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Chapter 5

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Part B

The Future of Money and Finance: Blockchain Transformation

Chapter 5

Crypto-asset policies and regulations in the EU

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The European Union's approach to digital finance is a multi-layered regulatory architecture aimed at fostering innovation while ensuring financial stability and investor protection. This chapter explores the three fundamental pillars of this strategy: MiCA (Regulation (EU) 2023/1114), which provides a harmonized framework for crypto-assets and service providers; the DLT Pilot Regime (Regulation (EU) 2022/858), which establishes a "regulatory sandbox" for tokenized traditional financial instruments; and complementary policies addressing anti-money laundering (AMLA/TFR), tax transparency (DAC8), and the development of the Digital Euro.

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1. General overview

- 1.1 The EU Digital Finance Package launched in 2020 represents a shift from a fragmented national landscape to a centralized European framework. Its core principle - “same activity, same risks, same rules” - is operationalized through the MiCA Regulation, which introduces a clear taxonomy for tokens and the regulation of crypto-asset service providers.
- 1.2 To bridge the gap between traditional finance and blockchain, the DLT (distributed ledger technology) Pilot Regime allows for controlled experimentation with tokenized shares, bonds and other financial instruments, allowing to bypass certain legacy constraints while maintaining strict thresholds.

Finally, the framework is reinforced by mandatory transparency: the anti-money laundering (AML) Package removes anonymity through a zero-threshold “Travel Rule,” while the DAC8 Directive (Directive on Administrative Cooperation) ensures fiscal compliance via the automatic exchange of transaction data.

2. MiCA: Markets in Crypto-Assets Regulation

- 2.1 For years, the crypto-asset ecosystem operated in a fragmented regulatory landscape across the European Union, with some Member States developing bespoke rules while others remained unregulated. This lack of legal certainty hindered cross-border expansion and exposed retail investors to significant volatility and fraud. In response, the European Commission introduced MiCA – **Markets in Crypto-Assets Regulation** (Regulation (EU) 2023/1114) – as a part of the broader **Digital Finance Package** in September 2020. Following intense negotiations, the European Parliament and the Council formally approved the Regulation in 2023. MiCA became fully applicable on 30 December 2024, covering all crypto-assets and crypto-asset service providers.

- ⇒ [Digital Finance Package](#)
- ⇒ [Markets in Crypto-Assets Regulation](#)

- 2.2 MiCA is designed to fill the regulatory gaps for digital assets that do not fall under existing financial services legislation such as MiFID II (Directive 2014/65 or Markets in Financial Instruments Directive, a cornerstone of EU financial market legislation). Its primary objectives are to provide legal clarity, support innovation, ensure high levels of consumer protection, and maintain financial stability. To this end, the Regulation, which, in line with the legal opinion expressed by ECB October 12, 2016 C 459/3, defines **crypto-assets** as “**a digital representation of a value or of a right that is able to be transferred and stored electronically, using distributed ledger technology or similar technology**”, introduces a

precise taxonomy to ensure that the “same activity, same risks, same rules” principle is applied across the digital asset space. It distinguishes between three main categories:

- **Asset-Referenced Tokens (ARTs):** These tokens aim to maintain a stable value by referencing a basket of currencies, commodities, or other crypto-assets. Due to their complexity, issuers must follow strict prudential requirements and maintain adequate reserves. For instance, issuers are required to establish a robust custody policy for the reserve of assets, ensuring they are legally and physically segregated from the issuer’s own assets to protect holders’ rights of redemption at any time.
- **Electronic Money Tokens (EMTs):** Commonly known as stablecoins pegged to a single fiat currency (e.g., the Euro). They are intended to function as a medium of exchange and are regulated similarly to traditional electronic money. This means that only credit institutions or electronic money institutions are authorized to issue them, and holders must be granted a claim on the issuer for the par value of the fiat currency they represent.
- **Other Crypto-Assets:** A “catch-all” category for assets that are neither ARTs nor EMTs, such as utility tokens (providing access to a specific service or platform) and certain types of payment tokens. In this regard, issuers must still comply with transparency obligations, such as the publication of a detailed crypto-asset white paper, and adhere to conduct-of-business rules to prevent misleading consumers about the token’s actual utility or risks.

MiCA does not regulate tokenized financial instruments which are subject to MiFID II, as well as unique and non-fungible tokens (NFTs) that do not represent fractionalized financial assets.

- ⇒ [Markets in Crypto-Assets Regulation \(MiCAR\)](#)
- ⇒ [Markets in Financial Instruments Directive II \(MiFID II\)](#)
- ⇒ [ECB Opinion C 459/3 2016](#)

2.3 MiCA also governs the so-called **Crypto-Asset Service Providers** (CASP), defined as any legal person or other undertaking whose occupation or business is the provision of one or more crypto-asset services to third parties on a professional basis, such as custody and administration, the operation of trading platforms, or the exchange of crypto-assets for funds. In this regard, **one of the most transformative aspects of the Regulation** is the resolution of national regulatory fragmentation. Previously, an operator wishing to offer services in different EU countries had to grapple with 27 different legal regimes. MiCA introduces a **centralized authorization mechanism**: once a company obtains a license from the competent authority of its home Member State (such as the AMF in France or BaFin in Germany), it receives the so-called “European Passport” allowing to operate across the Single market. To protect the EU internal market, MiCA limits ‘reverse solicitation’, preventing non-EU firms from aggressively targeting Union residents without a valid CASP license, thus ensuring that European standards of consumer protection are not bypassed. Furthermore, ‘significant’ tokens are subject to direct supervision by the European Banking Authority (EBA) to mitigate systemic risks. MiCA also imposes **strict governance and capital requirements**

to CASPs. In particular, providers are required to maintain a permanent minimum level of own funds or capital reserves to ensure they can absorb losses and remain resilient during market volatility. Moreover, CASPs must adhere to rigorous organizational rules, including the **segregation of client assets** from the firm's own funds to prevent losses in the event of insolvency, and they are legally mandated to act honestly, fairly, and professionally in the best interest of their clients, backed by mandatory insurance or guarantees.

2.4 To ensure the integrity of the digital finance ecosystem, the MiCA Regulation establishes a comprehensive legal framework designed to **prevent market distortion and enhance investor protection**. By transposing core principles from the traditional Market Abuse Regulation (Regulation 596/2014), the EU provides a clear set of prohibitions regarding illicit trading activities. The Regulation identifies and prohibits specific behaviors that undermine the transparency and fairness of crypto-asset markets. Each category is subject to strict monitoring by national competent authorities and involves significant administrative and legal penalties for non-compliance. Moreover, MiCA prohibits any person possessing inside information from using that information for their own benefit or for a third party. This includes executing trades based on non-public knowledge of future exchange listings, corporate partnerships, or regulatory decisions. The Regulation also prohibits activities that provide false or misleading signals regarding the supply, demand, or price of a crypto-asset. This includes the outlawing of “wash trading” (artificial transactions intended to create the appearance of market activity) and the dissemination of false information through media or social channels to artificially inflate or deflate asset values.

⇒ [Market Abuse Regulation](#)

2.5 Finally, in alignment with the **European Green Deal** (the EU's ambitious growth strategy, published in 2019, to make Europe the first climate-neutral continent by 2050), MiCA addresses the environmental impact of crypto-assets through transparency rather than prohibition. By focusing on investor awareness, the regulation mandates that crypto-asset issuers and service providers disclose the ecological footprint of digital assets to foster a more sustainable financial ecosystem. The key requirements include the mandatory white paper disclosure (where issuers must detail the energy consumption and greenhouse gas emissions of their consensus mechanisms), and the CASP public transparency (where service providers must display environmental data prominently on their websites to allow investors to compare the climate impact of various assets). This strategy aims to shift market dynamics by incentivizing technological innovation and directing capital toward energy-efficient protocols like Proof of Stake (PoS), ensuring the crypto market aligns with the EU's climate-neutral goals.

⇒ [European Green Deal – EU Commission Website](#)

⇒ [Communication on the EU Green Deal](#)

3. The DLT Pilot Regime

3.1 The DLT Pilot Regime (Regulation (EU) 2022/858) focuses on traditional financial instruments, such as shares and bonds, which are issued, transferred, and stored on a blockchain. Launched as a key component of the Digital Finance Package, the regime recognizes that current post-trading regulations were designed for centralized systems and may inadvertently hinder the adoption of decentralized technologies. To overcome this gap, the Pilot Regime acts as a **controlled experimental environment** where market participants can operate DLT-based infrastructures under the close supervision of ESMA (the European Securities and Markets Authority) and national authorities, ensuring that innovation does not come at the expense of financial stability or investor protection. To ensure financial stability during this experimental phase, the Regulation sets strict thresholds for eligible instruments: for shares, the market capitalization of the issuer must be less than €500 million; for bonds, the issuance size must be less than €1 billion (excluding those with embedded derivatives); for fund units, the market value of assets under management must be less than €500 million. The aggregate market value of all DLT financial instruments admitted to trading on a single infrastructure cannot exceed €6 billion to prevent systemic contagion.

⇒ [DLT Pilot Regime](#)

3.2 A core innovation of the Pilot Regime is the creation of three specific types of DLT-based market infrastructures, which can **request exemptions from traditional rules**. These include the **DLT Multilateral Trading Facility** (a platform for trading DLT financial instruments, operated by an investment firm or market operator), the **DLT Settlement System** (a system that settles transactions against payment or delivery, bypassing some requirements of the Central Securities Depositories Regulation that are incompatible with decentralized ledgers) and the **DLT Trading and Settlement System** (the most transformative category, allowing a single entity to combine both trading and settlement functions). To allow these infrastructures to function, the Regulation provides a framework for **conditional exemptions**. For instance, an operator might be exempted from the obligation to record securities with a central depository if the DLT itself provides a sufficient “golden record” of ownership. However, these exemptions are balanced by **stringent safeguards**. For instance, operators must comply with high standards of cybersecurity and IT governance; moreover, even in a pilot phase, operators are liable for the loss of funds or assets due to technical failures or cyber-attacks. Moreover, every participant must have a pre-approved “transition plan” or exit strategy, ensuring that if the pilot license expires or the thresholds are exceeded, the instruments can be migrated back to traditional systems without disrupting the market.

3.3 In sum, the DLT Pilot Regime represents a fundamental step toward the digitalization of finance and a token economy. By allowing a safe space for experimentation, the EU is positioning itself to lead the global shift toward more efficient, transparent, and accessible capital markets. However, after more than two years since its launch, the DLT Pilot Regime presents a polarized balance sheet: while it is a success in terms of regulatory leadership, its market adoption has been slower than initially anticipated by the European Commission.

4. Complementary EU Policies: AML, Taxation, and the Digital Euro

4.1 The regulation of the European digital financial space is not limited to the market rules defined by MiCA. To create a truly integrated and secure ecosystem, the European Union has developed a “multi-layered” policy approach. While MiCA focuses on market conduct and issuer obligations, complementary policies address the structural risks associated with financial crime, fiscal transparency, and monetary sovereignty. This holistic framework ensures that crypto-assets are treated with the same level of rigor as traditional financial instruments, eliminating regulatory vacuum and fragmentation within the Single Market.

4.2 One of the most significant pillars is the new **EU AML/CFT Package** (Anti-money laundering and countering the financing of terrorism) approved in 2024. It aims to neutralize the risks of illicit financial flows in the digital era. To this end, it created the **Anti-Money Laundering Authority (AMLA)**, based in Frankfurt, representing a shift toward centralized supervision. From 2028, AMLA will directly oversee high-risk Crypto-Asset Service Providers (CASPs) operating across borders, ensuring uniform enforcement of rules. Through the **Transfer of Funds Regulation** (Regulation (EU) 2023/1113), the EU has implemented a zero-threshold policy, which means that every crypto-transfer must be accompanied by the identity data of both the sender and the recipient, regardless of the amount. This reform remains **highly controversial within the digital asset community**. By mandating full transparency for every transaction, **the regulation directly challenges pseudonymity**, a core philosophical and technical feature of blockchain technology. Critics argue this may infringe on financial privacy, while regulators maintain it is essential to align crypto-assets with the standards of traditional finance. Furthermore, the framework introduces specific safeguards for the use of self-hosted wallets. CASPs are required to apply enhanced due diligence for transactions exceeding €1,000 when interacting with such digital wallets. Finally, to eliminate the possibility of “shadow” accounts, regulated operators are strictly prohibited from providing anonymous accounts or facilitating the use of privacy cryptocurrencies (such as Monero or Zcash) that purposefully obfuscate transaction history.

⇒ [EU AML/CFT Package](#)

4.3 To ensure that the crypto-economy contributes fairly to public finances, the EU adopted the **DAC8 Directive** (Directive on Administrative Cooperation). Effective from January 1, 2026, DAC8 mandates that all Crypto-Asset Service Providers (CASPs), regardless of their

size or location of headquarters, provided they serve EU residents, report comprehensive details of their users' transactions to the relevant national tax authorities. This reform represents a significant shift toward fiscal transparency, as it introduces the **automatic exchange of information for digital assets**. Moreover, by aligning with the OECD's Crypto-Asset Reporting Framework (CARF), the EU ensures that capital gains from crypto-investments are as traceable as those from traditional stocks, effectively preventing cross-border tax evasion and eliminating the "siloed" nature of digital wealth. This directive aligns the EU with the **OECD's Crypto-Asset Reporting Framework**: by standardizing tax reporting, the EU prevents tax evasion and ensures that capital gains from crypto-assets are monitored as effectively as those from stocks or bonds, fostering a level playing field between digital and traditional investments.

- ⇒ [DAC8 Directive](#)
- ⇒ [OECD's Crypto-Asset Reporting Framework](#)

4.4 The final component of the EU's digital strategy is the **Digital Euro**, a project spearheaded by the European Central Bank (ECB). Following the conclusion of the "Preparation Phase" in late 2025, the project has moved into a critical implementation stage. Its primary objective is to provide a public, digital alternative to private payment schemes and stablecoins, ensuring that the Euro remains the anchor of the European payment system in the digital age. On this topic, see the Chapter B3 of the Platform.

- ⇒ [OKP, Part B, Chapter 3, Central Bank Digital Currencies and the Digital Euro](#)