UDC: 336.74:004.031.4(4-672ЕУ)

DOI: https://doi.org/10.46763/BSSR24242407b

NAVIGATING THE FUTURE OF EU'S DIGITAL FINANCE AND OPEN FINANCIAL STRATEGIC AUTONOMY THROUGH STRATEGIC REGULATORY MANAGEMENT

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Abstract

The rapid evolution of crypto assets and the underlying blockchain technology has significantly transformed global financial markets. Cryptocurrencies have demonstrated high volatility and are mainly used for speculative activities rather than financing the real economy. Stablecoins, introduced a decade ago as a stable alternative to volatile cryptocurrencies, are currently used for crypto trading and enable fast peer-to-peer and cross-border payments. With the rise of decentralised finance (DeFi), they have become essential in providing liquidity within the crypto ecosystem. However, concerns about their stability are accompanied by various potential risks of misuse.

This paper discusses the complexities surrounding crypto assets and their implications within the EU, placing particular emphasis on stablecoins. It focuses on the regulatory landscape shaped by the MiCA Regulation, which aims to harmonise the fragmented European crypto regulatory environment and address the complexities introduced by new digital financing methods. It emphasises the necessity for robust regulatory oversight to mitigate risks associated with price volatility, market manipulation, and potential misuse of digital currencies in illicit activities.

Drawing on a qualitative analysis of secondary sources, the paper argues that the EU's MiCA Regulation provides a benchmark regulatory framework for the meticulous monitoring of operational resilience of financial sector. More specifically, it asserts theoretically that the EU is guiding the regulatory

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environment for European crypto assets – particularly in terms of stablecoin provisions – as a safeguard buffer for financial stability. Furthermore, the paper discusses the strategic importance of enhancing Europe's financial autonomy in response to geopolitical tensions and the growing influence of non-European financial institutions. By advocating for a balanced approach that fosters innovation while ensuring regulatory rigor, the paper underscores the need for comprehensive frameworks that promote transparency and accountability within the digital finance ecosystem.

Keywords: *stablecoins, crypto assets, digital finance, European financial regulation, MiCA, open strategic autonomy*

1 INTRODUCTION

Crypto assets are generally, digital records of values or entitlements which are stored and exchanged electronically. Their existence and operations are based on, supported by and dependent on digital ledger technology (DLT) or what is more commonly referred to as a blockchain. Understanding crypto assets requires a dive into their underlying technology which makes it more complicated due to their high-tech nature (Yaga et al., 2018). However, omitting this phase could result in significantly underestimating the risks and potential threats to financial markets that can come out from coupling with financial complexities and could create a potential risk to financial stability.

Blockchain technology has contributed to considerable shifts on the global financial markets and their participants. The new technology has brought in new market players to financial markets, i.e. Fintechs. Although Fintech is a broader term that stands for innovative technologies in the financial sector, it is often used to describe financial start-ups that, due to their innovative technologies, have the potential to have a disruptive impact on financial markets, by cutting out the traditional financial intermediaries, e.g. banks, stock exchanges. While, Fintechs, and especially BigTechs were somewhat pompously presented as a disruptive force that will reshape the financial ecosystem as we know it, the reality of market developments, up to now, has not been all that melodramatic. It did include both the elements of revolution, in a sense of new, faster and more convenient financial services available to consumers as a result of technological advancements and more competition on the financial markets, as well as evolutionary components, meaning that in many areas Fintech start-ups and incumbent industries ended up collaborating. Finally, this combination of competition and collaboration in the private sector

had a spillover effect on the regulatory sphere. Regulatory innovation, pioneered by the UK's Financial Conduct Authority (FCA), has advanced the financial regulatory governance model by introducing new methods of cooperation between the private sector and their supervisory authorities on the regulatory matters, namely innovation hubs and regulatory sandboxes.

The regulatory framework for crypto assets is rapidly progressing. In recent years, the approach of regulators towards crypto assets has been characterised as "ad-hoc, rhetorical or driven by enforcement in some instances" – compared to the post-Facebook's Diem/Libra shift of regulatory dynamics in which – "the race to regulate is now underway" (Hammond and Ehret, 2022, p. 3). Given the global financial reach of crypto assets, there is a necessity for enhanced legal definition and uniformity, which can be achieved through coordinated international policy and regulatory efforts (Financial Stability Board and International Monetary Fund, 2023; International Monetary Fund, 2022).

Before the introduction of MiCA, i.e. the Regulation on the Markets in Crypto-assets (MiCA Regulation, 2023), the European crypto regulatory environment was often characterised as highly fragmented and uneven (CMS, 2023; Hammond and Ehret, 2022). A significant regulatory challenge for future harmonisation of the crypto assets regulatory ecosystem lies within the legal qualification of crypto assets. More specifically, a national transposition of the MiFID II directive resulted in the divergent adoption of the definition of financial instruments in EU Member States (ESMA 2024, 2019), making achieving upcoming regulatory synchronisation throughout the EU more demending. Adding to the regulatory complexity, financial markets are naturally not standing still. On the contrary, the fast-evolving crypto space is reshaping through new-fangled development of decentralised finance (DeFi), which aims to further enhance peer-to-peer financing (ESMA, 2023). DeFi will certainly be a part of the already required MiCA 2.0 regulatory agenda, although the present timeline for MiCA has transitional period for certain measures extended until July 2026 (ESMA, 2023a, p. 2). Nevertheless, MiCA is considered an important regulatory milestone, that addresses not only crypto asset service providers but also emerging categories like stablecoins, which aim to enchance stability in the crypto market.

The purpose of this paper is twofold, first, to contribute to the digital financial literacy by raising awareness and discussing new financial innovations and changes these innovations are generating in the financial ecosystem, and second, to discuss the importance of strategic European policies in achieving open financial autonomy while embracing a regulatory approach for safeguarding European financial stability. The research for this paper was based on a qualitative analysis of secondary sources, i.e. relevant reports and case studies produced by financial authorities and international financial standard-setting bodies.

The paper is structured as follows: the introduction provides an overview of developments in digital finance and the initial regulatory responses, while Section two delves into crypto assets and market trends. Section three outlines the EU's strategic policy and regulatory approach to digital finance. Section four examines the stability of stablecoins and addresses open issues related to maintaining the stability of European financial markets during digital transformation. Section five takes a deeper look into broader issues concerning digital finance, providing crucial context for the EU's strategic focus on achieving open financial strategic autonomy. Finally, Section six provides the conclusion.

2 THE RISE OF CRYPTO ASSETS AND MARKET DEVELOPMENTS

Cryptocurrencies, pioneered by Bitcoin, are the most well-known types of crypto assets. Bitcoin was designed by Satoshi Nakamoto at the end of 2008 and presented in a whitepaper "Bitcoin: A Peer-to-Peer Electronic Cash System". The idea was to create a digital currency on an alternative and innovative payment platform, in order to process electronic payments and enable more efficient and cheaper peer-to-peer financing without the need for financial intermediaries such as banks or clearing institutions for authorising a transaction (Nakamoto, 2008).

The introduction of new digital financing was not without its critics. Renowned economists such as Paul Krugman, Joseph Stiglitz and Stephan Roach raised concerns and voiced criticisms about its potential impacts, labelling Bitcoin as unstable and an unreliable store of value and potentially a very hazardous speculative bubble (Cavusoglu and Goksel, 2019, p. 46). ECB's Fabio Panetta (European Central Bank, 2022) warned that the crypto market has already surpassed the size of the sub-prime mortgage market which triggered the 2007-2008 global financial crisis. Somewhat ironically, the rise of the popularity and expansion of crypto currencies occurred alongside the aftermath of the global financial and Eurozone crises, during which there was a decline in trust towards banks and the broader financial system. The trend was further accelerated during the COVID-19 pandemic, which hastened the transition towards digital payments (Saka et al., 2021). Additionally, surveys report that investors incorporate crypto assets into their portfolios to diversify their investments (Angeloni, in Beck et al., 2023, p. 31).

Since their introduction, crypto assets have evolved into a comprehensive ecosystem. For example, in 2022 this enormous emerging market had over 16,000 cryptocurrencies trading on over 400 exchanges, with a daily trading volume exceeding 275 billion USD (Hammond and Ehret, 2022, p. 2). However, the crypto market is highly concentrated, both in terms of traded assets and trading platforms. The majority of transactions take place internally. As a result, and in contrast to the traditional financial system, the crypto market is not used for financing the real economy, but rather for speculative purposes. Most crypto assets are unbacked and have a high price volatility, with high-

profile peaks and crashes, often accompanied by hacker attacks and market frauds. For instance, in 2021 the crypto market experienced annual growth of 300%, with its total value estimated at almost 3 trillion USD at the end of 2021, which then fell back by half within just three months in 2022. This "crypto winter" of 2022, 2023 was followed by a recovery year for crypto assets (ESMA, 2024a and 2023). Chainalysis' 2024 Crypto Crime Report estimates that crypto scamming and hacking revenues reached approximately 24 billion USD in 2023. However, the actual amount is likely higher since, for example, updated estimates for 2022 nearly doubled the initial figures, including creditors' claims against the failed third-largest cryptocurrency exchange, FTX, for fraudulent activities (Chainalysis, 2024, p. 3-4).

In 2023, Central, Northern, and Western Europe ranked as the second-largest cryptocurrency economy globally, following North America, and accounting for almost 18% of global transaction volume, with an estimated 1 trillion cryptocurrency value received. The U.K. is the biggest crypto economy in the region, followed by Spain, France, Germany, Italy and the Netherlands. Meanwhile, France's crypto hub in Paris has been thriving, e.g. Société Générale secured France's first crypto license in June 2023 to enhance custody, trading, and sales for its institutional clients. Additionally, major players in the crypto business, e.g. Binance, Crypto.com, and Circle have selected Paris to be their European headquarter (Chainalysis, 2023, p. 30-39).

Crypto assets still have a very small market presence compared to traditional finance, e.g. the total market value of all crypto assets accounts for approximately 0.8% of the EU's financial sector. At the beginning of 2021, several EUR-referenced reserve-backed stablecoins appeared. However, they hold a very small market share, e.g. in March 2023, the combined market capitalisation of the three largest EUR-referenced stablecoins (EURT, EURS, and CEUR) compared to the two largest USD-referenced stablecoins (USDT and USDC) amounted to 0.35% of the USD stablecoins' market capitalisation (European Systemic Risk Board, 2023, p. 13-14). According to the ECB, in the EU, services associated with stablecoins primarily involve acquiring, holding, or selling them through various methods. However, options for using stablecoins for purchases at merchants remain quite limited (Adachi et al, 2022).

Stablecoins were developed a decade ago as an alternative to volatile cryptocurrencies, i.e. with a goal to create a more durable digital asset and to offer a reliable monetary and payment instrument (Arner et al., 2020, p. 5-9). Presently, stablecoins account for around 7% of the cryptocurrency market by market capitalisation with daily trading volume exceeding 90 billion USD (Coincodex, April 2024). The largest stablecoins include: Tether, USD Coin and Dai. The stablecoin market is also highly concentrated, with Tether dominating this segment, representing approximately 70% of total market value and occupying between 80% to 90% stablecoin trading volume (ESMA 2024a, p. 8).

Originally, stablecoins primarily served as a link between official currencies and crypto assets, offering a "safe space" to mitigate crypto volatility. Currently, stablecoins serve various purposes, e.g. crypto asset trading, enabling swift peer-to-peer and cross-border payments, and assisting major banks with management of institutional liquidity. Moreover, with the emergence of decentralised finance (DeFi) applications, stablecoins have evolved into essential components of the crypto-asset ecosystem, acting as liquidity providers within DeFi. Research suggests that stablecoins could bring potential benefits in areas such as financial inclusion, markets with tokenized financial instruments and next-generation innovations such as Web 3 (European Commission, 2020c, p. 25-29; Adachi et al, 2022; Liao and Caramichael, 2022, p. 6-9; Ho et al., 2022, p. 7-15). However, they also raise numerous concerns related to potential misuse in the areas such as money laundering, bribery, terrorism financing, as well as risks concerning operational resilience of financial institutions and financial stability, all of which emphasise the need for their meticulous regulation, supervision and adequate international oversight co-ordination.

3 DIGITAL FINANCE PACKAGE – MANAGING EUROPE'S CRYPTO ASSETS REGULATORY LANDSCAPE

The EU's crypto asset regulation is part of the ongoing transformation process of digitalisation in the financial industry. Starting in early 2018, the European Commission has put forward a FinTech action plan as a segment of the ongoing Capital Markets Union implementation program aimed at enchancing integration within European financial markets (European Commission, 2018). Subsequently, the policy making itinerary encompassed, among other things, a broad public consultation on crypto assets and digital operational resilience initiated at the end of 2019, which resulted in a comprehensive Digital finance package divided into two strategies, proclaimed in September 2020.

To start with, the Digital finance strategy is focused on achieving a fully integrated European financial market for digital operations to boost Europe's competitiveness position, while supporting other EU policies (e.g. energy, sustainable finance). The ambition of an accompanying comprehensive rulebook is to provide legal clarity and legal certainty suitable for the digital age. It aims to boost the competitive landscape and market efficiency between incumbent industries and Fintech start-ups, while ensuring a level-playing field, consumer protection and financial stability (European Commission, 2020). Specifically, MiCA addresses certain types of crypto assets and establishes criteria for crypto assets service providers, including entities issuing crypto assets and firms providing services related to crypto assets, e.g. custody, exchanges, security related services (MiCA Regulation, 2023). Accompanying MiCA is DORA (Digital Operational Resilience Act – DORA Regulation, 2022) which was enacted in January 2023, but will be applied starting in January 2025. It aims to strengthen IT security of the financial institutions and

ICT third-party service providers against cyber-attacks or other ICT-related risks and threats that could cause severe operational disruptions.

The second part of the Digital finance package – a renewed Retail payments strategy (European Commission, 2020a, p. 3) focuses on digitalisation and open strategic autonomy in financial services through reducing reliance on non-European players, i.e. card-based payments managed by big global financial players (e.g. Visa, MasterCard). Parallel to that, the European Payment Initiative was launched by 16 major European banks from five countries with a goal of creating a pan-European payment solution, which gained the support of both the Commission and the ECB (European Commission, 2020b; European Central Bank, 2020). Building on the already existing SEPA (Single Euro Payments Area) credit transfers, the EU has upgraded its regulatory framework with the Instant Payments Regulation that has entered into force as of April 2024 and is designed to ensure 24/7 money transfer within 10 seconds. Furthermore, the second Payment Services Directive (PSD2), which was adopted in 2015 introducing, among other things, open banking to enhance competition and innovation in payment services, has been reviewed (European Banking Authority, 2022; European Commission, 2023) and is currently in the legislative pipeline as a part of the payments and electronic money services legislative proposal (European Commission, 2023a). Additionally, the Eurosystem is dedicated to leveraging the benefits of the impending digital euro to improve retail payments solutions within the euro area and amplify the pan-European payment solution (European Central Bank and Eurosystem, 2023, p. 3-4).

4 SAFEGUARDING STABILITY OF EUROPEAN FINANCIAL MARKETS – KEEPING AN EYE ON STABLECOINS

Prior to MiCA, some classes of crypto assets, that qualified as financial instruments, were governed by the existing EU legislation, i.e. EU securities law (e.g. MiFID, MAR). MiCA addresses three types of crypto assets: asset referenced tokens, e-money tokens and other varieties of crypto assets including utility tokens, while others fall outside the regulatory scope, e.g. digital currencies issued by central banks or other crypto assets not being used by the financial industry (MiCA Regulation, 2023, Preamble, points 10, 13, 18). For the purposes of this paper, these crypto assets shall be categorised into two groups: unbacked digital assets (e.g. Bitcoin, Ether, etc.) and asset backed crypto assets – referred to as stablecoins, that are backed either by a single currency (e-money token) or a basket of assets (asset referenced token).

Stablecoins were developed as an alternative to volatile unbacked digital assets, with a goal to create a safer digital asset. From a compliance perspective, in addition to customary requirements for crypto asset issuers (e.g. white paper, licencing regime, disclosure, etc.), stablecoins require further obligations on stabilisation mechanisms.

One of the most recognisable examples of stablecoin is Facebook's discontinued Diem project (formerly known as Libra). Initially, it was conceived as an asset referenced token, backed by a mix of bank deposits in different currencies and US Treasury securities. Although technically based in Switzerland, with a consortium of nearly 30 founding companies and non-profit organisations, including prominent entities such as Visa, MasterCard, eBay, Uber and Vodafone, it was still perceived as a Facebook-led venture. This perception fuelled concerns over its scalability and influence, leading to consistent rejections by U.S. financial authorities. The aftermath of such a high-profile case resulted in raised awareness of crypto market significance and a sense of urgency for their regulation (Murphy and Stacey, 2022; Arner et al., 2020, p. 9-13).

As a direct reaction to Facebook's Diem/Libra, MiCA differentiates between stablecoins and significant stablecoins. Policy analysts at the European Commission's DG FISMA (Financial Stability, Financial Services and Capital Markets Union) observes that "MiCA has introduced particularly stringent rules for so-called stablecoins" (Guedel and Sciascia, in Beck et al., 2023, n. 5, p. 17). In some respects, significant stablecoins also represent a defence mechanism for safeguarding the European monetary sovereignty, and financial stability, by keeping them "European" and under the domain of European supranational authorities. Translated into a regulatory act, MiCA imposes additional regulatory requirements for issuers of significant stablecoins, including: higher capital requirements, interoperability requirements and liquidity management policy, i.e. in case they meet or are likely to meet certain criteria qualifying them as significant, e.g. a large customer base, a high market capitalisation, a large number of transactions. Additionally, supervision of issuers of significant stablecoins has been assigned to the EBA – European Banking Authority (MiCA Regulation, 2023, Preamble, points 59, 102).

Converting back to economic policy drivers and providing context to the EU regulatory agenda, it is currently not profitable to introduce an "independent / substantial" stablecoin in the EU, due to high operational costs that are imposed by MiCA's regulatory requirements. As Eilis Ferran remarked, "regulation, in its narrow rule-making sense, is a favoured EU policy tool" (Ferran, 2004, p. 9). The EU has, through MiCA, successfully implemented a safeguard clause, i.e. a barrier to entry for stablecoins with the scalability potential of Facebook's failed Diem/Libra. In practice, it is not "that difficult" to fall within the classification of the significant stablecoin for conglomerates such as BigTech or financial consortium (for the list of criteria classifying asset-referenced tokens/e-money tokens as significant asset-referenced tokens/e-money tokens, see specifically Chapter 5 of Title III and Chapter 2 of Title IV, and in particular articles 43 and 56 of the MiCA Regulation, 2023). Once classified as significant, it triggers specific additional obligations, i.e. compliance costs that, from a business perspective, place private sector issuers at a competitive disadvantage in the European market by raising their operational costs

compared to the costs of issuing and running a potential alternative, e.g. digital euro or other digital currencies issued by non-Eurozone central banks still in the prototyping stage within central banks (European Central Bank, 2020a; Sveriges Riksbank, 2018 and 2024; Danmarks Nationalbank, 2022 and 2017).

The aforementioned analysis suggests that MiCA is also promoting European interests through reinforcing its monetary sovereignty by preserving and strengthening the international role of the euro (European Commission, 2018a). Nevertheless, MiCA's goal of safeguarding financial stability is equally important – a cautious regulatory approach is additionally beneficial because the stablecoins track record hasn't been as stable as the name suggests.

4.1 STABILITY OF STABLECOINS

The price volatility of reserve-backed stablecoins, which promise redemption at par, is far higher than it should be, namely zero.
European Systemic Risk Board, 2023

Tether, the largest stablecoin in the market, holding around 70% of the market share, grew from a value of 14 billion USD in 2020 to currently exceed 110 billion USD (CoinMarketCap, April 2024). In 2021, Tether agreed to settle for a fine in the amount of 18.5 million USD in New York for misleading the market about its US dollar reserves and failing to properly report the transfer of 625 million USD in assets to the digital trading platform Bitfinex. In 2021, Tether's leverage was estimated at 383-to-1, which means it would have been incapable of redeeming all of its tokens if it suffered a mere 0.26% in losses (Economist, 2021).

Typically, stablecoins have a one-to-one value ratio with the currency they are pegged to, which means they are "valued" but not exclusively backed with fiat currency. Tether's business model is set up so that customers can exchange one US dollar for one unit of Tether in their digital wallets and use it for crypto asset trading. In principle, customers can exchange their Tethers back to US dollars on 1:1 ratio, provided that the entity issuing the crypto asset, in this case Tether Holdings Ltd., maintains solvency and possesses sufficient capital reserves to fulfil its financial commitments. At the beginning of 2019, Tether changed its one-to-one promise, declaring: "Every Tether is always 100% backed by our reserves, which include traditional currency and cash equivalents and, from time to time, may include other assets and receivables from loans made by Tether to third parties, which may include affiliated entities." (Faux, 2021, p. 12). Tether's current reserve assets consists of the following: cash and liquid assets similar to cash, US government bonds, money market funds, bitcoin, gold and various other financial assets (Polizu et al., 2023, p. 3).

Stablecoins face various market related risks, e.g. market volatility and liquidity levels, technology related risks, regulatory uncertainties, and loss of confidence. Research shows that one of the primary risks associated with

stablecoins is the variation from their fixed rate, i.e. deviation from the pegged value. It also indicates that stablecoins face different kinds of vulnerabilities since they are backed by different types of collateral and reserve management practices (ibid., p. 6-21; Adachi et al, 2022). In a way, a case of depegging of the second largest stablecoin USD Coin (USDC) was somewhat paradoxical, since each token (unlike Tether's) was backed by cash and short-term US government bonds held exclusively in US banks, with market capitalisation above 33 billion USD (CoinMarketCap, April 2024). Principally, the crises initiated in the banking sector, specifically the collapse of three US banks: Silicon Valley Bank (SVB), Signature Bank and Silvergate Bank, in March 2023, resulted in a 13% drop in the value of USCD from its 1 USD peg. The stablecoin only regained its footing following the FED's declaration that it would back the banks' creditors. Despite the recovery, USDC saw a 50% reduction in its market capitalisation in the subsequent months (Polizu et al., 2023, p. 4-5; Bank for International Settlements, 2023, p. 14-15). Convincingly, the BIS Report forewarns: "These events demonstrated that it is likely not possible to develop truly stable stablecoins, i.e. stablecoins that can maintain their peg against all circumstances, even if they invest mainly or exclusively in safe assets" (Bank for International Settlements, 2023, p. 15).

The aforementioned case also demonstrates the interconnectedness with the traditional financial system. First, the stablecoin ecosystem relies on traditional finance to "licence" and endorse its business model. Second, connections could be further amplified through banks providing credit and custodial services to clients with crypto exposures. Furthermore, there may be both direct and indirect crypto asset exposures, e.g. entities might have a net-asset position in the crypto system coupled with a net-liability in the traditional system or vice versa. Next, various financial investors, including family offices, hedge funds and asset managers may raise their investment stakes in crypto assets. Also, turning ownership claims on stocks and real estate into digital tokens could further expand the crypto market thereby intensifying the nexus between the traditional financial system, and the crypto system, which could lead to significant systemic relevance (Bank for International Settlements, p. 14-15; ESMA, 2022, p. 9-11; Chimienti et al, 2019).

Volatility risks on the stablecoin market increase with high-tech complexities. Apart from the typical stablecoins, which strive to preserve a stable value by being anchored to a currency or a basket of assets, i.e. a real-world asset (RWA), algorithmic stablecoins employ algorithms and smart contracts to autonomously adjust and retain their value in order to keep their peg (Financial Stability Board, 2020, p. 7-10). The collapse of two algorithmic stablecoins, namely Iron in 2021 and UST (TerraUSD) in 2022, points to technological and design flaws, i.e. fragilities in the foundations of this type of stablecoins which both suffered from a "liquidity pool attack". In the case of UST, which was the worlds' fourth-largest stablecoin, the attackers on the stablecoin made over 800 million USD in profits, while the UST collapse triggered losses on the crypto

market of over 400 billion USD in terms of market capitalisation, converting "stable" to volatile (Briola et al., 2023; ESMA, 2023, p. 8).

Additionally, the IMF and BIS warn of the risks associated with the rise of stablecoins tied to foreign currency in emerging markets due to their inadequate regulatory and supervisory frameworks. The transition from foreign exchange deposits to foreign exchange denominated stablecoins results in capital flowing out of the local banks of developing nations, into reserves managed by custodians located in advanced economies. Such capital outflows could lead to increased volatility of the local currency and consequently present a threat to financial and macroeconomic stability of the emerging economies. Furthermore, there is a higher risk of targeting emerging economies for illegal financing activities such as money laundering and terrorism financing (Adrian, in International Monetary Fund, 2024; Bank for International Settlements, 2023, p. 15-16).

5 NAVIGATING THE FUTURE OF EU'S DIGITAL FINANCE AND OPEN FINANCIAL STRATEGIC AUTONOMY

5.1 SOME FURTHER OUTLOOKS AND CHALLENGES OF DIGITAL TRANSFORMATION OF FINANCE

Central bank digital currencies (CBDCs) might offer a practical solution to stabilise value amidst rapidly changing cryptocurrencies and the growing influence of BigTechs in payment systems. CBDCs could provide a more secure digital financial alternative, enhancing monetary sovereignty and improving cross-border payments. Presently, there are four countries that have officially fully launched CBDCs, the Bahamas in 2017, Zimbabwe and Nigeria in 2021 and Jamaica in 2023, while CBDCs have also been piloted in several cities or regions in more than 20 countries worldwide, including India, China, Turkey, Hong Kong (CBDC Tracker, May 2024). Research indicates that in developed economies, the primary motivations for central banks to introduce CBDCs include enhancing safety and integrity of the domestic payment system, i.e. ensuring the security of digital payments, reducing costs, and facilitating the efficient operation of both retail and wholesale payments, along with promoting financial stability (Boar and Wehrli, 2021 in Auer et al., 2022, p. 703).

However, as the BIS study pointed out, "it is an open question whether central bank digital currencies and other initiatives could in fact provide more effective solutions to fulfill the functions that stablecoins are meant to address" (Arner et al., 2020, p. 1). They find it challenging for CBDCs to integrate seamlessly with emerging decentralised financial platforms. While stablecoins are a type of a cryptocurrency, CBDCs are not. They represent a digital version of a nation's legal tender and are backed by the central bank. When implemented on private blockchains and governed by the country's monetary policy, CBDCs

do not possess the typical "crypto" features such as decentralisation, immutability and anonymity.

International financial institutions, e.g. the BIS advocate for public-private initiatives, such as retail fast payment systems (FPS). They believe these systems offer a complementary payment option with reduced transaction fees while keeping payment and settlement risk well-regulated (Arner et al., 2020, p. 17-22). In support of this perspective and countering assertions regarding the "superiority" of stablecoin technology over the traditional payment system, the Federal Reserve Bank of Boston discovered that during its testing of a central bank digital currency, a non-blockchain payment technology achieved ten times the transaction capacity of a high-performance blockchain solution. The results indicated that non-blockchain technology was capable of processing 1.7 million transactions per second, whereas the high performance blockchain technology managed only 170,000 transactions per second (Adachi et al., 2022). The previously stated points are intricately connected and aligned with the EU's strategic initiative to promote a pan-European instatnt payment solution and reduce its dependence on non-Europeans financial institutions.

5.2 NAVIGATING THE "OUTER BANKS" FOR EUROPEAN FINANCIAL STRATEGIC AUTONOMY

Digital finance provides innovative methods for more direct allocation of funding to businesses, which is particularly vital for start-ups and SMEs that drive innovations and economic growth. Promoting the digital transformation of financial services, therefore, aligns with the EU's goals of deepening financial market integration and bolstering the objectives of the Banking Union and Capital Markets Union. Digital Finance Strategy for the EU emphasises that, "a strong and vibrant European digital financial sector would strengthen Europe's ability to retain and reinforce our open strategic autonomy in financial services and, by extension, our capacity to regulate and supervise the financial system to protect Europe's financial stability and our values" (European Commission, 2020, p. 4).

Nevertheless, geopolitical disruptions are increasingly navigating away from the, until recently, dominant and mainstream, economic paradigm of open and multilateral international economic systems, which represents the core of the EU's strategic political and economic orientation. According to a study by the ECB, the euro area has become not only more financially open than either the U.S. or China, but also more open than the average advanced economy. In the last decade, external asset and liability positions in the euro area have averaged nearly 480% of GDP, compared to 320% in the U. S. and 170% in China (including Hong Kong). Additionally, during the past two decades, China has acquired certain European firms and strategically vital infrastructure, such as robotics and ports, while also contesting the EU's authority over its digital policies, including 5G telecommunications and data privacy regulations (European Central Bank, 2023, p. 10-11, 57-58).

Embracing the new circumstances, key questions arise: To what extent does the EU's financial openness and interdependence pose a source of potential vulnerability? What implications might the new shifts in global power and geopolitical tensions have on the EU's capacities to independently navigate its financial regulatory and supervisory framework in a way that protects "Europe's financial stability and values"? The clear solution focuses on reducing the EU's reliance on non-EU financial entities in areas that are strategically vital for the EU's financial independence and economic resilience.

This involves enhancing Europe's self-reliance in payment systems and reinforcing the international role of the euro across crucial economic sectors such as foreign exchange markets, energy, raw materials, agricultural and food commodity trade, and transportation (European Commission, 2021 and 2018a). However, the European payment landscape remains fragmented and heavily dependent on non-European entities, with card-based payments making up 64% of all electronic transactions issued within the euro area. Additionally, 65% of euro area countries depend on non-European card providers due to the lack of national card schemes, which stifles competition and disrupts a level playing field. Therefore, the EU is actively pushing for "home grown" pan-European instant payment solutions through the European Payments Initiative, enhancing it with the digital euro to improve availability for peer-to-peer, point-of-sale, and e-commerce transactions (Cipollone, in European Central Bank, 2024).

EBA's study on EU dependence on non-EU entities in the banking sector showed that, aside from the previously noted reliance on payment services, the EU financial system does exhibit certain dependence on services provided by non-EU entities, including settlement services and investment banking activities. In 2021, non-EU entities held an average market share of 12.2% of total assets in the EU. This concentration is primarily seen in a few EU Member States: Germany, France, Ireland, and Luxembourg. The parent banks originate from approximately 40 different countries, with over half coming from the U.S., the U.K., Switzerland, Japan, and China. Their business focus is primarily centred on wholesale banking, clearing and settlement, and investment banking services, while their exposure to EU households is relatively limited (European Banking Authority, 2022a).

While the EBA's study indicated that, overall, the foreign exposures do not raise concerns at the aggregate level, fostering competitive EU-based capabilities in the specified areas will be advantageous for strengthening the EU's financial market infrastructures and the resilience of the EU banking sector. Some foreign banks benefit from much more extensive domestic markets and, as a result, tend to be more profitable than euro area banks, which remain segmented by national borders and have seen slow progress in cross-border integration. For instance, U.S banks outperformed their European counterparts, with a return on equity of 7.5% from 2008 to 2020, compared to just 2.1% for euro area banks. The digitalisation of the EU banking system, along with other operational improvements, could encourage cross-border

integration, narrow the profitability gap and ultimately reduce risks from asymmetric shocks in the euro area through enhanced cross-border risk sharing capabilities (European Central Bank, 2023, p. 66).

The competitiveness of the European capital markets is lagging behind those of other regions, particularly the U.S., where risk capital availability is about ten times higher (0.044% of GDP in the EU vs. 0.633% in the U.S.). This limits support for young, innovative companies, particularly in private equity and large-scale financing, which is crucial for fostering innovation and strategic autonomy. Moreover, euro area banks have a limited role in capital market services, with foreign banks accounting for approximately 45% of bond issuance activities for non-financial corporations in 2021, and non-euro area institutions handling 48% of initial public offerings. This heavy reliance on foreign entities for essential capital market services poses risks to the euro area's strategic autonomy (ibid, p. 66-68).

International currency status is crucial for strategic financial autonomy, reducing vulnerability to external shocks. The euro's international position remained stable from 2010 through the pandemic, despite a gradual decline since the mid-2000s. By 2022, it lagged behind the USD in most metrics of international currency standing, including global payments, but it remains the second most significant currency in the global monetary system. The digital euro, although still developing, could enhance EU strategic autonomy by strengthening retail payments and providing resilience against geopolitical risks, ensuring stable and secure payment systems (Alcidi et al., 2023, p. 54-61).

Innovation in Europe's financial system relies heavily on non-EU companies, with foreign Fintech and BigTech firms entering the market through payment licenses. Europe represents only 6.3% of global tech market capitalisation, compared to 70% for the U.S. and 18% for China. The dominance of U.S. and Chinese tech firms in retail payments could lead to a more concentrated EU market, increasing systemic risks from operational failures or cyberattacks. Additionally, the complexities of the crypto ecosystem also pose significant risks, including concentration among a few large, often non-EU crypto service providers and opaque linkages within the ecosystem. The rise of decentralised finance could enable unregulated lending and borrowing, while the market's volatility and increasing connections to European financial players raise concerns about payment system stability and potential illicit activities (European Central Bank, 2023, p. 68-71).

As the EU strives to fortify its financial independence and foster a more competitive landscape in digital finance, the emergence of cryptocurrencies and blockchain technologies introduces a complex interplay of both opportunities and challenges. Although the European banking landscape is striving for digital transformation to reduce reliance on foreign financial entities, it faces significant challenges due to its dependence on non-EU players in payment

systems. This excessive reliance could pose a potential threat to the EU's financial stability, particularly in light of rising geopolitical tensions that further exacerbate vulnerabilities. In this context, cryptocurrencies could theoretically emerge as a potential solution. By providing decentralised and borderless payment capabilities, they have the potential to reduce the EU's dependence on foreign payment infrastructures, thereby enhancing the European financial autonomy in an increasingly interconnected global economy.

6 CONCLUSION

The rapid evolution of crypto assets and the emergence of blockchain technology have undeniably reshaped the landscape of global financial markets. The rise of cryptocurrencies, initiated by Bitcoin, has introduced a diverse ecosystem that includes various types of crypto assets, notably stablecoins. While these digital currencies offer novel opportunities for peer-to-peer financing and greater financial inclusion, they also pose significant risks, including price volatility, market manipulation, and potential misuse in illicit activities such as money laundering and terrorism financing.

This paper explored the complex interplay between innovation, regulation, and financial stability within the realm of digital finance, particularly in the context of the EU. As the regulatory framework – notably MiCA – continues to develop, the EU's approach reflects a dual focus on fostering innovation while ensuring robust oversight to safeguard financial stability.

The EU's Digital Finance Strategy is a part of a wider European economic transformation process, alongside initiatives like the Green Deal and the New Industrial Strategy. However, its implementation is occurring under atypical circumstances. Geopolitical tensions and disruptions have undermined mutual trust, adversely affecting international economic relations and moving away from the traditional emphasis on market openness and liberalised trade. In this context, the EU is reassessing its strategic positioning to mitigate dependencies on external players, particularly in the financial sector.

To reinforce its open strategic autonomy in financial services, the EU must navigate significant challenges stemming from a historical reliance on non-EU entities. The integration of its financial markets has been slow, and this dependency poses risks that compromise the resilience and stability of the EU's financial system. The predominance of a bank-based structure, coupled with an underdeveloped capital market, limits access to diverse funding sources for innovative start-ups and SMEs, which are vital for driving economic growth and technological advancements.

While the rapid growth of the crypto asset market – characterised by high volatility and speculative use – presents opportunities for innovation in digital finance, it also necessitates cautious regulation. Stablecoins, initially viewed as

a potential solution to the volatility of cryptocurrencies, have not fulfilled their promise of stability, leading policymakers to humorously label them as "neither stable nor coins" (Arner et al., 2020, p. 7). Despite these shortcomings, stablecoins have emerged as important tools for cross-border payments and liquidity within the decentralised finance ecosystem.

The MiCA's focused scrutiny on stablecoins underscores the necessity for robust regulatory frameworks to ensure financial stability and operational resilience. Therefore, the MiCA's attentiveness to stablecoins, particularly significant ones, highlights the need for stringent rules and detailed operational requirements for the market participants. This aligns with broader safeguards for financial stability and resilience of the financial system, along with the recent empirical evidence that supports a higher degree of transparency as a positive aspect of stablecoins' business models (Castren and Russo, 2024). This is critical in light of increasing interconnectedness between the crypto market and traditional financial structures, which can amplify systemic risks. Moreover, the ongoing evolution of digital assets and payment solutions, including central bank digital currencies, remains a subject of debate among international financial institutions regarding their potential to provide more effective alternatives to existing stablecoin frameworks.

In conclusion, the EU faces a dual challenge: fostering innovation in its financial system while simultaneously safeguarding against the vulnerabilities arising from external dependencies and the speculative nature of crypto assets. A balanced approach that emphasizes transparency, regulatory rigor, and the development of robust capital markets will be essential in enhancing the EU's financial autonomy and stability in an increasingly interconnected global economy. As the European landscape continues to evolve, it will be crucial for policymakers to remain vigilant and adaptable, ensuring that the regulatory framework not only protects financial stability but also encourages innovation and competitiveness in the digital finance sector.

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