

From Means of Payment to Settlement Asset: The Systemic Risks of Stablecoins for the European Economic Area and the Regulatory Response of the EU and the ECB

What has already been done preventively, what will follow, and what is additionally recommended

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Abstract

The present study analyzes the systemic risks emerging within the European Economic Area as dollar-pegged stablecoins migrate from the payment layer—where they function as redeemable claims—into the settlement layer, where obligations are definitively discharged. The analysis integrates monetary theories of currency competition and dollarization with the supervisory frameworks of the European Union and the United States (notably MiCAR and the GENIUS Act), supplemented by market data as of September 2026 and a stylized quantity model calibrated to euro-area aggregates for July 2026.

As long as the token remains redeemable, its impact on the price level remains bounded and the European Central Bank's (ECB) capacity for monetary steering is preserved, albeit at the cost of weakened transmission and increased volatility in bank funding. However, acceptance in settlement effectively removes the redemption obligation, enabling issuers to create credit without a banking license or capital requirements. Consequently, the price level loses its anchor, and for dollar-denominated tokens, currency substitution replaces inflation; the price level of the tokenized segment of the economy subsequently follows US price dynamics and exchange rate fluctuations. In the provided numerical example, a euro coin of EUR 500 billion increases payment capacity by up to 2.8 percent on a one-off basis and reduces bank lending capacity by one to two percent; upon settlement acceptance with a reserve ratio of 20 percent, this effect increases to 11.4 percent. Empirical data from 2015–2025 indicate that a dollar-based price level measured in euro would have risen by 21 percent in 2022 alone, compared to 8.4 percent for the HICP.

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While the EU and the ECB have established defenses on the settlement side—including means-of-exchange thresholds, interest prohibitions, reserve requirements, the Pontes solution, the digital euro, and ESRB recommendations—significant risks persist. These are primarily located within the 2026 MiCAR review, the phenomenon of multi-issuance, and the temporal gap extending toward 2029. This study proposes nine measures, prioritizing a rule of Union law stipulating that taxes, bank liabilities, and settlement finality may be discharged exclusively in euro.

Keywords: Stablecoins · Settlement layer · Finality · Currency substitution · MiCAR · GENIUS Act · Digital euro · Monetary transmission.

JEL codes: E42, E52, E58, F31, F33, G21, G28, K22.

Executive Summary

Stablecoins are digital assets on a blockchain whose value is pegged to a sovereign currency, most predominantly the US dollar. Holders of these tokens possess neither a bank deposit nor central bank money, but rather a claim against a private issuer that maintains reserves in bank balances and US government securities. By September 2026, the market capitalization reached approximately USD 300 billion, anchored in US federal law via the GENIUS Act and regulated in Europe under the MiCAR framework.² This paper investigates the implications of a transition where such tokens are no longer merely utilized for payments but become the primary medium in which obligations—including taxes, bank liabilities, and interbank balances—are finally discharged.

To analyze this, a distinction is made between two layers: the payment layer, encompassing everyday transactions where the specific medium of payment is secondary to the transfer of value, and the settlement layer, where a claim is transformed into money that is no longer a claim on another party (represented in the euro area by central bank money moving via TARGET). On the payment layer, a stablecoin remains a redeemable claim, necessitating that the issuer collect funds prior to issuance. Consequently, while it shifts deposits, it does not generate new purchasing power.

The primary risk is not growth, but the migration of the token into the settlement layer. If accepted for settlement, the redemption obligation lapses, allowing a custodian of third-party funds to operate as a bank without a license, deposit insurance, or capital buffers. The price level would subsequently lose its anchor. For the euro area, the dollar-denominated nature of these tokens means that the tokenized sector of the economy would follow US price levels and exchange rates, bypassing the ECB's interest rate mechanisms. Data from 2015–2025 illustrate the potential impact: in 2022, a dollar-based price level measured in euro would have risen by 21 percent, significantly exceeding the 8.4 percent increase in the European consumer price index.

A stylized numerical example calibrated to July 2026 aggregates demonstrates the scale of these effects. A euro coin of EUR 500 billion increases the economy's payment capacity by at most 2.8 percent and reduces bank lending capacity by one to two percent. However, if accepted in settlement with a 20 percent reserve, the effect increases to 11.4 percent, the neutralization of which would cost between 11 and 23 percent of annual output.

While Europe has largely established the necessary boundaries—through exchange thresholds, interest prohibitions, and infrastructure like Pontes and the digital euro—these defenses face pressure in 2026 from the MiCAR review, US policy promoting dollar-coin proliferation, and

² Market data as of September 4, 2026, from Stablecoinbeat; share of dollar-pegged tokens roughly 99 percent; providers differ in the decimals. The GENIUS Act was signed on July 18, 2025; MiCAR has applied to stablecoins since June 30, 2024.

the temporal delay of the digital euro's arrival in 2029. Nine policy measures are recommended, the most critical being the elevation of the rule that taxes, bank liabilities, and finality be discharged exclusively in euro to the level of Union law.

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1 Introduction

The rapid ascent of stablecoins from peripheral financial instruments to central monetary policy variables is unprecedented. By September 2026, digital dollar units with a combined market capitalization of approximately USD 302 billion are in circulation, with roughly 99 percent pegged to the US dollar; the issuers Tether and Circle collectively account for about 85 percent of this market. The United States has established a dedicated federal statute for the product—the GENIUS Act of July 18, 2025—while simultaneously prohibiting the development of a central bank digital currency via Executive Order 14178.³ The European Union has implemented the first comprehensive framework through Regulation (EU) 2023/1114 (MiCAR) and has initiated the development of a public counterpart, the digital euro, slated for 2029. The tension between these two regulatory orders will determine the currency in which the digital economy of the coming decade maintains its accounts.

Existing academic discourse regarding stablecoins has largely diverged into two primary streams. The stability literature focuses on the veracity of the parity promise: Gorton and Zhang (2023) analyze stablecoins as a resurgence of nineteenth-century private banknote issuance, including its susceptibility to bank runs; Catalini, de Gortari, and Shah (2022) examine the economics of the business model; Lyons and Viswanath-Natraj (2023) demonstrate how arbitrage maintains the peg; and Garratt and Shin (2023) explain why stablecoins fail to maintain the singleness of money preserved by tokenized deposits. The macroeconomic literature is more recent. Ahmed and Aldasoro (2025) demonstrate that inflows into stablecoins measurably reduce the yields of short-dated US government securities; Aldasoro, Beltrán, and Grinberg (2026) show their impact on exchange rates and funding costs across currencies; Hofmann, Kaldorf, and Rottner (2026) model the opposing effects on bank lending and fiscal space; Liao and Caramichael (2022) describe the displacement of bank deposits; and Borio, Disyatat, and Tarashev (2026) analyze the conditions under which an issuer attains the privilege of money creation. Furthermore, the Oesterreichische Nationalbank recently examined the effect on the price level using a general equilibrium model (Summer 2026). The conceptual framework for this paper is derived from the established theory of currency competition and dollarization—specifically the work of Hayek (1976), Klein (1974), Kareken and Wallace (1981), Hellwig (1985), Calvo and Végh (1992), Levy Yeyati (2006), Fernández-Villaverde and Sanches (2019), and Benigno, Schilling, and Uhlig (2022).

This research makes five primary contributions. First, it operationalizes the distinction between the payment layer and the settlement layer in legal and institutional terms—

³ Executive Order 14178 of January 23, 2025, is entitled "Strengthening American Leadership in Digital Financial Technology" and prohibits federal agencies from developing a central bank digital currency; the GENIUS Act is Public Law 119-27.

specifically through the finality of settlement as defined by Directive 98/26/EC and the Principles for Financial Market Infrastructures (CPSS-IOSCO 2012),⁴ and through acceptance for the payment of taxes, a core element of the state theory of money (Knapp 1905, Lerner 1947, Goodhart 1998). Second, it evaluates the preventive measures already implemented or announced by the EU and the ECB. Third, it outlines four scenarios illustrating the practical consequences should the token migrate into settlement and the ECB lose the ability to steer the price level via conventional instruments, calibrated against the historical dollarization experiences of Ecuador and Argentina and price/exchange rate data from 2015–2025. Fourth, it employs a stylized quantity model to compute the effects on payment capacity, sovereign bonds, and the banking sector. Fifth, it derives specific policy recommendations from these findings. This study does not address whether an issuer can honor its redemption promises, as this topic is extensively covered in the stability literature.

The structure of the analysis is as follows. Chapter 1 serves as the introduction. Chapter 2 introduces the stablecoin, its business model, and its European counterparts. Chapter 3 delineates the payment and settlement layers and the thresholds between them. Chapter 4 establishes the core basis of the systemic risks. Chapters 5 and 6 evaluate the preventive actions of the EU and the ECB. Chapter 7 analyzes the effects of migration in the absence of further measures, including structural coercibility and the eurodollar sphere. Chapter 8 provides the numerical example. Chapter 9 addresses further considerations, including the investor’s perspective. Chapter 10 presents the recommendations, and Chapter 11 concludes with an outlook.

2 The Stablecoin and Its European Counterparts

2.1 Mechanics and Business Model

A stablecoin is defined as a unit of value recorded on a blockchain, the price of which is maintained via backing relative to a reference currency. To obtain new units, a user transfers funds to the issuer, who then credits the corresponding number of tokens and allocates the funds to a reserve—consisting, under both US and EU law, of bank balances, short-dated government securities, and similarly liquid assets, at a minimum ratio of one to one. Tokens returned to the issuer are redeemed at par. If the market price deviates from the face value, arbitrage restores the peg, a process that becomes more reliable as access to minting and redemption increases (Lyons and Viswanath-Natraj 2023). Legally, the token constitutes neither a bank deposit nor legal tender, but a claim against a private issuer.

⁴ The Principles for Financial Market Infrastructures (CPSS-IOSCO 2012) require in Principle 8 clear and certain final settlement, at a minimum by the end of the value date; Principle 9 requires settlement in central bank money where practical and available.

The underlying business model is a direct consequence of this structure. The issuer accepts non-interest-bearing liabilities and invests them in interest-bearing assets; the return on the reserve accrues solely to the issuer, as both legal frameworks prohibit paying holders interest merely for holding the token.⁵ Catalini, de Gortari, and Shah (2022) describe this economics as a variant of seigniorage, wherein the issuer earns profits similar to those of a central bank without bearing its associated obligations; for instance, Tether reported a profit of approximately USD 13 billion for 2024. Of greater significance for the present analysis is the principle of *money first*: an issuer can only issue a token after receiving the corresponding funds. Consequently, stablecoins shift deposits rather than creating new purchasing power. In the monetary view of Aldasoro, Mehrling, and Neilson (2023), the stablecoin represents a resurgence of the eurodollar—a liability whose parity depends on the issuer’s liquidity rather than its solvency.

2.2 The Market in September 2026

The state of the market as of September 2026 is summarized in Table 1. Three key ratios are particularly salient: concentration—with USDT and USDC collectively accounting for roughly 85 percent of the outstanding supply; currency—with approximately 99 percent tied to the US dollar, effectively making the stablecoin market a privately operated offshore branch of the dollar area; and utilization—where the entire on-chain credit market, at roughly USD 26 billion, represents only one-twelfth of the coin supply, indicating that the sector is primarily utilized for cash management and payments rather than as a credit system. The Bank for International Settlements (2025) has evaluated the market against the three requirements of genuine money—singleness, elasticity, and integrity—concluding that stablecoins fall short in all three dimensions.

⁵ The interest prohibition is found in MiCAR in Article 40 (asset-referenced tokens) and Article 50 (e-money tokens); the GENIUS Act contains a corresponding prohibition for payment stablecoins. In practice, trading platforms pay "rewards" on custodied balances; Section 9.1 returns to this.

Table 1: The stablecoin market in September 2026

Item	Value	As of
Total market capitalization	USD 302.5 bn	Sept. 4, 2026
of which USDT (Tether)	USD 183.4 bn (60.6%)	Sept. 4, 2026
of which USDC (Circle)	USD 74.2 bn (24.5%)	Sept. 4, 2026
Share of dollar-pegged tokens	approx. 99%	Sept. 4, 2026
Euro stablecoins, total	approx. USD 810 m	Aug. 5, 2026
of which EURC (Circle)	approx. USD 526 m (65%)	Aug. 5, 2026
of which EURCV (Société Générale-Forge)	approx. USD 135 m (16.7%)	Aug. 5, 2026
Euro stablecoins according to the ECB	approx. EUR 450 m	Jan. 2026
Outstanding loans in DeFi	USD 26.1 bn (Aave 48%)	Aug. 2026
Share of the Tron blockchain in USDT supply	approx. 46%	Q1 2026

Sources: Stablecoinbeat (September 4, 2026); Token Terminal via Bitcoinworld (August 5, 2026); Born et al. (2026); DeFi lending volume from market data for August 2026; CoinDesk Research, TRON Q1 2026; own compilation.

Notes: Euro stablecoins converted into US dollars at the respective reporting date; the ECB figure for January 2026 is the most recent official figure. Shares within the euro coin market are provider-specific; here from Token Terminal.

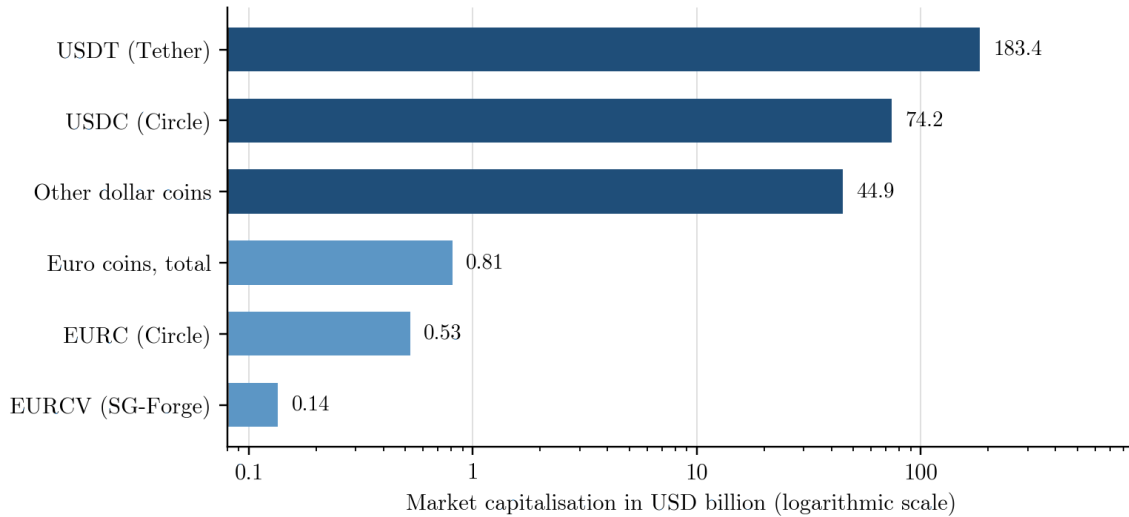


Figure 1: Market capitalization of dollar-pegged and euro-pegged stablecoins compared, USD billion, logarithmic scale. As of September 4, 2026 (dollar coins) and August 5, 2026 (euro coins). Sources: Stablecoinbeat; Token Terminal; own graph.

Figure 1 illustrates the disparity in scale on a logarithmic axis, as a linear scale would be inadequate: the market for dollar coins is roughly 370 times larger than all euro coins combined, and the largest single dollar coin is approximately 225 times larger.⁶ This does not represent a niche market but rather a total absence of a European equivalent—a fact that serves as the starting point for any consideration of the European response.

⁶ USD 302.5 billion to USD 0.81 billion gives 373; USD 183.4 billion (USDT) to USD 0.81 billion gives 226. The ECB figure of roughly EUR 450 million for January 2026 (Born et al. 2026) is of the same order of magnitude.

2.3 The European Counterparts

The European landscape comprises five distinct forms of digital euro-denominated money, differing in legal nature, maturity, and scale, as detailed in Table 2. The first two are MiCAR-compliant e-money tokens from private issuers: EURC (Circle), the largest euro coin at roughly 65 percent, and EURCV (Société Générale-Forge). The third is the banking consortium Qivalis, announced in September 2025 and expanding to thirty-seven institutions from fifteen countries by May 2026, with initial issuance expected in the second half of 2026. The fourth is the tokenized deposit: a standard bank deposit maintained on a programmable platform and settled in central bank money; the European Banking Authority (2024) has distinguished this from e-money tokens, and Garratt and Shin (2023) have demonstrated that, unlike the stablecoin, it preserves the singleness of money by settling at par in central bank money without trading on a secondary market. The fifth is the digital euro as a liability of the Eurosystem, the legal framework for which was approved by the Economic and Monetary Affairs Committee of the European Parliament on June 23, 2026; issuance is planned for 2029.⁷ At the wholesale level, Pontes serves as the Eurosystem’s solution for settling tokenized transactions in central bank money with finality in T2, with an initial launch planned for the third quarter of 2026 and user testing ongoing since August 2026.

Table 2: Digital euro money compared: legal nature, settlement, and size

Form	Legal nature	Settlement	Size / status
USDT, USDC (for comparison)	Claim against private issuer; GENIUS Act	Redemption at issuer; secondary market	USD 257.6 bn (Sept. 2026)
EURC, EURCV	E-money token under MiCAR; reserve at least 30% bank deposits (significant 60%)	Redemption at issuer; secondary market	approx. USD 660 m (Aug. 2026)
Qivalis (consortium)	E-money token under MiCAR, issued by 37 banks	Redemption; backed by bank assets	First issuance H2 2026
Tokenized deposit	Bank deposit on a programmable platform (EBA 2024)	At par in central bank money	Under construction; Wero as precursor
Digital euro	Liability of the Eurosystem	Central bank money itself	Issuance planned for 2029
Pontes (wholesale)	Settlement solution of the Eurosystem	Finality in T2	Initial launch Q3 2026

Sources: Regulation (EU) 2023/1114; European Banking Authority (2024); European Parliament (2026); European Central Bank (2026a); market data as in Table 1; own compilation.

⁷ The Governing Council's decision to move the preparation of the digital euro to the next phase dates from October 2025. Wero is the wallet of the European Payments Initiative of European banks, in use in Germany, France, and Belgium since 2024.

2.4 Implications of the Scale Comparison

Three primary conclusions may be drawn from this comparison. First, the European response has thus far been primarily legal rather than substantive: while foreign tokens have been regulated, Europe has yet to produce a token of significant scale. Second, the two forms Europe will eventually obtain in appreciable size—tokenized deposits and the digital euro—are not stablecoins but rather inside money on new rails and outside money in a new form; both remain within the two-tier monetary order that stablecoins circumvent. Third, the temporal dimension is critical: the retail space remains open for three years until the digital euro is issued. The observation by Lagarde (2026) that the case for promoting euro-denominated stablecoins is weaker than it appears, contrasted with Nagel’s (2026) advocacy for them as a remedy against dollarization, suggests that the European position is not yet unified regarding the role of private euro coins versus the public project.

3 The Payment Layer and the Settlement Layer

3.1 The Hierarchy of Money

Money is conceptualized not as a homogeneous mass, but as a hierarchy of claims in which each layer is discharged by the layer beneath it. Mehrling (2013) simplifies this hierarchy: central bank money occupies the apex as the ultimate medium of exchange; below it stand bank liabilities, which are discharged in central bank money; and at the base are the liabilities of the broader economy. In stable periods, these layers effectively merge as all claims trade at par; however, during crises, the hierarchy becomes explicit as agents seek refuge in the upper layers. Holmström (2015) explains the seamless acceptance of upper-layer claims, while Diamond and Dybvig (1983) formalize the dynamics of bank runs when this trust erodes. Within this hierarchy, a stablecoin is essentially a third-layer liability presented as a first-layer asset: it bears the name of the dollar, but remains a claim on a private issuer.

3.2 The Payment Layer

The payment layer comprises the operational environment for transactions: retail checkouts, corporate transfers, and wallet-to-wallet exchanges. In this context, a means of payment is exchanged, and the specific nature of the medium—whether banknote, bank deposit, card entry, or stablecoin—is secondary to the transfer of value. Kahn and Roberds (2009) delineate two distinct functions of a payment: the transfer of a medium of exchange

and the discharge of an obligation.⁸ A banknote discharge is immediate due to its status as central bank money; a card payment discharges the obligation toward the merchant but creates an interbank obligation settled subsequently in central bank money. A stablecoin discharge occurs vis-à-vis the recipient but creates no new obligation within the banking system; instead, it transfers an existing claim against the issuer. Thus, while stablecoins are highly efficient means of payment—global, rapid, and available continuously—they remain claims that must eventually be redeemed for money that the issuer cannot create independently.

3.3 The Settlement Layer

The settlement layer represents the level at which obligations are definitively discharged: the payment of taxes, the honoring of bank liabilities, and the squaring of interbank balances. In the euro area, this occurs in central bank money via the Eurosystem's TARGET services, with the finality of these entries being legally defined. Directive 98/26/EC on settlement finality stipulates that a transfer order entered into a designated system is legally enforceable and irrevocable, even in the event of insolvency. Furthermore, the Principles for Financial Market Infrastructures of CPSS and IOSCO (2012) require that finality be clear, certain, and achieved by the end of the value date, preferably in central bank money. Finality is the juncture at which a claim is transformed into money that is no longer a claim on any other party.

⁸ Fama (1980) formulated this separation early: a pure accounting system of exchange that nets claims needs an outside money as anchor in which the claims are ultimately discharged; without that outside money the price level is not determined.

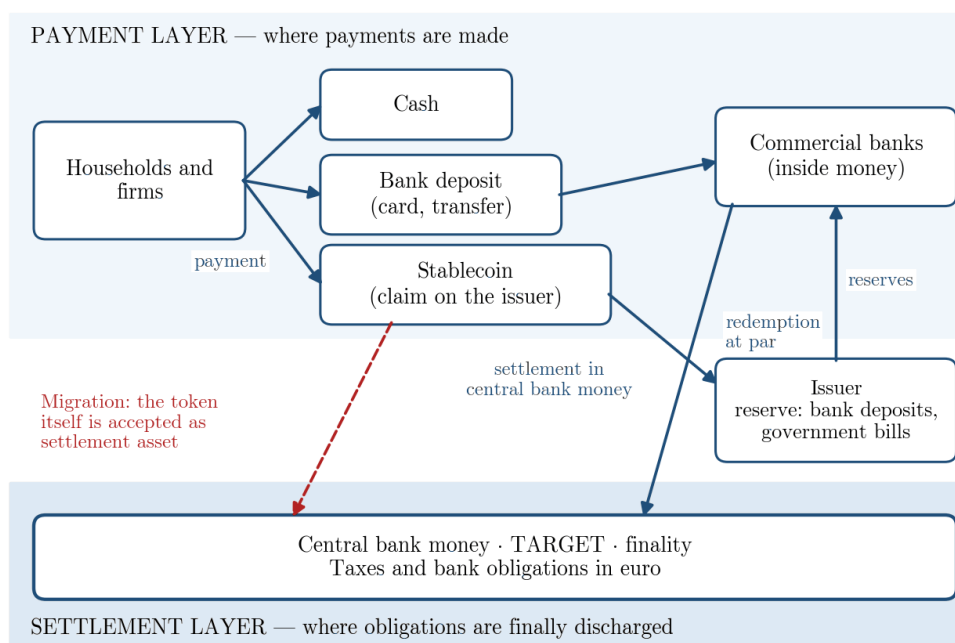


Figure 2: The payment layer and the settlement layer in the euro area. On the payment layer the stablecoin is a means of payment and at the same time a claim that is redeemed at par at the issuer and settled through the banks in central bank money. The dashed line shows the migration: the case in which the token itself were accepted as a settlement asset. Source: own graph.

A more fundamental definition of the settlement layer is rooted in the state theory of money. Knapp (1905) postulated that money is defined by what the state accepts at its pay offices; Lerner (1947) further argued that whatever the state accepts for the payment of taxes becomes money, as it creates a universal demand. Goodhart (1998) demonstrated that this chartalist view explains the history of currency areas more effectively than the theory of optimum currency areas, suggesting that currency boundaries align with those of fiscal authority. The settlement layer is therefore not merely a technical infrastructure but the locus where the state determines the final discharge of obligations in its unit of account. As long as taxes, bank liabilities, and interbank balances are discharged exclusively in euro and central bank money, all other means of payment remain claims that ultimately revert to the euro.⁹

3.4 The Redemption Obligation as Discipline

The current inability of stablecoin issuers to create credit, in contrast to commercial banks, stems from their lack of access to central bank liquidity. Tobin (1963) explained that banks can lend by crediting a deposit to a borrower because their liabilities are accepted as means

⁹ Article 128 TFEU makes the euro banknotes issued by the Eurosystem the only notes of that kind with the status of legal tender; under Articles 10 and 11 of Regulation (EC) No 974/98 this holds in the participating Member States. No rule that obligations may be discharged in euro alone follows from it.

of payment and they can settle in central bank money via the central bank. A stablecoin issuer possesses neither advantage: its liability returns as a claim that must be honored in external money to which the issuer has no inherent access. Consequently, the issuer must collect funds prior to issuance. Gurley and Shaw (1960) categorized such claims as “near-money”—liabilities of financial intermediaries that influence spending without being money themselves. Stablecoins are near-money with superior payment properties, but they remain so as long as the redemption obligation persists. This obligation serves as a critical discipline, regardless of the volume of tokens in circulation.

3.5 Two Thresholds: Payment Acceptance and Settlement Acceptance

Based on this framework, two distinct thresholds emerge, which are frequently conflated in public discourse. The first is broad acceptance in payments: the token is utilized at checkouts, in corporate transactions, and in card settlement. While this alters payment habits, affects the competitive position of banks, and influences the demand for government securities, the legal nature of the token remains unchanged: it is still a claim that must be redeemed. Borio, Disyatat, and Tarashev (2026) questioned at what point an issuer shares the banking privilege of paying with its own liabilities; the present analysis suggests that payment acceptance provides at most the elasticity of a bank, yet this elasticity remains constrained by the redemption obligation. The second threshold is acceptance in settlement: when taxes, bank liabilities, and interbank balances can be discharged in the token itself. Only at this point does the redemption obligation lapse, as there is no longer a need to redeem the token to achieve final discharge. Only then does the token function as money—a second outside money alongside the euro—allowing the issuer to lend funds it has not previously collected.¹⁰ The systemic risk analyzed in this paper resides at this second threshold, which is a matter of law rather than market size.

4 The Core Basis: Dangers for the Euro Area, Its Banks, and the ECB

This chapter delineates the primary systemic risks posed to the euro area, its banking sector, and the ECB, both under current conditions—where stablecoins remain on the payment layer—and in the event of a migration to the settlement layer. The analysis is based on the state of the market as of September 2026 and is structured around the two-layer framework.

¹⁰ Klein (1974) and Hayek (1976) read the competition of private monies as a discipline on issuers; Hellwig (1985) showed why that discipline fails among competing outside monies when the anchor of the unit of account is missing. Kareken and Wallace (1981) supply the formal indeterminacy result.

4.1 The Euro and the EUR/USD Exchange Rate

Since early 2026, empirical evidence has become available. Aldasoro, Beltrán, and Grinberg (2026) examined four dollar-pegged stablecoins across 27 currencies and 64 trading venues from 2021–2025, finding that a one percent increase in net inflows raises deviations from parity by 40 basis points, depreciates the local currency, and widens the dollar premium in synthetic funding markets—most notably where arbitrage is least efficient. For the euro, the most traded currency after the dollar, the effect is structural rather than cyclical. It depends on a critical distinction: if a token replaces a dollar balance a firm already held, no new foreign exchange flow is generated. The new flow arises only when agents in the euro area exchange euro for dollar tokens to facilitate payments previously conducted in euro—a path that the means-of-exchange thresholds of MiCAR specifically restrict.

Beyond exchange rate volatility, three more profound effects emerge. First, monetary transmission is impaired: agents who save and pay in dollars do not respond to the ECB’s deposit rate, meaning interest rate policy loses efficacy without necessarily impacting the inflation report. Second, seigniorage is reduced: since seigniorage derives from non-interest-bearing central bank liabilities, a contraction in their circulation reduces the income from which the Eurosystem funds its operations (Fischer 1982).¹¹ Third, the process of acceptance is incremental: it typically migrates first into cross-border corporate payments, then into neighboring currency areas, and finally into the domestic market. The eurodollar market followed this exact sequence (Schenk 1998).

4.2 The Credit Question: Through Whom Would the Credit Flow?

The migration of a token into a settlement asset removes the balance-sheet constraints currently governing issuers. An issuer earning four percent on its reserve would essentially become a bank with a lending margin, maturity transformation, and leverage—yet without a banking license, deposit insurance, a refinancing window, or capital buffers. Four potential paths for this credit flow exist: via existing on-chain credit markets (roughly USD 26 billion, largely overcollateralized and functioning as pawnbroking); through the issuers themselves (prohibited in Europe); through new crypto-banks (unlikely, as licensing would impose the very rules the issuers seek to avoid); or through banks via tokenized deposits—the most probable and least harmful path, currently pursued by Qivalis.

A critical European safeguard is found not in MiCAR, but in the Capital Requirements Directive and Regulation. Any entity lending against its own issuance is engaging in the business of lending and thus requires a banking license. This regulatory limit serves as a

¹¹ Fischer (1982) estimates the seigniorage loss of an economy that adopts a foreign currency and shows that it is small at low inflation and substantial at high inflation—an argument that is reassuring for the euro area in calm times and unsettling in times of crisis.

secondary line of defense, remaining effective even if the protection of the settlement layer in monetary and tax law were compromised.

4.3 The Gray Area Outside Europe: The Lesson of the Eurodollar Market

This regulatory barrier does not eliminate the risk but rather relocates it. Because the European framework prohibits lending against one's own tokens, such activities will likely emerge outside the Union and exert pressure from the exterior. This mirrors the historical emergence of the eurodollar market in London between 1955 and 1963 (Schenk 1998), which facilitated the internationalization of the dollar (He and McCauley 2012). The eurodollar market represented exactly the threat currently posed: dollar credit created outside the US by institutions not supervised by the Federal Reserve. The Fed never regained direct control, eventually learning to manage the market and support it during crises via swap lines.¹² A stablecoin credit system in the settlement layer would essentially be a digital eurodollar market, reaching end-users and operating with programmable speed.

4.4 How Likely Is the Migration?

While quantifying the probability of migration is not feasible, the path is determined by regulatory choices. The Federal Reserve (2026) provided an instructive precedent: American money market funds reached approximately USD 220 billion by the end of 1982, about 15 percent of bank deposits. Within three months of the authorization of the money market deposit account in December 1982, banks attracted over USD 300 billion into these accounts. This displacement was reversible once incumbents could offer equivalent products, yet the original product persisted, with money market funds growing to over USD 7 trillion by 2024. The most likely outcome is therefore incorporation rather than displacement or disappearance; the primary question is whether this occurs within Europe or outside.

The present assessment suggests that migration within the euro area before 2030 is unlikely, as finality remains centered in TARGET and Pontes will occupy the wholesale space starting in the third quarter of 2026.¹³ In the dollar area, however, migration is more probable, as the incentives of the US Treasury and the issuers are aligned and no explicit rulebook protects the settlement layer. For Europe, the primary danger is therefore an external escalation: the dollar token that imports its own anchor.

¹² The Federal Reserve's swap lines with other central banks peaked at roughly USD 583 billion on December 17, 2008, and at roughly USD 449 billion at the end of May 2020; Bordo and McCauley (2019) read them as the true safety net of the offshore dollar.

¹³ Finality under Directive 98/26/EC attaches to systems designated by a Member State and notified to the European Securities and Markets Authority; no token issuer is among them, and an issuer could attain that status only through an act of public authority.

4.5 Further Dangers from Regulatory and Market Practice

Beyond the theoretical risks associated with the layers, a second group of dangers emerges from regulatory and market practices of the past year. These risks are concrete and do not require migration to manifest: the MiCAR review, which may reconsider the interest prohibition, offering restrictions, and equivalence; multi-issuance with third countries, which could import external runs into the Union; the reserve rule of Article 54, which may transform a coin run into a bank run; deposit outflows and the resulting capital-rule disadvantage for European banks; foreign control over the means of payment; leverage and liquidation cascades; and the retail space that remains open until 2029. Chapters 5 to 7 analyze these risks in detail; Table 4 in Section 5.5 evaluates existing instruments against these gaps.

5 What the EU and the ECB Have Already Done Preventively

The European preventive framework is structured in three layers: the supervisory law of the MiCAR Regulation, which restricts the foreign token on the payment layer; financial stability oversight, which monitors its connections to the banking system; and public infrastructure, which occupies the settlement layer to prevent third-party capture. A fourth layer has emerged as a result of this framework: the strategic response of the banking sector.

5.1 MiCAR: The Restriction on the Payment Layer

Regulation (EU) 2023/1114 has been applicable to asset-referenced tokens and e-money tokens since June 30, 2024. While these provisions are framed as investor and market-integrity protections, from the perspective of this study, they effectively safeguard the settlement side of the euro. Table 3 delineates five critical provisions. First, the right of redemption at any time (Articles 39 and 49) codifies the redemption obligation, ensuring the token remains a claim rather than outside money. Second, the interest prohibition (Articles 40 and 50) confines the displacement of deposits to the pure payment function. Third, the means-of-exchange threshold (Article 23(1) and Article 58(3)) limits the payment acceptance of foreign tokens—the first threshold. Fourth, the reserve rule (Article 54 and Article 45(7)) limits the share of reserves backed by government securities, thereby constraining the stock effect.¹⁴ Fifth, the monetary policy veto (Article 24) allows for the

¹⁴ Under Article 43 MiCAR the EBA classifies a token as significant where at least three of seven criteria are met—among them more than ten million holders or an issuance value, market capitalization or reserve above EUR 5 billion.

withdrawal of authorization upon a serious threat to payment systems, monetary policy transmission, or monetary sovereignty.

Table 3: Five MiCAR provisions and their effect on the settlement side of the euro

Provision	Content	Effect on the settlement side
Art. 39; Art. 49	Right of redemption at any time; e-money tokens at par, asset-referenced tokens at the market value of the referenced assets	Codifies the redemption obligation: the token remains a claim, not outside money
Art. 40, 50	Prohibition of interest on holdings	Confines the displacement of deposits to the pure payment function
Art. 23(1), 58(3)	Means-of-exchange threshold: more than 1 million transactions and more than EUR 200 million per day (cumulative)	Limits the payment acceptance of foreign tokens—the first threshold
Art. 54, 45(7)	Reserve at least 30% in bank deposits; significant tokens 60% under Art. 45(7) in conjunction with Art. 58(1)	Limits the share backed by government securities to 70 (40)% and thus the stock effect
Art. 24(2), (3)	Withdrawal of authorization upon a serious threat; otherwise limits on the amount or a minimum denomination	Monetary policy veto against threats to transmission and monetary sovereignty

Sources: Regulation (EU) 2023/1114; own reading. The 60 percent deposit floor for significant tokens follows from Article 45(7) in conjunction with Article 58(1) and the EBA’s technical standards. Under Article 43 a token is significant where at least three of seven criteria are met.

Two characteristics of this regulatory framework are particularly noteworthy. First, MiCAR regulates issuance, not lending; any entity wishing to lend against its own tokens falls under the Capital Requirements Directive and requires a banking license. Second, MiCAR attaches to the authorized service provider, not to the token itself: licensed trading platforms delisted USDT in the European Economic Area as early as the first quarter of 2025.¹⁵ Consequently, the threshold captures only the portion of the outstanding amount that passes through the supervised perimeter.

5.2 Financial Stability Oversight: Systemic Risk and Banking Regulation

The European Systemic Risk Board’s adoption of Recommendation ESRB/2025/9 on September 25, 2025, targets the risks of multi-issuance—where a token is issued

¹⁵ ESMA had called on service providers to stop offering non-compliant tokens by the end of the first quarter of 2025; the transitional period of Article 143(3) MiCAR ended on 1 July 2026 or upon the decision on the authorization application.

interchangeably by an issuer in the Union and one in a third country.¹⁶ The ECB's Financial Stability Review of November 26, 2025, explains that under stress, holders outside the Union may redeem with the EU issuer, whose reserves cover only the EU share; this intensifies the run within the Union and impacts banks through the deposits held under Article 54. On the capital side, the Union has applied the Basel crypto standard through Article 501d of the Capital Requirements Regulation since July 9, 2024, imposing a risk weight of 250 percent for MiCAR-compliant asset-referenced tokens and 1,250 percent for other crypto-assets.

5.3 Public Infrastructure: Pontes and the Digital Euro

The third layer is the most critical, as it does not merely defend the settlement layer but occupies it. On the wholesale side, the Eurosystem decided on July 1, 2025, to settle transactions on distributed-ledger platforms in central bank money with finality in T2 through Pontes; initial launch is planned for the third quarter of 2026. For the longer term, Appia is being developed for cross-border settlement. On the retail side, the Governing Council advanced the preparation of the digital euro in October 2025, with the legal framework approved on June 23, 2026, and issuance planned for 2029. The digital euro is the only form that constitutes money itself rather than a claim on money. This decision contrasts with the US approach under Executive Order 14178, which prohibits public digital money in favor of a privately provided one privileged by statute.

5.4 The Market Response

A fourth layer has emerged as a result of the existing framework: the strategic response of the banking sector. Examples include Qivalis, with its first issuance in the second half of 2026, EURCV, and Wero. These responses remain within the two-tier order, as the issuers are supervised institutions and settlement occurs in central bank money. This process reflects the incorporation strategy seen in the US response to money market funds in 1982.

5.5 Balance of Prevention

Table 4 evaluates the balance of prevention. The Union protects the settlement side more effectively than public debate suggests, as each of the three thresholds—payment acceptance, lending, and settlement acceptance—is covered by at least one instrument.¹⁷ Remaining gaps include the measurement of use, multi-issuance, remuneration outside the

¹⁶ In October 2025 the Commission stated that it did not share the ESRB's concern about multi-issuance; in the consultation of May 20, 2026, it expressly describes multi-issuance as not currently prohibited. The ESRB's recommendation thus stands against the Commission's reading—an unresolved conflict within the Union.

¹⁷ The assignment of instruments to the three thresholds is that of this paper; the legal acts themselves do not use the distinction between payment layer and settlement layer but justify the same provisions by investor protection and financial stability.

issuer’s balance sheet, the absence of an explicit rule on discharge in euro, and the temporal gap until 2029.

Table 4: Balance of prevention: instruments, layer, and remaining gap, as of September 2026

Instrument	Layer	What it does	Remaining gap
Means-of-exchange threshold (Art. 23, 58)	Payment	Restricts foreign tokens as a means of exchange	No on-chain measurement; perimeter ends at the intermediary
Interest prohibition (Art. 40, 50)	Payment	Limits displacement of deposits	Remuneration via platforms outside the issuer’s balance sheet
Right of redemption (Art. 39, 49)	Payment/settlement	Keeps the token a claim	Multi-issuance with third countries
Reserve rule (Art. 54, 45(7))	Banks	Limits the stock effect	Transmits runs to custodian banks; no central bank backing
Licensing requirement (CRD/CRR)	Credit	No lending against own tokens without a banking license	Ineffective outside the Union
Monetary policy veto (Art. 24(2), (3))	Settlement	Withdrawal upon a serious threat	For foreign-currency tokens only Art. 24(3)
ESRB/2025/9	Banks	Exclusion or ring-fencing of multi-issuance	Not adopted by the Commission
Pontes (Q3 2026)	Settlement	Occupies the wholesale space with central bank money	Retail space remains open until 2029
Digital euro (2029)	Settlement	Public digital outside money	Time until issuance; holding limits
Discharge in euro only	Settlement	Tax and monetary law of the Member States	No explicit rule of Union law

Sources: Regulation (EU) 2023/1114; Regulation (EU) No 575/2013; ESRB (2025); ECB (2025a, 2026a); European Parliament (2026); own compilation.

6 What the EU and the ECB Will Do

Preventive measures are not yet exhaustive but are actively evolving. At the Union level, the MiCAR review is the central element. On May 20, 2026, the Commission opened a targeted consultation, with a report and possible legislative proposal due by June 30, 2027.¹⁸ Four provisions identified in this study as critical for the protection of the settlement side are currently under review: the retention of the interest prohibition, the restriction of access to non-EU trading and liquidity venues, the potential introduction of an equivalence regime for third-country issuers (specifically in response to the GENIUS

¹⁸ The review obligation follows from Article 140 MiCAR (interim report by 30 June 2025, report by 30 June 2027). The consultation of May 20, 2026, expressly names the GENIUS Act as the occasion for the question of an equivalence regime; the report may, but need not, be accompanied by a legislative proposal.

Act), and whether the automatic classification of euro tokens as e-money tokens impedes the international role of the euro. Additionally, EBA technical standards on reserve liquidity are pending, and the deadlines for the ESRB recommendation expire at the end of 2026 and 2027.

The Eurosystem’s strategy involves three primary initiatives: Pontes in the third quarter of 2026, followed by Appia; the digital euro, with a pilot phase in 2027 and issuance in 2029; and the integration of stablecoin-bank links—such as custody deposits under Article 54 and collateral eligibility—into ongoing monitoring. The Basel Committee will also determine whether tokenized deposits and MiCAR-compliant tokens qualify for Group 1 treatment without add-ons related to the use of public blockchains. In the United States, the GENIUS Act becomes effective no later than January 2027. At that juncture, two comprehensive regulatory orders will confront each other, making the question of equivalence unavoidable.

Table 5: Timeline of announced and ongoing measures, September 2026 to 2029

Date	Measure	Responsible
Q3 2026	Initial launch of Pontes: DLT settlement in central bank money with finality in T2	Eurosystem
H2 2026	First issuance of the euro token of the banking consortium Qivalis	37 banks
by end-2026	Technical standards on reserve liquidity; deadlines of Recommendation ESRB/2025/9	EBA, Commission
2026–2027	Accelerated review of targeted parts of the Basel crypto standard	Basel Committee
by Jan. 2027	GENIUS Act becomes effective	United States
2027	Adoption of the digital euro legislation; start of the twelve-month pilot phase	Parliament, Council, Eurosystem
by June 30, 2027	Report on the MiCAR review with a possible legislative proposal	Commission
from 2027	Appia: cross-border settlement of tokenized transactions	Eurosystem
2029	Issuance of the digital euro with holding limits	Eurosystem

Sources: European Commission (2026); ECB (2025a, 2026a); European Parliament (2026); Basel Committee (2026); GENIUS Act, Public Law 119-27; own compilation.

Notes: Announced dates; postponements are possible.

The overall assessment of these developments is ambivalent. The Eurosystem’s direction is unambiguous: it aims to occupy the settlement layer with its own money, starting with the wholesale sector in 2026 and the retail sector in 2029. Conversely, the Union’s direction remains open, as the MiCAR consultation suggests a tendency toward loosening rather than consolidation. The scenarios in the following chapter should therefore be viewed not as forecasts, but as descriptions of the systemic state that would result if loosening were pursued and the provision of public money were delayed.

7 When the Stablecoin Slides into the Settlement Layer—and No Further Measures Follow

This chapter analyzes the systemic consequences of the scenarios that the preventive framework seeks to avoid: specifically, the acceptance of stablecoins in settlement in the absence of further restrictive measures. The analysis begins with the mechanism of migration, evaluates the impact of the ECB’s loss of control over the price level, develops four scenarios, assesses structural coercibility, and concludes with the risks from the eurodollar sphere.

7.1 The Mechanism of Migration

Migration is initiated not by a formal decision, but through the emergence of behavioral habits. When firms settle payments in tokens, platforms maintain balances in tokens, and banks net tokenized balances among themselves, a circuit is created in which the token no longer reverts to the issuer. Redemption becomes infrequent, reserves remain idle, and the issuer realizes that a portion of these reserves can be lent without impacting redemption—the insight that transformed seventeenth-century goldsmiths into bankers. As long as the redemption obligation persists, the issuer bears this risk; Gorton and Zhang (2023) note that private banknotes in the free banking era traded at discounts reflecting the distance to the issuer, and Rolnick and Weber (1983) demonstrate that losses typically stemmed from declines in backing assets.¹⁹ Migration is complete when the redemption obligation lapses: for example, when the treasury accepts the token for the payment of taxes, when bank liabilities can be discharged in it, or when a settlement institution recognizes it as a settlement asset. At this point, the token functions as money, and the issuer can create credit rather than merely collecting it.

From a balance-sheet perspective, tokens that are no longer redeemed reside on the liability side, while loans replace reserves on the asset side. The issuer effectively becomes a bank—but one operating without a license, deposit insurance, access to a refinancing window, capital requirements, or a lender of last resort. This mirrors the history of banks prior to the establishment of central banking as described by Bagehot (1873), and the Diamond-Dybvig model of a bank without deposit insurance, where every run is rational.

7.2 The Impact of the Loss of Price-Level Control

An analysis of the potential loss requires an understanding of the ECB’s current mechanism for steering the price level. The ECB sets the interest rate on its own liabilities—the central

¹⁹ The price of a free banking note in Philadelphia depended on how far away the issuing bank was; the discounts were essentially redemption costs. Gorton and Zhang (2023) see in this the counterpart to the deviations from parity that stablecoins display in periods of stress.

bank money held by banks—and this rate propagates through the economy via four primary channels: the interest rate channel (transmission to deposits and loans), the credit channel (affecting borrowers' balance sheets and bank lending willingness, as per Bernanke and Gertler 1995),²⁰ the exchange rate channel (influencing the euro's value and import prices), and the expectations channel (anchoring wage and price setting, per Mishkin 1995). All four channels depend on the precondition that every claim in the economy is ultimately discharged in the money whose price the ECB determines.

The migration of a dollar token into settlement displaces this anchor for the tokenized segment of the economy. This results in four practical consequences. First, the interest rate channel is bypassed: token holders receive no ECB deposit rate, and token borrowers pay rates determined by the American money market. Second, the exchange rate channel's effect is reversed: for the tokenized sector, the euro becomes the foreign currency; a depreciation of the euro does not increase import costs but rather the cost of wages paid in euro. Third, the measured price level becomes a weighted average of two distinct price levels, of which the ECB influences only one. Consequently, the ECB must overcorrect the euro-denominated part of the economy to achieve its average target, shifting the burden of stabilization entirely onto those remaining in the euro. Fourth, the lender of last resort function is absent: the ECB cannot lend tokens to a bank whose liabilities are denominated in tokens. Ecuador encountered this gap following its dollarization in 2000; for the euro area, the only recourse would be the Federal Reserve's swap lines, which are granted at the Fed's discretion.

The impact on the price level consists of two components. The first is a one-off level effect: the conversion of government debt and reserves into means of payment increases payment capacity, which, at a given velocity and output, raises the price level—by up to 2.8 percent for a coin of EUR 500 billion, and by 11.4 percent if the issuer creates credit against a 20 percent reserve. The second is the ongoing directional effect: the price level of the tokenized sector follows US prices and exchange rates. Figure 3 illustrates this for 2015–2025: while the euro area's HICP rose to 128.8, a US price level measured in euro rose to 133.1.²¹ In 2022 alone, a dollar price level measured in euro would have risen by 21.3 percent, compared to 8.4 percent for the HICP. A household paying in tokens while earning in euro would have lost a fifth of its purchasing power in a single year. This is the practical reality of currency substitution: not necessarily higher inflation on average, but the importation of foreign price fluctuations in the absence of an independent monetary policy.

²⁰ Bernanke and Gertler (1995) call the credit channel the part of transmission that operates through borrowers' balance sheets and banks' willingness to lend rather than through the level of the risk-free rate alone.

²¹ Own calculation from annual averages of the euro-area HICP (Eurostat), the US consumer price index (Bureau of Labor Statistics), and the EUR/USD exchange rate (ECB), 2015 = 100, chained from the published annual rates; computed from index levels the 2025 value would be 133.4.

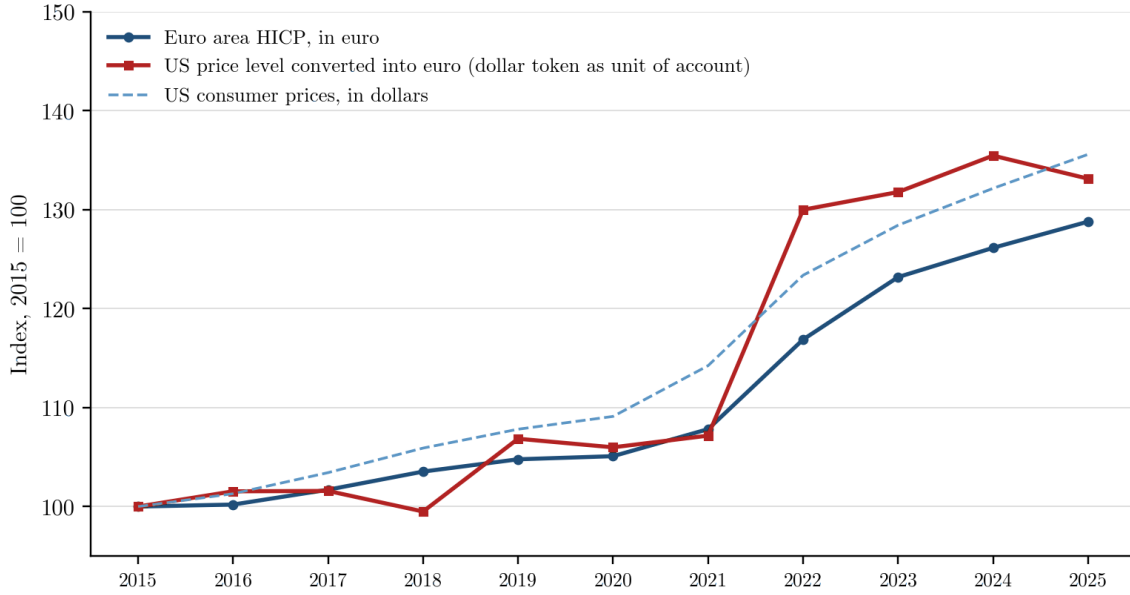


Figure 3: Euro-area price level (HICP), US price level (CPI), and US price level measured in euro, annual averages 2015–2025, 2015 = 100. The jump of the dollar price level measured in euro in 2022 (+21.3 percent) shows what currency substitution means for a household that pays in tokens and earns in euro. Sources: Eurostat; Bureau of Labor Statistics; European Central Bank; own calculation.

In this situation, the ECB has three potential responses, none of which are ideal. It could emulate the Federal Reserve by closing the interest rate differential to stabilize the exchange rate, effectively adopting a fixed exchange rate peg and surrendering monetary autonomy (Mundell 1963, Fleming 1962). Alternatively, it could overcorrect the euro-denominated sector to hit the aggregate average, which would likely accelerate the transition of more agents to the token—the self-reinforcing logic of currency substitution (Calvo and Végh 1992). Finally, it could abandon the target for the tokenized sector, effectively recognizing a second currency area within its own borders. Levy Yeyati (2006) associated such financially dollarized economies with higher inflation, greater output volatility, and a more fragile banking system; Reinhart, Rogoff, and Savastano (2003) noted that dollarization rarely recedes once established. Migration is not a process that can be permitted on a trial basis.

7.3 Four Scenarios of Migration

Table 6 presents four scenarios, distinguished by the threshold crossed and the currency of denomination. These are comparative-static descriptions of the resulting states, calibrated against historical precedents.²²

²² The scenarios are comparative-static: they describe the state after migration has been completed, not the transition; adjustments of velocity, output, and expectations are left aside and would dampen the level effects, not the directional effects.

Table 6: Four scenarios of migration: threshold, mechanism, effect on the price level, and historical counterpart

Scenario	Threshold	Mechanism	Effect on the price level	Counterpart
S1 Partial dollarization	Payment acceptance (10–20% of turnover)	Redemption obligation remains; transmission loses reach	One-off level effect up to 2.8% (Ch. 8); interest rate channel misses the token part	Financial dollarization (Levy Yeyati 2006)
S2 Dollar token in settlement	Taxes and bank liabilities dischargeable in tokens	Currency substitution; ECB becomes follower of the Fed; no lender of last resort	Token part follows US prices and exchange rate: +21.3% in 2022	Ecuador 2000; Argentina 1991–2001
S3 Euro tokens in settlement	Several issuers create euro money without redemption	Credit without license; discounts between tokens; price level indeterminate	Up to 11.4% per EUR 500 bn at 20% reserve ratio (Ch. 8); anchor lost	Free banking 1837–1863; Argentina 2002
S4 Fiscal dominance	Deficits absorbed by token reserves	Government debt becomes means of payment; monetary policy follows fiscal policy	Ongoing +0.66 to +1.32% per year at 25–50% absorption (Ch. 8)	Sargent and Wallace (1981); mini-BOT 2019

Sources: Own presentation; calibration according to Chapter 8 and the historical cases named.

Scenario S1 represents the state that current prevention seeks to maintain: partial payment adoption in dollar tokens, while the redemption obligation ensures the ECB retains control, albeit with reduced efficacy. Scenario S2 is the core risk analyzed in this paper: the dollar token is accepted in settlement, transforming part of the euro area into a foreign-currency economy. The closest counterpart is Ecuador post-2000—with the distinction that Ecuador adopted dollarization to resolve a currency crisis with inflation above 50 percent, whereas the euro area would suffer this transition without necessity—and Argentina under convertibility (1991–2001), whose collapse demonstrated the risks when a foreign unit of account permeates balance sheets and the peg breaks.²³

Scenario S3 addresses the euro itself: private euro tokens are accepted in settlement. While the unit of account remains the euro, money is created by multiple issuers without redemption obligations—the environment of free banking. Kareken and Wallace (1981) demonstrate that the price level is indeterminate among competing unbacked monies without a government rule, and Hellwig (1985) argues that competition between issuers does not resolve this. The closest counterpart is Argentina in 2002, where various quasi-currencies circulated at fluctuating rates against the peso. The euro area experienced this

²³ Convertibility tied the peso one to one to the dollar from April 1991 to January 2002; the deposit freeze of December 2001 and the conversion of dollar deposits and loans at different rates are regarded as the textbook case of the balance sheet effects of dollarization (Levy Yeyati 2006).

in miniature in 2019 with the proposal for mini-BOTs, which Mario Draghi correctly identified as either illegal money or an increase in the debt stock.

Scenario S4 focuses on fiscal dynamics. If token issuers hold reserves in government securities and deficits are continuously absorbed by new token reserves, the state effectively finances itself with money created by a third party. Sargent and Wallace (1981) showed that monetary policy cannot maintain its target under such conditions. The numerical example quantifies this: at a deficit of 2.9 percent of GDP and 25 to 50 percent absorption, payment capacity would rise annually by 0.66 to 1.32 percent.

7.4 Structural Coercibility and Deliberate Policy

The question arises whether a deliberate US policy of coercion could be executed once a dollar token has migrated into European settlement. This can be analyzed without assuming specific intentions. Farrell and Newman (2019) demonstrate that states controlling the nodes of global networks can utilize this control for observation (monitoring transactions) and as a chokepoint (blocking them), a phenomenon termed “weaponized interdependence.” The US has utilized this capability repeatedly, including the exclusion of Iranian and Russian banks from SWIFT. The European special-purpose vehicle INSTEX, designed to shield trade with Iran, proved largely ineffective, illustrating Europe’s inability to bypass the dollar area.²⁴

A dollar token in European settlement would significantly enhance this capability. Issuers can freeze addresses—Tether froze USD 5.69 billion across nearly 10,000 addresses by July 2026, often in coordination with the US Office of Foreign Assets Control—and the GENIUS Act mandates the ability to freeze and block assets upon lawful order. Furthermore, redemption can be restricted, and the Federal Reserve controls the swap lines that serve as the only lender of last resort in tokens. Transaction data for the tokenized European economy would reside with US-law companies. The risk is not necessarily intent, but the inherent capability: a state controlling another’s means of payment does not need to issue threats to exert influence. Cipollone (2026) describes this as a loss of monetary sovereignty.²⁵ The rationale for the digital euro, which addresses dependence on non-European card schemes, treats this as a strategic rather than a technical issue. A dollar token in settlement would represent a level of dependence that cannot be mitigated by infrastructure, as the unit of account itself would be foreign.

²⁴ INSTEX (Instrument in Support of Trade Exchanges) was founded by Germany, France, and the United Kingdom; the first transaction concerned medical goods in March 2020. The ten shareholder states liquidated INSTEX in March 2023, citing continued obstruction by Iran.

²⁵ Cipollone (2026), speech at the Accademia Nazionale dei Lincei, Rome, 12 February 2026; the figure on card schemes comes from the same speech.

7.5 Risks from the Eurodollar Sphere

Risks emanating from the eurodollar sphere differ from those associated with domestic migration and are more probable. The eurodollar market has functioned as a market for dollar credit outside the US since the 1950s (Schenk 1998), with its geography analyzed by Aldasoro and Ehlers (2018) and its safety net provided by Fed swap lines (Bordo and McCauley 2019). A stablecoin credit system lending against dollar tokens outside Europe would be a digital iteration of this market, with three critical differences: it reaches the end consumer; it is programmable and thus faster; and it lacks a lender of last resort, as the Fed would not support a token issuer in the Cayman Islands.

For the euro area, three dangers emerge even without domestic migration: a dollar-token credit cycle reaching European firms without ECB oversight; a run on US Treasury bills and custodian banks that would immediately impact European reserve banks; and the emergence of the “euro-eurodollar”—a euro-denominated token issued outside the Union and beyond MiCAR’s reach. The rule requiring all euro tokens to be authorized as e-money tokens in the Union prevents their offering domestically, but not their existence. The Commission’s current discussion of this rule increases this risk. The history of the eurodollar market teaches that the Federal Reserve never regained control over the offshore dollar; the lesson for the Eurosystem is to prevent the emergence of an offshore euro.

8 A Numerical Example: Bonds, Stablecoins, and Banks in a Stylized Model of the Euro Area

This chapter quantifies the effects discussed in Chapters 4 and 7 using a stylized quantity model, designed for transparency and traceability. The model is not a general equilibrium framework and does not claim to capture all behavioral responses; rather, it serves to establish orders of magnitude.

8.1 Model Structure

The analytical foundation is Fisher’s (1911) equation of exchange, formulated according to the Cambridge school: nominal GDP is the product of the economy’s payment capacity and its velocity.

$$P \cdot Y = V \cdot PC, \quad \text{with} \quad PC = M3 + T_s$$

Payment capacity PC is defined as the money stock $M3$ plus the portion of the token supply T_s that represents additional purchasing power. Stablecoins are treated as near-money in the sense of Gurley and Shaw (1960)—fully accepted as a means of payment—and thus contribute to payment capacity. At a given real output Y and velocity V , an increase in payment capacity directly influences the price level; this represents the upper

bound of the effect, which is reduced if velocity decreases or output increases. On the banking side, the model follows the Basel III liquidity coverage ratio: retail deposits carry an outflow rate of 5 percent, while unsecured wholesale deposits from financial institutions carry a rate of 100 percent.²⁶ If a token issuer replaces retail deposits with its own reserve deposits, the bank must hold an additional 95 cents per euro in high-quality liquid assets (HQLA) that cannot be lent.

Three distinct scenarios are analyzed: Case A (the MiCAR framework), where a euro token with supply S holds a share d of its reserve in bank deposits (30 percent, or 60 percent for significant tokens) and the remainder in government securities. Holders relinquish deposits of S ; the issuer maintains $d \cdot S$ as deposits and purchases $(1-d) \cdot S$ of government securities. If these securities are purchased from banks, deposits are extinguished and payment capacity rises by $d \cdot S$; if purchased from non-banks, deposits flow back to the sellers and payment capacity rises by S . Case B (the GENIUS framework), where $d = 0$ and the entire reserve is held in government securities, resulting in an effect between zero and S . Case C (settlement acceptance), where the issuer no longer faces a redemption obligation, maintains a voluntary reserve r , and creates credit of $S \cdot (1-r)/r$ according to the classical multiplier formula, operating without supervision, capital, or deposit insurance.

$$\text{Case A: } d \cdot S \leq \Delta PC \leq S$$

$$\text{Case B: } 0 \leq \Delta PC \leq S$$

$$\text{Case C: } \Delta PC = S \cdot (1 - r) / r$$

8.2 Starting Position

The model is calibrated using euro-area aggregates from the ECB and Eurostat as of July 2026, as detailed in Table 7. Nominal GDP is derived from the debt stock and debt ratio and rounded to EUR 16,000 billion.²⁷ The velocity of M3 is 0.909—a value reflecting the inertia of money holding in the euro area, which correspondingly dampens the impact of any increase in payment capacity.

²⁶ Delegated Regulation (EU) 2015/61, Article 24 (stable retail deposits: 5 percent) and Article 31a(1) (the residual 100 percent category, covering non-operational deposits from financial customers; operational deposits carry 25 percent under Article 27).

²⁷ EUR 14,243.5 billion of debt at 88.9 percent of GDP implies nominal GDP of EUR 16,022 billion, rounded to 16,000; velocity $16,000 / 17,600 = 0.909$. The loan aggregates are those of monetary financial institutions to euro-area households and non-financial corporations.

Table 7: Calibration of the model: euro-area aggregates, EUR billion

Item	Value	Source and date
Nominal GDP, annual rate (Y)	16,000	Eurostat, derived from debt stock and ratio, Q1 2026
Money stock M3	17,614	ECB, July 2026
Money stock M1	11,293	ECB, July 2026
Currency in circulation	1,613	ECB, July 2026
Overnight deposits	9,680	ECB, July 2026
Adjusted loans to households	7,241	ECB, July 2026
Adjusted loans to non-financial corporations	5,490	ECB, July 2026
Government debt, of which 84.3% debt securities	14,243.5 / 12,007	Eurostat, Q1 2026 (88.9% of GDP)
Claims on general government (loans, securities, equity)	6,249	ECB, July 2026
Deficit, 2.9% of GDP	464	Eurostat, April 22, 2026
Velocity $V = Y / M3$	0.909	own calculation

Sources: European Central Bank (2026b), Monetary developments in the euro area, July 2026; Eurostat (2026a, 2026b); own calculation. The debt stock refers to the first quarter of 2026 (euro area including Bulgaria), the deficit and GDP to 2025.

8.3 Results for a Token of EUR 500 Billion

The results for a token supply of EUR 500 billion—approximately three percent of M3—are presented in Table 8.

In the MiCAR framework with 30 percent deposit backing, EUR 350 billion of government debt becomes a means of payment; payment capacity increases by 150 to 500 billion, raising the price level by 0.85 to 2.84 percent on a one-off basis. Banks exchange EUR 150 billion of retail deposits for wholesale deposits from the issuer and must hold an additional 142.5 billion in HQLA—1.1 percent of their loan book. With 60 percent deposit backing, the banking effect doubles to 2.2 percent. In the GENIUS framework, the banking effect disappears, but EUR 500 billion of government debt—4.2 percent of the outstanding amount—becomes a means of payment.²⁸ In the settlement scenario, the issuer creates credit of EUR 2,000 billion against a reserve of 20 percent; payment capacity rises by 11.4 percent, with a corresponding increase in the price level.

²⁸ The 4.2 percent share refers to EUR 12,007 billion of outstanding euro-area government debt securities (Table 7); with 30 percent deposit backing it is 2.9 percent, with 60 percent 1.7 percent.

Table 8: Results for a token supply of EUR 500 billion by case

Item	A: MiCAR 30%	A: MiCAR 60%	B: GENIUS 0%	C: Settlement, r = 20%
Government debt in payment form, EUR bn	350	200	500	—
Share of outstanding government debt securities	2.9%	1.7%	4.2%	—
Additional payment capacity, EUR bn	150–500	300–500	0–500	2,000
One-off effect on the price level	0.85–2.84%	1.70–2.84%	0–2.84%	11.4%
Retail deposits replaced, EUR bn	150	300	0	—
Additional HQLA of banks, EUR bn	142.5	285	0	—
Effect on banks' lending capacity	–1.1%	–2.2%	0	unsupervised
Cost of neutralization (sacrifice ratio 1–2)	0.9–5.7% of GDP	1.7–5.7% of GDP	0–5.7% of GDP	11.4–22.7% of GDP

Sources: Own calculation based on Table 7. Cost of neutralization as the cumulative output loss per percentage point of avoided price increase according to the sacrifice ratios of Ball (1994).

Notes: Upper bounds at unchanged velocity and output; the lending effect assumes that banks meet the liquidity coverage ratio at the margin.

8.4 Impact on Sovereign Bonds

The demand for government securities by issuers is the inverse of the aforementioned effect. Ahmed and Aldasoro (2025) found that a USD 3.5 billion inflow into stablecoins lowers the yield on three-month Treasury bills by 0.71 basis points on impact and by up to four basis points within ten days. For outflows, the authors describe their estimates as a lower bound. Hofmann, Kaldorf, and Rottner (2026) contrast this fiscal-space effect with the bank-lending effect, finding a long-run output loss of approximately 0.03 percent alongside stronger transmission. For the euro area, a further complication arises: since there is no single government debt, demand concentrating on the scarcest safe asset (typically German federal debt) redistributes funding costs among Member States. Born et al. (2026) emphasize that the effect on sovereign bond markets depends on the type of issuer, the composition of the reserve, and the concentration of issuers across sovereign debtors. In a run, reserve securities would be liquidated rapidly—the “fire sales” warned of by the ECB in November 2025—transforming the issuer from a primary buyer into the largest seller in the market.

8.5 Impact on the Banking Sector

Figure 4 juxtaposes the price effect and the impact on bank lending capacity. The banking effect comprises three components: the loss of the deposit itself; the deterioration of funding, as described by Schnabel (2026), where retail deposits are replaced by

concentrated, rate-sensitive wholesale deposits, requiring an additional 95 cents of HQLA per euro (resulting in a loss of EUR 142.5 to 285 billion in lending capacity for a 500 billion token); and the distributional effect noted by Hernández de Cos (2026), where smaller banks are disproportionately affected. In the settlement scenario, this relationship is reversed: the issuer effectively becomes the bank, generating EUR 2,000 billion of credit outside any supervisory framework.

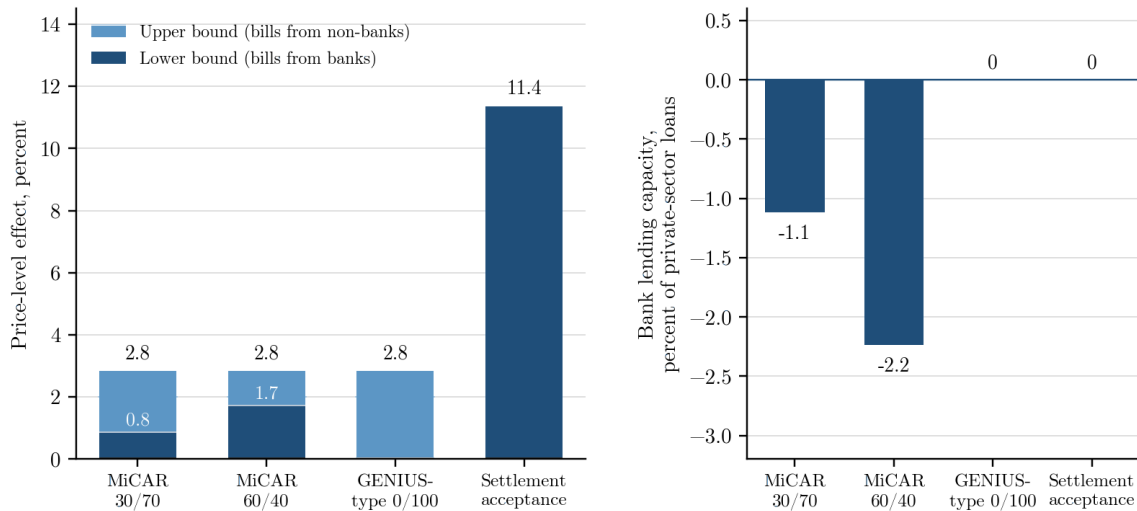


Figure 4: One-off effect on the price level (left, range) and effect on banks' lending capacity (right) for a token supply of EUR 500 billion by case. Source: own calculation based on Tables 7 and 8.

8.6 Sensitivity Analysis and the Cost of Neutralization

Sensitivity analysis for token supplies of EUR 250, 500, and 1,000 billion is provided in Table 9. The results are linear due to the model's structure—a simplification that may understate risks in the settlement scenario where credit cycles typically accelerate. The decisive comparison reveals that for any given supply, the effect of settlement acceptance is four times the upper bound of the MiCAR framework. The final row quantifies the cost of neutralization by the ECB: based on sacrifice ratios of one to two percent of annual output per percentage point of disinflation (Ball 1994),²⁹ neutralizing the settlement case for a EUR 500 billion supply would cost 11 to 23 percent of annual output—assuming conventional instruments still reach the tokenized sector, a premise contested in Section 7.2.

²⁹ Ball (1994) derives the sacrifice ratios from disinflation episodes in OECD countries; they are lower the faster the disinflation is carried out and the more flexibly wages respond. The range of one to two is a central assumption for the euro area.

Table 9: Sensitivity: results for token supplies of EUR 250, 500, and 1,000 billion

Item	250 bn	500 bn	1,000 bn
Upper bound of the price effect, cases A and B	1.42%	2.84%	5.68%
Lower bound of the price effect, MiCAR 30/60%	0.43 / 0.85%	0.85 / 1.70%	1.70 / 3.41%
Additional HQLA, MiCAR 30/60%, EUR bn	71 / 143	143 / 285	285 / 570
Banks' lending capacity, MiCAR 30/60%	−0.6 / −1.1%	−1.1 / −2.2%	−2.2 / −4.5%
Government debt in payment form (GENIUS), share of outstanding	2.1%	4.2%	8.3%
Credit creation under settlement ($r = 20\%$), EUR bn	1,000	2,000	4,000
Price effect under settlement ($r = 20\%$)	5.7%	11.4%	22.7%
Cost of neutralization under settlement, % of GDP	5.7–11.4	11.4–22.7	22.7–45.5

Sources: Own calculation based on Table 7; sacrifice ratios according to Ball (1994).

8.7 The Fiscal Feedback Loop

The preceding results describe level effects. A flow effect emerges when current deficits are absorbed by new token reserves: at a deficit of 2.9 percent of GDP (EUR 464 billion annually) and an absorption rate of 25 to 50 percent, EUR 116 to 232 billion of new government debt would become a means of payment each year, increasing payment capacity by 0.66 to 1.32 percent annually.

This mechanism is a modern iteration of the theory presented by Sargent and Wallace (1981): the state finances its deficit not via the central bank, but through a private issuer that converts government debt into money. For a currency area with twenty-one fiscal policies and one monetary policy, this is a significant risk: an issuer prioritizing the debts of states with the highest issuance needs could compromise monetary policy in a manner the Treaty sought to prevent by prohibiting monetary financing.

9 Further Considerations

9.1 The Stablecoin from the Investor's Perspective

Beyond the scope of monetary policy, the role of stablecoins from the investor's perspective requires clarification. As established in Section 2.1, a non-interest-bearing stablecoin serves as a medium for payment and settlement, not as an investment product. It carries no issuer interest, lacks deposit insurance, and entails issuer, reserve, and custody risks that are absent in supervised bank deposits. The deviation of USDC to USD 0.877 in March 2023, following the collapse of Silicon Valley Bank, illustrates these risks. For any investment horizon extending beyond a single payment, the stablecoin is inferior to interest-bearing instruments (Rupprechter 2026).

This observation has significant implications for monetary policy. As long as stablecoins bear no interest, demand is confined to payment functions, limiting the displacement of deposits and the risk of migration. Cipollone (2026) identifies the remuneration of holders as a primary accelerator of adoption.³⁰ While the prohibition is porous—trading and lending platforms often offer rewards—the present analysis suggests that the non-interest-bearing nature of the stablecoin is a critical safeguard.

9.2 Tokenized Deposits as the European Alternative

Tokenized deposits offer a mechanism for Europe to leverage programmability while remaining within the two-tier monetary order. Garratt and Shin (2023) note that unlike stablecoins, tokenized deposits are not bearer instruments trading on secondary markets; they settle at par in central bank money, preserving the singleness of money. The Bank for International Settlements (2025) has expanded this vision into a unified ledger, and Hernández de Cos (2026) views this as the frontier for monetary development. The European Banking Authority (2024) clarifies that tokenized deposits remain deposits, subject to deposit insurance and capital/liquidity regulations. Consequently, they can migrate into settlement without altering the systemic risk profile, as they are already anchored in central bank money. Their primary obstacle is the current capital regime: if the use of public blockchains incurs capital add-ons, incorporation will continue to occur outside Europe.

9.3 The Temporal Gap and the Power of Habit

A third, temporal gap exists. The digital euro is slated for 2029 and Pontes for 2026 (wholesale); this leaves a three-year window in the retail sector. International card schemes have been trialing settlement in dollar tokens since 2023, leveraging network effects.³¹ The economics of payment habits suggests that once a state is reached, it is self-sustaining; Reinhart, Rogoff, and Savastano (2003) demonstrate that dollarization is persistent even after its cause is removed. The precedent of 1982 indicates that incumbents can reverse displacement, but only if they respond in time. The transition to 2029 must therefore be managed via tokenized deposits and Wero, while means-of-exchange thresholds are maintained and rigorously measured.

³⁰ Cipollone (2026) expressly names remuneration through platforms as an accelerator; in the consultation of May 20, 2026, the Commission asks whether the interest prohibition of Articles 40 and 50 should be maintained (European Commission 2026).

³¹ Visa began settling with acquirers in USDC over the Solana blockchain in September 2023; Mastercard added settlement in stablecoins to its programs in 2025. Both schemes thereby connect dollar tokens directly to the European point of sale.

9.4 The Composition of Reserve Assets

A final critical question, while less relevant in the dollar area, is paramount for the euro area: the composition of the reserve assets for a euro-denominated token. While the GENIUS Act specifies US Treasury bills and MiCAR requires highly liquid instruments with minimal risk, it does not distinguish among Member States. A demand concentrating on the scarcest safe asset—typically German federal debt—would redistribute funding costs among Member States. Conversely, an issuer prioritizing high-yield states would trigger the fiscal feedback loop discussed in Section 8.7. Neither path is desirable. The proposed solution is a rule on reserve composition based on debtor weight, with a ceiling per Member State, and the admission of Union-level bonds as reserve assets.³²

10 Policy Recommendations

Based on the preceding analysis, this study proposes the following recommendations. These are derived from the balance of prevention analyzed in Chapter 5 and are structured according to the three thresholds defined in Section 3.5. The overarching principle is that Europe requires not new prohibitions, but the defense of existing structures and the proactive occupation of the public settlement space.

10.1 The Settlement Layer

- **Recommendation 1: Codify the exclusive discharge of obligations in euro within Union law.** The rule that taxes, bank liabilities, and the finality of settlement may be discharged exclusively in euro and central bank money currently resides in the national laws of Member States and Directive 98/26/EC. This should be elevated to an explicit provision of Union law—either within the digital euro regulation or the MiCAR review—to prevent its piecemeal surrender by national legislatures.
- **Recommendation 2: Prioritize the deployment of public settlement assets.** The launch of Pontes in the third quarter of 2026 is critical; every delay increases the risk of third-party capture. The pilot phase of the digital euro should commence as early as the mandate allows, with tokenized deposits and Wero serving as the bridge to 2029.
- **Recommendation 3: Prevent the emergence of an offshore euro.** The requirement that all euro tokens be authorized in the Union as e-money tokens must be retained. The Eurosystem, in coordination with the Financial Stability Board, should monitor the emergence of a tokenized credit system outside the Union. Synthetic and

³² The Union has issued bonds of its own under NextGenerationEU since 2021; as a reserve asset they would avoid the distributional effect between Member States.

algorithmic tokens should be ineligible as collateral, and backed tokens should be subject to haircuts reflecting run risks.

10.2 Lending and Supervision

- **Recommendation 4: Strategically prioritize tokenized deposits.** The permanent capital regime should categorize tokenized deposits and MiCAR-compliant tokens in Group 1, without add-ons solely due to the use of public blockchains; this should be anchored internationally via the Basel review.³³ Tokenized deposits should be directly connected to Pontes.
- **Recommendation 5: Integrate reserve management into banking supervision.** This includes: implementing concentration limits per custodian bank; treating reserve deposits in the liquidity coverage ratio as wholesale deposits with corresponding outflow rates; requiring significant euro tokens to maintain a reserve account with the Eurosystem (backing in central bank money) to separate coin runs from bank runs; and establishing a rule on eligible government debt based on debtor weight, with a ceiling per Member State and the admission of Union bonds.
- **Recommendation 6: Exclude or ring-fence multi-issuance schemes,** as recommended by the European Systemic Risk Board. This should be implemented before the first such scheme is authorized in the Union, stipulating that redemption is limited to customers of EU-authorized providers, reserves must cover the global outstanding amount, and joint and several liability with third-country issuers is prohibited.

10.3 The Payment Layer

- **Recommendation 7: Approach the MiCAR review as a defensive measure.** The interest prohibition must be retained without exception, including for remuneration provided outside the issuer's balance sheet. The offering prohibition for non-compliant tokens should be justified as a protection of the settlement asset rather than a matter of proportionality. Equivalence regimes should be conditional upon: the continuation of means-of-exchange thresholds, the establishment of the issuer within the Union, redemption within the Union, and the ability to freeze assets under Union law alone.
- **Recommendation 8: Implement on-chain measurement of stablecoin utilization.** Current thresholds based on issuer reporting under Article 22 MiCAR are insufficient. Measurement should occur directly on the blockchain, combined with the certification

³³ The Basel crypto standard (SCO60) places tokenized traditional assets and stablecoins with an effective stabilization mechanism in Group 1 and all others in Group 2 (Group 2b: 1,250 percent). Whether tokens on permissionless blockchains reach Group 1 is left open by the standard.

of access to decentralized platforms, to provide the ECB with the data necessary for the monetary policy veto under Article 24(3).

- **Recommendation 9: Establish a unified European position.** The difference between skepticism toward private euro stablecoins and advocacy for the digital euro should be clearly communicated.³⁴ Toward external actors—including the GENIUS area, the Financial Stability Board, and the Basel Committee—the Eurosystem should present the protection of the settlement layer not as hostility to innovation, but as a prerequisite for the existence of a monetary policy in Europe.

Table 10: The nine recommendations by threshold, addressee, and timeframe

No.	Recommendation	Threshold	Addressee	Timeframe
1	Anchor discharge in euro alone in Union law	Settlement	Parliament, Council, Commission	Digital euro legislation 2027
2	Public settlement asset first: Pontes, early pilot phase, bridge to 2029	Settlement	Eurosystem	Q3 2026 to 2029
3	Prevent the offshore euro; limit collateral eligibility; monitor interconnectedness	Settlement	Eurosystem, ESRB, FSB	ongoing
4	Favor the tokenized deposit: Group 1, connection to Pontes	Credit	EBA, Basel Committee	Basel review 2026–2027
5	Reserves: concentration limits, outflow rates, central bank account, eligible government debt	Credit	EBA, Eurosystem	Technical standards 2026
6	Exclude or ring-fence multi-issuance	Credit	Commission, EBA	before the first authorization
7	MiCAR review as a defense: interest prohibition, offering prohibition, conditional equivalence	Payment	Commission, Parliament, Council	Report by June 30, 2027
8	Measure use as a means of exchange on-chain; certify DeFi access	Payment	EBA, ESMA, national authorities	2026–2027
9	Represent the European position with one voice	all	Eurosystem, Commission	ongoing

Sources: Own presentation.

The nine recommendations are not of equal rank. The first and second secure the settlement layer itself and are therefore the most urgent; the others secure the time required for their implementation and protect the banking sector through which credit continues to flow.

³⁴ Lagarde's speech of May 8, 2026, and Nagel's speech of February 2026 (Section 2.4) show the range of positions within the Eurosystem on the private euro coin; both support the digital euro.

11 Conclusion and Outlook

This study investigated the systemic risks associated with the migration of stablecoins from the payment layer to the settlement layer, evaluated the current and planned responses of the EU and the ECB, and formulated a set of policy recommendations. The primary finding is that the systemic risk is a function of the layer transition rather than growth. As long as the token remains redeemable, it shifts deposits and creates no purchasing power; its effect on the price level is a bounded level effect—up to 2.8 percent per EUR 500 billion—and the ECB’s ability to steer is preserved, although through a shorter lever and a more volatile funding base for banks.

Acceptance in settlement removes the redemption obligation and transforms the custodian of third-party funds into a bank without a license. This quadruples the level effect, removes the anchor of the price level, and, for dollar tokens, results in currency substitution—where the tokenized segment of the economy follows US prices and exchange rates.³⁵ In 2022, this would have resulted in a 21 percent increase compared to 8 percent for the HICP. The ECB’s conventional instruments no longer reach this sector because the anchor point has been displaced.

The analysis shows that the EU and the ECB have largely established the necessary defenses, albeit often implicitly. MiCAR restricts the foreign token on the payment layer via means-of-exchange thresholds, interest prohibitions, and the redemption obligation, while keeping issuers within banking supervision. The Eurosystem is occupying the settlement layer via Pontes in 2026 and the digital euro in 2029. However, the direction of the Union remains open, as the MiCAR review threatens to loosen these protections at a time when the US promotes the spread of its coin by statute and the digital euro is still years away.

The resulting recommendations emphasize the defense of existing structures and the proactive occupation of the public settlement space. The most critical measure is the elevation of the rule that taxes, bank liabilities, and finality be discharged exclusively in euro to the level of Union law.

The future trajectory is defined by three critical milestones. In the third quarter of 2026, it will be decided whether Pontes occupies the wholesale space before it is claimed. By June 30, 2027, the Union will decide whether to consolidate or loosen the protection of the payment layer—by January 2027, the GENIUS Act will have established a complete foreign order. Finally, in 2029, it will be decided whether public money arrives in retail before payment habits have solidified. Future research should address three gaps: the actual measurement of foreign token utilization in the euro area; the response of velocity and output to increased payment capacity through near-money; and the economics of offshore

³⁵ The quadrupling follows from Table 8: 11.4 percent against at most 2.84 percent for a supply of EUR 500 billion; it holds for every size of supply because the model is linear (Table 9).

token credit.³⁶ The stablecoin is defined by the state: a means of payment as long as it must be redeemed, and money as soon as it no longer must. It is for the Union to ensure it remains the former.

³⁶ Article 22 MiCAR requires issuers of asset-referenced tokens above EUR 100 million to report quarterly on holders, outstanding value, and the number and value of transactions per day as a means of exchange; Article 58(3) extends this to e-money tokens denominated in a foreign currency.

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