputation of the issuer and its development team.” Notably, crypto-assets with an inbuilt anonymisation function are not allowed to be admitted for trading unless the CASP can identify the holders of these assets and their transaction history.

The presumption when a crypto-asset is requested to be admitted for trading on a trading platform is that the CAI issuing the asset should draft the whitepaper and be liable to comply with the requirements concerning the admission request.²³⁸ However, if a crypto-asset other than ART or EMT is admitted to trading at the initiative of the CASP operating the trading platform, the liability to comply with the admission requirements shifts from the issuer to the platform operator.²³⁹ Alternatively, the parties may also voluntarily enter into a written agreement, stating that the operator shall ensure and be liable for the compliance

²³⁷ Crypto-asset whitepaper is an information document released by a crypto project that gives investors technical information about its concept, and a roadmap for how it plans to grow and succeed. Notably MiCA plans to set extremely detailed requirements specifying e.g. the content, form, publication, updating and other operational and liability related questions for all whitepapers. See Art. 5, 7, 8, 11, 14, 17, 21, 22, 24, 46, 47 & 91a MiCA. See also Chapter 5.4.

²³⁸ Art. 4a MiCA.

²³⁹ Art. 4a (1) MiCA.

requirements outlined in subsections (b) – (e) of Art. 4(1).²⁴⁰ The same liability for the operator applies when a person seeking such admission is established in a third country. In addition, it should be noted that in all of these situations, “the person seeking admission to trading shall still be liable vis à vis the holders for matters not delegated or not covered by this Regulation and when it provides false or misleading information to the operator of the trading platform.”²⁴¹

While these requirements may seem pretty straightforward and reasonable, the complexity here comes, once again, with decentralisation. Although the EUCO has taken the approach that the Regulation does not apply in situations where both the crypto-asset is issued and the trading platform operates in a decentralised way,²⁴² the problem here arises if the CASP would fall under the scope of MiCA, but the crypto-asset not. In such situations, the possibility of seeking admission to the crypto-asset to trading in the platform may raise many questions and unclear situations. For instance, if the trading platform is subject to the Regulation, is it even possible to get admission for decentralised tokens to be traded in these platforms? If yes, how will the liability be divided? If the trading platform would be solely liable for fulfilling all the Regulation obligations, it would most likely impact in a way where these trading platforms would be highly cautious to seeking such admission to new crypto-assets. On the other hand, if the liability would be CAI or even divided between the parties, how could the liability be enforced towards a DAO, decentralised CAI or network? While answers to these questions are pretty hard to define, they are all crucial for the industry and market participants. If no action is taken to resolve the matter, it will only reduce innovation and further increase the gap between DeFi and traditional finance.

Last of all, it is also worth mentioning that according to the current Regulation draft, the EUCO intends to give direct authorisation for market operators authorised under MiFID II to operate a trading platform for crypto-assets by notifying its NCA at least 40 days prior to providing such service.²⁴³ While granting such approval for market operators without additional requirements may seem justified, given the similarity of the requirements described above, it may also raise some questions. For instance, if the market participants

²⁴⁰ However, it is required that such agreement states that the issuer seeking admission to trading must provide all necessary information to enable the operator to comply with the requirements. See Art. 4(2) MiCA.

²⁴¹ Rec. (18b) MiCA.

²⁴² Rec. (12a) MiCA.

²⁴³ Art. 53a (5) MiCA.

from traditional finance have such privilege, why does such opportunity not work vice versa? What makes this even more questionable is the fact that in the EC's initial Regulation proposal, this approach was not included. Furthermore, the EUCO has not justified or given any reasons for the new approach. All in all, regardless of the end result, open dialogue between legislators and all market participants should be held and valid arguments given before the Regulation enters into force. After all, improving the quality of regulation requires not only regulatory impact analysis but also more stakeholder involvement and an open public debate on the legislation project.²⁴⁴

5.3. Custodian Service Providers

To understand custodial solutions, they should be started to examine within the context of traditional finance. The business concept of custodian services is not a new invention but has already existed for decades.²⁴⁵ In general, custodians can be described as institutions that provide various financial services, including trade settlement, exchange, clearing, and corporate action execution. Moreover, one of their most notable roles is the safekeeping of investors' assets.²⁴⁶ Custodians can be described as “[‘vaults’], holding investors' assets securely in electronic and physical form against a fee”. What this means in practice is that they enter into different kinds of contractual agreements with investors, in which the custodian is responsible for safekeeping the assets while subsequently being returned to the investor upon request. As custodians usually contain comprehensive market expertise and resources, they have the advantage to minimise the risk of fraud, theft or loss of the clients' assets.²⁴⁷

While in the crypto-asset industry, custodian service providers can predominantly play a similar role as in the traditional finance markets,²⁴⁸ they also come with new problems. For instance, the custody of digital assets is technically much more complex than safekeeping traditional assets, starting from the technical definition of what custody and safekeeping in practice means. According to MiCA, the definition for custody and administration services of crypto-assets means “safekeeping or controlling, on behalf of third parties, crypto-assets

²⁴⁴ *Sunay* 2012, pp. 40-41. See also OECD 2014.

²⁴⁵ Riddle & Code n.d.

²⁴⁶ *Haentjens – de Gioia Carabellese* 2020, p. 162.

²⁴⁷ Deloitte 2020. More about the custody in traditional financial markets, see *Haentjens – de Gioia Carabellese* 2020, pp. 174-187.

²⁴⁸ *Ibid.*

or the means of access to such crypto-assets, where applicable in the form of private cryptographic keys”.²⁴⁹ While it can be argued that controlling private keys is crucial for the role of custody in crypto-assets, it should also be noted that differences in technology between crypto and institutional platforms require a more holistic approach when drafting the regulation.²⁵⁰ In this respect, the legislator seems to have managed to define the definition quite well, given that the custody or administration is not dependent on the question about the cryptographic keys alone.

The obligations specific to CASPs providing custodial services on behalf of third parties are defined in Art. 67 MiCA. First, CASPs face the obligation to have a contractual relation with their clients, with mandatory contractual provisions. These provisions include, inter alia, a description of the provided service, means of communication between the parties (including client authentication system), description regarding security systems, procedures, and policies applicable to the service, and the fee structure applied by the CASP.²⁵¹ In addition, there are some operational requirements in place. For instance, CASPs authorised to provide custodian services are obligated to establish and implement a custody policy that must be made available to clients on their request in an electronic format, provide quarterly (or at the clients’ request) statements of the clients’ assets held by the CASP, and ensure that those assets are segregated from its own.²⁵²

While custodians are trusted with the security of the asset delegated to them, it is crucial that clients can trust their assets to be safe with the service provider. Therefore, most of the operational requirements described above can be seen as justified. However, if the CASP providing those services would face unlimited liability towards its clients, such business would become extremely risky. This is probably why the most striking thing in the current Regulation draft concerning custodian services is that both the EC and EUCO have taken the approach that all CASPs providing custodian services should be held liable “[for] any damages resulting from an ICT-related incident, including an incident resulting from a cyber-attack, theft or any malfunctions”.²⁵³ While the EC took a rigorous approach stating that such CASPs should always be held accountable, the EUCO has eased the liability by

²⁴⁹ Art. 3 (1) No. 10 MiCA.

²⁵⁰ Global Custodian n.d.

²⁵¹ Art. 67 (1) MiCA.

²⁵² Art. 67 (3)-(7) MiCA. It should also be noted that CASPs providing these services are not allowed to actively use the customers’ crypto-assets for their own business. See Rec. (59) MiCA.

²⁵³ Rec. (59) MiCA & Art. 67 (8) COM(2020) 593.

adding that the incident needs to “[be] be attributed to the provision of the relevant service and the operation of the service provider [...] [from which is excluded], in particular, any event for which it could demonstrate that it occurred independently of its operations, in particular a problem inherent in the operation of the distributed ledger that the crypto-asset service provider does not control.”²⁵⁴ However, as the scope of liability paragraph shows, it remains unclear in which situations CASPs would be relieved from the liability. As *Zetzsche et al.* have noted, “a strict liability rule will make crypto-custodianship a risky business and render the establishment of well-funded crypto-custodians within EU/EEA territory difficult.”²⁵⁵ Thus, it would be recommended that in the final version of the Regulation, the liability provisions would be in line with the already existing *force majeure* principles, freeing the CASP from liability if it can prove that “[the] loss has arisen as a result of an external event beyond its reasonable control the consequences of which would have been unavoidable despite all reasonable efforts to the contrary”.²⁵⁶ As the industry of crypto-assets continues to grow and develop, the importance of custodians becomes even more crucial, as the demand for safekeeping the assets would increase as well.²⁵⁷ Therefore, more clarity should be provided regarding, e.g. technical standards and other security measures that the CASPs need to have in place, and those guidelines should be regularly updated as the industry develops. In the current draft of MiCA, the EUCO only mentions that EBA shall provide guidelines concerning procedures and policies in the context of services enabling the transfer of crypto-assets.²⁵⁸ Therefore, the obligations covering custodian services would most likely only increase regulatory uncertainty and even reduce the EU’s attractiveness in terms of innovation and economic growth in the current forming.

5.4. Issuance and Offering of Crypto-Assets

When considering the obligations MiCA sets forth for CAIs and CAOs, it should be noted that the requirements differ depending on the categorisation under which the asset ultimately falls. Therefore, and because the initial responsibility about the asset classification is set to the CAI, CASP, or CAO, they must pay extreme attention to a) what kind of crypto-asset

²⁵⁴ Art. 67 (8) MiCA.

²⁵⁵ *Zetzsche et al.* 2020, p. 20.

²⁵⁶ *Ibid.*

²⁵⁷ Deloitte 2020, p. 8. The key reasons for the growing importance include those custodians to i) reduce risk and complication, ii) increase security, iii) give more resources for investors, iv) increase safety compared to trading platforms, and v) increase operational efficiency.

²⁵⁸ Art. 67 (11) MiCA.

they are planning to issue or offer, b) what is the exact definition for such asset, and c) whether they meet all the requirements and obligations concerning the sub-category. This will be particularly important for the project, given that the classification may be challenged by the NCAs, both before the date of publication and at any moment afterwards.²⁵⁹

However, despite the differences in the obligations, some similarities can also be found. For instance, there are some general requirements, e.g. manners regarding marketing the asset and an obligation to prepare and deliver a whitepaper to the NCA.²⁶⁰ Furthermore, it is also worth noticing that some assets face less strict requirements than others, and some are entirely excluded from the scope of the Regulation. For instance, crypto-assets only accepted by the issuer or the offeror of the token, being technically impossible to transfer directly to other holders, are exempted from the scope.²⁶¹ As an example, MiCA mentions “some loyalty schemes that use DLT system, with the crypto-assets analogous to loyalty points”.²⁶²

5.4.1. *Crypto-Asset Issuers and Offerors*

To better understand the offering and issuance of crypto-assets, it is necessary to apprehend the general terminologies regarding the entities and operators behind the offerings and issuances. As mentioned in Chapter 4.2.2., one of the problems issuing crypto-assets might evoke in MiCA’s context is that the issuer might be challenging to determine in some instances. Furthermore, as in the initial Regulation proposal by the EC this potential issue was not reflected, it should be observed that it may lead to similar problems than, for instance, in the U.S, where a comprehensive discussion has been going on over the topic.

On the other hand, it appears that the EUCO seems to have noticed the issue. This can be concluded from the fact that it has taken a different approach to the Regulation by adding a new definition to the initiative, called CAO. By that, the EUCO means “a natural or legal person, or undertaking including, as the case may be, the issuer of crypto-assets, which offers crypto-assets to the public”.²⁶³ With this methodology, the EUCO is assumingly trying to avoid the problematic nature of the term ‘issuance’ by changing the subject of the obligations

²⁵⁹ Rec. (20) MiCA. It should also be noted that the NCAs shall have the ability to request an opinion on the classification from EBA, ESMA or EIOPA.

²⁶⁰ See Art. 6, 7, 8, 11, 24, 25 & 48 MiCA.

²⁶¹ Rec. (8a) MiCA.

²⁶² Ibid.

²⁶³ Art. 3 (1) No. 7a MiCA.

from the issuer²⁶⁴ to the offeror when offering other crypto-assets that ARTs or EMTs.²⁶⁵ This way, the answer to the question of who should be defined as the issuer might not be needed since it would be the offeror responsible for complying with the requirements that MiCA draws.

However, despite this new approach, one crucial point remains unsolved: how the markets should be regulated as a whole without creating market fragmentation? For example, when MiCA intends to set requirements for only persons or undertakings to issue or offer crypto-assets, at the same time, one of the key features of crypto-assets is that they are generally not issued by any central authority.²⁶⁶ This naturally would create a wide discrepancy between the intended Regulation and the markets in practice. While the lack of regulation leaves holders and potential holders of crypto-assets exposed to risks, partially regulating the industry by trying to squeeze it into the existing financial regulation regime, without elaborating the whole markets as one phenomenon, would likely only create more regulatory uncertainty and market fragmentation. Therefore, it should be noted that the following sub-categorisation follows the approach of MiCA,²⁶⁷ and the represented requirements apply to only those falling under the scope of the Regulation.

5.4.2. Payment Tokens

E-Money Tokens. Payment tokens under MiCA can be divided into ARTs and EMTs, whose issuers are subject to the regulation under Title III and IV of MiCA. Generally speaking, EMTs can be described as tokens designed to function as a form of electronic money. In other words, they are “[electronic] surrogates for coins and banknotes and are used for making payments or as a store of value.”²⁶⁸ Furthermore, critical requirements of these tokens include that they shall be provided with a claim on the issuer and must be redeemed

²⁶⁴ The crypto-asset issuer means “the natural or legal person or undertaking who issues the crypto-assets”. Art. 3 (1) No. 6 MiCA.

²⁶⁵ CF Art. 4 & 4a MiCA vs Art. 4 COM(2020) 593.

²⁶⁶ Investopedia 2021b.

²⁶⁷ It should be noted that various different classifications exist, for example crypto-assets can be classified by categorising tokens according to their economic function (for example, ‘payment tokens’ and ‘investment tokens’), or by other relevant characteristics, such as the rights they confer to users. Classifications have also evolved in line with the changing nature of the market. See e.g. MakerDAO 2020, Medipedia 2018 & Nimeria 2020. On the other hand, most jurisdictions have divided crypto-assets in the following three categories: (i) payment tokens (primarily used as a digital means of payment or exchange); (ii) utility tokens (grant holders’ access to, and use of, a digital resource (e.g. network, application)); and (iii) security tokens (represent an investment similar in nature to traditional securities). See *Blandin et al.* 2019, p. 36.

²⁶⁸ Rec. (9) MiCA.

by the respective issuer at any moment at par value and in funds other than the e-money tokens.²⁶⁹

Regarding the offering of these tokens, both the EC and EUCO have taken a strict approach. According to Art. 43 MiCA, no other party than the issuer of the EMT, is authorised to offer such crypto-assets unless there is written consent from the issuer to such party. In addition, the issuer must be an authorised credit- or e-money institution, as defined under EU laws, and is obligated to publish a whitepaper notified to the NCA.²⁷⁰ All marketing communications related to the EMT must also be consistent with the information provided in the whitepaper, be fair, clear, and not misleading, and clearly identifiable as such.²⁷¹ To increase the level of investor protection, in addition to the obligations concerning the issuance of EMTs, such CAIs are also held liable for the information provided in an initial or a modified whitepaper.²⁷²

In addition to all of these obligations, CAIs issuing EMTs also face operational obligations. These include, inter alia, having a recovery and redemption plan, depositing at least 30% of the reserve assets in a separate account in a credit institution, and following strict investment guidelines concerning the reserve assets. According to MiCA, “funds received by issuers of EMT in exchange of EMTs shall be invested in secure, low-risk assets denominated in the same currency as the one referenced by the e-money token.”²⁷³

Asset-Referenced Tokens. While EMTs are tokens that function as a way of electronic money, ARTs, on the other hand, can be described as crypto-assets that aim to maintain stable value by referring to the value of any other value or right or a combination thereof.

²⁶⁹ Art. 44 MiCA.

²⁷⁰ The content and form of the crypto-asset white paper for EMTs is defined in Art. 46 MiCA.

²⁷¹ Art. 48 MiCA.

²⁷² Art. 47 MiCA. However, it should be noted that the liability requires that the information provided in the whitepaper is deficient, misleading, inaccurate or inconsistent.

²⁷³ Art. 49 (b) MiCA. In general, the Art. refers to safeguarding requirements of Art. 7 E-Money Directive 2009/110/EC, which goes on to refer to Art. 10 of Payment Services Directive 2015/2366/EC. Under those provisions “funds shall not be commingled at any time with the funds of any natural or legal person other than payment service users on whose behalf the funds are held and, where they are still held by the payment institution and not yet delivered to the payee or transferred to another payment service provider by the end of the business day following the day when the funds have been received, they shall be deposited in a separate account in a credit institution or invested in secure, liquid low-risk assets as defined by the competent authorities of the home Member State; and they shall be insulated in accordance with national law in the interest of the payment service users against the claims of other creditors of the payment institution, in particular in the event of insolvency.” This way MiCA aims to prohibit the assumption of FX risks for funds received in exchange for EMTs.

Thus, ARTs cover a way more diversified spectrum of different crypto-assets than EMTs. Furthermore, while the issuers of EMTs need to hold a credit- or e-money institution license, the issuers of an ART needs to be either a) a legal person established in the EU and authorised to do so by the NCA, or b) a credit institution complying with the applicable requirements of MiCA.²⁷⁴ The Regulation further includes obligations and requirements concerning the minimum whitepaper content and ongoing disclosure rules,²⁷⁵ standard conduct of business rules, including conflict rules,²⁷⁶ governance requirements,²⁷⁷ and rules on acquisitions.²⁷⁸

The requirements set for CAIs of ARTs cannot be considered to be very surprising, given that they are all already known from other pieces of EU financial law.²⁷⁹ Thus, the core of MiCA regarding ARTs relates to the own funds' requirements, the handling of the reserve assets and investor rights. As to own funds, ART issuers need to put up to the higher of EUR 350,000 or 2% of the average amount of the average reserve assets in the last six months in Tier 1 capital as defined by Articles 26-30 CRR.²⁸⁰ That would mean, for an overall volume of EUR 10 billion, the issuer must set aside EUR 200 million in unencumbered, high-quality capital, typically consisting of issuers' shareholders' equity. Furthermore, given that own funds must be, in principle, in triple-A securities and central bank accounts, they cannot be used for other investment purposes or the further development of the ART systems.

The reserve assets of the ART need to be put into segregated custody at well-chosen and qualified credit institutions, investment firms or crypto-asset service providers. Additionally, the assets must be legally and operationally segregated from the issuer's own property, and from the reserve of assets of other asset-referenced tokens, in the interest of the holders of asset-referenced tokens under relevant national law, such that creditors of the issuers have no recourse on the reserve of assets, in particular in the event of insolvency.²⁸¹ This is to protect the reserve assets against claims of the issuers' and custodians' creditors. In case of a loss, the custodian must return an asset of an identical type to that lost to the ART issuer. However, custodians will not have to do so where it can prove the loss arose as a result of

²⁷⁴ Art. 15 MiCA. Requirements applicable for credit institutions are set forth in Art. 15a MiCA.

²⁷⁵ Art. 17, 21, 22, 24-26 & 46 MiCA

²⁷⁶ Art. 23 & 28 MiCA.

²⁷⁷ Art. 30 MiCA.

²⁷⁸ Art. 37 & 38 MiCA.

²⁷⁹ Such as the Prospectus Regulation (2017/1129/EU), MiFID II (Directive 2014/65/EU), and E-Money Directive (2009/110/EC).

²⁸⁰ Art. 31 MiCA.

²⁸¹ Art. 33 MiCA.

an external event beyond its reasonable control, and the consequences of which would have been unavoidable despite all reasonable efforts.

Additionally, issuers of ARTs face several stabilisation mechanism requirements, including detailed risk and investment assessments and an obligation to mandate an independent audit of the reserve assets every six months, which shall also include an assessment of the compliance with the obligations of the Regulation.²⁸² On the other hand, reserve assets must be invested in highly liquid financial instruments with a minimal market and credit risk, which are capable of being liquidated rapidly with minimal adverse price effects, with the EBA to determine the details. All profits or losses, including fluctuations in the value of the financial instruments, and any counterparty or operational risks that result from the investment of the reserve assets, should be internalized by the ART issuer.²⁸³

For crypto-asset holders' rights, MiCA follows a mixed approach. While Article 35 MiCA relies, in principle, on contractual stipulations, it also sets certain minimum requirements to protect, in particular, ART holders.²⁸⁴ It should also be noted that the holders of ARTs shall have the right to request the CAI to redeem at any moment by paying in funds the market value of the asset-referenced tokens held or by delivering the referenced assets.

Significant EMTs and ARTs. As the EC and EUCO try to prevent and control the systemic risk widely adopted stablecoins could expose, MiCA includes additional requirements for stablecoins considered 'significant'. The assessment of significance is performed by EBA. For that purpose, EBA must take into account several different factors, including the (i) size of the customer base; (ii) amount of reserve assets; (iii) value of the asset or market capitalization of all tokens of that type; (iv) amount and value of transactions; (v) significance of cross-border activities; and (vi) interconnectedness with the financial system.²⁸⁵ Once classified as significant, such issuers are subject to the supervision of the EBA and specific risk management requirements.²⁸⁶

²⁸² Art. 32 MiCA.

²⁸³ Art. 34 MiCA.

²⁸⁴ ART issuers must in detail determine: (i) conditions, including thresholds, periods and timeframes, for holders of asset-referenced tokens to exercise those rights; (ii) the mechanisms and procedures to ensure the redemption of the asset-referenced tokens, including in stressed market circumstances; (iii) valuation policy; (iv) settlement conditions; and (v) adequate management measures of increases or decreases of the reserve.

²⁸⁵ Art. 39 & 50 MiCA.

²⁸⁶ See Art. 41 & 52 MiCA.

As the review of the regulations shows, MiCA's approach is to try to fit the regulation of the crypto-asset markets into the existing regulatory framework of traditional financial markets. In some aspects, this is well justified, given that the financial system plays a critical part in economic stability, allowing it to function effectively.²⁸⁷ However, the approach is exposed to some criticism as well. For instance, it has been argued that the current categorisation would not help support constituting CAIs on a cross-border basis but rather sets limits upon an innovation that could provide a much-needed solution to the many issues in cross-border payments.²⁸⁸ Another risk regarding ARTs and EMTs is that they would *de facto* equate to payment instruments, regardless of their primary purported function or use under the proposed Regulation, because of their concrete use, coupled with the systemic importance they may acquire. Indeed, the ECB has noted that if that is the case, these crypto-assets “should be subject to similar requirements in order to prevent the risk of regulatory arbitrage between the respective regimes”.²⁸⁹ This approach could also be supported with the fact that the current EMT and ART definitions refer to the value of, *inter alia*, countries official currencies, without taking into account that some stablecoins may refer their value to the value of an official currency of a country, e.g. USD, while the reserve assets backing the token consist of other fiat currencies, commodities or crypto-assets, i.e. the reserved assets have actually nothing to do with the ART or EMT at hand. One example of such stablecoin would be DAI²⁹⁰, which refers to the value of USD, making it resemble EMTs at first glance, while the reserve assets of the asset are actually issued based on Ether, which on the other hand, points to a characteristic specific to ARTs.²⁹¹ As the current initiative stands, it would most likely mean that these kinds of tokens would become prohibited in the EEA area, given that the EUCO has stated that “any definition of ‘e-money tokens’ should be as wide as possible to capture all the types of crypto-assets referencing one single official currency of a country and strict conditions on the issuance of e-money tokens should be laid down”.²⁹²

²⁸⁷ The significance of the financial system lies in the functions it performs in relation to the real economy. For instance, financial markets help to direct the flow of savings and investment in the economy in ways that facilitate the accumulation of capital and the production of goods and services. *Armour et al.* 2016, pp. 22-23.

²⁸⁸ This has been argued to be caused by the requirement of all CAIs under MiCA needing to be established in the EU/EEA area, and by the lack of efficient international cooperation mechanisms. See *Zetzsche et al.* 2020, pp. 26-27.

²⁸⁹ Section 2.1.4. ECB 2021.

²⁹⁰ DAI is a stablecoin cryptocurrency aiming to keep its value as close to USD, maintained and regulated by MakerDAO. The DAO consists of the owners of MKR, a governance token of the MakerDAO. The owners of the token may vote on changes to certain parameters in its smart contracts in order to ensure the stability of DAI. See: *Maker Whitepaper* n.d.

²⁹¹ *Maker Whitepaper* n.d., pp. 5-10.

²⁹² Rec. (10) MiCA.

As the IFM has emphasized, crypto-assets are unprecedentedly global and cross-border in nature, which calls for wide-ranging international cooperation in the development phase of regulation.²⁹³ Therefore, it would be justified to take into account international cooperation on the regulation of stablecoins when the Regulation initiative was prepared. For example, with MiCA's stablecoin control system and the establishment requirement for issuers of stablecoins, international collaboration can be very challenging concerning developing a global stablecoin. If the EU excludes itself from the global dialogue by setting its own rules, it could, in the worst case, lag in significant developments of the sector.

Prohibition of Interest. Last of all, it should be noted that the ART and EMT issuers, as well as all CASPs providing services to those assets, are prevented from paying interest or any other benefit to holders related to the length of time the holder holds its assets.²⁹⁴ This has been justified with the argument that payment tokens should be mainly used as a means of exchange and not a store of value.²⁹⁵ Additionally, it has also been argued that “the prohibition seeks to avoid a circumvention of EU securities law, given that the promise to pay interest may mix up the criteria for currency and bonds.”²⁹⁶ On the contrary, this may also create market fragmentation and put some market participants into an unfair position. This may be the case, for instance, with CASPs operating trading platforms. They would be prohibited from paying interest to their clients, while DEXs and crypto lenders could continue to do so because they fall outside the Regulation's scope. On the other hand, if crypto lenders were added to the scope of the Regulation, it would only cause severe damage to the crypto credit markets in the EU. This, on the other hand, speaks once again for the fact that the regulation regarding crypto-asset markets should be approached with a holistic view and an excellent understanding of the functioning of the industry as a whole.

5.4.3. *Crypto-Assets Other than Payment Tokens*

As MiCA seeks to set forth a ‘catch all’ definition for crypto-assets, the last sub-category has been defined to retain all other crypto-assets than ARTs or EMTs.²⁹⁷ As can be inferred, this sub-category includes a wide array of different crypto-assets.

²⁹³ IMF 2021, p. 41.

²⁹⁴ Art. 36 & 45 MiCA. This requirement can be seen to mirror Art. 12 E-Money-Directive.

²⁹⁵ Rec. (41) MiCA.

²⁹⁶ *Zetzsche et al.* 2020, p. 17.

²⁹⁷ Rec. (9) MiCA.

When offering crypto-assets other than ARTs or EMTs, such assets may not be provided to the public in the EU unless the CAO is a legal person, has drafted and provided to the NCA a whitepaper, and complies with marketing and general conduct obligations.²⁹⁸ This includes the requirement that all marketing related to such assets must be clearly marked as such and refer to the whitepaper concerning the asset. In general, the requirements referring to the crypto-asset whitepaper has been argued to be “[in principle] prospectus requirements that seek to address the inadequate disclosures, misrepresentations and fraud currently often observed in certain initial coin offerings”.²⁹⁹ If the whitepaper includes misleading, inaccurate, or inconsistent information or does not include the key information about the asset, the offeror shall be held responsible for such damages.

MiCA also mentions a sub-category of utility tokens, described as tokens which are “[only] intended to provide access to a good or a service supplied by the issuer of that token.”³⁰⁰ These assets are only subject to limited obligations in the Regulation. As an example, MiCA mentions that no obligations of MiCA shall apply, if the token holder is enabled to collect the good or use the service the token represents, and if the holder of the crypto-assets has the right to use such tokens “in exchange for goods and services in a limited network of merchants with contractual arrangements with the offeror”.³⁰¹ However, the CAIs offering utility tokens are always required to mention in the respective whitepaper that the assets may not be exchangeable against the goods or services mentioned, especially if the project fails or there is discontinuation for some reason.³⁰² Notably, in the initial proposal, the EC stated that utility tokens should form the entire third sub-category in the Regulation, given that these tokens “[have] non-financial purposes related to the operation of a digital platform and digital services and should be considered as a specific type of crypto-assets”.³⁰³ At the same time, the actual Titles in the proposal followed the same categorisation as in the EUCO’s version.³⁰⁴ Therefore, the EUCO’s approach should be seen as a good step towards more precise classification to avoid any inconsistency in the Regulation, given that the third sub-

²⁹⁸ Art. 4 MiCA.

²⁹⁹ *Zetzsche et al.* 2020 p. 12.

³⁰⁰ Art. 3(1)(5) MiCA. The provisions and limitations applicable to utility tokens are covered in Chapter 5.4.3 in greater detail.

³⁰¹ Rec. (14a) & Art. 4(2) MiCA. It should also be noted that if an offer to the public concerns utility tokens for goods that are not yet available or services that are not yet in operation, the duration of the public offer as described in the crypto-asset white paper shall not exceed twelve months. Rec. (17) & Art. 4(3) MiCA.

³⁰² Art. 5(5)(d) MiCA.

³⁰³ Rec. (9) (COM2020) 593.

³⁰⁴ See Titles II-IV MiCA & COM(2020) 593.

category now includes all other crypto-assets than ARTs and EMTs, including utility tokens.³⁰⁵

Unlike the CAOs offering ARTs or EMTs, CAOs offering other crypto-assets falling under MiCA's scope do not face the obligation to be established in the EU. However, such offerors are obligated to notify the whitepaper concerning the asset and, where applicable, their marketing communication to the NCA of the Member State where they intend to offer the assets.³⁰⁶ For crypto-assets that have no offeror (as described under MiCA) *and* are not traded in a trading platform that could be considered operated by a CASP, the provisions of Title II MiCA do not apply. On the other hand, the EUCO has stated that “[crypto-asset] services provided for such assets should be subject to this Regulation, [and] when those crypto-assets are offered by a person or traded in a crypto-assets trading platform the requirements of this Regulation apply to that person and to that crypto-assets trading platform.”³⁰⁷ What this approach leaves a bit uncertain is the question of how will the EU approach crypto-assets with no offeror alone? If the requirement is that at least one CAO or CASP shall always be liable for a crypto-asset under the Regulation before it can be used in Europe, such requirement would most likely decrease the amount of new crypto-assets issued and decrease innovation. On the other hand, it could also force all new crypto-asset projects even more towards the DeFi industry, creating more market fragmentation.

Albeit MiCA seeks to set a broad, catch-all definition to avoid any crypto-assets falling outside the scope of EU legislation, the Regulation initiative has been criticised for the categorisation it uses. For example, the ECB has noted that while MiCA “[contains] a wide, catch-all definition, [...] the scope of application of the proposed regulation should be further clarified.”³⁰⁸ This is primarily caused due to the fact that the approach could easily lead to a situation where it could be very challenging to determine whether an asset would fall under the definition of financial instruments covered by the MiFID legislation or to the scope of MiCA.³⁰⁹ Resolving the problem of whether a token should fall within or outside the framework of existing EU financial legislation will not be achieved by a negative scope for

³⁰⁵ Rec. (9) MiCA.

³⁰⁶ Rec. (18a) MiCA.

³⁰⁷ Rec. (12a) MiCA.

³⁰⁸ Section 1.4. ECB 2021.

³⁰⁹ *Zetzsche et al.* 2020, pp. 22-23.

applying the intended legislation, as the current draft of MiCA does.³¹⁰ Indeed, the ECB has noted that “[more] clarity is needed with respect to the distinction between crypto-assets that may be characterised as financial instruments (falling under the scope of the MiFID II) and those which would fall under the scope of the proposed regulation.”³¹¹ Those working on DLT technology also agree with the position presented, as up to 46 per cent of respondents to the INATBA survey are expecting interpretation differences that could cause overlap and uncertainty as to which assets would fall under which regulatory regime.³¹²

One example of the problem mentioned above is that ESMA has pointed out that the boundaries concerning the definition of “transferable securities” as financial instruments under MiFID II are not entirely clear.³¹³ First, the requirement for transferable securities to be “negotiable” (as part of “transferability”) is open to dissenting definitions.³¹⁴ Furthermore, determining what is “similar” compared to shares or bonds depends on the laws of Member States, which may not be compatible with each other. Instead, results may differ from one Member State to another, especially when considering instruments “similar” to traditional shares or bonds.³¹⁵ Another concern relates to the notorious distinction between financial and commodity derivatives under MiFID II. Commodity derivatives under the EU law are defined as the financial instruments under MiFID II.³¹⁶ Altogether, this can be traced back to the general scope of MiFID II, and conclude that commodity derivatives fall under MiFID II’s scope if they have a ‘financial nature’. When considering the nature of the commodity, one of the most important factors is whether the derivative is traded on a regulated trading venue, regardless of how it is settled.³¹⁷ The same conclusion should apply if the trading platform is not registered as a trading venue under the MiFID regime but has essentially the same features. Thus, a crypto-asset other than ART or EMT with a derivative component could fall within the scope of MiFID II, and the platform on which it would be traded might face an obligation to be registered as a trading venue under MiFID II. Additionally, the

³¹⁰ Art. 2(2) MiCA. A similar approach has been used with AIFs, in Art. 4(1) AIFMD, that identifies its scope by referring broadly to all collective investment schemes that fall outside the scope of the UCITS Directive. This approach has led to complex interpretative issues. See *Zetzsche et al.* 2020, p. 23 with references.

³¹¹ Section 1.4. ECB 2021.

³¹² INATBA 2021, p. 22.

³¹³ ESMA 2019, pp. 39-41. This refers especially to Annex I, Section C(1) MiFID II.

³¹⁴ *Zetzsche et al.* 2020, pp. 21-22.

³¹⁵ *Ibid.*

³¹⁶ Art. 2 (19) No. 30 MiFIR. The Art. refers to point (44)(c) of Art. 4(1) MiFID II, which relate to a commodity or an underlying referred to in Section C(10) of Annex I, or in points (5), (6), (7) and (10) of Section C of Annex I MiFID II.

³¹⁷ *Zetzsche et al.* 2020, p. 22.

details of what constitutes a derivative component are not specified by EU financial law but vary across Member States. All in all, it should be noticed that the current approach might expose MiCA to regulatory arbitrage and would simultaneously increase the need to ensure a harmonized application of EU financial law. On the contrary, it could also create regulatory uncertainty among the market participants, which would go against one of the initial purposes set for the Regulation.

In the U.S., one approach to resolve the question as whether a crypto-asset has the characteristics of one particular type of security (an “investment contract”) or not, has been the so-called “*Howey test*”.³¹⁸ The aim and focus of the analysis is not only on “[the] form and terms of the instrument itself, i.e. the crypto-asset, but also on the circumstances surrounding the asset and the manner in which it is offered, sold, or resold, including secondary market sales”.³¹⁹ Therefore, the SEC has pointed out that “[all] parties engaged in the marketing, offer, sale, resale, or distribution of any crypto-asset will need to analyse the relevant transactions to determine if the federal securities laws apply or not”.³²⁰ Unlike in Europe, different crypto-assets in the U.S. have been interpreted on a lighter basis as investment contracts (cf. security) based on the possibility of an increase in value alone, without a requirement for ancillary return expectations.³²¹ Furthermore, both the nature of the token and the marketing of the offering have been considered to be important in the evaluation.³²² The inclusion of marketing as an element of assessment reflects, in a similar way to the European model,³²³ the consideration of the need for investor protection beyond the mere nature of the token. Given that the existing financial laws do not provide adequate investor protection when it comes to offering crypto-assets, it is a bit surprising that neither EC nor EUCO has taken this into account when drafting the Regulation.

³¹⁸ See SEC v. W.J. Howey Co., 328 U.S. 293 (1946) (“*Howey*”). According to the U.S. Supreme Court's *Howey* case and subsequent case law, an “investment contract” exists when there is the investment of money in a common enterprise with a reasonable expectation of profits to be derived from the efforts of others. See also *Kauppi* 2019, pp. 59-60.

³¹⁹ SEC 2019.

³²⁰ *Ibid.*

³²¹ *Kauppi* 2019, p. 61.

³²² SEC 2019.

³²³ See e.g. Rec. (5) MiCA.

5.4.4. Hybrid Tokens

While security tokens are excluded from the scope of the thesis and do not even fall into the scope of MiCA's regulatory framework, it should be noted that the classification of tokens is not always straightforward. As it happens to be, some security tokens share features with utility tokens. These tokens have been described as hybrid tokens. While these tokens would primarily meet the definition of a security, such tokens could also be used to unlock a utility from a network or decentralised application and would be offered with a limited supply. Thereby they act as means of exchange within a particular network. Moreover, "[the] lack of an early utility for the token holders in such applications or networks is mitigated by the additional potential for financial gains through the appreciation of a token's value when the network becomes more widely adopted."³²⁴ Remarkably, it appears that the EC has completely missed the dimension of regulating these tokens from the EU's digital finance strategy. For instance, hybrid tokens are not mentioned for once in MiCA. As already discovered in Chapter 5.4 the sub-categorising of crypto-assets and the question of whether a token would fall under MiCA or the MiFID II legislation is not always straightforward. Furthermore, the already tricky categorisation would be even more complex when it comes to hybrid tokens, leaving such tokens exposed to even more pressing regulatory uncertainty. However, as MiCA states that "limited network exemption does not apply for crypto-assets which are typically designed for a network of service providers which is continuously growing",³²⁵ it would be unlikely that hybrid tokens would get any exemptions if they would fall under the Regulations scope. In such case, the same issue with drawing the line between security tokens falling under the scope of MiFID II and those falling under MiCA's scope would become challenging.

5.5. Other Market Participants

5.5.1. Lenders and Borrowers

While lending and borrowing in crypto-assets may sound like nothing new compared to lending business in traditional financial markets, there are many opportunities that the traditional markets cannot offer. For instance, unlike in traditional finance, where borrowers

³²⁴ INATBA 2021, p. 19.

³²⁵ Rec. (14a) MiCA.

must prove their creditworthiness to banks when applying for a loan, in crypto-asset lending, borrowers, in most cases, can get a loan by simply depositing collateral in crypto-assets.³²⁶

There are two types of crypto lending today: CeFi and DeFi lending. CeFi lending is operated by private companies owning a platform through which they offer their services. Like a broker or a bank in traditional finance, these companies profit from liquidity exchange between savers and borrowers. In practice, CeFi crypto lenders offer borrowers savings accounts or asset management services and issue crypto-asset loans (mainly over collateralised) for lenders.³²⁷ DeFi platforms, on the other hand, are not backed by a company that organizes this exchange. Instead, the entire process is based on a technological protocol, a smart contract, which handles the lending processes entirely automatically. Crypto lending, therefore, no longer requires banks but either a CeFi provider or a DeFi protocol.³²⁸

An indication of the lending market's potential can be seen by looking at the growth numbers in the sub-industry. For example, the Assets under Management of the three biggest CeFi lending companies grew by 734 per cent alone in 2020.³²⁹ In addition to this, Genesis, the world's biggest CeFi crypto-asset lending company, has reported that the company has originated cumulative loans worth over USD 100 billion since 2018, from which USD 35,7 billion was originated in Q3 of 2021 alone.³³⁰ At the same time, the total amount of assets locked in DeFi lending platforms has surpassed USD 250 billion at the beginning of November 2021.³³¹ One potential reason behind the merging interest could be that these companies and platforms offer interest rates ranging from 4 per cent to 15 per cent, which

³²⁶ CryptoStudio n.d. The most significant value proposition here is argued to be that a high degree of automation offers critical advantages over traditional banking. For instance, processes can be made much faster and therefore also cheaper. In addition, the whole system is a lot easier to access for everyone around the world (for example, for people who have a poor credit history or do not have access to the banking system).

³²⁷ CryptoStudio n.d. For instance, Genesis is a crypto-asset CeFi lending company, which is also considered to be the industry leader in the market. More about the company, see e.g. Genesis Q3 2021.

³²⁸ CryptoStudio n.d. One example of DeFi lending platforms is an open-source liquidity protocol Aave, where borrowers can earn interest on deposits and borrow assets against collateral. More about the protocol, see Aave 2.0 Whitepaper 2020.

³²⁹ CryptoStudio n.d.

³³⁰ Genesis Q3 2021, p. 4.

³³¹ Bitcoin.com 2021.

are at a completely different level compared to bank deposits or government bonds, which have been close to zero or even negative since the financial crisis back in 2008.³³²

While the lending market for crypto-assets has much potential, some risks are naturally involved. In DeFi lending, the risks are mainly technical,³³³ but CeFi lending is exposed to more risks. The primary risks from an investors point of view can be divided into four categories: (i) loan repayment and default, (ii) counterparty risk, (iii) custody risk, and (iv) volatility. Regarding the first mentioned, the difference with crypto-asset lending is that while traditional bank deposits are usually subject to statutory deposit insurance in most developed jurisdictions,³³⁴ crypto savings accounts are not. This means that if the crypto-asset lending company goes bankrupt, the investors would be exposed to losing all of their assets. In those situations, the assets would become part of the insolvency estate, and the investors would be treated as creditors in the insolvency proceedings. Furthermore, these proceedings could be highly complex legal problems because the crypto-asset markets are spread worldwide, and no laws directly cover the sub-industry.

Second, in CeFi crypto lending, there is also counterparty risk involved. This is primarily because most CeFi lending companies regulate their contracts in a way where they are allowed to, e.g. lend, sell, pledge, hypothecate, invest or otherwise use the assets lent in.³³⁵ While the CeFi lending companies usually lend these assets to crypto trading platforms, hedge funds, or other institutional investors, it creates a counterparty risk, especially if the investor is not aware of the loan arrangements the CeFi lending company does with its counterparties on the other end. For example, these companies may not always over-collateralize their loans originated, leaving the investors capital exposed to default risks.

Third, one of the risks concerns the procedures, policies, and practices of handling the assets by the CeFi lending companies. Up to date, there has been no news concerning cyber-attacks on crypto lending companies where client assets would have been stolen. However, this does

³³² ECB interest rates development, see: <https://www.ecb.europa.eu/stats/>.

³³³ *Harvey et al.* 2021, p. 130.

³³⁴ For instance, in Europe there is a Deposit Guarantee Scheme Directive (2014/49/EU), which protects depositors' savings by guaranteeing deposits of up to EUR 100,000 in circumstances where their deposits are not available for retrieval. In the U.S., this insurance is provided by the Federal Deposit Insurance Corporation.

³³⁵ Up to date, this has become more like an industry standard, which can be found in almost every single contract where CeFi lending companies are offering interest accounts or similar arrangements to their clients. Such companies include e.g. Crypto.com, BlockFi, Celsius, and Genesis.

not automatically mean that all companies store their clients' assets in a secure way or that the client would be adequately informed of such matters. Since there are no direct laws concerning these companies, ensuring such things are being taken care of is challenging.

Last, many crypto-assets are quite volatile and subject to wide price fluctuations. If the price of the loaned crypto-asset would suddenly drop heavily, the investor might not be able to withdraw its deposits, given that some companies may have withdrawal periods of several days, or the deposit may have been made with a fixed-term contract. On such occasions, the investors would not be able to react to sudden market movements, exposing themselves to these fluctuations. One way to avoid this problem is to make deposits only in stablecoins. This way, the investors can protect themselves from sudden price drops in the market. However, it should be noted that this would not resolve the problem mentioned above regarding the fact that the investors capital could still be at risk because the loans the CeFi lender issues could be backed by volatile cryptocurrencies. On the other hand, if a borrower chooses to secure a loan with a volatile crypto-asset, like Bitcoin, there is always a volatility risk regarding the collateral. On such occasions, the CeFi lending company could liquidate some or even all of the collateral if its market value decreases and the borrower does not react to a margin call and post more collateral in time. As a borrower, it would therefore be essential to ensure that the exact terms and conditions of the loan are understood before the loan will be originated.

One fundamental difference with crypto lending markets compared to traditional finance is that it is truly global and accessible for almost everyone with an internet connection. While in traditional finance, the term "global financial market" faces many obstacles for being one in practice,³³⁶ the global and cross-border nature of crypto-assets could provide some entirely new opportunities. On the other hand, these opportunities do not come without risks, as described above. Remarkably, the EUCO has stated in particular that lending and borrowing of crypto-assets does not fall under the scope of MiCA.³³⁷ Given that these risks stated above could especially be considered such that they would need investor protection regulation, it can be considered a surprising approach. In addition, the companies providing

³³⁶ For instance, traditional lending requires credit-checks, and all money transfers need to be facilitated through multiple banks, accounts, and payment systems, which usually takes several days. One thing is also the fact that there are over 1,7 billion unbanked people around the globe. Findex 2017, p. 35.

³³⁷ Rec. (63e) MiCA.

these services will continue to be subject to national laws of the Member States,³³⁸ which will most likely create market fragmentation to the industry. In addition, the EU would require companies providing lending services and other crypto-asset services falling under the scope of MiCA to be subject to MiCA's registration requirements, and in addition, to comply with the national laws of every Member State in which they are providing their lending services. This approach would create burdensome administrative costs and put these companies in an unfair market position.

Furthermore, companies providing only CeFi crypto-asset lending services will not benefit from the right to offer their services across the EU with one registration, which will only slow down the development of the lending market. On the other hand, MiCA's approach to prohibit interest payments for stablecoins would dramatically decrease interest and succession possibilities for lending firms in the EU. This only demonstrates that either the EU's purpose has not been to regulate the markets as a whole in the first place, or the legislator has failed to understand the functioning of the whole ecosystem. What makes this even more interesting is that the financial crisis has been argued to be caused by the lack of proper regulation and supervision.³³⁹ As this would be the case, if expanding sizeable enough, the crypto-asset lending and borrowing market could also create systemic risk in the worst-case scenario if the sub-industry does not face proper regulation on time.

5.5.2. Market Makers

Market makers in traditional finance are often described as investment firms buying and selling a specific asset at a specific price.³⁴⁰ This way, market makers provide liquidity and depth to the two-sided financial markets³⁴¹ while making profit with the price difference between the bid-ask spread. While providing these services, market makers are obligated to follow the bylaws of each exchange where these services are provided.³⁴²

As described in Chapter 5.2, MiCA seeks to set regulatory obligations for all CASPs authorised to operate a trading platform. Since these obligations would also include these

³³⁸ Ibid.

³³⁹ Haentjens – de Gioia Carabellese 2020, pp. 7, 47 & 244-245.

³⁴⁰ Haentjens – de Gioia Carabellese 2020, p. 56.

³⁴¹ A two-sided market exists when both buyers and sellers meet to exchange a product or service, creating both bids to buy and offers to sell.

³⁴² See e.g. SEC 2013. The rights and responsibilities may vary depending on the exchange and the type of the financial instrument traded.

requirements and include operating rules for the CASPs and market participants, it would also increase the regulatory certainty for market makers. MiCA sets forth obligations regarding matched principal trading for CASPs operating a trading platform. For instance, these CASPs “[are] only allowed to engage in matched principal trading where the client has consented to the process”, and only after the CASP has ensured that such activities do not create a conflict of interest between the CASP and its clients. Furthermore, the CASP is also required to notify its NCA to explain the use of the matched principal trading.³⁴³

On the other hand, MiCA does not cover the operation of DEXs. As automated market makers³⁴⁴ provide the market making in these trading platforms, the regulation does not cover these market participants, leaving them exposed to regulatory uncertainty.

5.5.3. *Crypto Funds*

The public discussion around crypto funds has been increasing during the year of 2021, and many large market participants have confirmed that they are scrutinising the crypto fund space.³⁴⁵ Notably, the SEC approved the first U.S. bitcoin exchange traded fund in October 2021, which ended its first trading day in the New York Stock Exchange with assets of \$570m, making it the second-most heavily traded new ETF on record.³⁴⁶ Moreover, other spot cryptocurrency ETFs have been approved in Canada and several European countries as well. However, some concerns among the regulators and authorities have been raised as well. For example, the SEC has stated that crypto funds could have inadequate trading conditions or expose the underlying markets of crypto-assets for market manipulation, since these assets are mainly traded on unregulated trading platforms around the world.³⁴⁷

However, MiCA could bring some clarity and governance to these concerns in the EU. This is primarily due to the fact that the Regulation would also affect to MiFID II by amending the concept of ‘financial instruments’ to cover those “[specified] in Section C of Annex I [MiFID II], including such instruments issued by means of distributed ledger technology”.³⁴⁸

³⁴³ Art. 68(3a) MiCA.

³⁴⁴ Automated market makers are smart contracts quoting prices for both sides of a trading pair. The contract updates the asset size and prices behind the bids and the ask, based on the executed purchases and sales. See *Harvey et al.* 2021, pp. 51-54.

³⁴⁵ Financial Times 2021a.

³⁴⁶ Financial Times 2021b.

³⁴⁷ Financial Times 2021c.

³⁴⁸ Rec. (3) MiCA & EUCO 2021b, p.15.

As funds in the traditional financial industry are already subject to existing MiFID II and other EU legislation^{349,350} the above additions to existing legislation would also bring crypto funds within the scope of EU law and therefore increase regulatory certainty.

5.6. DeFi and DAOs

5.6.1. *The DeFi as a Phenomenon*

When approaching the regulatory questions related to the markets in crypto-assets, the concept of DeFi is crucial to understand. The reason behind this cruciality is simple: while the basic infrastructure of financial institutions has remained unchanged since it started, DeFi is a phenomenon trying to change that.³⁵¹ One of the key elements of that change is the aim to develop a financial system of minimised friction and maximised value to its users, based on blockchain technology without the need for trusted third parties or intermediaries.³⁵² Fundamentally, DeFi can be described as a financial marketplace, where various financial solutions are provided via decentralised applications. These can also be described as financial ‘primitives’, including lend, tokenise and exchange.³⁵³ Further, the infrastructure is developed by building blocks into sophisticated products, which anyone can access and benefit from the smart contract.³⁵⁴

DeFi is often argued to solve multiple problems related to the financial markets and even revolutionise them. These include, among others, the opportunity to reinform the financial industry’s narrow allocation practices, whose fragility has been argued to be exposed by the covid -19 pandemic and spreading the dividend of economic and financial development equally.³⁵⁵ Furthermore, DeFi seeks to solve some critical issues related to traditional finance, such as centralised control, limited access, inefficiency, lack of interoperability, and opacity.³⁵⁶

³⁴⁹ For instance, UCITS are regulated under Directive 2009/65 EC amended by Directive 2014/91/EU (together “UCITS V”), and AIFs under AIFMD and the AIFM Regulations (together “AIFMD legislation”).

³⁵⁰ *Haentjens – de Gioia Carabellese* 2020, p. 160.

³⁵¹ *Harvey et al.* 2021, pp. 1–2.

³⁵² *Harvey et al.* 2021, p. 2.

³⁵³ *Harvey et al.* 2021, p. 17.

³⁵⁴ *Ibid.*

³⁵⁵ *Avgouleas – Kiyias* 2020, p. 5.

³⁵⁶ *Harvey et al.* 2021, pp. 2–5.

What makes the DeFi difficult for regulators is that “[MiCA’s] obligations of CASPs assume static governance and management of crypto-assets, which may not be compatible with the *modus operandi* of DeFi protocols.”³⁵⁷ Moreover, as already mentioned in Chapter 4.2.2, everything in DeFi happens in a network or an organisation that is fully automated and based on open-source computer programming code that can be viewed and used by anyone. At the same time, the protocols are fully immutable and censorship-resistant, and DeFi often implements decentralised decision-making processes, for instance, through DAOs.³⁵⁸ Therefore, it would be rather challenging to determine who is in control and who should bear the liability for the operations of such CASP, and it becomes almost impossible to determine who would be the actual object of a right or obligation that the law could also identify. At the same time, the DeFi market needs regulatory certainty. However, due to the challenges the DeFi space has created for the regulators due to its decentralised nature, there would be a grave risk that such regulation would be rather disincentivising and could slow down the innovation efforts of the sub-industry.

However, despite all the challenges DeFi might create for regulators, the worldwide discussion has increased since the industry’s rapid growth.³⁵⁹ For instance, the FATF and some U.S. states and Australia have already published statements and other material regarding the regulatory approach towards DeFi and DAOs, which will be examined below.

5.6.2. FATF

In October 2021, FATF published its updated guidance for a risk-based approach for crypto-assets and CASPs.³⁶⁰ In the publication, FATF provided additional advice regarding the DeFi industry. According to the authority, although DeFi applications are not considered CASPs under the FATF standards,³⁶¹ the updated guidance states that DeFi developers and

³⁵⁷ INATBA 2021, p. 24.

³⁵⁸ DAO is a decentralised autonomous organisation with its operating rules coded in smart contracts, determining what behaviour, actions or upgrades are allowed. Furthermore, the governance of DAOs is usually arranged by having a governance token that gives its owner a percentage of the voting rights of the DAO. *Harvey et al.* 2021, p. 28. More about DeFi governance, see *Harvey et al.* 2021, pp. 35-37, 70, 86-87 & 135-136.

³⁵⁹ For instance, according to Defi Llama (<https://defillama.com/>), the combined amount of total assets locked in DeFi protocols has increased from USD 17 billion to over USD 260 billion in the past twelve months (from 7 December 2020 to 7 December 2021).

³⁶⁰ FATF 2021.

³⁶¹ FATF 2021, p. 27. This is due to the fact that the standards of FATF “do not apply to underlying software or technology.”

maintainers can be considered such in some instances.³⁶² According to some industry participants, this will likely lead to a situation where market participants that extract transaction fees or direct revenue from a protocol that they control will be classified as CASPs. In addition, some more fully decentralised protocols could be covered under some instances as well, but that would require a case-by-case analysis.³⁶³ In addition, the FATF has pointed out that many DeFi market participants commonly call themselves decentralised, “when they actually include a person with control or sufficient influence”.³⁶⁴ In such instances, the CASP definition should be applied.³⁶⁵ Additionally, the guidance proposes that in those occasions where the DeFi platform truly does not have a legal entity running it, countries could require a CASP to be involved for being responsible for the platforms’ obligations.³⁶⁶

As FATF is a task force of money laundering and terrorist financing, it should be noted that these guidelines are produced from that viewpoint. However, this does not mean that there would not be any effects from its guidelines and statements to other areas of the industry as well. Indeed, there have been arguments presented that the FATF’s approach will most likely slow down the development of new DeFi platforms in 2022 and even create legal battles between regulators and blockchain entrepreneurs who have “control or influence” over DeFi protocols.³⁶⁷ In addition, such an approach could also raise the gap between the traditional financial industry and DeFi. Furthermore, this could lead to geographical clusters, with the industry focusing its development on jurisdictions with an open approach towards the new industry. Therefore, it is worth noting that other approaches have been represented as well to resolve these issues.³⁶⁸ To avoid the above-mentioned problems and to ensure both

³⁶² Ibid.

³⁶³ Cointelegraph 2021.

³⁶⁴ FATF 2021, p. 27.

³⁶⁵ Ibid.

³⁶⁶ FATF 2021, p. 28.

³⁶⁷ CoinDesk 2021.

³⁶⁸ See e.g. *Avgouleas – Kiayias* 2020, pp. 16-19, where DLT-systems operate on the basis of access approval once a customer’s identity and origin of funds have been established under Know Your Customer controls. As a difference to traditional financial systems, member firms would distribute costs and expedite customer permission by sharing the through cryptographic techniques and zero knowledge proofs. In addition to efficiency, the approach would also increase customer privacy. See also COALA 2021. In this Model Law, an alternative approach for regulating DAOs is represented. Unlike other presented solutions, COALA aims to create uniformity and legal certainty for DAOs while still accommodating flexibility for further innovation by not imposing formal registration requirements. For instance, the model law proposes that shares recorded on a blockchain-based system could be regarded as valid titles to a share under existing corporate rules and that they could be transferable via a blockchain-based registry. This way, regulators could avoid the administrative burden for drafting a new corporate law, specifically applicable to ‘tokenized’ shares.

investor protection and innovation, a comprehensive mapping of all possible alternatives should be made before establishing any regulations for the whole industry.

5.6.3. *Safe Harbor*

As Australia, and some states in the U.S., some jurisdictions have presented a so-called “safe harbor” -approach for DAOs operating in DeFi. Safe harbors can be described as regulatory provisions specifying that if a person undertakes to comply with specific conduct, it will be deemed not to have violated any specific rules. As the guidance on and lack of rules and regulations regarding crypto-assets do not provide sufficient clarity for those wishing to develop blockchain technologies, safe harbors are one approach that has been represented to govern these issues.

In the U.S., Wyoming has been reported to be the first state to recognise and approve the registration of a DAO. This originates from the SECs Token Safe Harbor Proposal 2.0, represented by Commissioner Hester M. Pierce in April 2021.³⁶⁹ According to the proposal, “[the] safe harbor seeks to provide network developers with a three-year grace period within which, under certain conditions, they can facilitate participation in and the development of a functional or decentralised network, exempted from the registration provisions of the federal securities laws”.³⁷⁰ However, it should be remarked that the safe harbor does not provide a ‘free passport’ for crypto-asset projects but imposes regulatory requirements for DAOs.³⁷¹ On the other hand, the key benefits of this approach include the flexibility to endorse attributes that bring regulatory comfort and immediate clarity and safety to an area of law that was designed long before blockchain technology and crypto-assets were even invented.

Notably, Blockchain Austria has represented quite a similar approach in Australia to the SEC’s proposal. In their promoting document, the organisation notes that “[while] a long-term regulatory framework that is fit-for-purpose will take time, as policymakers seek to understand the issues and develop a considered solution [properly], it does not mean that no

³⁶⁹ SEC 2021.

³⁷⁰ Ibid.

³⁷¹ Ibid. These requirements include (i) semi-annual updates to the plan of development disclosure and a block explorer, and (ii) an exit report requirement with either: (a) an analysis by outside counsel explaining why the network is decentralised or functional; or (b) an announcement that the tokens will be registered under the Securities Exchange Act of 1934.

work needs to be done in the short term.”³⁷² For instance, more specific guidance in areas such as custody, de-banking, taxation and AML/CTF could be provided to enhance consumer and investor protection and promote innovation at the same time.³⁷³ In addition, regulators should increase their resourcing and knowledge by engaging more with industry market participants by establishing a regulator-industry working group.³⁷⁴ Indeed, in October 2021, the Senate Select Committee on Australia as a Technology and Financial Centre released a report including a proposal for legal recognition of DAOs.³⁷⁵

5.6.4. Recapitulation

The analysis of DeFi as a phenomenon shows that the regulatory solutions are not straightforward. However, as the industry keeps growing and developing rapidly, it would be crucial for the EU to follow the development of the crypto-asset industry as a whole. Otherwise, the development will be directed to jurisdictions with a more innovation-friendly approach. As the current MiCA proposal sets forth, the EU aims to represent, *18 months after the date of entry into force of the Regulation*, a report assessing “[the] development of decentralised-finance in the crypto-assets markets and the adequate regulatory treatment of decentralised crypto-asset systems without an issuer or crypto-asset service provider”.³⁷⁶ With this approach, the EU is inevitably already lacking behind on the international development of the DeFi industry. This way, the Regulation initiative will not fulfil its purpose to provide an innovation-supportive environment for the markets of crypto-assets.

³⁷² Blockchain Australia 2021, p. 5.

³⁷³ Ibid.

³⁷⁴ Ibid.

³⁷⁵ See Australia Senate Report 2021. In addition to proposing a regulatory framework for DAOs, the report includes significant reforms to the regulation of aspects of the crypto-asset economy in general.

³⁷⁶ Art. 122a (2a) MiCA.

6. Conclusions

6.1. Confrontation Between Traditional Finance and Crypto

“The Federal Reserve simply does not have the authority to supervise or regulate Bitcoin in any way.”³⁷⁷

– Janet Yellen, former Chairwoman of the Federal Reserve.

Since the financial legislation has been prepared and enacted pre-crypto-assets, the existing regulatory structures can often prove challenging for this phenomenon. A wide range of opinions and views have been expressed on regulatory solutions. For example, Janet Yellen's statement of the lack of U.S. authority to regulate Bitcoin can be mainly ascribed to the crypto-assets decentralised, centrally resistant nature. Indeed, it is a fair question to ask which jurisdiction, institution or authority should have the power and authority to regulate units or market participants whose control is not concentrated on any single entity? According to some, blockchain technology itself is already a phenomenon that, as such, is not suitable for the current regulatory framework and for which a different approach would be needed.³⁷⁸ On the other hand, very opposite views have also been put forward compared to the above. As the FATF report presented in the previous chapter shows, the risk of money laundering is often a concern for public authorities and regulators. Another indication of this concern has been the AMLD5, the first crypto-related piece of regulation in the EU, primarily aimed to cover AML regulations for crypto-assets. In addition, a specific concern that has recently emerged in the public debate is the supervision and regulation of DeFi.³⁷⁹

One thing that often sticks out from the discussion around crypto-assets is the confrontation between traditional finance and the markets of crypto-assets. This is understandable given that some of the objectives of the new industry would lead to the replacement of many traditional financial market players with technology and deprive the monetary policy of the banks that have dominated the financial sector for hundreds of years. However, the

³⁷⁷ Wall Street Journal 2021.

³⁷⁸ See e.g. *Björkenheim* 2021. In her thesis, *Björkenheim* argues that blockchains are not legal subjects under state law, but independent jurisdictions with their own laws and legal processes.

³⁷⁹ The Block 2021.

confrontation has already moved into a slightly grey area where banks may refuse to provide their services to crypto companies.³⁸⁰ At the other extreme, there are crypto-anarchists, who believe that the crypto-asset industry will supplant all traditional financial actors, and no state or authority has the power to regulate the market for cryptocurrencies.³⁸¹ These tensions show that the debate is also polarised in many places, which is why the detection of contradiction is really important for the regulation and future of the cryptocurrency market. It will not lead to an ideal result if the representation of either side in the preparation of legislation is given an unreasonable degree of unilateral influence on regulatory development. Therefore, achieving an optimal outcome should require extensive consultation from both traditional financing and crypto-asset market participants. In addition, regulating the subject with the existing legal frameworks without critical analysis should also be avoided.

6.2. Objectives of MiCA and Conclusions to the Research Question

The purpose of this thesis has been to examine the potential effects of the draft MiCA regulation on the market for cryptographic assets in the EU. MiCA is designed as a regulation, thus binding and directly applicable across the EU in all Member States when entering into force. Due to its wide-ranging impact, the success of the regulation in achieving its objectives is therefore particularly important. As shown in the thesis, MiCA intends to promote the development of crypto-assets by having a legal framework that supports innovation and fair competition, safeguards consumers' rights, and preserves market integrity.

6.2.1. Consumer and Investor Protection

The examination made in the thesis shows that, in general, MiCA would increase adequate investor protection, market reliability and legal certainty for investors in terms of services provided under the scope of the Regulation. The most significant examples of improved investor protection are the increased reliability of custodian services and crypto-asset trading platforms due to the operational requirements MiCA sets forth. Furthermore, the regulation

³⁸⁰ For instance, in Australia, due to the lack of transparency around decision-making of banks in denying banking services to various FinTech businesses, Australian Senate report has recommended a process to be developed for businesses impacted by de-banking, which should involve the Australia Financial Complaints Authority. See Australia Senate Report 2021, pp. 83-115.

³⁸¹ See e.g. The Crypto Anarchist Manifesto n.d.

of crypto-asset issuance and offerings, particularly the obligation to publish a whitepaper when offering a crypto-asset in the EU, can be seen as a remarkable development for closing the information gap between CASPs and investors. Additionally, in general, the critical improvements such as creating a harmonised market abuse regime and harmonising the rules for the industry across the EU can also be seen as improving investor protection, at least in the scope of the service providers who have registered CASPs under MiCA's requirements. However, some problems can be identified as well. For instance, MiCA does not seek to regulate DeFi nor lending and borrowing of crypto-assets, leaving adequate investor protection vulnerable to these sub-industries. Furthermore, it should also be noted that investors can use any crypto-asset services at their own initiative, regardless of whether the CASP would be authorised under MiCA or not. As the industry operates on the internet, the final assessment to ensure the registration and establishment status of the market operators will be left to the investor.

6.2.2. Future for Market Participants in the EU

Regarding the future for market participants, such as CASPs, CAIs, and CAOs, MiCA enables European businesses to have full access to the internal market, providing legal certainty and levelling the playing field for every CASP. However, as addressed in Chapter 4 and 5, the Regulation may have an adverse effect on the newer market players by possibly creating barriers to entry into the market and setting out strict liability requirements. For example, the regulatory requirements for custodian service providers are so extensive, especially regarding liability, that those service providers might not want to provide their services in the EU anymore.

The other problem the thesis points out, is the classification of different types of crypto-assets. This can be divided into two different sub-categories: a) cooperation with the existing regulatory regime in EU, especially with MiFID II, and b) classifications and requirements for stablecoins. Regarding the first-mentioned, the most significant issue is MiCA's interaction with the MiFID II regime when determining whether a crypto-asset including traits specific to financial instruments should be classified to fall into MiCA's scope, or whether it should be classified as a security under MiFID II. Furthermore, this would expose the market participants for regulatory uncertainty, and create opportunities for regulatory arbitrage.

The issues regarding stablecoins can be divided into three separate sub-categories. First, as identified in Chapter 5.4.2 the current categorisation would not help support constituting CAIs on a cross-border basis but would rather set limits upon an innovation that could provide a much-needed solution to the many issues in cross-border payments. Second, the division between ARTs and EMTs is not entirely clear, and it could lead to a situation where these assets could be *de facto* equate to payment instruments, regardless of their primary purported function or use under the proposed Regulation. Furthermore, the Regulations does not seem to take into consideration the fact that some crypto-assets refer to the value of a fiat currency but have their reserve assets consist of other fiat currencies, commodities or crypto-assets. This would also create regulatory uncertainty for such assets, or alternatively be prohibited entirely in the EU. Third, and last of all, there is also a possibility that the thresholds for whether an AMT or EMT would be classified as significant under MiCA can turn out to be unrealistic, given that in the current market, all relevant stablecoins would easily surpass those limits and be qualified as significant crypto-assets. Moreover, the consequences of this might prove to be preposterous for the issuers of such assets, since they would suddenly be obliged to observe additional requirements, e.g. owning capital funds of at least 3 % of the average amount of the reserve assets. In addition, the Regulation might also create regulatory barriers for truly large global stablecoins of global importance. As the IFM has emphasized, crypto-assets are unprecedentedly global and cross-border in nature, which calls for wide-ranging international cooperation in the development phase of regulation.³⁸² Therefore, it would be justified to take into account international cooperation on the regulation of stablecoins when the Regulation initiative was prepared. For example, with MiCA's stablecoin control system and the establishment requirement for issuers of stablecoins, international collaboration can be very challenging concerning developing a global stablecoin. If the EU excludes itself from the global dialogue by setting its own rules, it could, in the worst case, lag in significant developments of the sector.

The numerous issues pointed out above lead to the conclusion that regarding the categorisation of crypto-assets MiCA might not meet its objectives as set out in the initiative in its current forming. This indicates that the Regulation draft should be subject to some

³⁸² IMF 2021, p. 41.

clarifications or changes, or alternatively, a complete reclassification of crypto-assets could be made.³⁸³

However, despite all the practical problems outlined above, the biggest problem with MiCA has proven to be its fundamental approach to regulating the whole market of crypto-assets. What this means in practice is that the attempt to automatically incorporate regulation of new industry into an existing regulatory framework without any level of critical scrutiny or challenging leads to the conclusion that the background preparation work for the legislation is already quite deficient. Furthermore, almost all of the consultations mentioned in MiCA's recitals and other materials have been carried out only with traditional financial market participants. Although the EU legislators did arrange an open consultation after the EC published the first version of the Regulation proposal, it was not even tried to market actively or noticeably to these market participants. First and foremost, this reflects the paradox of regulating the industry: the biggest competitors the whole crypto-asset space is trying to challenge are dictating the preparation of the regulation for the industry. Not only does this call into question the regulatory objectivity, but it also appears to create poorly prepared legislation and create many challenges to the industry. In practice, leaving the already existing market participants out of the public discussion has materialised problems in such a way that some market participants, such as borrowers and lenders, and the whole sub-industry of DeFi, are entirely excluded from the scope of the Regulation. For instance, since only legal entities can issue crypto-assets or provide crypto-asset services, it is unclear how tokens and services generated (i) via an open blockchain network, such as Bitcoin, (ii) through an application, such as a smart contract, or (iii) by a DAO may be construed. This not only weakens the position of market participants but also effectively would lead to more fragmented markets. As many other jurisdictions are already examining the opportunities and different approaches to resolve these matters, the EU seems to be inevitably late from the industry's innovation-oriented regulatory development.

³⁸³ As an example, ESMA has proposed an alternative approach, where MiCA could be re-assessed such that all crypto-assets that are neither ARTs or ERTs are included in a revised MiFID II, but subject to different and less restrictive regimes defined by carefully crafting proportional exemptions from several requirements. See ESMA 2019.

6.3. Alternative Approaches to Resolve the Regulation Paradox

To address the problems outlined above, a brief review of alternative approaches is necessary. As a first option, based on the issues identified in this thesis, the regulation of the phenomenon is proposed to be divided into individual, smaller parts. This would not only prioritise the regulation of general policies and procedures for industry to ensure investor protection in the first place, but it would also save resources on background studies regarding other regulatory work. In addition to general procedures, the regulatory areas could include (i) the classification, issuance and provision of crypto-assets to the public, (ii) the regulatory approach on stablecoins, (iii) the legal personality of DAOs and legal approach on DeFi, and (iv) specific operational requirements for all market participants, including DeFi and lending and borrowing of crypto-assets.

Alternatively, a fully dedicated working group could be set up to develop an entirely new system and infrastructure. The group would consist of the best professionals, different market participants, scientists and jurists. The task would be to identify regulatory needs and possible approaches in the sector, identify challenging areas, and propose solutions. Then, based on the working group's report, an inventory would be made of the best option for regulating the sector as a whole.

Regardless of the result, either of these approaches would guarantee better law-making, a more objective approach to solving the regulatory problems, and broader international cooperation than the current draft version of MiCA. However, this would require politicians to make quick decisions and improve things. Even if MiCA becomes the world's first comprehensive crypto-asset law, it may not in practice achieve the intended results and, at worst, will only be detrimental to the industry's pro-innovation development.

6.4. Future Research

Finally, it is worth creating an overview of the future. First, as the thesis has pointed out, the lack of regulation of crypto-assets is sensitive to creating new legal problems when the first ones are even considered. The issues raised include the legal division between crypto-assets covered by MiCA and securities covered by MiFID II. Secondly, before the possible entry into force of MiCA, a comprehensive study on how the regulation fits in with all other EU legislation should be made. A brief review of the MiFID II regulation has already shown

ambiguities, so a more comprehensive analysis would undoubtedly be needed to ensure regulatory certainty.

Other relevant research topics include the regulation of stablecoin, especially on a global scale, and fundamental regulatory issues related to DeFi and DAOs.

At last, it should be noted that in spite of everything covered and represented in this thesis, the crypto-asset industry as a whole is only at such an early stage in its life cycle that its future is impossible to predict. In probably 50 years, we will be a lot wiser about what kind of solutions should have been made today. However, it is our job to make the best possible decisions from the current point of view, even though it is not always straightforward around such a politically tense topic. Money is often perceived in modern society as the most remarkable instrument of power, so it is no wonder that finding common solutions is not always easy.