EUROPEAN CENTRAL BANK

EUROSYSTEM

ESCB response to the European Commission's targeted consultation on the Markets in Crypto-Assets Regulation (MiCAR)

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1 Key messages on the MiCAR review

1.1 Key messages on the regulatory framework

The European System of Central Banks (ESCB) welcomes the Commission's targeted consultation on the review of the Markets in Crypto-Assets Regulation (MiCAR). The ESCB recognises the potential of distributed ledger technology (DLT) and tokenisation in supporting innovation and driving efficiency gains in payment and financial market infrastructures, and, more broadly, in contributing to the development of more integrated and efficient financial market infrastructure in Europe. In this context, MiCAR provides a robust, balanced and harmonised regime for crypto-asset service providers (CASPs) and issuers. The consultation serves as an opportunity to identify and assess areas where existing rules could be improved, taking into account lessons learned from the initial years of MiCAR's implementation, evolving market dynamics and practices in other jurisdictions. The overall aim is to ensure that MiCAR is fit for purpose, fostering responsible innovation that supports economic growth while safeguarding the integrity and stability of the financial system.

Amendments to MiCAR are needed to improve the framework for CASPs. The European Central Bank (ECB) made detailed comments in the context of the market integration and supervision package,[1] welcoming the proposal to strengthen the supervisory framework for CASPs, including by transferring authorisation, monitoring and enforcement powers for all CASPs to the European Securities and Markets Authority (ESMA) as well strengthening the role envisaged for the Anti-Money Laundering Authority (AMLA). It suggested technical clarifications on prudential requirements for all CASPs, including on the statutory audit requirement and the introduction of risk-sensitive own funds requirements. The ECB also suggested introducing enhanced prudential requirements for significant CASPs, including a review of the related identification criteria. Significant CASPs should be required to establish an intermediate parent undertaking within the EU. Finally, the ECB proposed enhanced supervisory oversight and coordination, as well as a holistic and consolidated prudential approach, to ensure sound and effective supervision of significant CASPs and multi-function groups (MFGs). These proposals remain relevant in the context of this consultation and are referred to in the chapter on CASPs and MFGs.

Furthermore, enhancing the regulatory framework for electronic money tokens (EMTs) and asset-referenced tokens (ARTs) – collectively referred to as stablecoins – is essential to ensure that their adoption takes place within a robust framework that balances openness to innovation with risk mitigation. MiCAR brought stablecoins within the regulatory perimeter ahead of other jurisdictions and before the emergence of certain operating models, while remaining

[1] See the Opinion of the European Central Bank of 9 April 2026 on proposals as regards the further development of capital market integration and supervision within the Union (CON/2026/13) (OJ C, C/2026/2837, 28.5.2026) and Annex 1.

in line with the recommendations of the Financial Stability Board (FSB) on global stablecoins.[2] The ESCB believes that some key elements of the framework should be maintained, such as the prohibition on interest payments, while other elements warrant a reassessment, such as the requirements regarding the reserves of assets and own funds applicable to non-bank issuers of EMTs. The ESCB also takes the view that minimum deposit requirements for ARTs and EMTs should be removed and replaced by a MiCAR requirement specifying minimum percentages of assets maturing within one and five working days (liquidity buckets). The calibration of the liquidity buckets could use, as a minimum starting point (to be further analysed), the percentages of reserve assets maturing within one and five working days laid out in the draft regulatory technical standards (RTS) prepared by the European Banking Authority (EBA), which should be implemented swiftly.[3] These draft RTS include several safeguards designed to mitigate contagion risks among the stablecoin sector, banks and the markets for other eligible reserve assets. With well-defined safeguards in place, the EU framework will continue to allow the private sector to innovate, without this undermining financial stability. Furthermore, additional diversification requirements beyond those already included in the RTS should be considered.

The ESCB supports maintaining the possibility under MiCAR for credit institutions to issue EMTs directly under a balance sheet model, as well as issuing through an electronic monetary institution (EMI) subsidiary. While the ESCB acknowledges certain benefits associated with issuance through a dedicated EMI vehicle, these benefits do not justify making issuance via an EMI-subsidiary mandatory under EU law as other means, such as clear legal definitions, appropriate disclosure requirements and the existing supervisory framework can achieve similar outcomes. Consideration could nevertheless be given to granting banking supervisory authorities the discretion to require EMT issuance through a separately authorised EMI subsidiary, particularly in the context of third-country multi-issuer arrangements.

MiCAR also needs to be amended so that additional measures can be adopted to address financial stability concerns arising from the issuance and circulation of ARTs and EMTs. This would include, in particular, extending the scope of ECB opinions (and the opinions of national central banks, where applicable). There is also a need for legal clarification on the permissibility of third-country multi-issuer stablecoin schemes under MiCAR. In this context, the ESCB stands by all recommendations set out in the Recommendation of the European Systemic Risk Board (ESRB) on third-country multi-issuer schemes including

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2 The Financial Stability Board's thematic peer review on crypto-assets, published in October 2025, revealed that the global regulatory framework and its implementation remained fragmented, with inconsistent and insufficient levels of cross-border cooperation and coordination. The limited global implementation of the FSB recommendations provides opportunities for regulatory arbitrage. For the EU, the peer review identified areas where further progress could be made in implementing the recommendations on crypto-asset activities and markets, such as the reporting obligations and lending/borrowing activities of CASPs.

3 See the EBA's Final Report – Draft Regulatory Technical Standards to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114, and the EBA Final Report – Draft Regulatory Technical Standards to specify the highly liquid financial instruments with minimal market risk, credit risk and concentration risk under Article 38(5) of Regulation (EU) 2023/1114.

Recommendation A.[4] Should the co-legislators decide to permit such schemes, this should be accompanied by a framework for assessing equivalence of third-country regimes and adequate safeguards in the legislation, taking the ESRB Recommendations from B to J as a starting point.

Lastly, crisis management provisions should be enhanced. Coordination between MiCAR and the Bank Recovery and Resolution Directive (BRRD) on crisis management, which is currently based solely on EBA guidelines, should be enhanced and accompanied by a sufficiently detailed crisis management framework for non-bank issuers of significant EMTs and ARTs.

For the regulatory framework to improve, the initial scope of MiCAR must first be reviewed. The consultation provides the opportunity to reflect on whether and how best to regulate crypto borrowing, lending and staking, and this response offers various considerations to that effect.

Beyond the scope of MiCAR, further clarification and harmonisation of the legal framework for tokenised assets are necessary in order to support responsible innovation. This may also be achieved by considering how MiCAR interacts with other legislation, such as the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD), in relation to tokenised deposits.

1.2 Key messages on the digital asset landscape

Stablecoins, more specifically EMTs, are just one instrument within the EU's broader digital asset landscape. They should therefore be assessed not in isolation, but as part of a wider digital asset ecosystem that includes tokenised central bank money, tokenised deposits and tokenised assets that qualify as financial instruments. Within that broader landscape, euro-denominated EMTs, as well as EMTs denominated in other EU currencies, may function as complementary private settlement assets for specific use cases, particularly where there is a cross-border dimension extending beyond the EU. At the same time, wider adoption of EMTs as an instrument class may have implications for financial stability, monetary sovereignty, payment systems, and monetary policy implementation and transmission.

The safe and sound development of this ecosystem requires central bank money to remain the anchor of the two-tier monetary system. Tokenised central bank money can provide the risk-free settlement anchor around which regulated private settlement assets, including tokenised deposits and euro-denominated EMTs, as well as EMTs denominated in other EU currencies, can develop. Tokenised central bank money plays a critical role in preserving the singleness of money by supporting trust and facilitating convertibility and interoperability between different forms of tokenised settlement assets, while reducing the risk that separate

[4] Recommendation of the ESRB of 25 September 2025 on third-country multi-issuer stablecoin schemes (ESRB/2025/9) (OJ C, C/2025/6342, 21.11.2025).

DLT networks or private settlement assets will develop into non-interoperable liquidity and asset pools.

Access to central bank accounts and central bank-operated payment systems is an integral part of the ESCB's statutory task of promoting the smooth operation of payment systems under Article 127(2) of the Treaty on the Functioning of the European Union. EMT issuers, unless they are credit institutions, do not have access to central bank facilities or services, such as reserve accounts or the ability to deposit cash at the central bank. EMT issuers licensed to operate as EMIs established in the EU are eligible to access central bank-operated payment systems and central bank accounts in the euro area under the Eurosystem's policy, published in July 2024, along with Decision (EU) 2025/222 of the ECB[5] adopted in January 2025. Under this policy, eligible non-bank payment service providers (NB-PSPs; i.e. EMIs and payment institutions) may access central bank-operated payment systems and central bank accounts if they meet certain requirements, but only for settlement purposes.

From a monetary and financial stability perspective, it is important that central bank accounts are not misused for safeguarding purposes. The provision of safeguarding accounts by central banks could affect the overall safety and soundness of the monetary policy transmission mechanism and the financial system as a whole, and could pose significant risks to the achievement of the ESCB's objectives. In the extreme, if an issuer could fully back its EMT with central bank money, this would effectively result in a "synthetic" central bank digital currency. Such EMTs, fully backed by central bank money, could, in theory, crowd out bank deposits, especially during periods of stress, leading to a progressive disintermediation of the commercial banking sector with negative implications on the availability of liquidity, and thus hinder the effective transmission of monetary policy. Similarly, EMTs backed with central bank money could blur the distinction between central bank money – a credit and liquidity risk-free settlement asset – and private forms of money. Safeguarding customer funds at central banks could also risk conflating EMTs with other forms of money, including central bank money, in the minds of the public, thereby distorting perceptions of risk.

Any decision to offer safeguarding accounts, including for the placement of funds originating from EMTs, remains at the discretion of Eurosystem central banks.[6] The Eurosystem has been unequivocal in its stance that Eurosystem central banks do not at present provide safeguarding accounts to non-bank PSPs. The decision not to offer safeguarding accounts to non-bank PSPs is guided by both important central bank (institutional) considerations and policy concerns (monetary and financial stability concerns, such as avoiding a blurring of the distinction between central bank money and commercial bank money). At the same time, the regulatory framework is evolving in this area. In particular, pursuant to Article 10 of the PSD2 as

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5 Decision (EU) 2025/222 of the European Central Bank of 27 January 2025 on access by non-bank payment service providers to Eurosystem central bank operated payment systems and central bank accounts (ECB/2025/2) (OJ L, 2025/222, 6.2.2025).

6 See the Opinion of the European Central Bank of 19 February 2021 on a proposal for a regulation on Markets in Crypto-assets, and amending Directive (EU) 2019/1937 (CON/2021/4) 2021/C 152/01 (OJ C 152, 29.4.2021, p. 1).

amended by the Instant Payments Regulation (and Article 9 of the forthcoming PSD3), payment institutions may meet their safeguarding obligations by depositing payment service users' funds either in a separate account in a credit institution authorised in a Member State, or at a central bank at the discretion of that central bank. In line with the aforementioned decision, such discretion has not been exercised. Finally, a safeguarding option at Eurosystem central banks should not be offered to CASPs for the same reasons, thus ensuring a level playing field with other non-bank financial institutions.

2 Scope and definitions

The ESCB is of the view that the regulatory treatment of tokenised assets should be guided by the principles of technological neutrality, clarity and harmonised definitions, and a consistent EU legal framework. Comparable activities should be subject to consistent regulatory treatment, irrespective of the technology used. Financial instruments that produce the same economic effects and confer substantively similar rights and obligations should not be treated differently solely because they are issued, recorded or transferred using DLT. This does not preclude targeted adaptations to avert the risk of regulation creating unnecessary frictions or obstacles to the use of DLT, or to address risks specific to tokenisation, such as those arising from permissionless DLTs. Harmonised and operationally workable definitions are crucial to ensuring legal certainty and should be provided in Level 1 legislation, preferably by means of directly applicable regulations. Finally, any regulatory approach should ensure clear and coherent interactions between relevant EU and national legislation.

Against this background, the ESCB is of the view that extending MiCAR's scope to all tokenised assets would not be the most appropriate way to achieve the above objectives. While it is acknowledged that such an approach may carry some benefits, it would also create parallel regimes for tokenised and non-tokenised financial instruments, raising concerns over technological neutrality. It would also depart from the EU's established sectoral regulatory approach, give rise to overlaps and regulatory arbitrage opportunities, and fail to address the underlying frictions stemming from divergent national legal frameworks.

The ESCB therefore supports preserving the current sectoral approach, while clearly delineating the boundaries of MiCAR and its interaction with other pieces of EU legislation. In particular, tokenised financial instruments should remain within the scope of the relevant financial services framework. Tokenised deposits should remain within the fold of the CRR/CRD, with a fully harmonised definition of deposits (see Section 6.3) and a clear delineation from adjacent regimes. This would help ensure a smooth transition from non-tokenised assets to their tokenised equivalents for financial market participants, while reducing the need for contractual adaptations.

Further work is desirable to ensure a clear delineation between crypto-assets and services falling within MiCAR and those governed by other EU legislation. Further reflection on the ART category may also be warranted.[7] In particular, the

[7] MiCAR defines ARTs as crypto-assets that aim to stabilise their value by referencing another value or right, including one or several official currencies, or a combination thereof. The EU is one of the few jurisdictions to have introduced a distinct category of stablecoins such as ARTs. By contrast, most other jurisdictions focus primarily on the regulation of payment stablecoins. For example, in the United States, the regulatory treatment of crypto-assets is generally based on functional and activity-based assessments, including the use of securities law tests such as the Howey test, rather than on a dedicated category equivalent to ARTs. The stablecoin legislation of Hong Kong SAR covers stablecoins that may perform both payment and investment functions and may reference a pool of assets (see Article 3 of the Hong Kong Stablecoins Ordinance).

current delineation between ARTs and adjacent categories – notably EMTs, financial instruments and money market fund shares – is not always clear-cut, carrying the risk of classification uncertainty and circumvention of the requirements applicable to the relevant regimes. This is particularly relevant where the structure or economic function of an ART may blur the boundary with financial instruments, raising questions about the interaction between MiCAR and MiFID as regards classification and the applicable requirements. Furthermore, as explained in paragraph 2.4 the effectiveness of MiCAR's stablecoin provisions aimed at preventing ARTs from being widely used as a means of payments warrants further attention, especially where ARTs are designed, marketed or used for payment purposes. Targeted adjustments could be effective in refining the scope of the ART category and improving its sustainability (see also Section 3.2.). In particular, the list of values or rights that an ART may reference should be narrowed to instruments that may be validly offered within the EU. In a related vein, further reflection may be warranted on the alignment between MiCAR's regime for stablecoins more broadly, and the relevant sectoral legislation, including the payment services framework.[8] This sectoral approach should continue to be refined to enable the use of DLT, including, for example, through the proposals put forward in the market integration and supervision package to adapt the Central Securities Depositories Regulation and expand the DLT Pilot Regime to make it more flexible.

Finally, the ESCB underscores the urgent need for EU-level action to enhance legal certainty for tokenised assets by addressing legal and regulatory fragmentation. Some EU Member States have already legislated on the matter, which may help foster the adoption of tokenisation by enhancing legal certainty. However, differences in national approaches are emerging, notably as regards corporate law, property law and insolvency law, which may increase cross-border complexity and create new forms of fragmentation. Fragmented legal and supervisory treatment may create obstacles to the single market by increasing cross-border compliance costs, reducing legal certainty when it comes to issuance, trading, custody and settlement, and limiting the scalability and interoperability of tokenised markets. Therefore, EU-level harmonisation should be pursued where necessary to support the adoption of tokenisation, including in areas such as property, corporate and insolvency law (see also Section 6.4 on the legal treatment of tokens), while ensuring technological neutrality.

[8] While MiCAR allows ARTs to be used for payment purposes subject to significant volume limitations, they do not fall within the scope of PSD2/PSD3 or the PSR. See also Section 4.2 for the interplay between MiCAR and PSD/PSR. Where ARTs reference financial instruments or commodities, their regulatory treatment may sit more naturally within the financial instruments framework.

3 Requirements applicable to asset-referenced tokens (ARTs), e-money tokens (EMTs) and their issuers

3.1 The role of stablecoins

EMT issuers have presented a range of possible use cases for their tokens, spanning cross-border payments to decentralised finance, among other applications. While it is not the role of the ESCB to determine which use cases are most beneficial, some observations can be made based on the experience gained from EMT adoption in recent years.

For domestic retail payments, the potential incremental benefit of EMTs is considered more limited, given that efficient, low-cost retail payments are already widely available in the EU, most notably via SEPA instant credit transfers, while the forthcoming digital euro is expected to be available for domestic retail use cases within the European Economic Area. In addition, whether EMTs actually lower the cost for international cross-border payments outside the EU should be assessed on the basis of total end-to-end costs. This should include all relevant components, such as conversion to fiat currency, custody, operational costs, and on and off-ramping costs. EMTs may nevertheless be relevant for specific use cases with a cross-border payment dimension, particularly where features such as programmability, atomic settlement and global reach add value. To date, EMT usage has been concentrated in crypto-asset markets,[9] particularly for trading and liquidity provision. Market participants are increasingly developing or positioning EMT initiatives for payment, treasury and settlement use cases, primarily with a cross-border dimension, though these use cases , remain at an early stage. To the extent that EMTs denominated in or referencing the currencies of EU Member States, including the euro, come to play a role in the European financial system, they should be EU-governed, properly designed and MiCAR-compliant. Such EMTs could support European strategic autonomy, and, in the case of euro-denominated EMTs, contribute to the international role of the euro. Their relative merits should, however, be assessed against existing and emerging alternatives – whether based on DLT or traditional infrastructure – on the basis of total end-to-end costs, risks and functionality.

For wholesale settlement, a system based on tokenised central bank money as the risk-free settlement anchor can support the safe development of Europe's tokenised financial market ecosystem. Central bank money is free from credit and liquidity risk and can preserve settlement finality, the singleness of money and financial stability as wholesale markets transition to DLT. The Eurosystem will provide tokenised central bank money through its Pontes and Appia initiatives. The

9 ESRB (2025), "Crypto-assets and decentralised finance – report on stablecoins, crypto-investment products and multifunction groups", October.

ECB opinion on the market integration and supervision package noted the importance of requiring central bank money for wholesale financial market infrastructures whenever practical and available, notably for the settlement of payments by central securities depositories and DLT market infrastructures licensed under the DLT Pilot Regime. The ECB also supported the proposed requirement for settlement schemes operated by banks under the DLT Pilot Regime to settle in central bank money. Such a model would help ensure that tokenised wholesale transactions remain anchored in central bank money, while allowing private-sector innovation to develop around that anchor. Among private settlement assets, tokenised deposits may be particularly well aligned with the two-tier monetary system, especially where interbank settlement ultimately takes place in central bank money. While EMTs may play a complementary role in specific use cases, they appear less suitable for wholesale settlement at scale than tokenised central bank money or tokenised deposits, given the risks to maintaining par during periods of stress, as well as scalability, fragmentation and integrity concerns.

Settlement in EMTs carries additional risks compared with settlement in central bank money or commercial bank money. These include the credit risk of the issuer, the risk associated with potential fluctuations in the price of the EMT, and the liquidity risk associated with the underlying reserve assets. Financial market infrastructures (FMIs) should only be permitted to use EMTs as a settlement asset where settlement in tokenised central bank money is not practicable or available, and should be subject to sound risk management safeguards to minimise the risks associated with their use, in line with international standards. In particular, these safeguards should ensure that EMT issuers maintain a low-risk exposure and are subject to adequate prudential requirements, sound governance arrangements and effective risk controls. In particular, these safeguards should ensure that the settlement arrangement as a whole remains robust. The assessment should therefore extend beyond the prudential soundness of the issuer and cover matters such as settlement finality, redemption at par, intraday liquidity, operational continuity, custody arrangements, default procedures, access criteria, governance and the ability to maintain convertibility under stress. Furthermore, settlement in EMTs should be permitted only if the EMT is issued by an EU entity in compliance with MiCAR and is not fungible with any crypto-asset(s) issued outside the EU, including those that are part of a third-country multi-issuer scheme.

3.2 Prudential regime for issuers of EMTs and ARTs

The prudential regime for issuers of EMTs and ARTs is based on two components: capital and liquidity. The capital component (own funds) is inspired by the regime for electronic money institutions and has been customised for significant EMTs and ARTs. As such, the own funds requirement is size-driven and the risk adjustment takes place via supervisory assessment and stress testing only, as established under Article 35(3)(5) of MiCAR for risks specifically related to EMT/ART issuance. Such an approach is adequate for entities (other than credit

institutions[10]) that issue only EMTs/ARTs. However, it is not adequate for non-bank EMT/ART issuers that engage in additional activities, including crypto-asset services. In these cases, supervisory assessment and stress testing should look at the entity's business as a whole, taking into account the combined risks arising from a multi-activity structure, which is a common feature in the crypto-asset sector.[11] In such cases, the interplay between own funds requirements under different licensing regimes should be clarified to avoid double-counting and provide legal certainty.

Liquidity requirements are there to ensure that token holders' redemption rights can be met at all times and are based on a combination of qualitative and quantitative measures. Specifically, MiCAR includes requirements regarding the type of reserve assets, insisting that at least 30% of reserve assets (60% for significant EMTs/ARTs) be held as deposits at credit institutions, with the remainder invested in secure, low-risk assets that qualify as highly liquid instruments with minimal market, credit and concentration risk.[12] MiCAR also states that investments must be capable of being liquidated rapidly with minimal impact on prices.[13] However, the European Commission has yet to approve two sets of RTS mandated to the EBA (which the ESCB supports), meaning that certain aspects of the liquidity requirements are not yet applicable or sufficiently clear.[14] This includes, for example, the MiCAR requirement to minimise concentration risk and the obligation for issuers to monitor the creditworthiness of the banks with which they place deposits. These requirements are not yet enforceable, because their implementation relies on the adoption of the relevant EBA RTS.[15]

3.2.1 Reserve asset requirements

There are various aspects to consider when discussing potential changes to the deposit requirement and possible alternatives. These include the implications of the requirement for potential contagion to banks and financial stability, as well as whether changes to the requirement could have implications for financial stability, monetary policy transmission and the markets for reserve assets (such as sovereign bonds or repo). It is also important to distinguish between stablecoins referencing the euro or other EU currencies and those referencing non-EU currencies, as the

10 For credit institutions, the CRR own funds requirement and CRD-based supervisory powers continue to apply.

11 See also Opinion of the European Central Bank of 19 February 2021 on a proposal for a regulation on Markets in Crypto-assets, and amending Directive (EU) 2019/1937 (CON/2021/4) 2021/C 152/01.

12 For EMTs, reserve assets must be denominated in the same official currency referenced by the EMT.

13 See Article 38. The value of assets is largely influenced by their exposure to credit and market risk and in this respect MiCAR mandates that issuers invest in instruments that carry minimal market, credit and concentration risk.

14 Final report – Draft Regulatory Technical Standards to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114; Final report – Draft Regulatory Technical Standards to specify the highly liquid financial instruments with minimal market risk, credit risk and concentration risk under Article 38(5) of Regulation (EU) 2023/1114.

15 The EBA RTS set concentration limits on deposits held with G-SII/O-SII banks at 25% of the market value of the reserve; at 15% for large institutions as defined in Article 4(1), point (146), of the CRR but which do not qualify as G-SIIs or O-SIIs; and 5% where the credit institution does not fall under any of the two previous cases. Furthermore, the RTS introduce a backstop measure whereby stablecoin issuers may not place deposits with any single bank exceeding 1.5% of the credit institution's total assets.

implications for banks, as well as the potential alternatives to the deposit requirement (such as highly liquid assets), would differ. Furthermore, the deposit requirement reduces issuers' profitability, given the limited yield on (sight) deposits.[16] Adequate profitability is needed to ensure the sustainability of issuer's business and in turn preserve their soundness and allow for the emergence of a competitive euro-denominated stablecoin market.

The requirement to hold a specific share of reserve assets as bank deposits creates a direct link between issuers and credit institutions. It could expose banks' funding to changes in the stablecoin market in normal times and create particular liquidity challenges if there is a run on a specific stablecoin. In such a case, the issuer would need to quickly withdraw its deposits from the bank. If such deposits constitute a large part of the bank's funding base, this could lead to liquidity issues for the bank. The transmission channel could also operate the other way around, as demonstrated by the events that took place in March 2023, when difficulties at Silicon Valley Bank (SVB) led to a run on the stablecoin USDC.[17]

While requiring issuers to hold a significant share of their reserve assets as bank deposits creates a liquidity buffer that can be drawn upon during periods of stress, a sudden withdrawal of a large amount of these deposits could have idiosyncratic effects for the relevant banks, potentially becoming systemic. The deposits can be used by the stablecoin issuer to reimburse users during periods in which the stablecoin experiences elevated redemption requests, thus acting as a liquidity buffer during periods of stress.[18] This could reduce the likelihood of having to sell off other reserve assets, such as securities, which, depending on market depth and their liquidity characteristics, may need to be sold below their carrying value. A high level of liquidity can however be achieved through other instruments. For example issuers may pledge such reserve assets in repo transactions. As an alternative to deposits, investing reserve assets in overnight reverse repos could provide availability of assets with daily maturity, thus ensuring sufficient liquidity to meet redemptions. Additionally, issuers could purchase short-term sovereign bonds either on the secondary market or at auctions (for instance large euro area countries routinely issue bills with maturity between 3 and 12 months).

The impact of stablecoins on banks depends largely on the management of reserve assets, while their broader adoption may make monetary policy transmission less predictable. If reserves are held as bank deposits, stablecoins can alter banks' funding structures by replacing relatively stable retail deposits with deposits from stablecoin issuers, which tend to be less stable and more sensitive to market conditions. If, instead, reserves are invested in highly liquid assets such as short-term government securities, stablecoin adoption may initially reduce the overall deposit base of the banking sector, although those funds may subsequently flow

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16 As a proxy, the average yield on deposits from corporations was 0.53% in April 2026, according to ECB statistics.

17 This occurred when it became known that Circle (USDC's issuer) held part of its reserves in the form of uninsured deposits at SVB.[17] See Du, C., Sonawane, R. and Watsky, C. (2025), "In the Shadow of Bank Runs: Lessons from the Silicon Valley Bank Failure and Its Impact on Stablecoins", *FEDS Notes*, Board of Governors of the Federal Reserve System, Washington, December 17.

18 This holds true if the deposits are redeemable at sight.

back into the banking system provided that they are not used for payments or investments outside the EU. Overall, the introduction of stablecoin issuers may result in a less stable funding structure for banks and, depending on the composition of reserve assets, a smaller aggregate deposit base, with implications for banks' capacity to supply credit to the economy. These changes in banks' liability structures could also affect monetary policy transmission. While this may strengthen some transmission channels, such as the bank lending channel, it could also weaken the deposit channel. Deposits received from stablecoin issuers are subject to a 100% outflow rate for the purposes of the liquidity coverage ratio (LCR) (as is the case for most deposits from financial sector entities).[19] This means that large-scale stablecoin adoption may leave banks with a funding structure that is both less stable and more costly[20], with implications for their ability to supply credit (for more details, see Section 3.6, "Monetary policy transmission implications").

Against this background, reviewing the approach to liquidity risk management for reserve assets could be considered along the following lines, subject to further assessment and sound calibration to take into account potential second-order effects of a change in the deposit requirement:

(a) Changing the minimum deposit requirement by removing the minimum predefined percentages that must be held as bank deposits.

(b) Revising Article 36(4) of MiCAR to introduce minimum floors for the daily and weekly liquidity buckets already set out therein. The calibration of those liquidity buckets would warrant further analysis and could take, as a minimum starting point, the percentages of assets maturing within one and five working days, as laid down in the EBA draft RTS under Article 36(4) of MiCAR. The RTS requires the daily liquidity bucket to be at least 40% for significant stablecoins and 20% for non-significant tokens, and the weekly liquidity bucket (which includes the daily part) to be at least 60% for significant tokens and 30% for non-significant tokens.

(c) The part of the reserve assets that is not included in the daily and weekly liquidity buckets – that would in any event need to meet the requirements for highly liquid financial instruments set out in Article 38 of MiCAR – could, subject to further analysis, be subject to maturity limits. Their calibration should take into account the calibration of the daily and weekly maturity buckets. For example, higher percentages for the daily and weekly maturity buckets could allow greater leeway with respect to the overall maturity of the remaining reserve assets, and vice versa.

(d) The above suggested approach could also differentiate between the treatment of EMTs referencing the currencies of EU Member States and

[19] Pursuant to Article 31a of Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 to supplement Regulation (EU) No 575/2013 of the European Parliament and the Council with regard to liquidity coverage requirement for Credit Institutions, a 100% outflow rate must be applied unless the deposit qualifies for the treatment provided for under Article 27 of the same Regulation.

[20] Banks could be forced to replace the stable retail deposit funding with term liabilities or repo funding.

those referencing third-country currencies,[21] reflecting differences in market depth and in the availability of sufficient liquid assets bearing minimal credit and market risk denominated in those currencies.

(e) The suggested approach should also include sound diversification requirements regarding counterparties (banks, asset managers, issuers of securities, etc.), as already outlined in the relevant EBA draft RTS. These diversification requirements should also be appropriately calibrated for significant stablecoins, which should be required to have a larger number of counterparties for transactions such as deposits and reverse repos (via lower concentration limits with each of their counterparties), given their greater potential to cause systemic shocks. An overall limit on the amount of deposit funding that credit institutions may receive from stablecoin issuers could also be included.

In the meantime, the ESCB recommends that the relevant EBA draft RTS, as approved by the EBA's Board of Supervisors, be implemented.[22] Draft EBA RTS were prepared to further specify the liquidity requirements of the reserve of assets in accordance to Article 36(4) of MiCAR and would impose explicit percentage floors on daily and weekly-maturing assets. Since these RTS are currently not yet in force (pending the European Commission approval), the deposit requirement currently acts as the only liquidity floor. However, the deposit requirement could still be met by holding term deposits that are not redeemable at sight and are therefore less liquid. Hence, the ESCB calls for the timely adoption of the draft RTS to implement safeguards designed to mitigate contagion risks between the stablecoin sector, banks and sovereign bond markets. With well-defined safeguards in place, the EU regulatory framework will continue to enable responsible innovation while preserving financial stability.

If the ART category is retained, existing MiCAR requirements on the composition of reserve assets for ARTs could be adjusted to enable issuers to meet potential customers' needs while maintaining a sustainable business model. By definition, an ART's objective is to maintain a stable value with respect to the referenced asset(s). Therefore, issuers and holders alike have an interest in ensuring that the value of an ART is as closely aligned as possible with that of its reference asset. Such alignment would be easier to achieve if an ART's reserve could be invested (in full) in the referenced assets. However, pursuant to MiCAR, if the referenced asset is neither a currency nor a highly liquid financial instrument, it is not possible to invest the reserve in that asset.[23] However, allowing reserves to be

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21 ARTs referencing one or more currencies could be subject to the same requirement as EMTs referencing third-country currencies.

22 See the EBA's Final report – Draft Regulatory Technical Standards to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114, and the EBA Final report – Draft Regulatory Technical Standards to specify the highly liquid financial instruments with minimal market risk, credit risk and concentration risk under Article 38(5) of Regulation (EU) 2023/1114.

23 Issuers are permitted to keep the assets received as consideration when offering an ART, even if those assets do not qualify as highly liquid financial instruments.

invested in less liquid assets, could also limit issuers' capacity to meet redemption requests promptly unless issuers are given with possibility to redeem in kind.[24]

Where the referenced asset consists of one or more financial instruments, including fund units, tokenisation can already be accommodated within existing financial services legislation, notably MiFID II. The rationale for extending the ART regime to such structures is therefore not self-evident. Any reconsideration of the reserve asset requirements should instead focus on cases that cannot readily be accommodated under existing financial services legislation, in particular where a token references assets, rights or values that do not qualify as financial instruments. It should exclude structures that are primarily designed to circumvent classification as an EMT or a money market fund (MMF). In any case, the range of assets that can be referenced should be narrowed to those whose offering is permitted under EU law. Any revision should continue to prioritise redeemability and risk containment.

3.2.2 Redemption fees

MiCAR confers upon holders of EMTs a claim against the issuer, in line with FSB recommendations.[25] Accordingly, issuers of EMTs must redeem them, at any time and at par value, by paying holders the monetary value of the EMTs in funds. MiCAR allows redemption fees to be charged only after the activation of a recovery plan (see Article 49).[26] While MiCAR provides that EMTs are legally equivalent to electronic money governed by the Electronic Money Directive (EMD), the two regulatory frameworks take different approaches to the applicability of redemption fees, allowing them under different circumstances.[27]

The absence of a specified redemption timeline in MiCAR may have negative economic effects for token holders. While the prohibition on redemption fees ensures that holders fully recover the nominal monetary value of their holdings, MiCAR does not specify a maximum time frame for processing redemptions, which may have negative economic consequences for token holders. Issuers could rely on this circumstance to delay the transfer of funds to token holders, thereby deriving an economic benefit. Such a benefit could exceed the benefit that would arise if redemption fees were allowed and delay fund transfer and would constitute a hidden cost for token holders. In this respect, it should be noted that the FSB recommendations require redemptions to be processed in a timely manner. The Principles for Financial Market Infrastructure,[28] which apply to stablecoin

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24 Under current Article 39(2) MiCAR, issuers can redeem in kind only if the consideration for initial ART issuance was not paid in funds.

25 See Recommendation 9 of the FSB's High-level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangements.

26 Outside the context of the implementation of the recovery plan (Article 46), MiCAR states that redemption must not incur a fee.

27 Article 11 of the Electronic Money Directive states that redemption fees "shall be proportionate and commensurate with the actual costs incurred by the electronic money issuer". It also provides that redemptions should, in general, be free of charge. However, redemption fees are allowed under specific circumstances, depending on the conditions stipulated in the contract, such as where the contract is terminated early.

28 See CPMI and Board of IOSCO, "Application of the Principles for Financial Market Infrastructures to stablecoin arrangements", Bank for International Settlements and IOSCO, July 2022.

arrangements that are considered systemically important, define “timely” as “as soon as possible, at a minimum by the end of day and ideally intraday”. Providing token holders with prompt access to funds upon the reimbursement of EMTs would ensure a high level of protection, although it would also make issuers more exposed to liquidity risk.

While there is some merit in allowing redemption fees to be charged outside a recovery plan scenario, the nature of such fees as a liquidity management tool for products redeemable at sight, such as stablecoins, needs to be duly considered. This means that different perspectives on how the fees could affect holders’ behaviour need to be balanced. In general, the FSB requires that any redemption fees be clearly communicated to users and, be proportionate and not be high enough to become a de facto deterrent to redemption. In addition, inspiration can be drawn from other products redeemable at sight, such as MMFs. To be able to fulfil potential investor redemptions in times of severe market stress, MMFs should have provisions in place for liquidity fees to ensure investor protection and prevent a “first mover advantage”.

The primary vulnerability of stablecoins is that holders lose confidence in their ability to be redeemed at par. To address this vulnerability, the FSB recommends that stablecoins have an effective stabilisation mechanism in place. Ensuring a high level of liquidity in the reserve assets, through the requirements discussed in Section 3.2.1, is the primary tool for ensuring that stablecoins maintain a stable value at all times and are able to fulfil all redemption requests.

From a financial stability perspective, if redemption fees are allowed beyond what is currently possible under MiCAR, they should be implemented in a way that avoids creating incentives for investors to pre-emptively redeem their holdings during periods of stress, thereby giving rise to so-called threshold effects. Imposing redemption fees in normal times could, in principle, reduce the probability of a run, as it could encourage holders to wait rather than redeem immediately. However, introducing redemption fees in normal times would also reduce the value for holders. If those fees were not proportionate to operational costs incurred by issuers,[29] they could lead to large price deviations from par on secondary markets.[30] In addition, fees should not be rigidly tied to a specific numerical or regulatory thresholds (e.g. the activation of a recovery plan), as this could create sharp cliff effects around those thresholds.

Given the interaction between different liquidity risk management tools, i.e. the stabilisation mechanism (reserves), the maximum timeline for processing redemptions and the charging of redemption fees in normal times, the ESCB sees merit in a holistic assessment. As outlined by the FSB, the stabilisation mechanism should serve as the first line of defence. When calibrating the

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29 The FSB recommendations for GSC require that any fees for redemption should be “proportionate, and not be high enough to become a de facto deterrent to redemption”. The Electronic Money Directive sets out that redemption fees ‘shall be proportionate and commensurate with the actual costs incurred by the electronic money issuer’.

30 If investor exposures were to further increase significantly, this would raise the risks of adverse wealth effects. This could ultimately reduce the purchasing power of individuals and businesses holding these stablecoins, leading to lower consumption and investment.

requirements for the reserve assets (see Section 3.2.1), due consideration should be given to the interaction between those requirements and the redemption timeline, given that MiCAR does not set a specific limit. The aim should be to ensure the sustainability of issuers while protecting clients and safeguarding financial stability more broadly.

In any event, the ESCB recommends retaining the unconditional right of token holders to redeem their holdings. This means that no minimum redemption amounts should apply.

3.2.3 Prohibition on paying yield

The ESCB is of the view that the payment of stablecoin remuneration should continue to be prohibited. To effectively enforce the prohibition on paying remuneration, attempts to circumvent this prohibition through, for example, tri-party schemes must be addressed.[31] The ESCB continues to support the prohibition on CASPs paying remuneration on stablecoins.[32] However, the ban should not be limited to cases where CASPs offer services governed by MiCAR, but should apply also to unregulated services, such as crypto borrowing, lending and staking.[33] Should the co-legislators decide to bring these three activities within the scope of MiCAR, as advocated in the draft ESCB reply, they should do so in a way that prevents the circumvention of the prohibition on paying remuneration. Recent developments in decentralised finance, whereby decentralised finance protocols use crypto-assets to create new financial products, show how stablecoins may be transformed into yield-bearing arrangements through lending, staking or other layered structures, thereby potentially circumventing the prohibition on direct remuneration.[34] In this context, maintaining and, where necessary, strengthening the prohibition – covering both direct and indirect forms of remuneration – should be a clear legislative priority. Such indirect remuneration may, for example, take the form of some kinds of benefits provided under loyalty programmes, or liquidity mining incentives embedded in DeFi arrangements.

The prohibition on the payment of interest on EMTs is consistent with the principle of technological neutrality and the dual nature of EMTs as both a crypto-asset under MiCAR and electronic money. The EMD[35] provides that the issuance of electronic money does not constitute a deposit-taking activity, because

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31 Remuneration may also be offered through indirect mechanisms, such as rewards, fee reductions or bundled services.

32 The prohibition on paying interest should remain in place for ARTs as well, given that ARTs could be designed to replicate the economic profile of an EMT. Furthermore, as noted earlier, ART holders aim to obtain a return from positive variations in the value of the referenced asset(s), rather than from interest payments.

33 Some CASPs currently engage in crypto lending, borrowing or staking, thereby replicating the economic effect of interest payments through ancillary or unregulated services.

34 See Lee, M.J. (2026), "Composable finance", *Federal Reserve Bank of New York Staff Reports*, No 1177, Federal Reserve Bank of New York, January.

35 Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC (OJ L 267, 10.10.2009, p. 7).

electronic money is intended to be used for making payments and not as a means of saving. This distinction is maintained under Directive (EU) 2015/2366 (the second Payment Services Directive, or PSD2) and confirmed in the legislative proposal for the third Payment Services Directive (PSD3), which clarifies that entities providing payment services are not permitted to take deposits or other repayable funds. Because EMTs qualify as electronic money, they are broadly subject to the same rules. Maintaining the prohibition on remuneration is essential in order to preserve the integrity of the regulatory framework and ensure a level playing field across the EU financial system.

3.2.4 Union holders

Recital 54 of MiCAR introduces the concept of "Union holder", which, however, is neither defined nor used elsewhere in the Regulation. MiCAR pursues the objective of ensuring a high level of protection for holders of stablecoins, yet the Regulation fails to define which holders qualify as Union holders and therefore stand to benefit from this protection. Therefore, the ESCB calls for the introduction of a definition (and not just the concept) of "Union holder" in MiCAR, which should encompass both natural and legal persons. This definition should also be conceived in a way that prevents circumvention, including by taking into account the use of non-custodial wallets (also referred to as self-hosted wallets or unhosted wallets).

3.2.5 Issuance model for credit institutions

The ESCB supports maintaining in MiCAR the possibility of direct EMT issuance by credit institutions under a balance sheet model. Accordingly, it does not support the proposal to require credit institutions to establish a segregated reserve of assets within their balance sheets to back EMT issuance. Such a proposal, considered in the consultation document, conflicts with the principle of technological neutrality enshrined in MiCAR. EMTs are legally equivalent to electronic money, the prudential framework for EMT catered for by MiCAR mirrors the one under the Electronic Money Directive that enables banks to issue electronic money directly. Moreover, it is unlikely to strengthen banks' overall soundness. Instead, it could worsen the position of unsecured creditors such as depositors and bondholders and in turn increase the volatility of banks' funding. When a bank runs a business line that is backed by a dedicated pool of assets and that business suffers losses, those losses reduce the bank's own funds, which are intended to support the bank's entire operations. If a particular business line (for example, EMT issuance) is backed by a segregated pool of estates within the bank, creditors of that business are effectively insulated from the firm's broader business risk while still benefiting from both the segregated pool of assets and the bank's general asset base. This insulation would leave other unsecured creditors, including depositors, relatively worse off. If banks issuing EMTs were required to comply with Articles 37 and 38 of MiCAR, the funds raised through EMT issuance would not be available for lending.

This contrasts with the current situation where banks, depending on their liquidity profile, risk appetite and LCR management, can use part of the proceeds to extend loans. The proposed model therefore produces a different outcome from the on-balance sheet covered bond model[36]: covered bonds are term liabilities, whereas EMTs are sight liabilities. Segregating assets to back sight liabilities weakens a bank's liquidity profile. [37] Moreover, if token holders cannot be repaid from the segregated assets because those assets are illiquid or otherwise insufficient, the bank would need to deploy other assets to cover the shortfall, to the detriment of other unsecured creditors.

The ESCB considers that credit institutions should remain free to choose, as currently under MICAR, whether to directly issue EMTs or through a subsidiary. Only in specific instances, and subject to a case-by-case assessment - banking supervision authorities may request issuance to be undertaken via an EMI subsidiary. The ESCB acknowledges that the issuance of EMTs through a dedicated legal entity may offer the benefit of greater transparency for retail users if a clearly distinguished legal name is used. However, a clear distinction between EMTs and tokenised deposits should be achieved through appropriate legal definitions in Level 1 legislation and adequate customer disclosures, rather than through mandatory legal-entity separation. Besides, EMI licence may provide a convenient vehicle for establishing joint ventures involving multiple financial institutions. While issuance through a subsidiary may help to separate EMT issuance activities from the balance sheet of the credit institution, it does not remove the expectation that a sponsoring bank will "step in" for an EMT issued by a subsidiary in the event of financial distress. Given these considerations, the ESCB considers that, as general rule, both issuance models should continue to be available. Only in specific instances, and subject to a case-by-case assessment - banking supervision authorities may request issuance to be undertaken via an EMI subsidiary. Such request could be justified, inter alia, by the level of complexity of bank's operation or its interconnectedness with the financial sector. In order to be aware of such situations, Articles 17 and 48 should be modified to include a requirement for competent authorities to inform the relevant banking supervision authority when they receive a notification from a credit institution that it intends to issue an ART or an EMT (see also 6.5.2). Such a notification would enable the banking supervision authority to assess whether there are grounds to intervene, including the possibility to request the issuance via subsidiary.

3.2.6 Specific considerations for ARTs

Further reflection on the ART category and its delineation from other regulated products may be warranted. The use of ARTs as a conduit for offering non-

[36] Banks' on balance sheet issuance of EMT enables to remove the rigidity of the pre-funding mechanism embedded in EMI based issuance model. Such an EMI issuance model prevents fractional credit creation while giving rise to systemic liquidity bottlenecks during market stress.

[37] If EMT reserve were segregated, this could, in a crisis, raise incentives for clients to shift from deposits to EMTs instead. In the absence of any restrictions on deposit-to-EMT conversion, large-scale conversions would represent an 'internal run into seniority'. This would require the bank to increase its holdings of HQLA in a time of elevated stress.

authorised products in the EU, or for circumventing classification of other regulated products (e.g. EMT, financial instrument), should be prohibited. MiCAR defines ARTs as a type of crypto-asset that aims to stabilise its value by referencing another value or right, including one or several official currencies, or a combination thereof. This definition may create uncertainty regarding the boundary between ARTs and products that are already regulated under other EU legislative categories or facilitate references to assets whose offer or distribution in the EU has not been approved. To avoid this, Article 3(1)(6) of MiCAR should be amended to clarify its scope. Otherwise, competent authorities under MiCAR may have difficulty in preventing regulatory arbitrage and the distribution within the EU, through ARTs, of products that do not comply with EU law.

The MiCAR requirements on the composition of ARTs' reserve assets could be adjusted to enable issuers to fulfil potential customers' needs and facilitate the sustainability of issuers' business model. The definition of ART suggests that their primary objective is to maintain a stable value in relative terms to the referenced asset(s), while ART holders may seek a return from the positive variation in the value of the referenced asset(s). Pursuing the best possible alignment between an ART's value and that of the referenced asset(s) could be in the interest of both the issuer and its holders and could be facilitated by allowing the ART's reserve to be invested (in full) in the referenced assets. However, pursuant to MiCAR, if the referenced asset is neither a currency nor a highly liquid financial instrument, this is not permitted.[38] This means that an ART cannot reference commodities and any other legitimate right or value that is not a financial instrument under EU or national law.[39] This constraint may have hindered the development of the ART market by making it difficult to ensure an effective and economically sustainable correlation between an ART's value and the referenced assets. It could also be considered to allow ART issuers to redeem solely in kind if the token references values or rights other than currencies. Such an approach should be permitted only where appropriate disclosure is provided in the white paper.[40] Moreover, it would warrant a reduction in an ART's exposure to liquidity risk without causing any harm to token holders who are informed of those conditions before purchasing the token.

3.2.7 Crisis management framework for stablecoin issuers

While MiCAR caters for the category of significant ARTs and EMTs, it does not contain tailored rules for the management of crisis situations affecting such

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38 Issuers are permitted to retain the assets received as consideration when offering an ART, even if those assets do not qualify as highly liquid financial instruments.

39 The minimum deposit requirements to which ART issuers are subject, similarly to EMIs issuing EMTs, are a further source of misalignment between the value of the reserve assets and that of the referenced asset(s) when the latter is (are) not currencies.

40 A crypto-asset white paper is an information document containing mandatory disclosures under MiCAR. Notably, this document should contain general information on, among other matters, the issuer of the crypto-assets, the offer to the public or admission to trading of the crypto-assets, the rights and obligations attached to the crypto-assets, the underlying technology used for such crypto-assets, and the related risks. Article 19 of MiCAR sets out the content and form of the crypto-asset white paper for ARTs.

issuers[41]**.** The guidelines issued by the EBA pursuant to Articles 46(6) and 47(5) of MiCAR cover only the content and format of the recovery plan and redemption plan and cannot ensure the harmonisation of crisis management regulatory frameworks for issuers of ARTs and EMTs among Member States. Given this situation, it makes sense to amend the Regulation so as to ensure closer coordination between the recovery plan obligations under MiCAR and those under BRRD, and to clarify certain aspects related to the bail-inability of deposits of EMT and ART[42] issuers as well redemption claims in resolution scenario[43]. Lastly, the ESCB recommends that a tailored regime for the crisis management of issuers of significant EMTs and ARTs other than credit institutions be introduced through a revision of MiCAR.

3.3 Criteria for determining the significance of EMTs and ARTs

MiCAR currently establishes seven criteria for the classification of EMTs and ARTs as significant. Significant EMTs and significant ARTs are subject to additional requirements, given their heightened risks. Moreover, where an ART has been classified as significant, MiCAR subjects the activities of the issuer to the supervision of the EBA.[44] For issuers of significant EMTs, the EBA's supervisory role is limited to ensuring the issuer's compliance with specific provisions under MiCAR.[45] However, being classified as a significant EMT is not a sufficient criterion for assessing that EMT's suitability for use as a settlement asset in FMIs. As outlined in the ECB opinion on the market integration and supervision package, such suitability should instead be assessed based on compliance with additional prudential requirements under the relevant regulations applicable to FMIs, in order to further mitigate the risks stemming from the use of EMTs.[46]

The ESCB believes that revising certain aspects of the significance criteria would be highly beneficial, particularly in view of the role assigned to the ECB

41 Except for issuers that are credit institutions, whose activities are covered by the BRRD.

42 Article 44(2) BRRD contains exclusions from bail-in for certain liabilities, including covered deposits and certain client-assets, client-money or fiduciary arrangements. However, it does not contain a specific exclusion for ART reserve assets (including deposits). Further clarity may therefore be needed on whether and how liabilities corresponding to such reserve or safeguarding arrangements would be treated in bail-in, including by analogy with existing protections for client assets.

43 MiCAR requires reserve assets to be operationally segregated from the issuer's estate and protected through custody arrangements, but the insolvency treatment of those assets across Member States remains not fully harmonised. It may be therefore unclear whether, upon the issuer's failure, the custodian (e.g. a credit institution) should return assets directly to token holders, transfer them to the issuer's insolvency administrator for distribution in accordance with the applicable insolvency process, or follow another mechanism under national law. This dependence on national insolvency law could lead to divergent outcomes across Member States.

44 Except where the issuer is a credit institution, in which case the EBA's supervision is limited to the ART issuance only.

45 In particular, Article 117(4) states that: "EBA shall supervise the compliance of the issuer of such significant e-money token with Articles 55 and 58".

46 See paragraph 4.5.2 of the ECB opinion on the market integration and supervision package; see Amendment 33 in Technical working document (1/3) produced in connection with ECB Opinion [CON/2026/13].

(and national central banks, where relevant)[47] in this regard. In their current form, the criteria do not comprehensively capture the significance of EMTs and ARTs, partly due to the global nature of DLT-based activity. More specifically, as further outlined below, certain quantitative significance criteria (namely, criteria under letters(a), (b) and (c) of paragraph 1, Article 43 MiCAR)[48] should be assessed on a global scale to reflect the cross-border nature of stablecoins. Furthermore, as also noted in the following paragraphs, the overall significance criteria should be amended to account for emerging developments in the stablecoin market that could pose heightened risks, such as third-country multi-issuer stablecoin schemes, if such schemes are permitted. While the ECB and, as the case may be, national central banks are not responsible for classifying ARTs and EMTs as significant, they are tasked with providing observations and comments on the EBA's draft decision regarding such classifications, in accordance with Articles 43(5), 44(2), 56(4) and 57(2) of MiCAR.

The quantitative criteria related to the size and use of ARTs and EMTs should be comprehensively evaluated, including activities conducted outside the EU. This means that the quantitative criteria set out in points (a), (b) and (c) of Article 43(1) of MiCAR should be revised and the related thresholds recalibrated. It should be specified that the number of holders, the value of the ART or EMT issued, its market capitalisation, the size of the reserve assets and the average number and average aggregate value of transactions in that ART or EMT must be considered both within and outside the EU. As noted in Section 3.4, the rationale for this approach is that, because of the way distributed ledgers work, it is not possible to determine with reasonable accuracy where stablecoins are held or to geographically identify where the parties to the transactions are located. For instance, it is not feasible to ascertain whether stablecoins held in non-custodial wallets are held by parties within or outside the EU. These technical constraints also apply when assessing certain core indicators used to evaluate the qualitative criterion set out in point (e) of Article 43(1) of MiCAR, which refers to the significance of the activities of the issuer of an ART or EMT on an international scale.[49] Additionally, recalibration of these quantitative thresholds could potentially warrant further reflection from the perspective of EU central banks located outside the euro area.[50] It also appears

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47 Pursuant to Article 43(4) of MiCAR, where the issuer is established in a Member State whose official currency is not the euro, or where an official currency of a Member State that is not the euro is referenced by the asset-referenced token, the central bank of that Member State may also provide observations and comments on the EBA's draft decision.

48 More specifically, these criteria are the following: (a) the number of holders of the ART or the EMT is larger than 10 million; (b) the value of the ART or the EMT issued, its market capitalisation or the size of the reserve of assets of the issuer is higher than EUR 5 000 000 000; (c) the average number and average aggregate value of transactions in that ART or EMT per day during the relevant period, is higher than 2,5 million transactions and EUR 500 000 000 respectively.

49 Commission Delegated Regulation (EU) 2024/1506 of 22 February 2024 supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council by specifying certain criteria for classifying asset-referenced tokens and e-money tokens as significant, provides a set of core indicators for assessing the qualitative criterion set out in point (e), concerning significance on an international scale, which rests on the identification of cross-border transactions and, therefore, on determining the location of the parties, and more precisely whether they are located within or outside the EU.

50 In a small currency area outside the euro area, an ART or EMT could become materially important at outstanding values and numbers of holders that are orders of magnitude below the thresholds set out in Article 43 of MiCAR. Additional indicators complementing the qualitative criteria could also be explored.

necessary to revise the underlying Commission Delegated Regulation 2024/1506[51] to clarify how the relevant indicators and ratios should be weighted within the overall significance assessment.

The ESCB considers that the qualitative criteria could potentially be broadened. Additional criteria could capture dimensions that go beyond risks to payments and financial stability. For example, a criterion that captures operational risks arising from the underlying infrastructure could be considered. This could include factors such as the deployment of an ART or EMT across various DLT networks, the use of interoperability mechanisms and reliance on critical service providers. The existing ancillary indicators used to assess interconnectedness with the financial system could also be expanded to include additional factors, such as the use of an EMT as a settlement asset within financial market infrastructures.

Lastly, should third-country multi-issuer stablecoin schemes be permitted, participation in such schemes should be explicitly included as a criterion for classifying an ART or EMT as significant. This would be consistent with Recommendation D of the Recommendation of the European Systemic Risk Board of 25 September 2025 on third-country multi-issuer stablecoin schemes (see Section 3.5).

3.4 MiCAR reporting framework and restrictions on the issuance of ARTs and EMTs widely used as a means of exchange

MiCAR establishes transaction thresholds for ARTs and EMTs denominated in non-EU currencies in order to prevent their widespread use as means of exchange. Currently, under MiCAR, issuers must cease issuing ARTs and EMTs denominated in non-EU currencies if the estimated quarterly average volume and average daily aggregate value of transactions associated with their use as a means of exchange within a single currency area exceed 1 million transactions and €200,000,000.[52] The Regulation allows the MiCAR competent authority to use information provided by the issuer, its own transaction estimates, estimates provided by the ECB or, as the case may be, by the central bank referred to in Article 20(4)[53], in order to determine whether the thresholds have been met and, therefore, whether issuance restrictions should be applied. This is important, as ARTs and EMTs denominated in non-EU currencies should not be used widely for payments, as this could hamper the transmission of monetary policy and ultimately undermine

51 COMMISSION DELEGATED REGULATION (EU) 2024/1506 of 22 February 2024 supplementing Regulation (EU) 2023/1114 of the European Parliament and of the Council by specifying certain criteria for classifying asset-referenced tokens and e-money tokens as significant.

52 Article 23 of MiCAR.

53 Article 23(2) and Article 22(5) of MiCAR. Pursuant to Article 20(4) of MiCAR, where the issuer is established in a Member State whose official currency is not the euro, or where an official currency of a Member State that is not the euro is referenced by the token, the central bank of that Member State could provide its own estimates of the transaction thresholds.

monetary sovereignty. It could also pose risks for the smooth operation of payment systems.

The ESCB has pointed to existing data gaps in the MiCAR reporting framework that hinder its ability to effectively fulfil its role. To verify whether transaction thresholds have been met, the ECB, MiCAR competent authorities and, as the case may be, national central banks need quantitative data. However, they face significant challenges in this regard. Determining whether the transaction thresholds have been met means: (i) identifying users' locations to attribute transactions to the euro area (or any other EU Member State's currency area), and (ii) classifying transactions in which the token has been used a "means of exchange"[54]. In practice, it is impossible to identify users' locations reliably and classify transactions by purpose due to the structural features of DLT[55]. Therefore, such information is not currently available to the ECB, MiCAR competent authorities and national central banks.

Amendments to MiCAR are needed in order to establish a viable reporting framework that can reliably support the application of issuance restrictions. The above-mentioned data gaps undermine the practical application of issuance limits and restrict the possibility for the ECB, MiCAR competent authorities and national central banks to address the risks arising from ARTs and EMTs denominated in non-EU currencies, including if where such tokens are widely used as a means of exchange. As a result, the risks MiCAR seeks to mitigate are not adequately addressed, including where a non-EU currency EMT or ART threatens the smooth functioning of payment systems, the transmission of monetary policy or monetary sovereignty.

Issuers are likely to face similar challenges in obtaining accurate data. MiCAR competent authorities may also rely on estimates provided by issuers to verify whether transaction thresholds have been met. Issuers may obtain the information needed to prepare their reporting from CASPs, including data on transactions conducted outside the distributed ledger.[56] However, while data obtained from CASPs licensed in the EU could be used to determine the location of EU-based transactions, such CASPs would not necessarily be able to provide data on which transactions are associated with the use of the token as a means of exchange. Moreover, transactions conducted through non-EU regulated CASPs or involving non-custodial wallets would not be captured. Lastly, issuers may encounter potential conflicts of interest when reporting. In this context, estimates provided by the ECB, MiCAR competent authorities or national central banks may serve as a safeguard for verifying the accuracy of assessments of whether the transaction thresholds have been met.

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54 As defined in Article 22(1)(d) of MiCAR and further specified under Article 3 of Commission Delegated Regulation (EU) 2025/298.

55 Distributed ledger networks record transactions and data, but are unable to track the geographical location of a participant or a transaction with absolute certainty. While it is possible to infer the location of a custodial wallet or, in some cases, the setup location of a non-custodial wallet or signer, these can be obfuscated using tools such as VPNs or proxy servers. Additionally, raw transaction data alone are not enough to determine whether a transaction is associated with the use of a token as a "means of exchange". Although CASPs can identify certain transactions linked to merchants based on specific patterns, this approach captures only a limited subset of all transactions.

56 Article 22(3) of MiCAR.

Against this background, the ESCB suggests further reflection on ways to enhance the existing MiCAR reporting requirements. For instance, potential ways forward could involve further consideration of the "means of exchange" use case, such as whether its scope could be expanded or exploring ways to determine the purpose of a transaction. This might help improve the way transactions are reported and issuance restrictions applied. Additionally, further consideration could be given to collecting data on activities outside the EU, which could be particularly valuable with respect to third-country multi-issuer schemes. Lastly, the perspective of EU central banks outside the euro area also warrants further reflection.[57]

Furthermore, the MiCAR reporting framework could be enriched beyond the provisions under Article 22 of MiCAR. Further consideration could be given to consolidating the reporting framework, notably by building on the reporting requirements for issuers of ARTs and EMTs set out in the EBA's own-initiative guidelines and incorporating them into the Level 1 text.[58] To help ensure the effective enforcement of reporting obligations, penalties for instances of non-compliance should be part of the supervisory toolkit of MiCAR competent authorities.

Reported data should also be made usable for statistical purposes to support ESCB tasks and avoid a duplicate reporting burden for reporting entities. To fulfil its tasks, the ESCB requires comprehensive and reliable statistical information. The forthcoming updates to the ECB Guidelines on quarterly financial accounts and external statistics will include reporting requirements for national central banks on crypto-assets, aligned with methodological changes to consistently categorise, measure and track crypto-assets within national macroeconomic indicators in the forthcoming updates to the European System of Accounts (ESA 2030) and the Integrated Balance of Payments and International Investment Position Manual (BPM7). Extended reporting on EMT and ART holders would facilitate the work of the ESCB in compiling this statistical information. If the reported information could also be used for statistical purposes, which is currently not the case under MiCAR, this would reduce the need for reporting agents to report slightly different but broadly similar information through different channels, such as through MiCAR competent authorities and national central banks. To this end, the reporting obligations under MiCAR should be enriched to include geographical breakdowns for resident and non-resident holders of crypto-assets. Information on non-resident holders should be made available with further breakdowns at least between holders within and outside the euro area. Sectoral breakdowns of resident ART and EMT holders, as outlined in the draft ESA 2030 legislation, are also required. While such data could be obtained where wallets are custodial, they cannot be collected for non-custodial wallets.

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57 When an EMT issued in another Member State and denominated in another EU currency, for example a euro-denominated EMT, becomes widely used in a non-euro area Member State, the relevant national central bank may not have a clear role under MiCAR, even if the EMT becomes relevant for the smooth operation of payment systems or financial stability.

58 See EBA Guidelines on templates to assist competent authorities in performing their supervisory duties regarding issuers' compliance under Titles III and IV of Regulation (EU) 2023/1114, EBA/GL/2024/16.

3.5 Financial stability implications

MiCAR aims to address the risks to financial stability in the EU arising from crypto-assets such as EMTs. The primary vulnerabilities stem from the maturity transformation inherent in the product: while stablecoin issuers offer conversion back into fiat currency on demand, the reserves are invested in assets with varying degrees of liquidity, ranging from deposits to short-term securities. MiCAR provides for redemption rights directly with the issuer.[59] In practice, however, stablecoin holders seeking to exit their positions at a particular point in time typically sell their tokens in the secondary market rather than redeeming them directly with the issuer. Since a stablecoin is designed to trade at parity with its reference currency, this is generally equivalent to direct redemption. However, secondary market liquidity is not immune to the market's perception of the quality of the reserve assets and, more broadly, the soundness of the issuer. As such, a deterioration in confidence in the reserve assets (e.g. due to an adverse news event) can cause the stablecoin's market price to fall below par, resulting in what is known as a de-peg. This, in turn, would increase pressure on the issuer's redemption mechanism as users seek to exit the stablecoin at par. If the stablecoin issuer does not have sufficient liquidity on hand, asset sales would ensue, transmitting stress to the markets for the stablecoin's reserve assets, which include both deposits and sovereign debt.

Stablecoins can have financial stability implications through their reserve assets, which need to be appropriately addressed, including through diversification requirements (see discussion in Section 3.2). Since stablecoin issuers must currently hold a significant share of their reserve assets as deposits with EU banks, stress in the crypto sector could be transmitted to the banking system via stablecoins. If a stablecoin were large in size and its deposits significant relative to the assets of the banks with which those deposits were deposits, a run on the stablecoin would not only affect the liquidity of those banks, but could trigger a run on an exposed bank. To mitigate this risk, draft RTS propose limits on deposit concentration and an obligation to assess the creditworthiness of the deposit-taking bank.[60]

As with contagion to banks, a run on a stablecoin could also spill over into the market for sovereign debt. If reserve assets are invested in the debt of a small number of sovereign issuers, a redemption-driven sell-off could amplify stress in those markets, exerting upward pressure on yields and causing adverse price dynamics that may extend beyond the impact from the stablecoin sector itself. This is particularly relevant if the euro-denominated stablecoin sector grows significantly, as unlike in the United States, the EU sovereign debt market is fragmented across multiple issuers. Appropriate diversification requirements across sovereign issuers would serve to distribute this risk, limiting the extent to which any single sovereign bond market is exposed to the liquidation behaviour of stablecoin issuers under stress. Under the draft regulatory standards, up to 35% of reserve assets can be allocated to a single sovereign issuer whose debt instruments are not subject to any

[59] Under Article 49(4) of MiCAR, this redemption must be available "at any time and at par value".

[60] See the EBA's Final report – Draft Regulatory Technical Standards to further specify the liquidity requirements of the reserve of assets under Article 36(4) of Regulation (EU) 2023/1114.

haircuts in accordance with Commission Delegated Regulation (EU) 2015/61. Lastly, vendor concentration risks should also be considered. The increasing reliance of crypto-asset ecosystems on a limited number of critical technology providers, such as cloud service providers, blockchain infrastructures, custodians, key management providers, bridges, and oracle services, may create common or single points of failure capable of affecting multiple market participants simultaneously and amplifying stress across the ecosystem.[61]

Given the financial stability implications of stablecoins, financial stability should be included as a ground in all instances where MiCAR assigns to the ECB and, as the case may be, to national central banks the task of providing binding opinions.[62] The assessment of financial stability is not treated consistently under MiCAR. While it is a criterion in the authorisation assessment for both the MiCAR competent authority[63] and the ECB or, where applicable, the national central banks when providing an opinion on the authorisation, this opinion is not binding on the competent authority.[64] A similar approach also applies when it comes to withdrawing an authorisation, where financial stability is a criterion for the competent authority, but is not regarded as a risk or threat to be assessed in the ECB's or national central bank's opinion.[65] In this context, it is recommended that the grounds on which the ECB can issue a negative opinion that is binding on the competent authorities be extended to encompass financial stability, thus enabling the ECB to perform its role more effectively through the issuance of opinions. Given the above-mentioned vulnerabilities associated with ARTs and EMTs, these ECB opinions would serve as an important tool were a stablecoin to grow rapidly in scale and pose a risk to the broader financial system. Furthermore, this would benefit the national central banks referred to in Article 20(4) of MiCAR whenever they are required to issue analogous opinions pursuant to the provisions of MiCAR.

Appropriate regulatory safeguards are needed to address the risks posed by the growing use of foreign currency-denominated EMTs issued by non-EU entities. These safeguards are necessary to preserve financial stability, the smooth

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61 See also ESRB (2025), "Crypto-assets and decentralised finance – report on stablecoins, crypto-investment products and multifunction groups", October.

62 Notably, this includes opinions on applications for authorisation by issuers of ARTs (Article 20(5) of MiCAR); information submitted by credit institutions in relation to an offer to the public or admission to trading of ARTs (Article 17(5) of MiCAR); the withdrawal of authorisation of an issuer of ARTs and issuance limitations on ARTs and EMTs denominated in non-EU currencies (Articles 24(2)(3) and 58(3) of MiCAR); and modifications to ART whitepapers and proposals for corrective measures (Article 25(3) of MiCAR).

63 Article 21(2)(e) identifies, as a ground for the MiCAR competent authority to refuse to authorise an issuer of an ART, the fact that the applicant issuer's business model might poses a serious threat to, among others, financial stability.

64 Article 21(4) provides that competent authorities shall refuse authorisation if the ECB or, where applicable, the central bank gives a negative opinion under Article 20(5) on the grounds of a risk posed to the smooth operation of payment systems, monetary policy transmission, or monetary sovereignty.

65 Article 24(2) provides that the ECB or, where relevant, national central banks, may issue an opinion requiring the MiCAR competent authority to withdraw the authorisation of an issuer of an ART when that ART poses a serious threat only on the grounds of the smooth operation of payment systems, monetary policy transmission or monetary sovereignty. There is no reference to financial stability as a ground for the assessment of the ECB and, where relevant, the national central bank. The same applies to the ECB's and national central banks' opinions on issuance limitations regarding EMTs denominated in non-EU currencies. According to Article 24(1)(g), financial stability is, however, included among the grounds based on which the MiCAR competent authority may withdraw the authorisation of an ART issuer on its own initiative, without an assessment by the ECB or, where relevant, the national central bank concerned.

operation of payment systems, monetary policy transmission and monetary sovereignty. It would be useful if MiCAR competent authorities were able to impose to issuers of EMTs denominated in third-country currencies a prohibition to issue new tokens, as well as an obligation to redeem existing tokens. If the ECB, or the relevant national central bank, concludes that such an EMT poses a threat on grounds not only of monetary policy transmission, the smooth operation of payment systems or monetary sovereignty, but also of financial stability. This may prove necessary, as it may not be possible to foresee such threats at the authorisation stage. This tool is already available for ARTs under Article 24 of MiCAR. In line with the principle of technological neutrality, this should apply to both e-money and its tokenised form. In any case the exercise of the supervisory power proposed above would be subject to appropriate safeguards aimed at protecting financial stability, the smooth operation of payment systems, monetary policy transmission and monetary sovereignty, as well as preserving the rights of token holders.

3.6 Monetary policy transmission implications

The composition of stablecoin reserves has important implications for the cost and stability of banks' funding. If stablecoin issuers hold their reserves entirely as bank deposits, the aggregate volume of deposits within the banking system will remain unchanged. However, the composition of banks' liabilities does change, as deposits previously held by households and non-financial firms are replaced by deposits held by stablecoin issuers, which are typically non-bank financial institutions. This makes banks more reliant on non-retail deposits, which are generally more rate-sensitive, less stable and more expensive than traditional retail funding. The effects are more pronounced when stablecoin issuers allocate their reserves to highly liquid assets other than bank deposits. In this case, stablecoin issuance may displace bank deposits by redirecting funds away from the banking sector. The magnitude of this effect depends on the counterparties involved in these transactions. If the securities that stablecoin issuers invest in as reserve assets are sold to them by banks, deposits are withdrawn directly from the banking system. If the issuers purchased these securities from non-bank sectors, some of the proceeds may eventually flow back to banks in the form of deposits, mitigating the net reduction in funding. Even in this case, however, the composition of deposits may change, potentially reducing the share of stable retail funding. Consequently, large-scale stablecoin adoption may leave banks with a funding structure that is both less stable and more costly, with implications for their ability to supply credit.[66] There may also be distributional consequences within the banking sector, as the banks that lose retail deposits as consumers move to stablecoins are not necessarily those receiving the deposits from stablecoin issuers. If the former are small banks, this might lead to stronger downside effects of stablecoin issuance on lending.

[66] See, for example, Altavilla C., Boucinha, M., Burlon, L., Adalid, R., Fortes, R. and Maruhn, F. (2026), "Stablecoins and Monetary Policy Transmission" *Working Paper Series*, No 3199, ECB, March, for discussion of the implications for monetary policy in the euro area; and Lee, M.J. and Tou, D. (2026), "Stablecoin Disintermediation", *Staff Reports*, No 1185, Federal Reserve Bank of New York, February, for evidence of deposit substitution and bank disintermediation in the United States.

These changes in bank funding have important consequences for monetary policy transmission. Banks become more exposed to funding sources that are sensitive to market conditions and face greater competition for deposits. As a result, the deposit base is likely to become more responsive to monetary policy changes, as wholesale funding is typically remunerated at levels closer to market rates than retail deposits, and competition from stablecoins may increase the responsiveness of retail deposit rates. Monetary policy impulses may therefore be transmitted more rapidly to banks' funding costs. For example, an increase in policy rates would exert greater upward pressure on funding costs, leading to a faster increase in lending rates and a quicker decline in lending volumes, thereby strengthening the bank lending channel. At the same time, increased competition from stablecoins may diminish banks' market power in deposit markets, particularly in the retail segment, limiting their ability to maintain large spreads between deposit rates and market rates compared with a system in which stablecoins are absent. This would lead to a smaller reduction in deposit volumes following a policy rate increase, thereby weakening the deposit channel of monetary policy transmission. Overall, widespread stablecoin adoption can interfere with multiple monetary policy transmission channels, potentially making the strength of transmission less predictable.

3.7 Global stablecoins and multi-issuer schemes

The ESCB considers that amendments to MiCAR are urgently needed to clarify the permissibility of third-country multi-issuer stablecoin schemes. MiCAR explicitly provides for intra-EU multi-issuer arrangements (Articles 36(5) and 37(2)), mandating specific safeguards for them (e.g. maintaining a single reserve of assets and a single custody policy). Importantly, all parties to an intra-EU multi-issuer arrangement are subject to the same legal regime, and to consistent supervision. However, MiCAR does not provide a legal basis for multi-issuer stablecoin schemes involving a third-country issuer. The permissibility of such schemes can only be established through a legislative amendment to MiCAR. Permitting such schemes without a legislative amendment would be legally problematic and could have significant financial stability implications, while at the same time creating an unlevel playing field for stablecoin issuers in the EU.

The ESCB shares the ESRB's concerns about the risks that third-country multi-issuer schemes pose for the financial system, and supports all of the ESRB's related recommendations.[67] Making amendments to MiCAR in respect of such schemes would provide legal clarity and mitigate risks arising from the technical fungibility between tokens that may not be legally or economically equivalent. In particular, where reserve, redemption, prudential or supervisory requirements differ across jurisdictions, tokens that are technically indistinguishable may nevertheless give rise to different claims and levels of protection. EU reserve assets could be used to meet redemption requests from holders of tokens issued outside the EU, while the corresponding reserve assets held outside the EU would not be subject to

[67] See Recommendation of the ESRB of 25 September 2025 on third-country multi-issuer stablecoin schemes (ESRB/2025/9).

MiCAR requirements. In a run scenario, EU issuers may not have sufficient reserve assets to fulfil redemption requests from both EU and non-EU token holders. This risk is compounded by the unbalanced distribution of reserves across jurisdictions and the potential for the cross-border mobility of reserve assets to be restricted in times of stress.[68] The risk management practices across entities may not be sufficiently aligned, as only the EU entity will operate subject to the safeguards provided under MiCAR (e.g. on liquidity, solvency and safekeeping of assets). Where issuers need to liquidate their reserves, banks could also be affected if they hold deposits from those issuers, with potential contagion effects and financial stability implications.

Apart from the risks associated with runs and reserves highlighted above, multi-issuer schemes also carry the risk of regulatory arbitrage. This is due not only to the fungibility of tokens. Co-issuers might market the stablecoin as MiCAR-compliant, while only a small share of reserves might be held in the Union. At the same time, due data-tracking challenges, EU authorities cannot determine with certainty how many tokens are held within the Union and if the EU reserves match the liabilities. This further inhibits both the identification and mitigation of salient risks and the effective supervision of entities located partly or largely outside the EU. These risks are further compounded by the fact that multi-issuer schemes may be regulated and supervised in their home jurisdictions under less stringent standards than those existing in the EU.

Should third-country multi-issuer schemes be permitted, MiCAR would need to be amended to introduce a comprehensive framework of safeguards, premised, at a minimum, on the ESRB recommendations for an equivalence regime and the need for safeguards. Such amendments should include, at a minimum, a robust procedure for the EU-level assessment of the equivalence of third-country regulatory and supervisory frameworks, effective cooperation arrangements with third-country authorities, and requirements ensuring that reserve assets are effectively available and can be transferred across entities and jurisdictions during periods of stress, without interference by regulatory authorities. They should also address redemption rights, reserve composition and custody, supervisory reporting, crisis management, and mechanisms to prevent regulatory arbitrage. Equivalence should be declared only where the third-country regime is fully established and effectively implemented and delivers a similar regulatory outcome to MiCAR through comparable licensing conditions, prudential requirements for capital and liquidity, requirements governing the quality and maturity of the reserve, redemption rules, crisis management and supervisory powers. The broader reflection on the future role and design of the ART category should also extend to the treatment of ARTs in third-country multi-issuer arrangements. While multi-issuance more generally raises important supervisory and financial stability considerations, some challenges relating to confidence, fungibility and consistent valuation may be more pronounced in the case of ARTs.

[68] This could involve the insolvency of an issuer, whereby reserve assets could be ring-fenced under national insolvency regimes.

Further elements could be considered. Following ESRB Recommendation B, alignment between the third-country issuer and the EU issuer could be required regarding key operational procedures. The white papers of the parties to a multi-issuer scheme[69] should contain the same contractual terms, including economic conditions (especially regarding redemption fees and redemption timelines, in compliance with MiCAR). Information made available to the public about the key features of the multi-issuer scheme, such as the existence of a rebalancing mechanism and its risks, should also be the same among all co-issuers. Rebalancing mechanisms should be assessed and enforced at issuer level. The investment and custody policies could also be aligned, as ensuring that the composition of reserve assets is the same for both issuers would help reduce the risk of one issuer being perceived by market participants as being more stable than the other. This would facilitate the rebalancing of reserves. More generally, issuers could be required to provide evidence that the financial institutions supporting the relevant multi-issuer scheme are able to promptly execute asset sales, process cross-border fund transfers and maintain access to international payment systems. Accurate information on the location of token holders is needed to ensure the proper functioning of the reserve rebalancing mechanism. However, this is hindered by the use of unhosted (non-custodial wallets) wallets[70], which inherently present heightened identification and geolocation challenges (and thus higher money laundering and terrorism financing risks[71]). As their use would reduce visibility of potential incoming redemption requests from other jurisdictions in the context of third-country multi-issuer schemes, the possibility to exclude redemptions of stablecoins held through such wallets could be considered. Given the inherent vulnerabilities of the rebalancing mechanism, the Union-based issuer should maintain an adequate liquidity buffer within the EU. In this respect, participation in a third-country multi-issuer arrangement may warrant additional liquidity safeguards to ensure the timely fulfilment of redemption requests by EU token holders. Risk management arrangements, including stress testing and contingency planning, should be aligned.[72] Similarly, recovery and redemption plans should be aligned to ensure consistency of measures in crisis scenarios. These measures would ensure a minimum level of coordination and consistency between third-country and EU issuers. Within the EU, it will be important to ensure that competent authorities have the necessary powers to mitigate the risks arising from multi-issuer schemes, including those currently listed under Article 94 of MiCAR, and to ensure adequate levels of consumer protection. Besides concerns over the prudential, financial stability and monetary sovereignty implications, any measures to mitigate the risks

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69 Issuers of stablecoins are required to produce a crypto-asset white paper, as a document containing all the information necessary to enable prospective buyers to make an informed purchasing decision and understand the risks associated with the stablecoins being offered. It includes, inter alia, information about the issuer, the token itself, redemption rights, and the risks inherent in the underlying technology. These requirements are set out in Article 51 of MiCAR.

70 Under EU law, “self-hosted address” means a distributed ledger address not linked to either of the following: (a) a crypto-asset service provider; or (b) an entity not established in the Union and providing services similar to those of a crypto-asset service provider (see Article 3(20) of Regulation (EU) 2023/1113). The Financial Action Task Force (FATF) defines unhosted wallets as wallets that are not hosted or managed by a third-party service provider and for which the user maintains exclusive control over the access keys.

71 See FATF (2026), *Targeted Report on Stablecoins and Unhosted Wallets – Peer-to-Peer Transactions*, FATF, France, March.

72 This is reflected in ESRB Recommendation F.

associated with multi-issuer schemes, including the assessment of equivalence, should be considered holistically, also taking into account other risks, such as money laundering and terrorist financing.[73] Finally, if third-country multi-issuer schemes were permitted, reciprocity agreements would be needed to ensure that EU currency-denominated stablecoins issued from within the EU are assigned the same rights in the third country, with a view to ensuring a level playing field.

The ESCB also notes that ECB opinions issued under MiCAR are not an appropriate instrument for addressing the risks arising from third-country multi-issuer stablecoin schemes. The ECB is not a competent authority under MiCAR, and its opinions are limited to evaluating the specific risks that issuing an ART or EMT denominated in a third-country currency might pose to the smooth operation of payment systems, monetary policy transmission or monetary sovereignty. These opinions do not constitute a tool for addressing the full range of risks posed by such schemes, including financial stability risks arising from run events, cross-border reserve mismatches and regulatory arbitrage. Moreover, any supervisory measure resulting from a negative ECB opinion would apply only to the EU issuer and would not constrain issuance by third-country co-issuers. Even if the EU issuer were constrained, the non-EU issuer would be free to continue increasing the circulating supply of the token. Thus, a negative ECB opinion cannot fully address the risk of runs and does not compensate for the lack of a robust mechanism to ensure the cross-border transfer of reserve assets. Reporting gaps, in particular regarding third-country entities – which are outside the scope of MiCAR – would further limit the prompt identification and mitigation of risks. Therefore, ECB opinions cannot substitute for clear legislative rules and binding safeguards in MiCAR.

[73] Multi-issuer schemes may also pose risks from a money laundering and terrorist financing perspective, as recognised by the FATF and the EBA. See page 18 of FATF (2026), Targeted Report on Stablecoins and Unhosted Wallets – Peer-to-Peer Transactions, FATF, France, March; and use case 19 in EBA (2025), Report on tackling ML/TF risks in crypto-asset services through supervision – lessons learned from recent cases, October.

4 The appropriateness of the current legal framework for CASPs

4.1 Crypto-asset services and requirements for CASPs

MiCAR established a harmonised regime for the provision of crypto-asset services across the EU. However, owing to the increasing scale, cross-border reach and operational complexity of CASPs, the regulatory framework must continue to evolve to ensure adequate coverage of in-scope activities, consistent supervision, effective enforcement and an appropriate allocation of supervisory responsibilities.

In the current landscape, authorities face material challenges in ensuring the effective enforcement of MiCAR requirements. The continued accessibility of the EU market to crypto-assets and stablecoin-like arrangements that do not comply with EU requirements, including through third-country, cross-border provision of such assets and arrangements, raises concerns over investor protection, market integrity and the credibility of the regulatory framework. In a digital environment characterised by low barriers to entry and global reach, enforcement tools must be sufficiently robust and consistently applied across jurisdictions. Building on the ECB's detailed comments in its opinion on the market integration and supervision package and Annex 1[74], the key points on the supervision and prudential treatment of CASPs are summarised below; readers are invited to consult that opinion for further detail.

Improving the existing framework would require bringing the supervision of CASPs to the European level. The ECB welcomed the Commission's proposal to transfer authorisation, monitoring and enforcement powers for all CASPs from the national competent authorities to ESMA, including the supervision of entities authorised under a licence other than a CASP licence, once the provision of crypto-asset services becomes the main activity of such entities. For credit institutions, however, only the enforcement of anti-market abuse monitoring requirements for CASP activities and related enforcement could also be assigned to ESMA, as those activities are not covered by Council Regulation (EU) No 1024/2013. The transfer of supervisory powers to ESMA would help to ensure supervisory convergence, reduce fragmentation and mitigate cross-border risks in crypto-asset markets, thereby supporting financial stability and the integrity of the single market.

The framework should also be made more risk-sensitive, notably by subjecting CASPs to risk-driven own funds requirements. CASPs can engage in a variety of regulated and unregulated activities that expose them to both financial and non-financial risks. Yet, they are subject only to an own funds requirement that is calibrated on the basis of operational expenses and thus unable to provide a buffer against losses arising from financial and non-financial risks. Calibrating the own funds requirement on the basis of operational expenses may still be appropriate for

[74] See the ECB opinion on the market integration and supervision package and its Annexes. See, in particular, Annex 1, pages 71 to 85.

entities engaging solely in activities entailing limited risk exposure[75], as in such a context own funds serve to ensure the orderly completion of the winding-down process. However, when operations entail material exposure to financial risks, for example where a CASP performs currently unregulated activities such as proprietary trading, a risk-sensitive approach appears more appropriate (see Section 4.2).

Additional metrics should be considered to identify significant CASPs, which should be subject to specific requirements. MiCAR currently provides that a CASP is considered significant where it has an average of 15 million active users in a calendar year. Significant CASPs are not currently subject to specific requirements. The category of significant CASPs should be maintained, and the existing criteria should be expanded to include objective metrics of significance (e.g. size, cross-border activity, systemic relevance, volume of trades for platforms, volume exchanged against funds, and group-wide activities).[76]

Significant CASPs should be required to establish an intermediate parent undertaking in the EU. This should also apply in all cases where a third-country firm controls, within the EU, both a credit institution and a CASP and/or an EMI issuing EMTs or ARTs.[77]

Beyond entity-level supervision, enhanced oversight is warranted due to the increasing relevance of CASPs operating within complex group structures, including in combination with other regulated or unregulated activities. In particular, the use of fragmented corporate structures and legal arrangements may obscure the allocation of risks, hinder effective oversight and create channels for contagion within the group. MiCAR should therefore ensure adequate group-level visibility, including as regards intra-group exposures, operational dependencies and governance arrangements. Accordingly, the regulatory entry point should be at group level and supervisory authorities should be given the ability to intervene at group level.

While CASPs are subject to governance and risk management requirements, those should be more closely calibrated to reflect the corporate structure (group vs single entity), scale, complexity and riskiness of the group's or entity's activities. This would include enhanced rules on governance arrangements, holistic risk management, and the use of independent external auditors capable of

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75 Namely: advice on crypto-assets, placing of crypto-assets, reception and transmission of orders for crypto-assets on behalf of clients, execution of orders for crypto-assets on behalf of clients, and providing transfer services for crypto-assets on behalf of clients.

76 A CASP should be considered significant where it meets a combination of criteria reflecting its scale, cross-border activity and systemic relevance, including, inter alia: (a) the number of active users; (b) the volume of transactions on a trading platform; (c) the value of assets under custody; (d) balance sheet size; (e) the volume and value of client orders processed; (f) the provision of critical infrastructure or platform services; (g) involvement, including at group level, in the issuance of ARTs or EMTs; and (h) designation as a gatekeeper or significant interconnectedness with the financial system, including through international activities. The assessment of significance should take into account group-wide activities where relevant and be based on a multi-factor approach, with a requirement to meet a combination of criteria, and be subject to periodic review to ensure that thresholds and criteria remain appropriate in light of market developments and risks.

77 See Athanassiou, P., Czák-Ludwig, S. and Di Gabriele, N. (2026), "Neo-conglomerates and EU regulatory perimeter challenges – state of play and evaluation of policy options", *Occasional Paper Series*, No 394, ECB, July.

assessing novel risks related to crypto-asset services, with a special focus on operational resilience, custody arrangements, conflicts of interest and leverage.

A stronger Level 1 text-based supervisory reporting framework for CASPs should include prudential and accounting information and facilitate the identification of risks arising from concentration, interconnectedness or operational dependencies. Given the pace of market developments and the heterogeneity of business models, reporting requirements that go beyond those currently provided for under MiCAR[78] would support more effective and forward-looking supervision while ensuring compliance with the Regulation.

In addition, where CASPs perform activities that are economically akin to investment services or other forms of financial intermediation, the applicable Union frameworks[79] should continue to apply. For further discussion, see Section 5 on CASPs as part of MFGs and Section 6.2. on crypto lending, staking and borrowing.

4.2 PSD/PSR MiCAR interplay

The forthcoming Payment Services Directive 3/Payment Services Regulation framework specifies the conditions under which services involving EMTs qualify as "payment services" and introduces targeted exclusions from its scope. EMTs are recognised as having a dual nature, as they qualify, on the one hand, as "crypto-assets" under MiCAR, while, on the other hand, constituting "electronic money" and, therefore, "funds" for the purposes of PSD3/PSR.

PSD3/PSR provides that services involving EMTs may qualify as payment services, in particular where they consist of the execution of payment transactions, including transfers of EMTs on behalf of users. At the same time, PSD3/PSR excludes from its scope specific activities involving EMTs, notably where CASPs exchange EMTs for funds or other crypto-assets, including where they act in their own name or act as intermediaries between buyers and sellers. The framework thereby establishes a functional delineation between the use of EMTs for payment purposes, which falls within the scope of PSD3/PSR, and their use for exchange or trading activities, which is governed by MiCAR. These exclusions are activity-based and do not apply to CASPs as such, thus ensuring that services involving EMTs and meeting the definition of "payment services" remain subject to PSD3/PSR, irrespective of the type of provider.

The Court of Justice of the European Union, in Case C-661/22 (ABC Projektai), clarified that the mere receipt and holding of funds in a payment account, including where such funds are intended for future or unspecified payment transactions, does not constitute the issuance of electronic money. The Court's reasoning rests on the absence of a particular defining characteristic of electronic

[78] Current reporting requirements under MiCAR cover, among other aspects, accounting details, the scale of activities, risk exposures, intra-group linkages and cross-border operations.

[79] Including Directive 2014/65/EU (MiFID II) and Directive 2013/36/EU (CRD).

money, namely the creation of a distinct monetary asset, separate from the funds received. Funds held in a payment account remain a claim against the payment service provider and are not transformed into a unit of value that can be regarded as having been "issued" within the meaning of the legal definition of electronic money. In Case C-389/17 (Paysera), the Court further emphasised that electronic money must be capable of functioning as a means of payment accepted by third parties, rather than constituting merely a technical arrangement for the execution of payment transactions.

The existing definition of electronic money has nevertheless been maintained in Article 3(50) of the PSR, without reflecting this clarification. As a result, certain activities may fall outside the concept of electronic money, while, depending on their specific set-up, it may remain unclear whether they qualify as payment services under Annex I. This has created uncertainty in supervisory practice and should be addressed at Level 1.

The interaction between MiCAR and PSD3/PSR reveals a gap in own funds requirements, as MiCAR does not provide for the risk-based calibration of CASP capital requirements, unlike the more flexible – albeit constrained – approach under PSD3. Within Title V of MiCAR, Article 67 (prudential safeguards) sets out the prudential requirements applicable to CASPs. It establishes a framework based on fixed minimum capital thresholds, as specified in Annex IV, combined with an own funds requirement equal to the higher of those thresholds or a proportion of fixed overheads. MiCAR does not provide competent authorities with powers to adjust capital requirements on the basis of the risk profile, scale or business model of the CASP that are comparable to supervisory review mechanisms in other Union prudential regimes. By contrast, the PSD3 framework introduces a degree of supervisory flexibility. In particular, Article 6 (own funds framework), in conjunction with Articles 7 and 8 (own funds calculation methods), allows competent authorities to adjust own funds requirements within a predefined margin (e.g. up to ±20%) based on an evaluation of the risk management processes, risk-loss data base and internal control mechanisms of the payment institution. Moreover, they may restrict or limit business activities, operations or networks or require the divestment of activities posing excessive risks to financial soundness (Article 25(1)(g)), and require the reduction of risks inherent in activities, products and systems, including outsourced activities (Article 25(1)(h)). While this introduces a degree of proportionality, the own funds calibration remains mechanical and capped, is not based on a comprehensive, forward-looking assessment of the institution's overall risk profile and may not adequately counterbalance incentives for increased risk-taking.

MiCAR and PSD3 fall short in capturing the risk profile of fully integrated and platform-based business models, in which crypto-asset services, payment services and related financial or quasi-financial activities are closely interconnected. In such models, risks do not arise in isolation but are generated jointly across activities, including liquidity risks stemming from the interaction between proprietary trading and crypto-borrowing and lending, operational and ICT risks related to shared infrastructures, and reputational risks that may materialise

across the entire platform irrespective of legal segmentation. However, neither framework provides a methodology or supervisory toolset with which to assess, aggregate and calibrate these risks on a holistic basis.

The forthcoming PSR contributes to greater legal clarity regarding the interaction between MiCAR and PSD3/PSR, including through the introduction of an equivalence-based notification regime for payment institutions providing certain EMT-related crypto-asset services under Article 110b PSR. Nevertheless, some uncertainties remain related to crypto-asset services in EMTs that may also qualify as payment services. Further clarification is needed, in particular, on the regulatory treatment of intermediary arrangements, including agency models, outsourcing arrangements, sub-custody structures and other forms of partnerships and delegation across the payment and crypto-asset value chain between CASPs and PSPs for the provision of these services. Such interplay, and the resulting dual authorisation model and overlapping regulations may benefit from greater clarity, including on when a CASP is required to obtain a licence under PSD3. Furthermore, it may be beneficial to clarify more explicitly that funds received in connection with crypto-asset services pursuant to Article 70 of MiCAR and held by payment institutions or electronic money institutions constitute funds received for the provision of payment services and therefore fall within the safeguarding requirements under the Payment Services Directive.

MiCAR does not provide for a group-level or consolidated prudential framework for CASPs. PSD3, while allowing payment institutions to engage in other business activities under Article 10, limits prudential requirements to the payment services component, subject to rules on the separation of own funds and the avoidance of double use under Article 6(2). Although competent authorities may, under Article 13(4), require structural separation where other activities could impair the soundness of the institution in the context of the authorisation process, this tool remains discretionary and is not systematically linked to the scale, complexity or risk profile of the entity.

These structural limitations are further compounded by the fragmentation of supervisory competences. In practice, different competent authorities may be responsible for supervising the same entity or group under the respective frameworks, with one authority overseeing compliance with MiCAR, including the prudential safeguards under Article 67, and another supervising payment services under PSD3/PSR. This fragmentation makes it inherently difficult to ensure a fully consistent and risk-sensitive calibration of capital requirements, particularly in the absence of a clearly designated lead authority, effective mechanisms for joint risk assessment, or a framework ensuring the coherent treatment of interconnected risks across sectors.

MiCAR should allow prudential requirements to be calibrated in a holistic manner so that they can address risks arising from ancillary or currently unregulated crypto-asset activities, such as proprietary trading, crypto-asset lending and borrowing, staking services, or leverage and yield-enhancing arrangements embedded in CASP business models. Such activities are not explicitly regulated under MiCAR (see Recital 94), but may give rise to credit, market

and liquidity risks that are economically comparable to those incurred by entities subject to financial intermediation legislation. However, neither Article 67 of MiCAR nor Articles 6 to 8 of PSD3 provide for a clear mechanism for adjusting capital requirements to capture such exposures, particularly where they form part of an integrated and economically unified business model. See also on Section 5 on MFGs.

4.2.1 Indirect deposit insurance coverage of crypto-asset issuance and services via the concept of "client funds deposits"

The interaction between MiCAR, the legacy framework under Directive 2009/110/EC (EMD2) and the proposed PSD3/PSR regime, on the one hand, and the Deposit Guarantee Schemes Directive (DGSD), on the other, gives rise to a structural inconsistency in the treatment of client funds. MiCAR builds on the existing e-money framework by maintaining a clear principle: funds received in exchange for EMTs should not be treated as deposits and should not therefore benefit from deposit guarantee protection. This principle is consistent with EMD2, which explicitly provides that electronic money and funds received in exchange for electronic money do not constitute deposits. It is further reinforced under MiCAR through the requirement that EMTs must be accompanied by a clear disclosure that they are not covered by deposit guarantee schemes. This approach is carried forward and further clarified in PSD3, which is based on the explicit premise that payment institutions do not take deposits and that funds received in the course of providing payment services or issuing electronic money do not constitute deposits or other repayable funds. Instead, PSD3 establishes a dedicated safeguarding regime, including segregation of funds, protection against the claims of other creditors and, where applicable, insurance or comparable guarantees. Under this framework, user protection is ensured through safeguarding arrangements and insolvency law rather than through deposit insurance.

However, the latest Deposit Guarantee Schemes Directive (DGS-D2)[80] introduces the possibility of deposit guarantee coverage for EMTs and ARTs, albeit only at the level of the issuer and, in the case of ARTs, to cover the reserve assets held at a credit institution (rather than at the level of the individual holder of the EMTs/ARTs). In particular, the newly introduced rules on "client funds deposits" provide that deposits placed by certain financial institutions on behalf of their clients may be covered by deposit guarantee schemes, subject, among other things, to the condition that the underlying clients are identified or identifiable. This extends deposit protection to funds deposited for the purpose of complying with safeguarding obligations, including funds backing the issuance of EMTs and ARTs.

The existence of indirect deposit guarantee scheme protection may reduce the incentive for EMT and ART issuers to monitor the creditworthiness of their

[80] Directive (EU) 2026/804 of the European Parliament and of the Council of 30 March 2026 amending Directive 2014/49/EU as regards the scope of deposit protection, the use of deposit guarantee schemes funds, cross-border cooperation, and transparency (DGS-D2) (OJ L 2026/804, 20.4.2026).

banking counterparties and potentially give rise to moral hazard. Issuers could avoid the risk management expense arising from monitoring and hold their funds at banks offering higher remuneration irrespective of their soundness.

The DGS-D2 approach appears difficult to reconcile with MiCAR and EMD2/PSD3. While the protection would formally apply to the deposit placed with a credit institution rather than to the electronic money or token itself, the economic effect could be to extend deposit protection indirectly to these instruments, thereby circumventing the intent of the MiCAR, EMD2 and PSD3 frameworks.

In addition, the requirement that underlying clients be "identified or identifiable" may raise practical challenges in the context of EMTs and ARTs. Where an issuer allows such tokens to be held via non-custodial wallets and third-country CASPs, reliable information on token ownership may not be available. In such cases, EMT and ART issuers may not be able to reliably identify token holders and, in turn, may be unable to pass the relevant information to the credit institutions holding the related deposits.

This absence of reliable information has implications for banks' compliance with DGS-D2 obligations and LCR requirements[81]**.** Credit institutions are only allowed to apply the reduced outflow rates under the LCR to deposits covered by a deposit guarantee scheme (DGS) if they have accurate information on the depositors of such funds. Even assuming that accurate information on depositors is available, holdings of EMTs and ARTs are expected to change frequently, including within the same day. This may lead to changes in the type of depositor and require banks to readjust the classification of deposits and, consequently, the outflow rates for LCR purposes. While banks may not be able to benefit from the reduced outflow rate that comes with DGS coverage, they will still be required to pay contributions to DGS funds. Moreover, at the time of a bank's insolvency, deposits in respect of which DGS contributions have been paid may no longer be eligible for protection because they relate to ineligible clients.

Extending deposit guarantee coverage in this manner could significantly broaden the perimeter of covered deposits, thus increasing the contribution base and the costs for credit institutions. This may create incentives, including for marketing purposes, to structure activities in a way that maximises access to deposit guarantee coverage, including by encouraging banks to issue EMTs via EMIs that are subject to safeguarding requirements rather than doing so directly from their own balance sheets. The extension of deposit guarantee protection to safeguarding arrangements, including those backing globally issued stablecoins, may indirectly support business models with significant third-country exposure, including tokens denominated in non-EU currencies. For instance, if third-country multi-issuer stablecoin schemes were to be permitted, the look-through approach under DGS-D2 would provide a further incentive to seek redemption in the EU rather than from the third-country co-issuer. Greater alignment across the DGSD, MiCAR and PSD3/PSR frameworks would therefore be warranted to ensure coherent and

[81] As set out in Commission Delegated Regulation 2015/61.

consistent treatment of client funds and to preserve the integrity of the EU's financial regulatory architecture.

5 Multi-function groups

The current approach to the supervision of multi-function groups (MFGs)[82] providing crypto-asset services should be strengthened, as existing requirements do not adequately reflect the scale, complexity and risk profile of such entities. While MiCAR allows EMT/ART issuers and CASPs to operate within MFGs, the increasing integration of crypto-asset services with other regulated and unregulated activities gives rise to risks that are not fully captured by an entity-based supervisory approach and that often extend beyond the scope of MiCAR. A lack of group-level supervision carries the risk of regulatory arbitrage and of activities migrating to less regulated entities within a group. Without an adequate consolidated perspective, economically significant activities may develop outside effective supervisory oversight, weakening the effectiveness of the regulatory framework.

These groups, as highlighted by the ESRB, operate largely outside consolidated supervision, amplifying intra-group contagion channels, and can transmit governance failures, operational disruptions or liquidity shocks to the financial system.[83] Risks are amplified where activities are spread across multiple legal entities or jurisdictions, potentially obscuring risk concentrations and limiting supervisory oversight. As outlined by the FSB[84], some groups engage in proprietary trading, market making on their own trading venues, and the lending and borrowing of crypto-assets, which can lead to higher leverage. MFGs offering investment programmes to their clients, issuing crypto-assets or operating investment and venture capital arms may also be exposed to liquidity mismatch. These vulnerabilities are further amplified by the lack of effective control arrangements in relation to governance and risk management frameworks, limited operational transparency, insufficient disclosures and conflicts of interest. There are also additional vulnerabilities stemming from their market power and centrality in the crypto-asset ecosystem. There is evidence[85] that many of the largest MFGs engage in bank-like intermediation, borrowing from customers to fund lending and leveraged transactions, thereby assuming material levels of credit, market and liquidity risk. Comprehensive consolidated supervision and proportionate but risk-sensitive prudential requirements (capital and liquidity) are warranted so as to ensure robust governance and risk management arrangements.

Enhanced supervisory oversight and coordination, as well as a holistic and consolidated prudential approach, are needed to ensure sound and effective MFG supervision. MFGs should be supervised – depending on their main activities – under the lead of the relevant European Supervisory Authority, unless the group

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82 Note that the FSB uses the term “multifunction crypto-asset intermediaries” (MCIs).

83 See also ESRB (2025), “Crypto-assets and decentralised finance – report on stablecoins, crypto-investment products and multifunction groups”, October.

84 FSB (2023), *The Financial Stability Implications of Multifunction Crypto-asset Intermediaries*, 28 November.

85 See Garcia Ocampo, D., Goodrich, P. and Lovicu, G.-P. (2026), “Cryptoasset service providers as financial intermediaries: risks and policy approaches”, *FSI Occasional Papers*, No 27, 23 April.

already falls under the regime for financial conglomerates (FICOD)[86], with enhanced cooperation among competent authorities, including across all relevant sectors. In addition, supervisory colleges may need to be established to facilitate international cooperation. To address risks and regulatory arbitrage opportunities stemming from complex and unconsolidated group structures and parties with close links, such groups should be required to consolidate their EU financial activities under a dedicated financial holding company. Such an approach mirrors the intermediate parent undertaking (IPU) requirement introduced under Article 21b of CRD V for third-country banking groups with significant operations in the EU.[87] This would facilitate group-wide supervision, enable prudential consolidation and ensure clear accountability for governance, risk management and compliance, while also capturing intra-group exposures, operational dependencies and cross-sectoral activities. Moreover, MFGs should be required to establish group-level recovery plans. These requirements should be calibrated based on the scale, complexity and risk profile of the institution concerned (including potential engagement in asset and maturity transformation) and should comply with the principle of proportionality. Such a harmonised regime could reduce the risk of undercapitalised groups contributing to financial market instability, particularly during periods of stress.

[86] See Articles 3(2) and (3) of Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC, 92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council.

[87] See Athanassiou, P., Czák-Ludwig, S. and Di Gabriele, N. (2026), "Neo-conglomerates and EU regulatory perimeter challenges – state of play and evaluation of policy options", *Occasional Paper Series*, No 394, ECB, July.

6 Topics beyond the initial scope of MiCAR

6.1 Decentralised finance

Decentralised finance (DeFi) continues to be a niche market within the crypto-asset ecosystem, albeit one presenting elevated vulnerabilities. The total value locked (TVL) of DeFi protocols amounts to around 3% of total crypto-asset market capitalisation. The DeFi sector has been declining alongside the broader crypto-asset market since October 2025 and experienced particularly sharp declines following two material hacking incidents.[88] This shows how DeFi continues to be vulnerable to operational risks.[89]

While the size of DeFi activities associated with the EU is likely to be small, DeFi's novel approach to delivering financial services and the types of services it offers make it necessary to clarify whether and how DeFi protocols should be regulated. The global and pseudonymous nature of DeFi protocols makes it challenging to ascertain the level of activity associated with the EU. As highlighted by the EBA and ESMA, proxy indicators suggest that DeFi activity within the EU remains at very low levels.[90] However, the main services offered by DeFi protocols include crypto lending, staking (including both liquid staking and restaking) and trading, and it is important to regulate lending and staking in particular to prevent any circumvention of MiCAR (see Section 5.2). This should also include regulating the provision of these services through DeFi protocols.

While MiCAR does not apply to services provided in a fully decentralised manner, studies show that in practice many DeFi protocols remain far removed from the theoretical ideal of decentralisation. MiCAR (Recital 22) states that crypto-asset services provided in a fully decentralised manner without any intermediary fall outside its scope. However, it does not define a threshold for "full decentralisation" and a number of studies have shown that decentralisation exists on

88 These incidents included the hack of the Drift protocol, which led to the theft of US$ 285 million (see Chainalysis (2026), *The Drift Protocol Hack: How Privileged Access Led to a $285Million Loss*, 9 April) and the hack of the Kelp DAO, which led to the unauthorised release of a token held on cross-chain bridging infrastructure. The token was then used as collateral to borrow crypto-assets worth US$290 million across various blockchain protocols (see Galaxy (2026), "KelpDAO/LayerZero Exploit Drains $290m, Freezes DeFi Markets", 22 April).

89 While the vulnerabilities of DeFi sometimes take different forms, they are broadly similar to those present in the traditional financial system, although the novel technology may create additional vulnerabilities (see, for example, FSB (2023), *The Financial Stability Risks of Decentralised Finance*, 16 February).

90 See EBA and ESMA (2025), "Joint Report: recent developments in crypto-assets (Article 142 of MiCAR", 16 January.

a spectrum, with full decentralisation rarely, if ever, being achieved.[91] This means that DeFi's purportedly decentralised governance, together with its opaque structure and pseudonymous nature, makes it challenging to effectively regulate and supervise DeFi protocols and apply existing regulation.[92]

Bringing relevant entities within the regulatory perimeter through regulatory anchor points is difficult as it is often unclear who is in control. Studies assessing DeFi governance arrangements show that, based on current publicly available data, governance token holders, developers and centralised exchanges cannot be used as regulatory entry points.[93] This is because there is ambiguity as to who holds decision-making power within these protocols and hence, which parties can ultimately be held accountable. Improving the traceability of token holdings and clarifying the roles and obligations of various stakeholders – including, for example, delegates – could facilitate more effective governance and regulatory oversight. Regulators would also need to consider mechanisms to improve transparency around token ownership structures and the delegation of voting rights, so that token holders who delegate their voting rights can better understand who their delegates are and what affiliations they may have. It needs to be clarified whether the holders can be held accountable, as it would seem that the link between the largest token holders and the voters who participate most actively in governance cannot easily be ascertained. Moreover, the lack of identifiable legal entities within a decentralised autonomous organisation (DAO), in particular unclear distinction between protocol-controlled treasuries and developers holding control, complicates the assignment of responsibility. A potential regulatory approach could involve creating tailored legal structures specifically for DAOs, clearly defining responsibilities, liability and governance obligations. It could also be discussed whether entry points into DeFi should be regulated. For example, where access to DeFi is offered by regulated CASPs, it may prove necessary to restrict access to specific groups of investors. Any approach to DeFi should also take into account policies developed in the AML/CFT context. In any case, close monitoring is needed, in particular in relation to the scope of decentralisation and who holds effective control, and approaches should be aligned with best practices.[94]

6.2 Staking and lending

Activities commonly referred to as staking and lending of crypto-assets encompass a range of arrangements whereby customers make crypto-assets

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91 See, for example, Born et al. (2026), "Who to regulate? Identifying actors within DeFi's governance", *Working Paper Series*, No 3208, ECB, March; (2023), "Decentralised Finance in the EU: Developments and risks", *ESMA TRV Risk Analysis*, 11 October; Aramonte et al. (2021), "DeFi risks and the decentralisation illusion", *BIS Quarterly Review*, Bank for International Settlements, December; Nadler and Schär (2020), "Decentralized Finance, Centralized Ownership? An Iterative Mapping Process to Measure Protocol Token Distribution", 16 December; and Jensen, von Wachter and Ross (2021), "How Decentralized is the Governance of Blockchain-based Finance: Empirical Evidence from four Governance Token Distributions", 24 February.

92 See, for example, the discussions in OECD (2022) and IOSCO (2023).

93 See Born et al., op cit.

94 See for example Financial Action Task Force (2026): Targeted Report on Regulatory Challenges from Decentralised Finance (DeFi), July.

available to third parties in return for remuneration. Borrowing, in turn, refers to arrangements whereby customers receive financing from CASPs or other professional players in crypto-assets. The regulatory classification of such activities should be based on their legal and contractual characteristics, as well as their economic substance, rather than their technological implementation.

A key distinction arises between services where CASPs act in a purely technical or agency capacity and arrangements whereby intermediaries assume balance sheet exposure vis-à-vis clients. Where clients transfer control of crypto-assets to an entity that undertakes to return equivalent assets, potentially at a premium, such arrangements give rise to financial intermediation comparable to the taking of repayable funds. Where this is the case, and particularly where such activities are conducted with the public, a careful assessment is required as to whether such arrangements fall within the scope of Directive 2013/36/EU (CRD), irrespective of whether the underlying assets are denominated in fiat currency or crypto-assets.

In parallel, certain staking, lending or borrowing arrangements may incorporate features that qualify as investment services or financial instruments.[95] This may be the case, in particular, where clients are exposed to the performance of a managed pool of assets, where returns depend on the actions of the intermediary, or where claims are structured or standardised in a way that renders them economically comparable to transferable securities. Such cases should be assessed carefully to ensure that MiFID II requirements, including conduct of business and investor protection rules, are applied accordingly.

Particular attention should be given to the allocation of risks between clients and service providers. This includes whether clients retain legal ownership and control over their assets, the extent of rehypothecation, and the nature of any repayment obligation. Where clients are exposed to the creditworthiness of an intermediary, this should be clearly disclosed and adequately mitigated.

Staking, lending and borrowing of crypto-assets should be regulated at Union level. Such a framework should provide for a clear, substance-based delineation between agency services, investment services and banking-type activities. This would promote consistent classification, mitigate the risk of regulatory arbitrage and ensure that activities involving credit intermediation are subject to appropriate and proportionate regulatory requirements.

6.3 Tokenised deposits

EU law does not provide a single, harmonised definition of "deposits", which creates legal uncertainty, particularly in the context of tokenised arrangements, and should therefore be addressed. The concepts of "deposit" provided in Article 4(1)(1) of the CRR, Article 9 of the CRD and Article 2(1)(3) of Directive 2014/49/EU (DGSD) are not fully aligned and have been defined for

[95] Within the meaning of Directive 2014/65/EU (MiFID II).

different purposes.[96] This may lead to inconsistent classifications across Member States based on national law and has frequently been highlighted by the EBA.[97] From a supervisory perspective, this gap complicates the assessment of licence applications and business model changes and may hinder the development of cross-border activities. Further clarification at Union level is therefore warranted, including through a more consistent definition of "deposits" in the CRR/CRD.

Such clarification should provide that tokenised deposits constitute deposits where the creditor's claim against a credit institution is recorded, transferred or represented using DLT or similar technologies, instead of – or in addition to – traditional banking ledgers, while leaving the other fundamental characteristics of deposits unchanged. A "deposit" should possess at least the following core features: (a) the deposit arises from a contract between a depositor and a depository in respect of a credit balance resulting from funds left in an account or equivalent record; (b) those funds have been taken by the depository, in the course of its business activities, from the public, whether legal or natural persons; (c) the credit balance is repayable, unconditionally, at par (face value)[98], with or without any agreed interest or premium, on demand or at a contractually agreed point in time; and (d) the credit balance constitutes a claim on a depository whose deposit-taking activity is lawfully conducted under a credit institution[99] licence and remains subject to Article 9 of Directive 2013/36/EU (CRD).

Consistent with the principle of technological neutrality, the use of DLT or similar technologies for record-keeping, representation or transfer does not, in itself, affect the legal features of deposits. It does not modify the existence of the contractual relationship between the depositor and the credit institution. The determination of how and when parties enter into an agreement and what constitutes a legally enforceable contract remains subject to the applicable national law.[100] Tokenised deposits remain fully subject to the existing EU regulatory framework applicable to deposits.[101] Payment mechanisms, processing systems or settlement arrangements – including those based on DLT – merely adjust underlying account balances and do not alter the contractual relationship between the depositor and the bank. Accordingly, since the credit balance underlying a deposit results from funds

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96 Compare the definition of "deposit" in the Annex to CRD6 with the definition provided in CRR3, which does not specify that deposits are taken "from the public", implying that deposits from other credit institutions may also be covered.

97 See EBA (2014), Opinion of the European Banking Authority on matters relating to the perimeter of credit institutions, November; EBA (2020); "Opinion of the European Banking Authority on elements of the definition of credit institution under Article 4(1), point 1, letter (a) of Regulation (EU) No 575/2013 and on aspects of the scope of the authorisation" (EBA/OP/2020/15), September; and EBA (2024), "Report on Tokenised Deposits" (EBA/REP/2024/24), December.

98 This is consistent with the "singleness of money" which refers to a situation where all forms of money denominated in the same currency (e.g. central bank money and commercial bank deposits at different institutions) are fully interchangeable at a fixed one-to-one rate, irrespective of the form or issuer (see "The role of central bank money in payment systems", Bank for International Settlements (BIS) Committee on Payment and Settlement Systems, August 2003.

99 See Article 4(1)(1) of Regulation (EU) No 575/2013 (the CRR).

100 Likewise, despite their name, smart contracts are a form of automated execution mechanism; their legal enforceability depends on the applicable legal framework. Tokenised deposits may or may not be transferred using smart contract mechanisms.

101 This is reflected in particular in Article 5a of the CRR and Article 2(4)(b) of Regulation (EU) 2023/1114 (MiCAR) and Recital 9 of MiCAR, which explicitly excludes deposits from its scope and confirms their continued treatment under banking law.

left in an account or equivalent record (also referred to as scriptural money), transfers of funds involving tokenised deposits constitute payment transactions within the meaning of Article 4(5) of Directive (EU) 2015/2366 (PSD2). Where transferability is contractually permitted[102], the transfer of deposit claims does not alter their status as deposits. Rather, it remains the responsibility of the credit institution to ensure ongoing compliance with all applicable legal requirements.

Credit institutions should not be unnecessarily constrained in using innovative technologies, including tokenisation, to carry out activities they are already authorised to perform, provided that they identify, manage and mitigate the associated risks. Credit institutions are required to manage their business in a sound and prudent manner. As long as they conduct their activities, regardless of the technology used, in compliance with that principle, they should not be required to implement any further measures beyond those already provided for in the relevant regulatory framework.

Still, certain design features, such as transfer restrictions, wider transferability or potential use of tokenised deposits in more open networks, may affect the product's risk profile, particularly from an operational (ICT, financial crime and legal) perspective. Where a bank or consortium of banks envisages a greater degree of openness, especially as regards the range of parties capable of receiving or transferring tokenised deposits, this may warrant enhanced supervisory scrutiny. Such aspects need to be assessed on a case-by-case basis in the context of authorisation procedures, business model changes and ongoing supervision, taking into account the adequacy of the risk mitigation measures in place and their consistency with the institution's risk appetite. Where an instrument is primarily designed to be negotiable on capital markets or listed on a trading venue, this may expose it to capital market risks and therefore require a case-by-case assessment of its legal classification under Union and national law. While it could be argued that variations from par value resulting from the instruments being negotiated could have implications for the singleness of money and, potentially, for financial stability, it should be noted that if an instrument were to be negotiable it would not be a deposit but would fall in the category of "other repayable instruments". This understanding is based on the EBA Guidelines on a common assessment methodology for granting authorisation as a credit institution under Article 8(5) of Directive 2013/36/EU whereby it is acknowledged, on one hand, that deposits may take several forms and may be transferable, including savings deposits, fixed-term deposits and non-negotiable certificates of deposit, while on the other hand that the category of "other repayable funds from the public" includes bonds and comparable securities such as negotiable certificates of deposit. This suggests that the transferability of a claim is a concept distinct from the negotiability of an instrument on capital markets and the latter may fall in the category of other repayable funds from the public. In view of the principle of technological neutrality, the same distinction should therefore be applied in the context of tokenised deposits.

[102] The deposit contract may establish that either the bank's prior consent is needed for the transfer or the bank prohibits a priori any transfers.

Moreover, where tokenised deposits are used to settle payments in settlement arrangements, e.g. by tokenised securities platforms, competent authorities, including overseers, should assess whether the arrangement complies with applicable regulatory requirements and oversight principles.

The delineation between tokenised deposits and other regulated instruments should be based on the legal and contractual nature of the claim. A deposit is based on a contract between a depositor and a depository regarding a credit balance resulting from funds left in an account or equivalent record for which the depository undertakes the commitment to repay them in the currency of denomination with or without an interest or premium. Credit institutions are subject to a comprehensive prudential framework under the CRR and the CRD, including capital, liquidity and risk management requirements, as well as ongoing supervisory scrutiny. By contrast, while credit institutions were already permitted to issue e-money and provide payment services, the regulatory regimes for electronic money and EMTs are designed to allow non-bank entities to provide payment-related services under a distinct framework that does not extend to deposit-taking and is not subject to the same level of prudential regulation and oversight. Maintaining a clear distinction between credit institutions and non-bank regimes is therefore essential in order to ensure a consistent regulatory perimeter and a level playing field.

Regulators and supervisors should ensure the consistent treatment of activities that fall within the banking regulatory perimeter in adherence to the principle of technological neutrality. Deposit-taking is a prerogative of credit institutions and provides them with the funding essential for conducting their credit intermediation activities. Tokenisation does not alter this function and must not lead to an alteration of the regulatory perimeter. Activities which, in substance, amount to taking deposits or other repayable funds from the public must remain restricted to authorised credit institutions in accordance with Article 9 of the CRD. Where tokenised liabilities are recognised on the balance sheet of a credit institution, their prudential treatment – including from a liquidity risk perspective, such as outflow rates under the LCR – should continue to be determined by their underlying characteristics rather than the technology used to record them, so as to avoid creating unintended disincentives for on-balance-sheet issuance compared with alternative structures.

For these reasons, tokenised deposits should be treated as an evolutionary development within the existing regulatory framework. The priority should be to ensure consistent application of EU law and to address existing legal gaps. In particular, co-legislators are invited to provide greater clarity on the concept of deposit and its tokenised form[103], as well as their delineation from adjacent regimes, taking into account the principle of technological neutrality and principle of "same activities, same risks, same rules". This would support supervisory convergence,

[103] It is noted that Article 5a(4)(c) of the CRR introduces a cross-reference to the definition of deposits in Article 2(1)(3) of Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on deposit guarantee schemes (OJ L 173, 12.6.2014, p. 149) (the Deposit Guarantee Schemes Directive), including structured deposits, as part of the delineation of "traditional assets" for the purposes of the prudential treatment of crypto-asset exposures. However, that provision does not necessarily aim to define deposits for the purposes of the CRR but, rather, to include them among a set of traditional asset classes which, collectively, serve to delineate the scope of crypto-asset exposures.

reduce legal uncertainty and facilitate the development of sound cross-border arrangements within the EU.[104]

6.4 Legal treatment of tokens

The ESCB considers that there is merit in fostering legal clarity on the treatment of tokens within the EU, and certain EU Member States have already legislated on the matter.[105] National efforts may enhance legal certainty, which may help foster the development of tokenisation. However, while tokenisation is still in its infancy, differences in national legal approaches have already emerged, notably as regards corporate law, property law and insolvency law.[106] Such differences may increase cross-border complexity and create new forms of fragmentation if the legal and regulatory treatment of tokens depends on the Member State concerned. In practice, such fragmentation may hinder the development of a single market for tokenised assets by creating uncertainty around their issuance, holding, transfer, use as collateral and enforcement, and by requiring market participants to adapt their legal structures to the requirements of each Member State.

The ESCB therefore calls for urgent legislative action at EU level, and at an early stage, to prevent further fragmentation, with the MiCAR review providing an important opportunity to achieve this. Legal certainty – including as regards the legal effects of token issuance, holding and transfers, the recognition of token-based rights vis-à-vis third parties, the legal treatment of tokenised collateral, the rights of token holders in intermediated custody chains and the treatment of tokens in insolvency proceedings – is an important precondition for the safe development of a market for DLT-based assets[107] and related services. Providing such legal certainty at EU level would represent a unique opportunity to design a more integrated European digital financial ecosystem from the outset and help avoid reproducing (or aggravating), in the markets for tokenised assets, the fragmentation already observed in traditional capital markets. EU-level legal clarity would support the development of a scalable and interoperable market for tokenised assets, complement ongoing Eurosystem work on central bank money settlement, and contribute to the objectives of the savings and investments union. This also requires legal interoperability, meaning that rights, transfers, collateral effects, custody arrangements and settlement finality are recognised consistently across platforms, intermediaries and jurisdictions. For market infrastructures, legal compatibility is also needed regarding settlement finality, delivery-versus-payment arrangements and

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104 See also paragraph 4.5.2 of the ECB opinion on the market integration and supervision package.

105 Five Member States in particular have developed legislation: Germany (eWpG, 2021, extended by ZuFinG, 2023), France (the DEEP register, Ordonnance 2017-1674, updated through 2025), Italy (Decreto Fintech, Law 52/2023; updated 2024), Luxembourg (Blockchain Laws I–IV, 2019–2024) and Spain (LMVSI, Law 6/2023).

106 National laws differ as regards whether tokens or DLT records are recognised as objects of property or as capable of representing securities or other rights; whether securities can be issued natively on DLT or only through the tokenisation of pre-existing securities or claims; the legal effects of entries in a DLT register; and rules governing transfers and third-party effects, among others.

107 As the frictions relate mostly to national law, this applies to tokenised assets in general, including tokenised financial instruments (even if regulated under MiFID, they are still subject to national laws) and crypto-assets (regulated under MiCAR).

existing EU regulatory frameworks. These should be considered in conjunction with the Settlement Finality Regulation, CSDR and the DLT Pilot Regime.

There are several options for enhancing the legal treatment of digital assets under EU law, although they differ in terms of their harmonising ambition, legal effectiveness, institutional complexity and political feasibility. Each option should be evaluated in terms of its strengths and weaknesses, and the urgency of EU-level action. Some of these options may be complementary. Critically, any option considered should be consistent with the principles of technological neutrality and "same activity, same risks, same rules", and should promote these same principles across prudential, collateral and market infrastructure frameworks in order to facilitate the tokenisation, transfer and cross-border use of existing assets.[108] Each option should also include clear delineations and well-defined interactions with other relevant pieces of EU and national legislation. Keeping these important parameters in mind, the ESCB's preliminary assessment of the options put forward by the Commission is as follows:

- **Implementation of a 28th regime** recognising the legal effects of DLT registers recording tokens, including rules on good faith acquisition and on opposability and enforceability vis-à-vis third parties (erga omnes effects):
    - This could be an effective way to provide an optional and directly applicable legal framework for DLT-based assets, especially where full harmonisation cannot be achieved. If well designed and implemented, such a regime could operate alongside national legal regimes and could recognise the legal effects of DLT registers, including rules on entitlement, transfer, good faith acquisition and opposability vis-à-vis third parties, without requiring immediate and comprehensive reform of national private law systems (which would also reduce the potential political costs). This would allow tokenised markets to develop on the basis of common legal and technological foundations from the outset, for those firms opting in.
    - The effectiveness of a 28th regime would depend on its design and implementation. In particular, it would need to be sufficiently attractive for issuers, investors, intermediaries and infrastructure providers to opt into it. The interaction with other pieces of legislation is also critical, as the 28th regime should be closely aligned with existing sectoral frameworks such as MiFID II and MiCAR. Moreover, the progress achieved through a 28th regime would depend on the extent to which it relies on national law for its implementation, which may limit its potential to foster harmonisation.

[108] Tokenised instruments typically fall under existing securities and market infrastructure frameworks, and most regimes are designed to be technology-neutral as a matter of law. However, specific provisions, such as DLT-related capital add-ons, the more conservative prudential treatment of permissionless versus permissioned DLT, and higher collateral haircuts for tokenised instruments backed one-to-one by traditional securities, show that economic outcomes can deviate from formal technological neutrality, although such measures may be needed due to additional risks posed by DLT infrastructure, particularly permissionless DLT. For example, the DLT-related capital add-on in the Basel crypto standard will initially be set to zero but may be increased if any weaknesses in the infrastructure are observed.

- **Full harmonisation of the private law treatment of tokens in Member States**:
    - Full harmonisation of the private law treatment of tokens would be the most effective means of reducing regulatory fragmentation. It would provide the strongest basis for legal certainty and cross-border integration by ensuring that tokenised assets receive equivalent legal treatment across the EU. It may be particularly valuable for wholesale financial markets, where tokenised assets may be issued, traded, settled, pledged and held across borders by multiple intermediaries and infrastructures.
    - Should this option be considered, a careful assessment would be required to ensure technological neutrality and to avoid unintended effects on national property law concepts and inconsistencies with existing national securities and corporate law. While a directly applicable EU regulation would ensure the highest level of harmonisation, a directive could also be considered to facilitate implementation by Member States in a manner consistent and suitably aligned with their respective legal regimes, thus also lowering the political costs of this option. However, the implications of using a directive should be carefully assessed.
- **Partial harmonisation of the private law treatment of tokens in Member States**:
    - This option, which would entail the harmonisation of some (but not all) elements of the private law treatment of tokens, could target those legal issues creating the most significant frictions that hinder market development, while avoiding the complexity of a comprehensive reform of national private law systems by focusing on a limited number of key building blocks. These key building blocks would deserve careful strategic consideration, but could include the recognition of tokens or DLT-based records as rights, transfer rules (validity and protection of acquisition and disposition), legal certainty as regards third-party effects, and the treatment of collateral and insolvency.
    - This approach could help contain the risk of fragmentation by focusing on key elements, thereby lowering the political costs involved. However, while it could help to reduce cross-border frictions hindering the development of tokenised assets, this option would not eliminate them altogether and could give rise to opportunities for regulatory arbitrage.
- **Introducing a conflict-of-laws regime for tokens under EU law**:
    - A conflict-of-laws regime could help determine which national law applies to a token or to rights recorded on a DLT register. This may be useful in certain cross-border situations. Should full harmonisation not be accomplished, proper conflict-of-laws rules would be needed to ensure legal certainty, including in relation to those aspects that remain outside the scope of harmonisation.

- However, such a regime would not itself harmonise the substantive legal treatment of tokens and would not, therefore, ensure that tokens are treated equally across the EU. While perhaps the most politically feasible option, Member States would bear the burden of fostering EU-compatible approaches, which would be unlikely to reduce the legal frictions that already exist, particularly in view of the fragmentation that currently exists in traditional capital markets.

6.5 Other issues

6.5.1 DORA

While the Digital Operational Resilience Act (DORA) establishes a comprehensive horizontal framework for ICT risk management and cyber resilience through its foundational elements, the ESCB considers that, for CASPs, certain crypto-asset-specific cybersecurity risks only indirectly covered by DORA could be addressed more explicitly. In particular, risks related to private key custody, vulnerabilities in smart contracts, dependencies on decentralised or permissionless infrastructures, and the operational implications of transaction irreversibility might warrant closer attention. It may be appropriate to introduce safeguards so as to ensure a minimum level of robustness for the DLT infrastructures supporting regulated tokens, including with regard to governance, security, resilience and emerging technological threats such as quantum computing. Issuers could be required to conduct and provide competent authorities with a structured assessment of the risks associated with the chosen infrastructure, including, where appropriate, independent verification mechanisms such as external audits. Such assessments could apply both at issuance and when deploying tokens on additional infrastructures.

The ESCB suggests delegating the development of technical standards or guidelines on crypto-asset cybersecurity risks to the European Supervisory Authorities. Given the technical nature of these issues and the need for flexibility, the ESCB is of the view that, rather than setting out such specifications in the context of Level 1 legislation, it would be preferable to confer mandates on the European Supervisory Authorities to develop RTS or guidelines addressing crypto-asset-specific cybersecurity risks. This approach would promote proportionality, ensure consistency across the EU and allow for timely updates in response to technological developments.

6.5.2 Interplay between the CRR/CRD and MiCAR

For credit institutions, responsibility for supervising compliance with anti-market abuse monitoring requirements applicable to CASP activities, and for

enforcing those requirements, should be assigned to ESMA,[109] **as those activities are not covered by the Single Supervisory Mechanism Regulation.**[110] At the same time, ESMA should inform the competent authority under the CRD before adopting any supervisory measure or initiating any enforcement action, in view of the potential implications for the institution's soundness and to ensure that actions are coordinated under the respective mandates.

Ensuring that the relevant authorities share information would support a more integrated supervisory approach and allow the impact of crypto-asset activities to be fully reflected in the prudential assessment of credit institutions. In this context, MiCAR should be amended to ensure that any notification submitted by a credit institution within the scope of MiCAR is systematically transmitted by the recipient authority to the authority responsible for supervision under the CRD.

The proposed PSD/PSR framework and the interplay between MiCAR and Article 5a of the CRR[111] **give rise to a number of conceptual inconsistencies, overlaps and unnecessary redundancies, thereby reducing legal clarity and creating a risk of interpretative uncertainty regarding the prudential treatment of tokenised traditional assets.** First, while the CRR definition of "crypto-asset" refers to MiCAR, it introduces an additional exclusion for central bank digital currencies (CBDCs), notwithstanding that CBDCs are already excluded from the scope of MiCAR pursuant to Article 2(2) and Article 3(1), point (5), of MiCAR. Second, the CRR definition of "traditional asset" as "any asset other than a crypto-asset" draws a strict binary distinction between crypto-assets and non-crypto-assets. While this conceptual dichotomy is acceptable, it is not consistently maintained throughout the article. In particular, the illustrative list provided in point (4) introduces elements that blur this distinction. The reference to "financial instruments" relies on the definition used in the CRR, which is not fully aligned with the MiFID II definition and may therefore lead to inconsistencies in classification across the EU. Similarly, the reference to "funds", as defined in Directive (EU) 2015/2366 (PSD2), encompassing banknotes, scriptural money and electronic money, is problematic in light of MiCAR, which explicitly recognises EMTs as a distinct category of crypto-assets (Article 3(1), point (7)). This tension is further amplified by the legislative developments under the proposed PSR3, which envisage extending the notion of "funds" to explicitly include EMTs and retail CBDCs, thus directly conflicting with both the binary distinction established in Article 5a and the exclusion of CBDCs under point (1).

Additional uncertainty arises in relation to deposits. The reference to the definition of "deposit" under Directive 2014/49/EU (Deposit Guarantee Schemes Directive) lacks clarity as to whether it is meant to be an exhaustive definition or

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109 See Section 7.2 of the ECB's opinion on the market integration and supervision package and Annex I, Amendment 44.

110 Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (OJ L 287, 29.10.2013, p. 63).

111 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1).

merely to serve as an illustrative reference. Given that the DGSD concept of "deposit" is tailored to the purpose of depositor protection, its transposition into the CRR context without further clarification may lead to divergent interpretations, particularly as regards the boundary between deposits, funds and tokenised representations thereof.

One of the main inconsistencies concerns the definition of "tokenised traditional asset", which the CRR describes as a "crypto-asset" representing a traditional asset, including an EMT. As the term "crypto-asset" falls within the scope of MiCAR, this wording is problematic and should instead refer to "the tokenised version of" a traditional asset. Moreover, the explicit inclusion of EMTs duplicates categories already covered by the definition of crypto-assets and creates a potential overlap with the references to funds and electronic money in point (4)(b). Overall, closer alignment of the CRR definitions of crypto-assets and tokenised traditional assets with the definitions and scope of MiCAR and PSD3/PSR is needed to ensure legal certainty and avoid interpretative fragmentation across EU law.

6.5.3 AML/CFT matters

While anti-money laundering/combating the financing of terrorism (AML/CFT) legislation is separate from MiCAR, a review of MiCAR should also consider whether the interplay with the relevant AML/CFT legislation remains fit for purpose. In particular, the Financial Action Task Force (FATF) has updated its Recommendation 16 on Payment Transparency,[112] also known as the "Travel Rule", which now applies also to crypto-assets and CASPs. The EU should consider these updates when reviewing its Transfer of Funds Regulation, in accordance with that Regulation's review clauses[113]. It would be beneficial for this review to also consider risks stemming from the use of self-hosted addresses, and the potential regulatory responses to such risks. As mandated by the Transfer of Funds Regulation itself, it will be important to take into account new developments and relevant evaluations, including those of the FATF.[114]

Issuers of ARTs and EMTs, which operate on the same technology, should be subject to the same AML/CFT obligations. In particular, EMT issuers are obliged entities under the EU's AML/CFT framework by virtue of the licenses they are required to hold. However, an undertaking without any financial sector licence other than the authorisation under Article 21 of MiCAR is not an obliged entity pursuant to

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112 See FATF (2025), "FATF updates Standards on Recommendation 16 on Payment Transparency", 28 October.

113 Article 37 of the Transfer of Funds Regulation provides for multiple reviews. See Regulation (EU) 2023/1113 of the European Parliament and of the Council of 31 May 2023 on information accompanying transfers of funds and certain crypto-assets and amending Directive (EU) 2015/849 (OJ L 150, 9.6.2023, p. 1).

114 The FATF has produced several reports relevant to money laundering and terrorism financing risks stemming from crypto-assets and crypto-asset service providers. See, for example, FATF (2026), "Targeted Report on Stablecoins and Unhosted Wallets – Peer-to-Peer Transactions", FATF, France, March; FATF (2026), "Understanding and Mitigating the Risks of Offshore Virtual Asset Service Providers (oVASPs)", March; FATF (2026), "Cyber-Enabled Fraud – Digitalisation and Money Laundering, Terrorist Financing and Proliferation Financing Risks", February; [potential addition of new FATF report].

Directive 2015/849[115] or the AML Regulation[116]. The rationale for this divergence is unclear and does not appear consistent with the principle of “same activity, same risk, same regulation”.

[115] Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC (OJ L 141, 5.6.2015, p. 73).

[116] Regulation (EU) 2024/1624 of the European Parliament and of the Council of 31 May 2024 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing (OJ L 2024/1624, 19.6.2024).

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