The Myth of Singleness of Money:

Stablecoins, Market Structure and the Visibility of Risk

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Abstract

The principle of the *singleness of money*, that all forms of money denominated in the same unit are interchangeable at par, has long been regarded as a foundational feature of modern monetary systems. The emergence of stablecoins has challenged this assumption, as observable price deviations across trading venues suggest fragmentation and instability. This paper argues that such interpretations of singleness are imprecise. Stablecoins do not undermine the singleness of money; rather, they expose the reality that money has never been truly singular. Singleness of money is not a binary – it is a step function in which below a certain level of deviation, we choose to treat money as singular.

Commercial bank deposits, which constitute the majority of money in circulation, are themselves forms of private money subject to credit, liquidity, and settlement risk. The apparent singleness of money in the traditional system is sustained not by the intrinsic properties of money, but by institutional arrangements that can minimize and obscure these underlying risks. By contrast, stablecoins introduce continuous market-based price discovery, rendering these differences visible.

This paper reframes the concept of singleness of money as an engineered outcome dependent on clearing, liquidity, and access to central bank settlement. It concludes that achieving functional singleness in digital monetary systems requires the development of robust clearing infrastructure rather than the suppression of price signals.

1. Introduction

The concept of the singleness of money underpins the functioning of contemporary financial systems. It implies that a unit of currency maintains a stable and uniform value regardless of the form in which it is held, whether as cash, a bank deposit, or another monetary instrument. This assumption is critical to the smooth operation of payments, the coherence of pricing, and the stability of financial intermediation. Indeed, US Dollar frictions during the Free Banking period of the 1830s underscore the difficulty of conducting financial operations without this principle.

The rise of stablecoins has prompted renewed scrutiny of this principle. Stablecoins, as privately issued digital representations of fiat currency, frequently exhibit small but persistent deviations from par when traded on secondary markets such as Coinbase and other crypto exchanges. Despite policies such as the GENIUS Act requiring 100% backing in highly liquid assets and prompt redemption (typically being T+2 in the US), these secondary market deviations are often interpreted as evidence that stablecoins introduce fragmentation into the monetary system and undermine its unity.

This paper challenges that interpretation. It argues that stablecoins do not create fragmentation; rather, they reveal pre-existing fragmentation within the monetary system that has historically been obscured. The traditional banking system is built on private money in the form of commercial bank deposits, which are neither risk-free nor perfectly interchangeable in economic terms. The perceived singleness of money is therefore not a natural property, but a false perception by overlooking the mechanism of how final settlement is achieved through central banks.

By introducing continuous market pricing and reducing opacity, stablecoins expose the underlying heterogeneity of monetary claims. This development necessitates a reconsideration of how singleness of money should be defined and achieved in an increasingly digital and market-based financial environment

2. Private Money in Modern Banking

In modern economies, the majority of money exists not as central bank liabilities but as commercial bank deposits. These deposits represent liabilities of individual banks and constitute claims on future settlement in central bank money. Their value is therefore contingent upon the ability of the bank to honour its obligations, including the execution of payments through domestic and cross-border settlement systems.

From an economic perspective, bank deposits are a form of private money. Unlike central bank reserves, they are subject to the creditworthiness and liquidity position of the issuing institution. The act of holding a deposit entails exposure to several interrelated forms of risk. These include the possibility of bank insolvency, constraints on liquidity that may limit withdrawal or transfer, and the operational and financial capacity of correspondent banking networks to complete settlement.

These risks are not merely theoretical constructs; they are actively assessed and priced in financial markets. Instruments such as credit default swaps (CDS) provide a continuous measure of the perceived credit risk of banking institutions. The existence of positive and varying CDS spreads across banks indicates that market participants recognise meaningful differences in risk profiles. Consequently, deposits placed with different banks are not economically equivalent, even if they are treated as such in everyday transactions.

3. The Engineered Nature of Singleness

Despite these underlying differences, bank deposits are generally accepted at par. This apparent uniformity is not a reflection of inherent equivalence between deposits issued by different banks. Rather,

it is the result of a complex set of institutional arrangements designed to sustain confidence in the monetary system and ensure that private bank money functions, in practice, as if it were single.

Central banks play a central role by providing liquidity facilities that enable banks to meet short-term obligations and support settlement during periods of stress. Deposit insurance schemes further reinforce confidence by protecting retail depositors against losses up to prescribed limits. Correspondent banking networks facilitate the transfer of funds across institutions, supported by pre-funded accounts and bilateral credit arrangements and established settlement relationships. Together, these mechanisms ensure that payment instructions are executed reliably and that most end users do not experience deviations from par in ordinary transactions.

The maintenance of this system therefore depends on structural mechanisms that promote confidence and absorb risk. Banks must allocate capital to liquidity buffers, maintain settlement balances and manage counterparty exposures within correspondent networks. Regulatory requirements impose additional constraints on risk-taking and are designed to reduce the likelihood that losses crystallise in a way that threatens systemic stability.

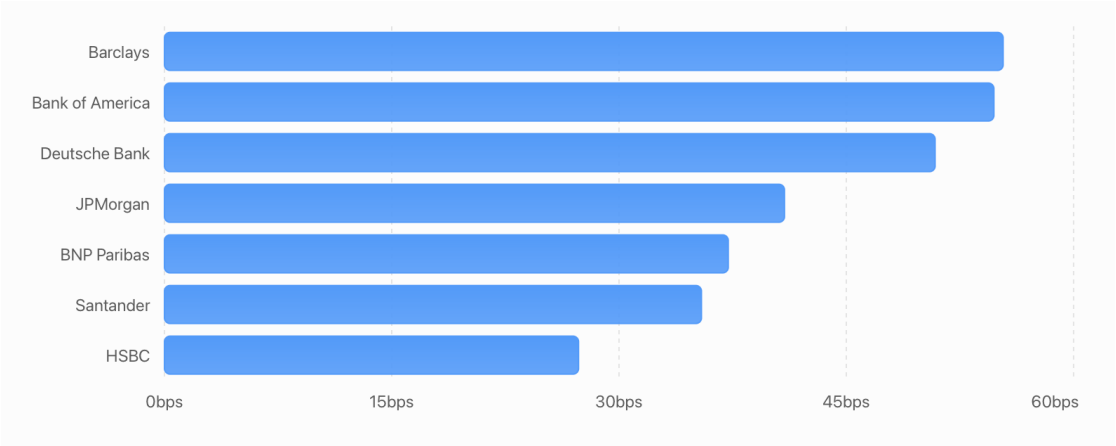
The singleness of money in the traditional banking system should therefore be understood as conditional rather than inherent. It holds only to the extent that banks continue to extend settlement lines to one another, central bank and deposit insurance backstops remain credible, and market participants believe that banks have sufficient capital and liquidity to absorb losses and withstand runs. Singleness is therefore sustained through institutional coordination, public-sector support and economic trade-offs, rather than arising naturally from the properties of monetary instruments themselves.

4. CDS Markets and the Visibility of Risk

Developed in the 1990s, J.P. Morgan is recognised to have executed the first credit default swaps (CDS) that provides a market determined measure of creditworthiness. CDS spreads reflect the market's forward-looking assessment of default probability and loss given default for individual banking institutions. The persistent positive spreads to purchase CDS on banks indicates that their liabilities are not perceived as homogeneous or risk-free, but instead embed institution-specific credit risk. This is most clearly observable for larger banks, where liquid CDS markets, typically 5Y CDS, provide an almost continuous measure of credit risk.

Selected Banks 5-year CDS spread[1]

(June 2026 data)



[1] Markit, five-year senior CDS mid-spreads for selected banks. CDS spreads are expressed in basis points and represent the annual premium paid by the protection buyer for credit protection on the reference entity.

In stressed markets, bank CDS spreads can rise by an order of magnitude. For example, during the 2011 European periphery crisis, Bank of America's 5-year CDS reached around 435 bps, while Deutsche Bank's senior CDS traded at nearly 300 bps[2]. This illustrates that, in periods of stress, market-implied credit risk on bank liabilities can become materially larger, even though the traditional banking system largely suppresses any corresponding price discount on deposits through deposit insurance, central bank liquidity, resolution frameworks and payment-system design.

Furthermore, deposits do not adjust in line with these market-implied risk differentials. As shown by Drechsler, Savov and Schnabl (2017), deposit rates can be systematically "sticky" and insensitive to changes in bank risk or broader financial conditions. This stickiness allows banks to maintain funding costs below market-implied levels, effectively generating a deposit franchise value. As a result, deposits do not reflect the variation in credit risk that is readily observable in CDS markets.

If deposits were freely tradable and subject to continuous market pricing, this divergence would not persist. Liabilities issued by banks with wider CDS spreads would be expected to trade at a discount relative to those of stronger institutions, aligning their valuation more closely with underlying credit and liquidity risks. The absence of such pricing is therefore not evidence of equivalence, but a consequence of structural features, such as deposit insurance, limited transferability, and customer inertia that suppress price discovery.

The traditional banking system thus obscures the heterogeneity of private money. While CDS markets reveal a differentiated risk landscape across institutions, deposits mask these differences by design. This disconnect is central to sustaining the perception of singleness, even as market-based measures make clear that money issued by commercial banks is inherently non-uniform.

5. Stablecoins and Market Based Price Discovery

Stablecoins introduce a fundamentally different dynamic by enabling continuous market-based price discovery. Unlike bank deposits, stablecoins are actively traded on open markets, where their prices reflect real-time assessments of liquidity, demand, and perceived risk as well as fluctuations in the broader crypto market.

As a result, stablecoins may trade at premiums or discounts to their nominal value. Even for stablecoins backed 100% by highly liquid assets, these deviations are often interpreted as signs of instability. However, such an interpretation fails to account for the role of market structure in shaping price formation.

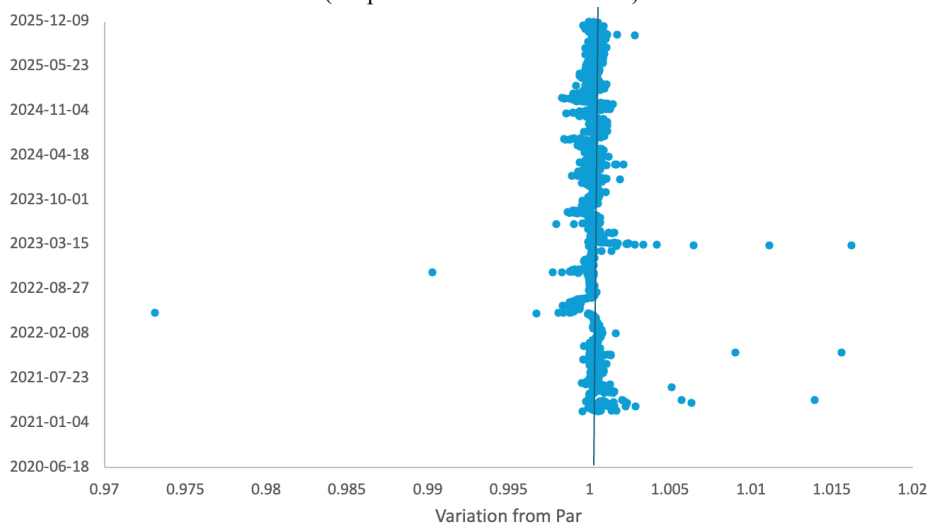
Stablecoin prices incorporate not only assessments of the issuer and quality of the backing assets, but also factors such as the depth of liquidity on trading venues, the ease of redemption, and the fragmentation of markets across different platforms and jurisdictions. Price deviations should therefore be understood as signals rather than failures, providing insight into the underlying conditions of the market.

Using daily mid-price data for the period from 1 April 2021 to 30 March 2026, USDT exhibited a 99% historical par-deviation VaR of 13.5 basis points and a 99.5% historical par-deviation VaR of 16 basis points. In other words, over the sample period, USDT's daily mid-price remained within 13.5 basis points of par on 99% of observed days and within 16 basis points on 99.5% of observed days.

[2] Markit, historical five-year senior CDS mid-spreads for Bank of America Corporation and Deutsche Bank AG, 2011.

USDT/ USD price[3]

(1 April 2021 to 30 March 2026)



An additional and often overlooked driver of price deviations is the cost of redemption. For some issuers, converting stablecoins back into fiat through primary issuance and redemption channels can involve fees of up to ~10 basis points (footnote 15). It is possible that this creates a natural arbitrage band within which prices can fluctuate without triggering immediate redemption activity.

As a result, stablecoins trading slightly below par on secondary markets may not necessarily reflect concerns about credit quality or backing assets. Instead, such discounts can be economically rational, as market participants factor in the cost and operational frictions associated with redemption. Only when deviations exceed this cost do other factors become more relevant. Therefore small, persistent deviations from par should be understood as a function of market design rather than evidence of instability.

6. Liquidity and Market Structure

A critical distinction must be drawn between stability and price. The price of a stablecoin is not solely a function of its backing or credit quality; it is also heavily influenced by liquidity conditions. In markets characterised by fragmented liquidity and limited arbitrage capacity, even small imbalances in supply and demand can result in observable deviations from par. We see this frequently in highly volatile periods in the cryptocurrency market, before seeing prices stabilise shortly thereafter.

This perspective is consistent with arguments advanced in the Stanford Blockchain Review, which emphasise that the stability of a monetary instrument depends not only on the quality of its backing assets, but also on the robustness of its redemption mechanisms and the design of the surrounding system.

In the absence of sufficient liquidity and integration, price deviations are an inevitable feature of market-based money. They reflect the constraints of the system rather than deficiencies in the concept of stablecoins themselves.

[3] Source: USDT/USD Yahoo Financial

7. The Absence of Clearing Infrastructure

One of the most significant structural differences between traditional financial markets and stablecoin ecosystems is the absence of a comprehensive clearing layer. In traditional finance, clearing systems perform essential functions that mitigate risk and enhance efficiency. Through multilateral netting, they reduce the gross value of obligations that must be settled. Margining frameworks manage counterparty risk, while centralised processes ensure that settlement occurs in central bank money with finality.

Stablecoin transactions are executed across fragmented networks and venues, each with its own liquidity constraints and operational characteristics. This structure leads to inefficient capital utilisation, as participants must maintain liquidity across multiple platforms, and contributes to persistent price discrepancies.

The absence of clearing infrastructure is therefore a primary driver of the fragmentation observed in stablecoin markets. It limits the ability of participants to net exposures and amplifies the impact of liquidity imbalances on pricing.

8. Tradable Deposits as a Thought Experiment

A useful illustration is to consider a hypothetical scenario in which commercial bank deposits are fully tradable on open markets. In such a system, deposits would be subject to continuous price discovery, with their value reflecting the creditworthiness, liquidity and settlement capacity of the issuing institution. Market-based indicators such as CDS spreads would likely influence these prices, making differences between banks visible to market participants.

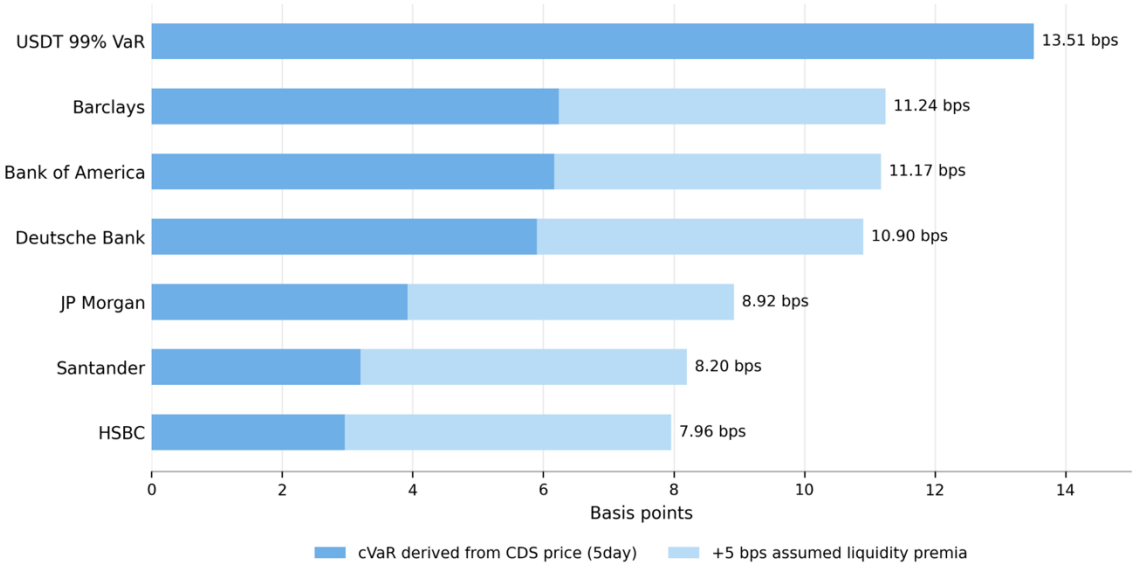
Under these conditions, deposits would not be expected to trade consistently at par. Instead, they would likely exhibit price deviations similar in nature to those observed in stablecoin markets. Deposits issued by institutions perceived as weaker would trade at a discount relative to those issued by stronger banks, while liquidity conditions, market fragmentation and settlement frictions would further influence pricing dynamics. In stressed markets, the price of deposits would be expected to fluctuate more materially, reflecting heightened uncertainty about the issuing bank's creditworthiness and liquidity position.

This thought experiment highlights a critical point: the singleness of money in the traditional banking system depends not on the intrinsic equivalence of monetary instruments, but on the absence of continuous market-based price discovery. By limiting the transferability of deposits and suppressing secondary-market pricing, the system preserves the appearance of uniformity even though underlying differences persist.

The comparison between CDS spreads and stablecoin price deviations is not perfectly like-for-like. CDS spreads are measures of credit risk over a multi-year horizon, whereas stablecoin price deviations are observed in real time and reflect a broader range of factors, including liquidity, redemption costs and market structure. However, when CDS spreads are converted into a short-horizon credit-risk proxy, the resulting basis-point figures are of a similar order of magnitude to the price deviations observed for stablecoins.

This suggests that part of the observed difference between bank deposits and stablecoins may be explained not by the absence of risk in deposits, but by the absence of visible pricing. Stablecoin deviations, by contrast, are continuously observable. In many cases, the scale of these deviations may also reflect redemption fees, operational frictions and the absence of efficient clearing infrastructure. As liquidity improves and settlement costs decline, one would expect further convergence between stablecoin prices and par.

USDT stablecoin VaR vs Bank cVaR[4]



The scenario of "priced" or "tradable" deposits may no longer be purely hypothetical. The emergence of tokenised deposits creates a pathway through which bank liabilities could become more readily transferable, and potentially more directly priced, either through trading or through the development of related derivatives markets. Tokenised deposits represent claims on commercial banks that are issued and transacted on distributed ledger systems, enabling forms of programmability, transferability and near real-time settlement that differ from traditional account-based deposits. Recent initiatives such as J. P. Morgan's JPM Coin, Citi Token Services and HSBC's Tokenised Deposit Service demonstrate how commercial bank deposits can be given characteristics that resemble digital settlement instruments.

As these instruments develop, they may begin to share more of the characteristics currently associated with stablecoins. Tokenisation can increase transparency, facilitate near real-time transfer and potentially enable interaction with market-based liquidity venues. To the extent that tokenised deposits become integrated into broader digital asset ecosystems, they may also become subject to more explicit forms of price discovery, whether directly through trading or indirectly through arbitrage relationships with other monetary instruments.

This convergence raises an important regulatory tension. Tokenised deposits remain commercial bank liabilities, but the more they resemble settlement assets, the more they raise questions about reserve backing, access to central bank money and the boundary between bank money, narrow-bank models and stablecoins. The Narrow Bank litigation in the United States, concerning access to a Federal Reserve master account, illustrates the sensitivity of allowing private institutions to intermediate more directly around central bank settlement infrastructure.

The implications are significant. If tokenised deposits increase visibility into the relative credit and liquidity characteristics of issuing banks, they may erode the opacity that has historically sustained the

[4] USDT VaR is calculated from observed daily mid-market traded prices against USD over the period 2011–2026. Bank cVaR refers to credit-spread value-at-risk, calculated using current five-year senior bank CDS spreads and scaled to a five-business-day horizon. The additional 5 bps adjustment reflects an estimated bid-offer spread for CDS in normal market conditions. The comparison is intended to illustrate the visibility of market-implied liquidity and credit risk across stablecoins and bank liabilities, and should not be read as a direct equivalence.

perception of singleness. Differences that are currently implicit and largely hidden from end users could become observable, challenging the assumption that all deposits are economically equivalent.

In this sense, the conceptual boundary between traditional bank deposits and stablecoins begins to narrow. Both can be understood as forms of private money that represent claims on underlying assets and are subject to risks arising from their respective structures. The key distinction lies not in their economic nature, but in the degree to which that nature is visible, transferable and priced within the system.

9. Redefining Singleness of Money

The traditional definition of singleness of money as universal par acceptance is insufficient in a system characterised by multiple forms of private money.

A more robust and meaningful definition is the ability to settle obligations in a common, risk-free asset with certainty and finality. In contemporary financial systems, this role is fulfilled by central bank money. Both bank deposits and stablecoins represent claims on such settlement, rather than settlement itself. The degree to which singleness is achieved therefore depends on the reliability and accessibility of mechanisms that convert these claims into final settlement.

Under this definition, singleness is not about eliminating differences between monetary instruments, but about ensuring that those differences do not impede the execution of payments and the discharge of obligations.

10. Implications for Stablecoin Design and Policy

The analysis presented in this paper suggests that the central challenge for stablecoins is not the elimination of price deviations, but the development of infrastructure that addresses their underlying causes. This includes the introduction of clearing mechanisms that enable multilateral netting and centralised risk management, reducing reliance on fragmented bilateral settlement and improving overall system stability.

Integration with central bank settlement systems is also critical. Anchoring stablecoin transactions in central bank money enables true settlement finality and materially reduces counterparty and settlement risk. Modernised central bank payment infrastructure, such as the Bank of England's upgraded RTGS system, provides a pathway to link digital asset transfers with central bank payment rails in real time. This creates a robust integration layer between blockchain networks and central bank systems, enabling risk-free settlement, which is essential for wholesale markets.

Regulatory heterogeneity also has important implications for stablecoin design. Frameworks across jurisdictions differ materially, including the EU's MiCA regime, with its distinction between asset-referenced tokens and e-money tokens, Hong Kong's Stablecoins Ordinance, Singapore's MAS stablecoin framework, the UAE Central Bank's Payment Token Services Regulation, VARA's framework for fiat-referenced virtual assets, and the Bank of England's proposed regime for systemic stablecoins. These regimes take different approaches to reserve composition, redemption rights, safeguarding, operational segregation, permitted use cases and the role of settlement infrastructure. This heterogeneity can itself contribute to cross-venue and cross-jurisdiction price deviations, as market participants price the legal, operational and liquidity characteristics of each stablecoin differently. Over time, greater convergence around global standards may therefore be necessary to support interoperability, reduce fragmentation and promote functional singleness across digital money markets.

Finally, improving liquidity conditions through greater market integration and capital efficiency can reduce the magnitude and persistence of price deviations. By consolidating liquidity across venues and

enabling more effective arbitrage, the system can move closer to functional singleness without suppressing the informational value of price signals.

11. Conclusion

Stablecoins are often portrayed as a challenge to the singleness of money. This paper has argued that they instead provide a lens through which the true nature of money becomes visible. Commercial bank deposits, which dominate the monetary landscape, are themselves heterogeneous forms of private money subject to varying degrees of risk. The traditional system conceals these differences through institutional arrangements that suppress price discovery and redistribute costs.

Stablecoins introduce transparency by enabling continuous market pricing. In doing so, they reveal the importance of liquidity, clearing, and settlement infrastructure in maintaining the coherence of monetary systems. The deviations observed in stablecoin markets are not anomalies, but reflections of structural realities that have long existed.

The future of money will depend not on preserving the illusion of singleness, but on building systems that can support it in practice. This requires explicit management of risk, the development of efficient clearing mechanisms, and the anchoring of settlement in central bank money. Stablecoins, far from undermining monetary unity, offer an opportunity to redesign it on more transparent and resilient foundations.

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