

Digital Liquidity Fragmentation and Stablecoin Expansion: A Maqasid al-Shariah Perspective

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Abstract

The rapid expansion of stablecoins structurally accelerates digital liquidity fragmentation, producing a monetary dualism between public central bank money and private digital instruments across jurisdictions. This study examines liquidity creation and fragmentation patterns driven by stablecoins and evaluates their implications for monetary stability through the maqasid al-shariah framework, particularly hifz al-mal. Employing a normative-critical qualitative methodology with a systematic prisma review, three principal findings emerge: first, reserve-backed issuance generates liquidity outside central bank regulatory perimeters; second, a paradox of concentration and fragmentation exists whereby capitalization remains concentrated in USDT and USDC while functional liquidity disperses across 107-127 blockchain networks, constituting a systemic governance failure; third, fragmentation becomes mafsadah when it undermines value stability, distributive justice, and systemic risk equity. This study contributes by reinterpreting digital liquidity fragmentation as a structural governance problem, operationalizing hifz al-mal as a normative criterion for systemic risk assessment, and conducting comparative normative analysis across five Islamic jurisdictions. Limitations include the absence of empirical quantitative testing, exclusion of non-fiat models and broader maqasid dimensions, and policy analysis confined to five countries. Regulators are urged to implement transparent reserve audits, cross-network interoperability standards, and cross-jurisdictional harmonization to prevent fragmentation-induced erosion of stablecoin benefits.

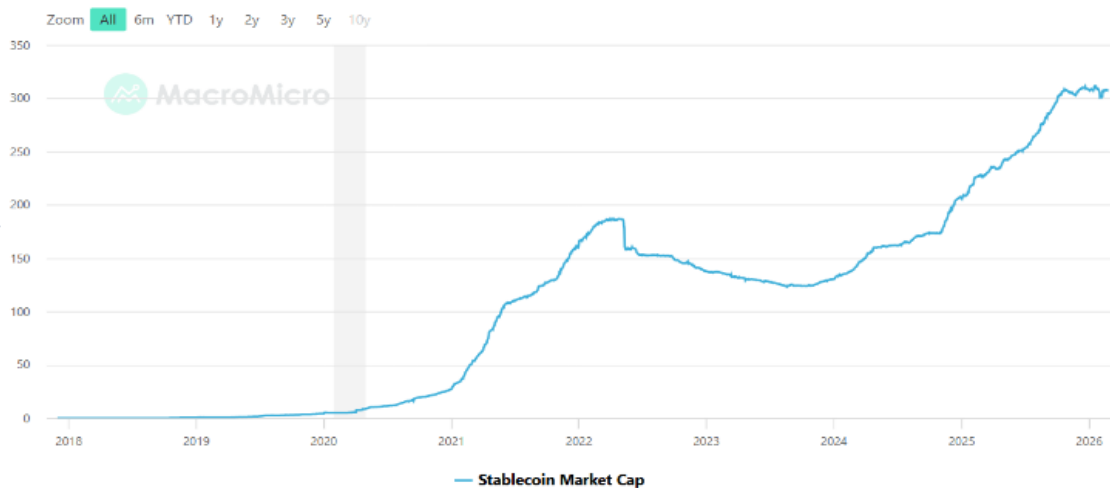
Keywords: Stablecoin; Liquidity Fragmentation; Monetary Stability; Maqashid Sharia; Hifz al-Mal.



1. INTRODUCTION

In recent years, advances in financial technology have spurred the emergence of digital financial instruments, such as stablecoins (Mashoene et al., 2025). Stablecoins are crypto assets whose exchange rates are pegged to specific assets, such as fiat currencies, commodities, or algorithms, making their value relatively stable and enabling them to serve as a primary liquidity instrument within the digital financial ecosystem (Boar et al., 2020). Stablecoins such as USDT, USDC, and DAI were initially created to mitigate volatility in the cryptocurrency market (Yu, 2026). However, they have now become the primary source of liquidity for digital asset trading, international transactions, DeFi, and blockchain-based payments (S. Santoso et al., 2024). This shift in function has led to a transfer of liquidity from traditional financial systems to blockchain-based and decentralized ecosystems.

Figure 1. Global stablecoin market cap, 2018–2026 (trillion dollars)



Source: <https://en.macromicro.me> (2026)

Figure 1 indicates that the market capitalization of stablecoins rose dramatically from 2018 to 2026, despite a correction during the 2023–2024 period. Currently, the market capitalization has surpassed its all-time high, exceeding \$364 billion and continuing to rise well above \$310 billion. The Bank for International Settlements (BIS) emphasized in its Quarterly Report that the rise of stablecoins could impact the implementation of monetary policy as liquidity shifts out of the conventional banking system (Bank for International Settlements, 2023). This situation leads to digital liquidity fragmentation, where liquidity is dispersed across various blockchain networks, protocols, and stablecoins, each with distinct governance structures, reserve transparency, and risk profiles. These conditions can lead to market inefficiencies, amplify hidden systemic risks, and weaken the transmission of monetary policy, while simultaneously creating

a duality in the monetary system that reduces authorities' control over financial stability (Adrian et al., 2025). In other words, the growth of stablecoins not only technically affects the structure of the crypto market but also has structural implications for the architecture of the global financial system.

A number of previous studies and reports have discussed stablecoins in the context of global financial stability and monetary regulation. Referring to the findings (Aquilina et al., 2025) in a report by the Bank for International Settlements (BIS), the report emphasizes that the development of stablecoins could disrupt the transmission of monetary policy by shifting liquidity from the banking system to blockchain-based instruments. The risk of a digital run on stablecoins with non-transparent reserves is a primary concern for maintaining financial system stability. In line with this, the (International Monetary Fund, 2023), in its Global Financial Stability Reports highlights stablecoins as a source of potential new vulnerabilities that could accelerate the transmission of cross-jurisdictional shocks. In the realm of global governance, the (financial stability board, 2020) Underscored in its final report the urgency of establishing a unified regulatory framework for global stablecoins to prevent systemic risks and safeguard national monetary sovereignty. From an academic perspective, (Zetzsche et al., 2023) emphasize the importance of a risk-based regulatory approach in addressing digital asset innovations. Meanwhile, (Gorton et al., 2022) link stablecoins to historical banking practices of "private money," which are prone to instability without adequate institutional backing.

Although previous research has made significant contributions, existing studies have largely focused on financial stability risks, regulatory frameworks, and the governance of stablecoin reserves. Meanwhile, analyses that specifically examine how the growth of stablecoins leads to liquidity fragmentation and its impact on the effectiveness of monetary policy within the central bank framework remain limited. Thus, there is a significant research gap: no study has systematically examined digital liquidity fragmentation as both a structural monetary problem and a normative governance issue within the framework of maqasid al-shariah. This research fills that gap by integrating monetary analysis and Islamic normative evaluation to present a more comprehensive reading of the expansion of stablecoins.

Furthermore, a normative approach linking the phenomenon of digital liquidity fragmentation to the principles of justice and public welfare in Islamic economics has not yet been systematically developed. Digital liquidity fragmentation is not merely a technical issue within the crypto market, but rather a structural shift in the architecture of the financial system (Kuznetsov, 2025). The

distribution of liquidity across various blockchain networks, DeFi, and types of stablecoins with different governance structures creates alternative sources of liquidity that lie outside the traditional monetary perimeter (Shah et al., 2023). This situation has the potential to give rise to a dualism in the monetary system between public money managed by central banks and private digital money operating across jurisdictions.

From an Islamic economic perspective, this phenomenon must be analyzed through the framework of *maqasid al-shariah*. The conceptualization of *maqasid* developed by Abu Ishaq al-Shatibi identifies the protection of wealth (*hifz al-mal*) as one of the primary objectives of *shariah* (Nurwahidah et al., 2024). Currency stability, transaction certainty, and protection against systemic risk are part of efforts to safeguard the public interest (*maslahah amanah*) and prevent harm (*mafsadah*) (Pramita & Nisa, 2024). If the fragmentation of digital liquidity creates uncertainty in value, disparities in liquidity distribution, or systemic vulnerabilities, then this becomes not only a monetary issue but also a normative concern within the framework of *maqasid*.

Thus, this study positions stablecoins as a phenomenon with structural, institutional, and normative dimensions. Using a qualitative approach with normative-conceptual analysis, this study examines: (1) the mechanisms by which stablecoins create and distribute liquidity; (2) patterns of digital liquidity fragmentation within the blockchain ecosystem; (3) their implications for monetary stability and asset protection from the perspective of *maqasid al-shariah*. This approach enables a more comprehensive understanding of the transformation of the digital financial system in the era of technological disruption.

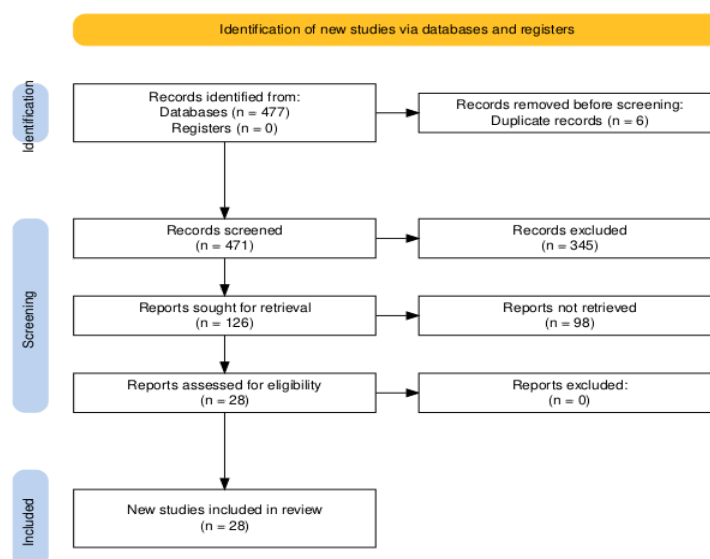
2. METHODS

This study employs a qualitative approach with a normative critical design (Marzuki, 2005). The analysis process is conducted through four stages: (1) mapping relevant literature; (2) selection using the prisma protocol; (3) categorization into three analysis domains; and (4) normative synthesis using the *maqasid al-shariah* framework. The normative dimension assesses stablecoin governance through the *maqasid al-shariah* framework, particularly Al-Syatibi's concept of *hifz al-mal* as a criterion for evaluating systemic risk. The critical dimension concerns a structural examination of power relations and governance failures embedded within the digital liquidity system, following a critical theory approach (Cox, 1981) that distinguishes between problem solving and critical theory in political economy. These two dimensions are supported by a systematic literature review in accordance with the prisma protocol to assess the

relationship between stablecoin growth, digital liquidity fragmentation, and monetary stability from the perspective of maqasid al-shariah. An interpretive-critical framework is used to examine digital financial transformation as a change in the global monetary structure and to analyze it in light of Islamic economic principles.

The systematic review process is carried out in four phases of the prisma framework. In the first phase, identification, relevant articles are searched in the scopus and google scholar databases using structured keywords such as stablecoin, digital liquidity fragmentation, monetary stability, maqasid al-shariah in finance, and Islamic monetary economics. In the second phase, screening, all search results are filtered by title and abstract against the inclusion criteria: publications from 2020 to 2026, in English, and relevant to stablecoins, digital liquidity, or Islamic economics. In the third phase, eligibility, the literature that passes the screening is comprehensively evaluated to ensure methodological and substantive appropriateness. In the fourth phase, inclusion, the selected literature is classified into three areas for analysis: stablecoin liquidity creation, digital fragmentation structure, and normative maqasid assessment. Secondary data are obtained from reports by the Bank for International Settlements (BIS), the IMF, and the FSB, as well as from international journals, websites, and literature on maqasid, particularly Abu Ishaq al-Shatibi's ideas regarding hifz al-mal. The analysis is conducted using descriptive-explanatory and critical-structural approaches, and then synthesized normatively through the maqasid framework to assess the impact of liquidity fragmentation.

Figure 2. Analysis of relevant literature (2026)



The literature review was conducted using the prisma protocol, as shown in Figure 2. During the identification phase, a search of the Scopus and Google Scholar databases using seven structured keywords yielded 477 articles: stablecoin (155), digital liquidity fragmentation (6), monetary stability (185), maqasid al-shariah finance (84), and Islamic monetary economics (47). After deduplication, 6 duplicate articles were removed, leaving 471 articles for screening. During the screening stage, titles and abstracts were reviewed against the inclusion criteria, resulting in the exclusion of 345 articles that were unrelated to stablecoins, digital liquidity, or Islamic economics and were not published between 2020 and 2026. Of the 126 articles that passed, 98 were not fully accessible (full text unavailable), leaving 28 articles to proceed to the eligibility stage. All 28 articles met the methodological and substantive criteria and were thus included as the final literature analyzed in this study.

3. RESULT AND FINDINGS ANALYSIS

Reserve-Based Stablecoin Expansion Mechanism

Global stablecoin growth is dominated by dollar backed models that maintain their value through reserves of short-term financial assets such as U.S. Treasury bills and money market instruments (Ahmed & Aldasoro, 2025). Stablecoin issuers generate digital tokens whose value is pegged to a fiat currency, usually the U.S. dollar, and backed by reserve assets such as cash, short-term debt securities, or liquid money market instruments (Bellia & Schich, 2020). Any surge in demand for stablecoins prompts issuers to accept fiat currency deposits and create an equivalent amount of new tokens, thereby creating digital liquidity that aligns with reserve expansion.

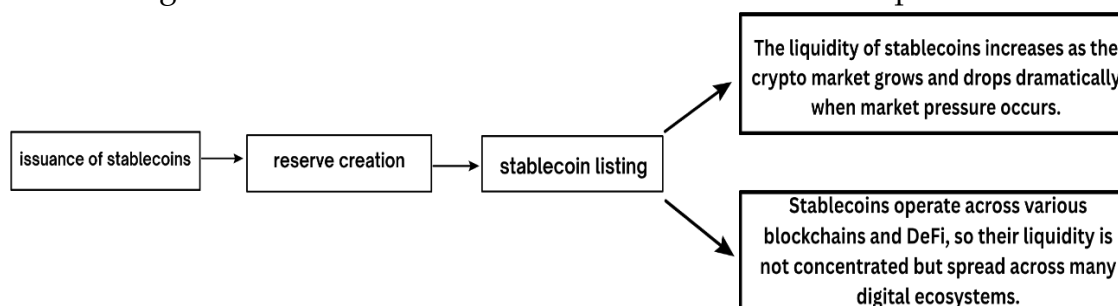
Stablecoins generate new liquidity flows outside the conventional banking system, causing funds previously held in bank accounts or money markets to shift to the blockchain space (Capponi & Jia, 2025). This phenomenon is not merely a technical aspect but also signals a transformation in how financial intermediaries operate. According to the (International Monetary Fund, 2025) the link between stablecoins and global financial markets is growing stronger as a portion of stablecoin reserves is allocated to short term instruments. Therefore, the development of stablecoins cannot be completely separated from the traditional financial system; rather, it fosters a complex relationship.

Structurally, this mechanism has two main effects. First, the creation of stablecoin liquidity has a positive impact on the economic cycle: it increases rapidly as the crypto market expands and can decline sharply during periods of

market stress (Aldasoro et al., 2024). Second, because stablecoins operate across various blockchain networks and decentralized finance (DeFi) protocols, the resulting liquidity is not concentrated in a single system but is distributed across many digital ecosystems (León & Lehar, 2026).

This indicates that reserve-backed models not only maintain value stability but also create a new layer of liquidity that operates outside the conventional monetary oversight system (Bratsiotis, 2022). This situation serves as the initial foundation for the emergence of digital liquidity separation. This study shows that the evolution of stablecoins has created a distinct layer of liquidity that does not fully align with conventional monetary rules. Liquidity that was previously confined to the banking system has now spread into private blockchain technology and involves various sectors. The development of stablecoins is not merely an innovation in payment instruments but also a harbinger of a distinct financial system. In analytical terms, this reserve-based expansion model does not merely replicate traditional liquidity creation it displaces monetary authority by constructing a parallel liquidity layer that operates beyond the regulatory perimeter of central banks, thereby laying the structural foundation for digital liquidity fragmentation (Morgan, 2023).

Figure 3. Mechanism of Reserve-Backed Stablecoin Expansion



Source: Author (2026)

Figure 3 illustrates how reserve-backed stablecoins operate, starting with issuance, followed by the creation of asset reserves, and finally by listing on the market. During this process, stablecoin liquidity increases alongside the growth of the crypto market, but it can also fluctuate significantly under market pressure. Additionally, stablecoins operate across various blockchains and DeFi ecosystems, so their liquidity is not centralized but distributed across many digital platforms.

Digital Liquidity Fragmentation Structure

The development of stablecoins has not only created a new layer of liquidity but has also given rise to a fragmented liquidity structure within the digital financial ecosystem (Lehar et al., 2024). This fragmentation occurs because stablecoins operate across various blockchain networks, decentralized exchanges, and decentralized finance protocols, each with distinct liquidity mechanisms and governance structures (Satibi et al., 2025). Unlike traditional banking systems connected through a centralized clearing process, liquidity in stablecoins flows across markets that are not structurally well coordinated (Schär, 2021).

The distribution of stablecoin market capitalization exhibits a mixed pattern. Market capitalization is concentrated among a few major issuers, yet liquidity is spread across various tokens, networks, and protocols (Almeida & Gonçalves, 2024; Y. Li & Mayer, 2026). Thus, the stablecoin market is neither entirely centralized nor fragmented, but rather combines capital concentration with operational dispersion.

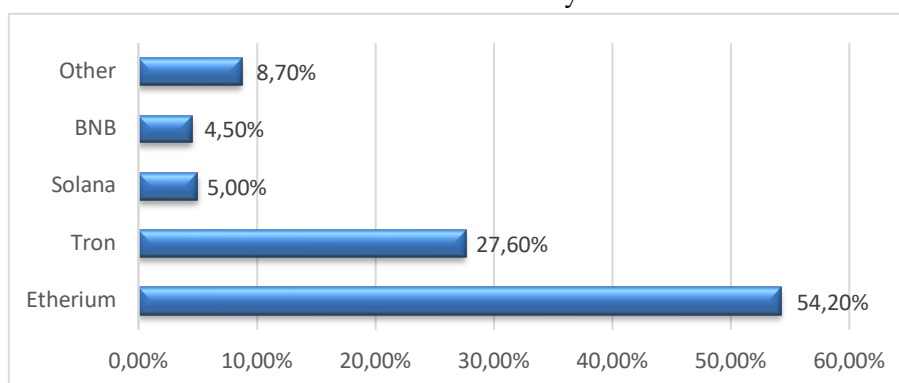
Table 1. Top Five Stablecoins by Market Capitalization and Blockchain/DeFi Network Adoption (2026)

Stablecoin	Market capitalization (in billions of USD)	Network deployment
USDT	183,57	107
USDC	75,32	127
USDS	8,074	6
OSDe	5,203	23
DAI	4,65	48

Source: *coinmarketcap.com* (2026)

As shown in Table 1, although the majority of the market's total value is concentrated in the two major stablecoins USDT and USDC, there are many other stablecoins, indicating that liquidity is spread across various types of tokens and ecosystems. This situation highlights two distinct aspects: on the one hand, funds are concentrated in large companies, but on the other hand, the ability to use those funds in practice is distributed across numerous blockchain networks and DeFi systems (Tang et al., 2025).

Table 2. Distribution of Stablecoins by Blockchain Network



Source: axelar.network (2025)

Table 2 shows that stablecoins are distributed across many blockchains and are not confined to a single system. Although some networks account for a larger share, their use across various protocols indicates a technical distribution of liquidity. Liquidity flows can vary significantly depending on consensus mechanisms, management approaches, or other factors, and how one chooses to manage the entire network (Karkkainen & Broussard, 2025). These results indicate that the growth of stablecoins not only increases market value but also transforms the overall structure of digital liquidity into a more fragmented one.

Structurally, this fragmentation affects the market's depth and the efficiency of its liquidity. Liquidity fragmented across various liquidity pools and networks can lead to price discrepancies, price deviations, and imbalances in fund distribution during market fluctuations (Unal & Goksu, 2025).

Table 3. Characteristics of Stablecoins and CBDC

Assets	Type	Stability mechanism	Governance	Liquidity implications
USDT	Fiat-backed	USD peg, cash reserves & Treasury bills	Private, centralized	Dominant liquidity, distributed across networks
USDC	Fiat-backed	USD peg, audited reserves	Private, centralized	High integration with formal financial systems
DAI	Crypto-backed	Over-collateralized crypto	Decentralization (DAO)	Fragmented liquidity in DeFi
USDe	Synthetic	Derivative hedging	Hybrid	Adding complexity to the liquidity structure
CBDC	Public digital money	Guaranteed by the central bank	State authority	Potential for integration & reduction of fragmentation

Source: (Aquilina et al., 2025; Le et al., 2025; Thanh et al., 2022)

Table 3 shows that differences in stability mechanisms and governance among stablecoins result in diverse liquidity distributions. Fiat-backed stablecoins provide stability through real assets but remain tied to an interest-based financial system, while crypto and synthetic models are more fragmented and vulnerable to price fluctuations and automatic liquidation. From the perspective of *maqasid al-shariah* (*hifz al-mal*), these structural variations reflect different levels of asset protection. Thus, the fragmentation of digital liquidity is not merely a technical issue but has a normative dimension related to economic stability and well-being.

This fragmentation affects monetary stability: stablecoins backed by money market assets that operate across borders, along with the underlying technology, complicate the interaction between crypto markets and the conventional financial system (Mahrous et al., 2025). The rise of stablecoins not only broadens the range of private digital currencies but also creates fragmented liquidity, affecting oversight and control of financial stability. This study identifies a structural contradiction: market value is concentrated in USDT and USDC, while liquidity is functionally dispersed across various blockchains and DeFi protocols, in contrast to traditional financial systems connected through centralized clearing.

Fragmentation reduces market efficiency, as dispersed liquidity leads to price discrepancies, arbitrage opportunities, and distributional imbalances when the market comes under pressure (Aramonte et al., 2021). Unlike traditional banking, which uses a single clearing system, the structure of digital liquidity, which lacks centralized settlement, complicates the coordination process. Taken together, these findings demonstrate that digital liquidity fragmentation is not a passive by-product of blockchain innovation, but an active structural outcome of uncoordinated stablecoin governance. The concentration-fragmentation paradox, whereby capitalization centralizes in USDT/USDC while functional liquidity disperses across 107–127 chains, constitutes a systemic governance failure with direct implications for monetary policy effectiveness.

Normative Evaluation in the Perspective of Maqasid al-Shariah

The fragmentation of digital liquidity caused by the rise of stablecoins can be viewed not only as a technical issue in the market but also as a shift in the power dynamics of financial institutions within the digital realm (Rahardjo, 2021). It also represents a new approach for monetary authorities to regulate matters in the digital sphere. In the context of *maqasid al-shariah*, particularly the principle of *hifz al-mal*, maintaining value stability and order within the financial system is crucial for collectively safeguarding assets (Izadin et al., 2025).

This study indicates that liquidity fragmentation can be detrimental if it causes systemic instability, reduces asset values, or undermines the public interest. Any changes to liquidity must be evaluated based on their impact on stability, distributive justice, and systemic risk (Tri et al., 2025). Unlike previous studies that emphasized regulation and financial stability, this research views liquidity fragmentation as a structural and normative issue within the framework of maqasid al-shariah, thereby expanding the discourse on Islamic economics by incorporating digital monetary dynamics into efforts to protect communal wealth. According to Al-Syathibi, the preservation of religion, life, intellect, lineage, and wealth (through the levels of dharuriyat, hajiyyat, and tahsiniyat) is a prerequisite for maintaining benefits (Nurwahidah et al., 2024).

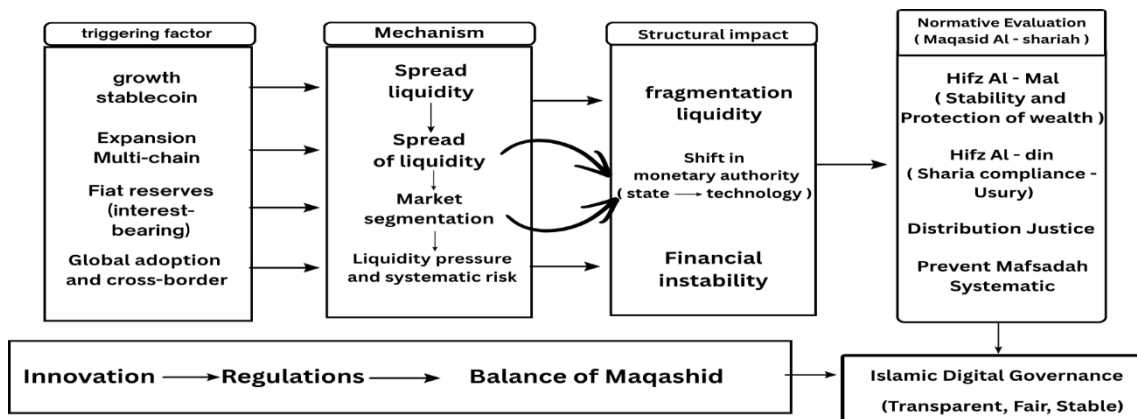
According to (Widjiantoro et al., 2026), in their article, USDT uses fiat currency as its underlying asset, which involves interest, and this fiat currency is issued by conventional financial institutions. From the perspective of Maqasid al-Shariah, Tether (USDT) helps protect wealth by maintaining a stable value and safeguarding assets from unexpected fluctuations (Izadin et al., 2025). However, since these reserves are linked to interest-bearing instruments, this can conflict with Shariah principles (riba) and affect hifz al-din. Thus, while it serves a beneficial function, its structure requires scrutiny to ensure alignment with the maqasid.

Liquidity fragmentation leads to network separation, price discrepancies, and misaligned liquidity pressures, which ultimately weaken the transmission of monetary policy and increase hidden systemic risks (Wei et al., 2026). Within the maqasid framework, this is considered a general threat because it disrupts the unity of the financial system (Al-deek, 2025). Both sides of money, namely, public money issued by the central bank and private digital money, indicate a shift in monetary control into the hands of technology companies, thereby making it difficult for institutions to protect the public interest (Rihani et al., 2025). The maqasid approach does not oppose innovation: stablecoins offer benefits such as payment efficiency, increased access to digital finance, and reduced barriers to cross-border transactions (Nurhidayatullah & Sw, 2024). The primary focus is not on the existence of stablecoins, but rather on governance and system integration. The principle of hifz al-mal demands a balance between innovation and stability through reserve transparency, liquidity risk management, and international cooperation (Fadilah, 2025).

The normative approach in this study emphasizes the importance of balancing innovation and stability through transparent governance, strengthened cross-sectoral regulation, and a flexible oversight framework.

Within the framework of modern maqasid, the fragmentation of digital liquidity poses challenges to monetary sovereignty and the protection of public assets (Widjaja, 2024). The normative response must go beyond mere individual Sharia compliance, toward the reconstruction of digital financial governance that safeguards the integrity of the system as a whole, through an institutional approach that is adaptive, collaborative, and oriented toward the collective public interest (Dewi & Suselo, 2025).

Figure 4. Fragmentation of digital liquidity from the perspective of Maqasid al-Shariah



Source: Author (2026)

Figure 4. Analysis of stablecoin liquidity fragmentation using the maqasid (hifz al-mal). The dispersion of liquidity can be harmful if it disrupts stability and fairness, while stablecoins also offer benefits such as efficiency and financial access. Transparent governance is needed to ensure that innovation aligns with the public interest. This study employs a descriptive analysis by integrating quantitative data on daily price volatility against the USD. Fiat-backed stablecoins (USDT, USDC) exhibit minimal volatility, ranging from 0.001 to 0.003 under normal market conditions (Baur & Hoang, 2021). As full reserves statistically reduce volatility compared to crypto-collateralized models (Jarno & Kołodziejczyk, 2021). Crypto-backed stablecoins (DAI) exhibit volatility of 0.008–0.014 under normal conditions and rise to 0.045 during extreme liquidity stress (March 2020) due to the automatic liquidation of ETH collateral (Ante et al., 2021). Algorithmic stablecoins (UST) had volatility of around 0.007 during January–April 2022, but experienced a total depeg in May 2022 (S. Lee et al., 2023).

Table 4. Comparison Matrix of Three Stablecoin Models Based on Empirical Literature

Dimensions of Analysis	Fiat-Backed	Crypto-Backed	Algoritmik
Daily volatility	0,001–0,003	0,008–0,014	0,007
Collateralization Ratio	100% (fiat currency, securities)	≥150% (ETH/WBTC)	0–100% (algorithmic/fractional)
Stabilization mechanism	Centralized bank reserves	Over-collateralization + automatic liquidation	Seigniorage / fractional reserve
Key risks	Counterparty & Regulation	Crypto asset liquidity	Bank run & deflationary spiral
Level of decentralization	Low	currently	Varied (low–medium)

Source : (Ante et al., 2021; Baur & Hoang, 2021; Jarno & Kołodziejczyk, 2021; S. Lee et al., 2023)

A comparison of the three types of stablecoins, fiat-backed, crypto-backed, and algorithmic, shows that none of them fully aligns with the principles of Islamic economics, although each contains partial elements with varying degrees of compliance. Based on the maqashid al-shariah framework, particularly hifz al-mal and ‘aql, the use of halal collateral such as gold tokens or digital sukuk is the alternative most compatible with shariah. Open smart contracts, community-consensus-based governance mechanisms, and the absence of intermediaries with hidden fees align with the values of justice (‘adl) and transparency (syafāfiyyah) (Atiyah et al., 2024). On the other hand, pure-seigniorage algorithmic stablecoins like UST exhibit the most prominent element of maysir (systemic speculation) because their stability relies solely on market expectations, without the backing of real assets (Clements, 2021).

4. DISCUSSION

Interpretation of Findings on Digital Liquidity Fragmentation

This study makes an original contribution, distinguishing it from previous research on stablecoins. In contrast to the predominant approaches in the literature, which focus on financial stability risks (Aquilina et al., 2025) or regulatory design (Zetzsche et al., 2023), this study specifically examines digital

liquidity fragmentation as a structural phenomenon rather than merely a technical variation within blockchain systems. A key, previously unreported finding is a structural paradox: the concentration of market capitalization among major issuers (USDT and USDC) coexists with the functional fragmentation of liquidity across various blockchain networks and DeFi protocols. This paradox is absent in the studies by (Lehar et al., 2024) and (Karkkainen & Broussard, 2025), which only highlight technical distribution aspects without capturing this structural dualism.

Furthermore, this study is the first to incorporate digital liquidity fragmentation into the *maqasid al-shariah* framework (*hifz al-mal*). Unlike previous CBDC studies (Omar, 2022; Tok, 2021), these findings indicate that preserving *hifz al-mal* in the digital era requires systemic integrity, not merely nominal stability, as cross-network fragmentation leads to *mafsadah* in the form of price disparities, liquidity pressures, and weakened monetary policy transmission. This paper introduces a new analytical framework that integrates structural, institutional, and normative dimensions and goes beyond the conventional view of the risks posed by stablecoins to monetary stability.

Digital liquidity fragmentation has three consequences: (1) liquidity shifts to high-yield private instruments, creating pockets of liquidity that are less responsive to monetary policy; (2) interest rate transmission and open market operations weaken because liquidity resides within private ecosystems governed by their own regulations; (3) risk concentration is centered on market makers and major stablecoin issuers, which increases systemic vulnerability to a crisis of confidence or a digital bank run.

Comparison with Stablecoin Regulatory Literature and Systemic Risk

The study identifies two main approaches to regulating stablecoins: integrating CBDC to maintain control over monetary policy, or imposing strict regulations on private issuers to prevent misuse and safeguard system stability (Dionysopoulos et al., 2024). This research confirms that both strategies remain important amid the fragmentation of digital liquidity, but does not focus the discussion on CBDC as part of global policy. Key findings indicate that without adequate regulatory coordination, liquidity fragmentation will continue to undermine monetary stability, regardless of the policy instruments employed.

The *maqasid* framework for CBDC highlights the importance of preserving the functions of money and the integrity of the monetary system to reduce fragmentation that hinders policy transmission, in line with findings that fragmentation of digital liquidity can reduce the effectiveness of monetary policy and create new risks (Omar, 2022). Research on the Sharia governance of

cryptocurrencies reveals gaps in fatwas and regulatory ambiguities that hinder coordinated implementation, thereby creating broader opportunities for private stablecoins to grow in a fragmented manner (Balarabe et al., 2025), which reinforces the need for regulatory harmonization and a robust Sharia framework. On the other hand, some studies highlight the benefits of asset-backed tokens under strict oversight, while others warn of the risks of speculation in highly volatile cryptocurrencies (Assulthoni et al., 2025; Omar, 2022). Research findings indicate that dollar-backed stablecoins can enhance payment efficiency and expand financial access; however, mechanisms relying on interest-bearing instruments must be re-evaluated to align with the principles of maqasid al-shariah.

The consensus in the literature is that the growth of unregulated digital financial instruments can increase the likelihood that liquidity issues will spread between conventional banks and the crypto ecosystem (Hakim et al., 2025; Q. Li et al., 2025). The findings of this study support this view by demonstrating that liquidity fragmentation can lead to price discrepancies, arbitrage, and imbalances in the distribution of funds, ultimately reducing market efficiency and the overall stability of the financial system.

Implications for Monetary Stability from the Perspective of Maqasid al-Shariah

From the perspective of maqasid al-shariah, particularly the principle of hifz al-mal, which means protecting wealth, the fragmentation of digital liquidity poses significant challenges to the stability of currency value, ease of access to liquid instruments, and legal certainty, all of which are essential prerequisites for safeguarding an individual's wealth (Nurhidayatullah & Sw, 2024). The growth of stablecoins could become a major problem if it causes systemic instability, a decline in the value of money, or a disruption to public welfare.

(Zuchroh, 2025), In her research on CBDC in the Islamic economy, she states that preserving value is an essential part of hifz al-mal; if money is mixed with highly volatile instruments or those lacking tangible assets, it loses its function as a store of value, thereby compromising the objective of hifz al-mal. This study supports that statement, showing that a digital liquidity crisis can be detrimental to value stability if not properly managed.

Studies on maqasid highlight the importance of managing stablecoin reserves and ensuring their transparency to maintain the value of money and reduce uncertainty (Omar, 2022; Tok, 2021). Uncertainty regarding reserves can trigger digital panic and accelerate negative cross-border effects, which run

counter to the maqasid principles of certainty and risk protection. According to the concept of *maslahah*, currency stability is a public good; imbalances in liquidity distribution weaken monetary policy and disrupt economic stability and public welfare (Bustamante, 2023; Hisyam et al., 2024). Therefore, the maqasid approach advocates for policies that minimize harm and maximize benefits, with the following recommendations: (1) strengthening central banks through CBDC; (2) establishing strict, Sharia-compliant reserve requirements for stablecoins; (3) implementing supervision grounded in maqasid; (4) limiting speculative practices and excessive uncertainty.

A discussion of the differences between CBDC (central bank digital currencies) and privately managed stablecoins reveals that while both serve similar roles, their regulatory frameworks differ, which could lead to problems if left unaddressed. (Wartoyo & Haerisma, 2022) argue that CBDCs serve to maintain financial stability, while private stablecoins can accelerate payment processes provided they are regulated under strict standards, a view supported by the findings of this study.

Without uniform regulations, differences between public and private systems can create legal loopholes, exacerbate problems, and undermine the effectiveness of monetary policy. The absence of spiritual and ethical considerations in digital business models often reduces economic activity to a purely profit-oriented pursuit, neglecting justice and the protection of market participants (Aufa et al., 2026). From a maqasid perspective, clarity regarding reserves, *halal* and productive assets, open access, and restrictions on speculative practices are required (Widjaja, 2024). Furthermore, interoperability and uniform supervisory standards are essential to ensure that fragmentation does not undermine stability and the objectives of safeguarding public wealth and the common good.

According to the maqasid approach, liquidity fragmentation requires achieving a balance (*tawazun*) between benefits (*maslahah*) and harms (*mafsadah*) (Guney, 2024). The benefits of stablecoins, such as cross border payment efficiency, increased financial inclusion, and low transaction costs, can be considered necessities (*hajiyyat*) as long as they do not violate basic necessities (*dharuriyat*).

However, the identified risks, such as price discrepancies, liquidity pressures, systemic arbitrage, and weakened monetary policy transmission, threaten these fundamental needs, as central banks lose control over value stability, asset protection (*hifz al-mal*) is jeopardized, and uncertainty (*gharar*) arises due to non-transparent reserves.

This study contributes by: (1) redefining digital liquidity fragmentation as a structural governance issue, not merely a technical variation within the blockchain system; (2) extending the *maqāṣid al-sharī'ah* framework into the domain of digital monetary architecture, specifically by operationalizing *hifz al-mal* as a normative criterion for evaluating systemic risk; and (3) providing a comparative normative analysis of stablecoin governance across various Islamic jurisdictions, thereby bridging the gap between Islamic legal scholarship and contemporary monetary policy discourse.

A. Islamic Countries that Have Adopted Policies and Fatwas on Stablecoins

The development of stablecoins across various countries reflects a variety of approaches (Crisanto et al., 2024). In Islamic countries, in particular, national Sharia authorities and financial regulators collaborate to ensure compliance with the principles of *maqasid al-Sharia*. Some Islamic countries regulate stablecoins through local fatwas and financial regulatory frameworks: Malaysia tends to permit them subject to conditions and oversight; Indonesia has issued a DSN-MUI fatwa and is considering integration into national regulations; the UAE and Bahrain emphasize licensing and compliance (Rizieq & Baidhowi, 2025; Sidiq & Muliana, 2025; Sufian et al., 2024).

In Malaysia, the integration of the *Maqasid* principles by the Securities Commission and the Shariah Council has resulted in policies that permit digital asset transactions provided they meet strict Shariah governance criteria (Putra et al., 2025). Indonesia, through the DSN-MUI Fatwa, provides a strong legal foundation for the Sharia economy, where the status of stablecoins such as IDRT (Digital Rupiah) is thoroughly reviewed to ensure the absence of elements of *gharar* and *maysir*, as well as to prevent monopolistic practices that are detrimental to the public interest (*maslahah*) (Rizieq & Baidhowi, 2025).

On the other hand, the United Arab Emirates (UAE) and Bahrain have adopted a pragmatic regulatory strategy. Both countries require all digital token issuers to hold an operational license and ensure that reserve mechanisms are managed transparently to meet sharia compliance standards and protect assets (*hifz al-mal*). Meanwhile, in Saudi Arabia, although policies continue to evolve through the Saudi Central Bank (SAMA), the primary focus remains on controlling systemic risk and integrating technology within a stable financial framework (Sidiq & Muliana, 2025).

Table 5. Comparison of Stablecoin Policies and Fatwas in Islamic Countries

Country	Sharia Authority/Regulator	Fatwa Position & Status	Compliance mechanism	Main Focus
Malaysia	Sharia Council & Securities Commission	Permitted under certain conditions (Permissive)	Integration of Maqāṣid principles and digital governance	Risk literacy and operational compliance
Indonesia	DSN-MUI	Fatwa regulates asset status; recognized as a commodity	Incorporation of fatwas into national regulations	Prevention of gambling, uncertainty, and monopoly
UEA	Local Financial Services Authority	Proactive-Regulatory	Strict licensing for token issuers	Investor protection and fintech innovation
Bahrain	Central Bank of Bahrain (CBB)	Accepted with formal regulations	DeFi licensing obligations and reserve audits	Reserve transparency and market stability
Arab Saudi	SAMA (Bank Sentral)	Conservative-Evolutionary	Systemic risk mitigation and strict supervision	Monetary sovereignty and value stability

Source : (Riziek & Baidhowi, 2025; Sidiq & Muliana, 2025; Sufian et al., 2024)

Table 5 shows that Islamic countries have adopted diverse approaches to stablecoins, resulting in a spectrum of policies that vary according to their respective institutional structures, regulatory capacities, and monetary stability objectives (Crisanto et al., 2024). These variations reflect how each country balances financial innovation with the protection of its national financial system.

If we take a closer look, Table 5 illustrates three approaches to stablecoin policy in Islamic countries: a permissive approach with Sharia compliance, the use of fatwas as normative guidelines, and the issuance of operational licenses focused on stability. The implications for asset protection include: open countries

emphasize good governance, reserve transparency, and risk education; whereas cautious countries prioritize macroeconomic stability and monetary sovereignty.

Regarding the comparison of stablecoin policies in Islamic countries, table 5 reveals diverse interpretations of *hifz al-mal* that have not yet been addressed in comparative analyses. Malaysia and Indonesia tend to view *hifz al-mal* as protection through inclusion, namely by integrating stablecoins into a clear regulatory framework to manage risks. In contrast, Saudi Arabia and Bahrain emphasize protection through restrictions, prioritizing macroeconomic stability through a more cautious approach (Rizieq & Baidhowi, 2025; Sidiq & Muliana, 2025; Sufian et al., 2024)

Differing policies across countries create challenges for cross-border coordination. In the absence of uniform standards regarding reserves, sharia audits, and regulatory harmonization, liquidity may potentially shift to regions with weak oversight, which, from a *maqāṣid* perspective, could lead to inequities in risk distribution and reduce the protection of collective assets (Güney, 2024; Kanu, 2025). This comparative section reinforces the view that stablecoins touch upon both monetary and normative governance issues. The application of *maqāṣid al-shariah* in stablecoin policy must shift from individual shariah compliance to safeguarding the stability of the system as a whole. The challenge is not choosing between innovation and stability, but rather formulating a framework that can maintain a balanced approach to both. Differences in approach, an inclusive one emphasizing *tahsin al-mu'āmalah* versus a restrictive one prioritizing *al-mafasid*, represent diverse *maqāṣid* priorities. This study asserts that no single approach is absolutely the best; what is required is a contextual balance tailored to each country's financial literacy, market depth, and supervisory capacity (Zuhdi & Nasir, 2024).

5. CONCLUSION

This research found that the growth of stablecoins creates new digital liquidity through reserve-backed issuance across various DeFi networks, posing a structural dilemma: capital is concentrated in USDT/USDC, while liquidity is distributed across 107–127 blockchains. This fragmentation causes price discrepancies and asynchronous liquidity tensions, undermining monetary policy implementation. From the perspective of *hifz al-mal* (protection of wealth), this condition constitutes a *mafsadah* (harm) because it disrupts the stability of value and poses risks to justice, even though stablecoins offer benefits such as payment efficiency and financial inclusion. The main issues are not the existence of stablecoins but rather governance, reserve transparency, and regulatory harmonization. This study contributes by expanding Islamic

economic studies through integrating structural fragmentation into the concept of hifz al-mal, emphasizing that digital asset protection requires systemic integrity beyond nominal stability. Additionally, the research proposes three normative steps: open reserve auditing, inter network interoperability, and cross-jurisdictional regulatory alignment to ensure that the benefits of stablecoins are not eroded by fragmentation related losses. The limitations of this study include: (1) lack of quantitative empirical testing on macroeconomic variables; (2) non fiat stablecoin models and maqasid dimensions outside of hifz al-mal have not been explored; (3) comparative policy analysis is limited to five Islamic countries. Future research should develop empirical models, expand the digital maqasid framework, explore halal asset-based stablecoin designs, and pursue cross-jurisdictional regulation synchronization that integrates maqasid al-shariah into fintech governance.

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