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# STABILITY WITHOUT CONSENSUS: LEGAL APPROACHES TO STABLECOINS IN THE EU, UK, SINGAPORE AND JAPAN

## ABSTRACT

This article examines the legal and regulatory approaches to stablecoins across four key jurisdictions: the European Union (EU), the United Kingdom of Great Britain and Northern Ireland (UK), the Republic of Singapore (Singapore), and Japan. The analysis reveals significant divergence in strategies, reflecting differences in legal traditions, economic priorities, and institutional design. While each jurisdiction seeks to achieve stablecoin stability, no consensus exists on how this should be done in legal terms. The EU's Markets in Crypto-Assets Regulation (MiCAR) emphasizes transparency and financial stability, yet may be too rigid to accommodate rapid market evolution. Japan prioritizes security through strict reserve and custody rules; Singapore fosters innovation through regulatory flexibility, though at the cost of greater redemption risk; and the UK pursues a balanced model combining liquidity, investor protection, and asset segregation.

The study highlights that regulatory consensus has not emerged even among leading economies, and each state adapts its legal framework to its own needs and risk profile. Against this backdrop, the article argues that Ukraine should develop a context-sensitive strategy balancing financial stability, investor protection, and innovation. Drawing on international practices - particularly the UK's liquidity and asset separation mechanisms - and global coordination initiatives such as Project Guardian, Ukraine can build trust in digital assets while aligning with evolving global standards. The recommendations offer practical legal guidance for integrating stablecoins into Ukraine's financial system in a secure and future-oriented way.

**Keywords:** legal regulation, digital assets, investor protection, insolvency, stablecoin, financial stability, liquidity requirements, innovation

**JEL Classification:** K29, G18, O31

## INTRODUCTION

Stablecoins have emerged as one of the most promising innovations in the modern financial system, bridging the gap between traditional finance and digital assets. By combining the speed and efficiency of digital currencies with the stability of fiat currencies, they offer a unique solution to the volatility associated with cryptocurrencies like Bitcoin and Ethereum. This dual nature has made stablecoins particularly attractive for facilitating instantaneous, cost-effective transactions, enabling businesses to bypass many of the constraints of traditional banking systems. Their growing utility highlights their significant role in optimizing cross-border settlements and enhancing global financial integration.

However, the rapid adoption of stablecoins also presents considerable challenges for national regulators. As of October 27, 2024, the total market capitalization of stablecoins has reached USD 172.437 billion (Binance News, 2024), reflecting their increasing importance. Despite their benefits, stablecoins carry risks that can undermine financial stability, including operational vulnerabilities, counterparty credit risks, loss of investor confidence, and instances of devaluation or "breakages" (PYMNTS, 2022; Gladwin, 2022). These risks emphasize the need for robust and comprehensive regulatory frameworks.

While some jurisdictions, such as the EU, Singapore, Japan, and the UK, have made significant progress in regulating stablecoins, challenges remain. Issues such as the lack of unified standards, regulatory gaps, and insufficient mechanisms for cross-border settlements highlight the need for coordinated international approaches. For Ukraine, which has been developing its virtual asset legislation since 2020, learning from international experience is crucial. By addressing identified shortcomings and leveraging successful regulatory practices, Ukraine can ensure market stability, safeguard investors, and strengthen its position within the global digital financial ecosystem.

## LITERATURE REVIEW

The emergence of stablecoins and their rapid integration into the financial payment system has spurred growing academic interest in the regulatory and economic characteristics of these crypto-assets. Research in this field spans a wide range of topics, from exploring the properties of digital assets and their impact on financial markets to examining the macroeconomic implications and mechanisms behind their stability. Scholars such as Bullmann, Klemm, and Pinna (2019), Arner, Auer, and Frost (2020), and others (Barthelemy, Gardin, Nguyen, 2023; Berentsen, & Schär, 2019; ECB, 2020; Kim, 2022) have explored the role of stablecoins in financial markets, focusing on their impact and integration. In contrast, Catalini & De Gortari (2021), Liao & Caramichael (2022), Lyons & Viswanath-Natraj (2022), Asadov, Yildirim, & Masih (2023), Kwon, Pongmala, Qin, Klages-Mundt, Jovanovic, Parlour, ... & Song (2023) have examined the broader economic and stability implications of these digital assets.

A significant body of literature focuses on the evolving regulatory frameworks that govern stablecoins, with scholars debating the balance between stringent regulation and fostering innovation. Steven L. Schwarcz's (2021) work, *"Regulating Global Stablecoins: A Model-Law Strategy"*, stands out in this regard. Schwarcz examines the challenges and opportunities posed by global stablecoins and proposes a model law as a pragmatic alternative to international treaties for their regulation. He provides a potential text for such legislation, demonstrating how this approach aligns with the principles and recommendations of leading central banks and international financial organizations and highlighting the need for international coordination without stifling innovation.

Further exploration of regulatory approaches can be found in Pierre Ostercamp's (2022) study, *"Stablecoin Regulation: EU, UK, and US Perspectives"*. Ostercamp compares the regulatory frameworks in the EU, the UK, and the US, discussing the differing approaches to stablecoin regulation. He argues that centralized stablecoin issuers should face strict requirements regarding the management of reserve assets, liquidity, and capital buffers, ensuring constant redemption capabilities. Ostercamp contends, however, that traditional deposit protections, akin to those in the banking sector, may not be necessary if other safeguards such as asset segregation and protection are implemented.

Another key issue in stablecoin regulation is consumer protection. Shi, He, and Liu (2021) focus on this aspect, proposing legal frameworks to address potential risks to consumers in the context of stablecoin usage. This discussion contrasts with the work of Nøkleholm and Kviseth (2021), who analyze the EU's regulatory proposals for crypto-assets, including stablecoins, released in 2020. They provide insights into the regulatory measures concerning issuers and service providers, underscoring the regulatory tension between consumer protection and fostering innovation within the crypto sector.

Francesca Carapella (2024) takes a different perspective by addressing the competitive disadvantage that stablecoin issuers face compared to traditional financial institutions. She proposes a resilience-enhancement mechanism designed to address this issue, suggesting that such a mechanism would not only help stabilize the stablecoin market but also indirectly enhance the resilience of traditional financial institutions. Carapella compares this mechanism to existing regulatory proposals, highlighting the potential for a more holistic regulatory approach that strengthens both traditional financial systems and the emerging digital assets market.

In addition to regulatory frameworks, the prevention of financial crime through stablecoins is a crucial area of concern. Okunleye Olalekan Jamiu (2024), in his study *"The Role of Information Governance in Mitigating Financial Crime Risks in Stablecoin Transactions"*, examines how information governance can be leveraged to reduce financial crime risks in stablecoin transactions. He emphasizes the importance of integrating Know Your Customer (KYC) and Anti-Money Laundering (AML) measures with transaction monitoring systems to improve crime detection and mitigate risks associated with stablecoin use.

The legal regulation of stablecoin circulation is explored in the works of Martino (2022), Mulvey (2022), Bains, Ismail, Melo, and Sugimoto (2022), Carapella (2024), Tercero-Lucas (2024), Giardinella (2024), Zhu (2023), Borneman (2023), Martino (2023), Falk, and Hammer (2022), Sheehy, Hawkins, and Diaz-Granados (2023). These studies contribute to the

broader scholarly understanding of stablecoin regulation by examining the diverse legal challenges and proposing solutions to ensure the safe integration of stablecoins into the financial system.

One of the key drivers of continued academic research in stablecoin regulation is the rapid evolution of legislative initiatives. As these digital assets become more integrated into the global payment system, particularly for cross-border transactions, the need for a robust regulatory framework becomes even more pressing. The literature reflects the growing controversy surrounding the balance between stringent regulation and the flexibility needed for innovation. While some scholars advocate for strict regulatory oversight to mitigate risks, others argue that excessive regulation could hinder the technological advancements that stablecoins promise. This debate underscores the need for a regulatory approach that not only ensures financial stability and consumer protection but also allows for the continued development and innovation of these digital assets within the global financial ecosystem.

## AIMS AND OBJECTIVES

The aim of this article is to conduct a comparative analysis of the regulatory approaches to stablecoins adopted by the EU and selected Project Guardian countries - namely the UK, Singapore, and Japan. The study identifies gaps in existing frameworks and proposes policy recommendations tailored to Ukraine's regulatory environment. The article is structured as follows: the first section explores the theoretical and practical significance of stablecoins; the second section examines regulatory models in the EU, the UK, Singapore, and Japan; the third section highlights key challenges and gaps; and the final section provides recommendations for Ukraine's stablecoin regulatory framework.

## METHODS

The research methodology is grounded in a comprehensive comparative analysis of the regulatory approaches to stablecoins adopted by the EU and select countries participating in the Guardian project, including the UK, Singapore, and Japan. These countries and regions were chosen due to their substantial influence on global financial markets and active engagement in the regulation of digital assets. As one of the world's largest economic blocs, the EU is developing a regulatory framework for crypto-assets at a supranational level, most notably through the introduction of the Markets in Crypto-Assets Regulation (MiCAR). Analyzing MiCAR's provisions offers valuable insights into the EU's approach to creating a stable, transparent, and secure environment for the circulation of stablecoins, which could inform similar regulatory efforts in Ukraine.

In the case of the Guardian project countries, the UK has been formulating its regulatory framework independently since its exit from the EU, aiming to retain a leading role in international finance. The UK's approach reflects its goal of balancing support for innovation in digital assets with the assurance of financial stability. Singapore, as a major financial hub in Asia, has adopted a distinctive regulatory approach to digital assets, including stablecoins, by implementing a progressive framework that fosters innovation while safeguarding investor rights. Japan, a pioneer in the establishment of a legal framework for cryptocurrencies, offers valuable lessons from its extensive experience in regulating digital assets and ensuring their secure oversight.

To organize and interpret the collected data, the study employs content analysis of relevant legal acts, government reports, and analytical materials. This approach enables the identification of key trends, risks, and benefits across the various regulatory frameworks for stablecoins. Additionally, comparative legal analysis is used to examine the similarities and differences between these regulatory models, focusing on their legal, financial, and technological aspects. Legal forecasting is also employed to project how these insights could be applied to the Ukrainian context, considering the country's specific legal, economic, and social realities.

The analysis was conducted in several stages:

1. Key legal documents, including the micar, UK's regulatory framework, Singapore's regulations on digital assets, and Japan's cryptocurrency laws, were examined. This involved identifying provisions related to the management of reserve assets, issuer requirements, and consumer protection measures.
2. A systematic comparison was made between the regulatory approaches of the EU, UK, Singapore, and Japan. The focus was on how each jurisdiction addresses core issues such as reserve asset requirements, issuance protocols, and transparency mechanisms for stablecoin circulation.

3. Building on the comparative analysis, recommendations for Ukraine's stablecoin regulation were developed, based on the lessons learned from these jurisdictions. This included considerations of Ukraine's economic structure, financial stability needs, and regulatory capacity.

While the methodology provides comprehensive insights, certain limitations must be noted. The regulatory models examined are tailored to the unique financial and legal landscapes of their respective jurisdictions, making direct application to Ukraine's legal system complex and requiring adaptation. The regulatory environment surrounding digital assets is continuously evolving, and some of the data may become outdated as new laws and regulations are introduced. The study focuses on a limited number of jurisdictions, which, while influential, may not fully represent the diversity of regulatory approaches globally. The inclusion of additional countries could provide a more comprehensive view.

Despite these limitations, the study offers valuable insights into the regulatory frameworks for stablecoins and provides a solid foundation for further research and policy development in Ukraine.

## RESULTS

Stablecoins are defined by the Financial Stability Board as a crypto-asset designed to maintain a stable value relative to another asset (typically a currency unit, commodity, or basket of assets) (FSB, 2019). This feature gives stablecoins lower volatility compared to cryptocurrencies. Unlike central bank digital currencies, stablecoins can be issued not only by central banks but also by private entities, underscoring the need for specialized regulatory oversight to ensure their stability and mitigate financial risks.

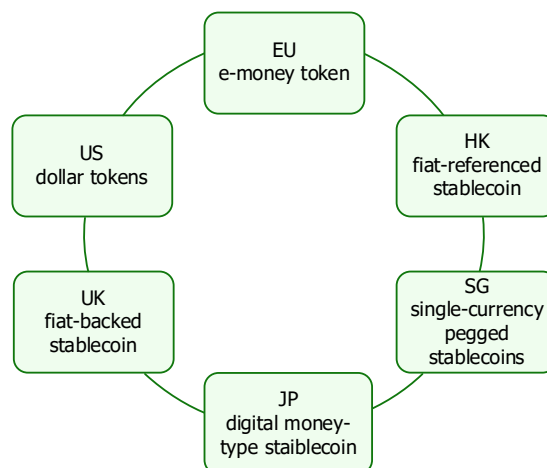
Notably, some countries avoid the term "stablecoin" in legislation, primarily due to its potential for misleading interpretation. The European Central Bank's (ECB) crypto-asset task force highlights that the term "stability" tends to carry positive connotations, especially when referring to money. However, ECB representatives stress that such positive associations, implied by the term, are not necessarily accurate for stablecoins. The stability of these crypto-assets largely depends on their design and risk management practices rather than their inherent characteristics. Consequently, the task force recommended regulatory actions to replace "stablecoin" with a less ambiguous term that does not focus solely on the "promise of stability" from the issuer (ECB, 2020).

Consequently, the EU's MiCAR does not designate stablecoins as a separate category but instead introduces two new token categories aimed at maintaining stable value:

- asset-referenced tokens;
- electronic money tokens.

Asset-referenced tokens are defined as crypto-assets intended to maintain stable value relative to another asset, including official currencies. Electronic money tokens aim to maintain a stable value relative to a single official currency. MiCAR also addresses algorithmic tokens, which adjust supply based on demand changes. However, an analysis of the document reveals that the EU devotes minimal attention to algorithmic tokens, mentioning them only twice.

In essence, MiCAR establishes new regulatory categories for stablecoins without explicitly acknowledging the term "stablecoin", instead offering clear definitions and classifications for relevant crypto-assets. This reflects a cautious regulatory approach focused on risk management. Whether this approach will be adopted by other countries remains an open question. There is a possibility that MiCAR's terminology and categories could become globally accepted through the so-called "Brussels Effect", where EU policies shape standards and terminology beyond its borders. However, some scholars warn that, otherwise, MiCAR's novel approaches might mislead non-professional investors (Cichon, 2024). In contrast, experiences from other countries, particularly the UK, Singapore, and others, indicate an opposing trend. During the formation of their respective regulations, these countries tend to use the term "stablecoin" rather than "token", as seen in EU legislation (MiCAR) (Figure 1).



**Figure 1. Terminology of Stablecoins in Different Regulatory Frameworks.** (Source: Author's elaboration based on data from the Financial Stability Institute)

The consolidation of several countries within Project Guardian has likely influenced the shared, yet distinct from the EU, approach to terminology regarding stablecoins. On 30 October 2023, the Monetary Authority of Singapore (MAS) announced the launch of a joint initiative involving the Financial Conduct Authority (UK), the Financial Services Agency (JP), the International Monetary Fund, and the Swiss Financial Market Supervisory Authority. This initiative aims to deepen cross-border cooperation on setting standards and legislation for a sustainable digital asset ecosystem, including stablecoins. In 2024, financial institutions from the French Republic (Banque de France) and the Federal Republic of Germany (Deutsche Bundesbank) joined the project, influencing regulatory approaches among the participant countries toward stablecoin regulation.

Unlike the EU's MiCAR, which represents a dedicated legal act for the regulation of crypto-asset markets, Project Guardian participants (Singapore, Japan, and the UK, among others) have adopted different regulatory approaches - either through the modernization of existing laws or the application of existing legal frameworks, as in the United States and Switzerland. For instance, the UK has chosen a gradual approach, opting to make amendments to current legislation rather than establishing a wholly new law. The initial stage will focus on regulating stablecoins backed by fiat currencies as a means of payment, through amendments to the Electronic Money Regulations (2011) and Payment Services Regulations (2017). Additionally, the redefinition of "specific investments" within the Financial Services and Markets Act and the Regulated Activities Order will allow the issuance and custody of fiat-backed stablecoins to be considered regulated activities, necessitating authorization by the UK Financial Conduct Authority.

This phased approach appears more practical, as it optimizes the resources and time required for the development and implementation of new norms.

Once again, it is worth noting that in Ukraine, the development of a regulatory framework for crypto-assets has been underway since 2020, with the first draft law "On virtual assets" registered on June 11, 2020, and to date, this area remains unregulated (Verkhovna Rada of Ukraine, 2020). To date, the sector remains largely unregulated. Legal certainty, achieved through progressive reforms, helps to mitigate legal uncertainties, which is especially critical for micro and small enterprises (SMEs) that may lack the resources for swift adaptation to new regulatory realities. Additionally, the preservation of judicial precedents and existing legal interpretations helps to maintain the stability of the legal system, bolstering trust in legal norms and reducing the likelihood of legal conflicts.

In the second stage, the UK plans to develop a regulatory framework for crypto-assets other than fiat-backed stablecoins, as well as for standard activities associated with them, such as issuance, custody, and exchange operations (HM Treasury 2022, p. 36; HM Treasury 2023, p. 94). As previously noted, in earlier HM Treasury documents, the established term 'fiat-backed stablecoin' is used - referring to a crypto-asset that aims to or intends to maintain a stable value by pegging to a fiat currency and holding fiat currency as full or partial collateral. This definition does not limit itself to specific currencies (for example, in Singapore, stablecoins are pegged to the Singapore dollar or any G10 currency) (Certik, 2024) and excludes so-called algorithmic or crypto-backed stablecoins. These tokens will be covered under the crypto-asset regulations in Stage 2.

It is worth noting that the forthcoming UK legislation will apply to all entities providing crypto-asset-related services, both within and outside the UK, if their clients are UK residents, regardless of the entity's primary location. This approach closely

resembles the territorial application scope of the EU's MiCAR (MiCAR, 2023). However, unlike MiCAR, the UK regulatory framework does not currently plan to introduce a reverse solicitation mechanism that would allow foreign entities to provide services to UK residents solely at their own initiative without adhering to UK regulations (Đurić, 2024). Similar approaches are observed in Singapore and Japan.

Refraining from the reverse solicitation mechanism in the UK and other regulatory systems has its advantages and disadvantages. On one hand, this approach enhances control over the stablecoin market and better protects consumer interests, which is particularly important for non-professional participants. On the other hand, it limits access to new technologies and reduces competition, which may make the market less attractive to international participants. Such an approach is justified in countries striving to uphold high regulatory standards to ensure financial market stability and security.

Overall, a risk-oriented approach - where the level of regulation is determined based on the risk level of the activity - is typical of all countries concerned with the legal regulation of stablecoin circulation. They set different rules for issuers of such assets, including licensing requirements, reserve requirements, redemption terms, and reporting obligations, among others.

### Licensing Approaches and Their Impact

Regarding licensing, the approaches of the countries studied can generally be divided into those that permit stablecoin issuance exclusively by financial institutions and those that allow issuance by both financial institutions and other entities that have obtained the relevant license. For example, MiCAR establishes different rules for issuers of electronic money tokens and asset-referenced tokens, introducing additional requirements for 'significant stablecoins,' given their potential threat to financial stability. MiCAR introduces stratification in terms of issuance permissions for stablecoins. Legal entities in the EU may issue asset-referenced tokens upon receiving authorization (Article 16 of MiCAR). This approach significantly limits the number of potential issuers, especially small businesses for which the authorization process is too burdensome. In contrast, electronic money tokens may only be issued by authorized credit institutions or electronic money institutions (Article 48). Issuers are required to publish a stablecoin issuance prospectus (whitepaper) and submit it to the competent authority along with a designated list of documents (Articles 17, 48 of MiCAR).

A similar approach to authorizing the issuance of currency-backed stablecoins is also characteristic of Japan, which amended the Payment Services Act in June 2022, allowing only licensed banks, money transfer agents, and trust companies to issue stablecoins (Ashizawa, 2020). This approach enhances trust in these assets, especially among investors and consumers, by ensuring a high level of transparency and financial accountability.

In contrast, in Singapore, the MAS permits both banks and non-bank entities to issue single-currency pegged stablecoins (SCS). For non-bank issuers, their inclusion in the SCS regime is determined by the total value of SCS they have in circulation. If the total value exceeds SGD 5 million, the issuer must obtain a Major Payment Institution license to provide 'stablecoin issuance services.' These issuers fall under the SCS regime and may label their SCS as 'MAS-regulated stablecoin.' Conversely, issuers with SCS in circulation valued under SGD 5 million are exempt from the SCS regime and cannot label their SCS as 'MAS-regulated stablecoin' (Msiglobal, 2024). Unlike the stringent legal requirements in the EU and Japan, the Singaporean approach provides opportunities for innovation and development in a less regulated environment for smaller participants, which can encourage competition. Meanwhile, stricter requirements for large issuer companies increase confidence in their activities. This approach allows the combination of innovation and flexibility with a sufficient level of control to protect financial stability. However, this regulatory approach introduces certain risks. First, there is a risk to financial stability if the volume of stablecoins issued by smaller, less-regulated entities grows significantly. This could affect the overall stability of the financial system, especially if these stablecoins lack adequate backing or regulatory oversight. Secondly, systemic risks may arise from a large number of small issuers operating without sufficient oversight, potentially leading to issues if trust in these stablecoins is lost or if an issuer defaults. Furthermore, there are consumer protection risks if smaller issuers fall short of their obligations, as consumers may not be adequately protected in case of insolvency or failure. Lastly, as the use of stablecoins increases, it could pose risks to monetary policy. If stablecoins gain widespread adoption, they could reduce the ability of central banks to influence monetary policy, potentially undermining efforts to control money supply and interest rates. Therefore, while the Singaporean model encourages innovation, it requires careful management to avoid potential systemic and financial risks.

### Reserve Requirements and Audits: Risk Management Measures

Regarding reserve requirements and audits, countries' approaches also differ. In the EU, for example, electronic money token issuers are required to hold part of the funds received in separate accounts in credit institutions (at least 30%), while the rest must be invested in safe, low-risk assets (Article 54 of MiCAR). Upon request by the electronic money token

holder, the issuer must redeem the token at any time at its nominal value (Article 49 of MiCAR). Issuers must conduct an independent audit of reserves at least once every six months and keep these assets in separate accounts. Additionally, information on the number of tokens in circulation and the composition of reserve assets must be published monthly (Article 36 of MiCAR).

Regarding asset-backed tokens, the MiCAR introduces minimum standards for their issuance and reduces monitoring costs while exempting the issuance of tokens from authorization if the total amount of stablecoins over 12 months is less than EUR 5 million or if they are intended for qualified investors (Article 16 of MiCAR). At the same time, it enhances oversight of issuers through reporting requirements (quarterly if the issuance value of the token exceeds EUR 100 million), governance (Articles 33-34 of MiCAR), own funds (Article 35 of MiCAR), and reserves (Articles 36-37 of MiCAR), among others.

The Regulation also distinguishes between 'significant' and insignificant tokens based on risk. The significance of an asset is determined by criteria such as the number of holders (over 10 million), market capitalization (over EUR 5 billion), and transaction volume (amounting to EUR 500 million or 2.5 million transactions), among others. Some criteria, like market capitalization and transaction volume, are objective but are criticized for being measured at the company level rather than at the group level. Furthermore, setting thresholds in the MiCAR rather than in delegated legislation may complicate future adjustments.

'Significant' stablecoins are subject to stricter requirements, including higher capital reserves and oversight by the European Central Bank (ECB) rather than national authorities. This is due to the substantial risks they pose to financial stability and monetary policy. Large-scale fluctuations in their value or a loss of confidence in them could trigger financial crises, impacting broad markets. Additionally, the widespread use of such stablecoins could limit the ability of national central banks to influence monetary policy, as they might replace national currencies as a medium of exchange or store of value. The higher level of oversight, particularly by the ECB, ensures more coordinated and consistent regulation across the EU, allowing for better management of these risks and maintaining financial stability.

Overall, the MiCAR regulation is based on a risk-aware approach that requires accurate forecasting of their magnitude. It includes a mechanism for monitoring market changes and obliges the European Commission to prepare reports on the development of the crypto asset market. However, this approach has been criticized for its insufficient forecasting ability, as it relies on reporting data rather than the use of innovative tools such as regulatory technologies or 'sandboxes' (Cichon, 2024).

Japanese legislation is characterized by stricter requirements for reserve assets. According to the law, they must be held in trust funds within the country and can only be invested in deposits of Japanese banks. This ensures the stability of stablecoins, which must be pegged to the Japanese yen, and gives holders the right to redeem tokens at face value. At the same time, stablecoins pegged to the US dollar and issued outside Japan are not recognized (Ashizawa, 2020).

Such requirements of Japanese legislation regarding reserve assets for stablecoins have both positive and negative aspects. On the one hand, regulations that require reserves to be held in trust funds within the country and allow them to be invested only in deposits of Japanese banks contribute to financial stability and the protection of the domestic market. This enhances the reliability of stablecoins for users, prevents issuers' insolvency and strengthens the national economy, as all transactions go through local banks. Moreover, such regulation reduces the risk of uncontrolled financial flows from abroad, which can protect the domestic market from currency fluctuations and diminish the potential impact of foreign factors. Transparency and increased regulatory oversight due to local reserve storage allow for better tracking of stablecoin transactions and ensure their stability.

On the other hand, this practice creates several limitations. The refusal to recognize stablecoins issued outside Japan significantly reduces competition in the market, limiting consumer access to international innovations in the field of digital assets. Foreign investors may view such conditions as a barrier to entering the Japanese market, which diminishes its attractiveness to international companies. Dependence solely on domestic banks creates a risk of monopolization in certain market sectors and additional strain on the national financial system. Furthermore, in conditions of global integration, the lack of access to dollar-pegged stablecoins may complicate Japanese companies' entry into international markets and their ability to conduct transactions in global currencies such as the US dollar.

In contrast, the regulation of stablecoins in Singapore, as in other matters, is more flexible. Issuers can issue stablecoins pegged to the Singapore dollar or G10 currencies. The reserves for such assets must ensure coverage of at least 100% of their value, and their composition must meet requirements regarding low credit and liquidity risks. To ensure transparency and control, reserves are subject to monthly audits, and independent audits must be conducted at least once a year. Reserve assets must be held in separate accounts, distinct from the issuer's assets, including foreign entities only if they have a high credit rating and a licensed branch in Singapore. The results of the audits must be published on the issuer's

website and submitted to the MAS no later than the end of the following month. Additionally, issuers are subject to prudential requirements regarding their own capital of at least SGD 1 million or 50% of annual operating expenses, if that amount exceeds 1 million. Issuers are prohibited from engaging in other types of activities that may create additional risks (Payment Services Act 2019, n.d.-b; MAS, 2023). Thus, the Singapore model balances investor protection with maintaining a competitive market, which can serve as a model for other countries seeking to combine high supervisory standards with flexibility for financial innovations.

The process of redeeming stablecoins, unlike in other countries (the EU, the UK, Japan, and others), must be completed within 5 business days. In the event of market shocks, MAS may extend the redemption period for the realization of reserve assets. This approach creates certain risks for investors, especially during market instability when quick access to capital is crucial for protecting their interests. During this time, fluctuations in the value of the assets backing the stablecoins may occur, which consequently threatens the stability of their value. Delays in redemption also impact trust in the issuer and the stablecoin overall, increasing demand for alternative digital instruments.

The UK's Financial Conduct Authority (FCA) offers a more balanced regulatory model. It establishes requirements for issuers of fiat-backed stablecoins. Among the key requirements is ensuring the stable value of stablecoins by holding reserve assets equivalent to their circulation. These assets must be stable and liquid (government treasury debt securities with maturities of no more than one year, as well as short-term cash deposits held in various banking institutions) (FCA, 2023, p. 109) to ensure the possibility of rapid redemption of stablecoins upon customer request. Issuers are required to clearly separate their reserve assets from their own assets, which helps avoid mixing and protects against insolvency.

Holders of stablecoins will have the right to redeem stablecoins for fiat currency at their nominal value within the next business day after submitting a request. To ensure transparency, issuers must regularly publish key information on their websites as well as through other communication channels. Furthermore, the FCA will regulate activities related to the storage of stablecoins. Entities providing such services must ensure adequate protection of customer assets by using special accounts to separate customer assets from their own and by conducting an annual audit of such assets by an independent auditor. These entities must also provide customers with information about security measures, adhere to high accounting standards, ensure the reliability of their systems, and guarantee transparency in asset management (FCA, 2023, p. 109).

## DISCUSSION

The comparative analysis of stablecoin regulatory approaches in the EU, the UK, Singapore, and Japan reveals both commonalities and significant differences, shedding light on the complex and evolving nature of stablecoin governance. Our findings indicate that while the EU adopts a more standardized and comprehensive approach through the Markets in Crypto-Assets Regulation (MiCA), the UK emphasizes flexibility, fostering innovation while maintaining strong reserve and liquidity requirements. Singapore, under the Payment Services Act, focuses on a risk-based approach tailored to the nature of digital payment tokens, while Japan integrates stablecoin regulation into its existing financial regulatory system, ensuring strict oversight comparable to traditional financial instruments.

When juxtaposed with previous research, these results align with Ostercamp's (2022) conclusion that the EU, UK, and US adopt varying approaches, with the EU leading in comprehensive regulatory coverage. Our study further corroborates Schwarcz's (2021) argument that global coordination remains a challenge, as the lack of uniformity between regulatory regimes could potentially fragment the stablecoin market. The findings also echo Carapella's (2024) concerns about the competitive disadvantages faced by stablecoin issuers compared to traditional financial institutions, with our analysis highlighting how Japan's strict oversight mechanisms resemble those applied to banks.

Notably, our research extends beyond existing literature by incorporating the regulatory stance of Project Guardian countries such as Singapore and Japan. While Catalini & De Gortari (2021), Liao & Caramichael (2022) and others primarily focus on stablecoin stability mechanisms and macroeconomic implications, our study emphasizes regulatory gaps, offering a nuanced understanding of how different jurisdictions approach these digital assets.

However, this study has certain limitations. First, the rapidly changing regulatory landscape means that new legislative initiatives may emerge, potentially altering the frameworks analyzed. Additionally, while our focus is on the EU, the UK, Singapore, and Japan, future research could benefit from including a broader range of jurisdictions, especially those with emerging or experimental regulatory models. Finally, this study does not delve deeply into the technical underpinnings of stablecoins — an area that warrants further exploration to fully understand how technological advancements might influence regulatory strategies.

In summary, our comparative analysis highlights both convergence and divergence in stablecoin regulation, underscoring the need for greater international coordination and continuous adaptation of legal frameworks. These insights lay the groundwork for the subsequent policy recommendations tailored to Ukraine's regulatory context.

## CONCLUSIONS

Stablecoins, as financial instruments blending traditional asset features with innovations from the crypto industry, are gaining increasing prominence in the global financial system. However, their regulatory status remains ambiguous, prompting countries, including Ukraine, to develop effective legal mechanisms to mitigate risks. A comparative analysis of approaches from the EU, UK, Japan, Singapore, USA, and Switzerland reveals diverse strategies, ranging from enacting new laws (EU) to modernizing existing frameworks (UK, Japan, Singapore) or relying on general legal principles (USA, Switzerland). Differences also emerge in terminology, issuer requirements, and regulatory specifics, reflecting each jurisdiction's priorities, such as investor protection, financial stability, and fostering innovation.

The EU's MiCAR prioritizes stability and transparency, but its strict requirements may hinder market responsiveness. Japan focuses on financial security and domestic market protection, imposing stringent reserve requirements that limit foreign access. Singapore adopts a flexible approach, enabling the issuance of stablecoins pegged to G10 currencies and promoting innovation. However, this flexibility increases redemption risks during crises. The UK offers a balanced model that combines market stability with issuer flexibility. It mandates strict liquidity requirements, swift redemption processes, and asset segregation, which provide robust protection for investors. Moreover, the UK's approach to mitigating stablecoin issuer insolvency - by clearly separating issuer assets from reserve assets - ensures that clients are protected even in the event of an issuer's insolvency.

For Ukraine, the regulatory frameworks of both the EU and the UK are especially relevant given its strategic goal of European integration. While MiCAR provides a comprehensive foundation, Ukraine can benefit from incorporating the UK's strengths, such as liquidity requirements, asset segregation, and rapid redemption processes. These measures not only build trust in digital assets but also offer critical safeguards for financial stability, particularly during times of economic uncertainty.

The growing significance of stablecoins in the global financial system underscores the need for harmonized regulatory approaches that account for national market characteristics while fostering international collaboration. As Ukraine aligns its legislation with EU norms, drawing on international best practices like the UK's insolvency protection measures can further enhance resilience. Joining global initiatives such as Project Guardian could also help Ukraine harmonize its regulatory standards, mitigate risks, and foster trust in its financial system.

Future research should focus on developing a stablecoin regulatory framework tailored to Ukraine's integration into the EU's financial ecosystem. Key areas include cross-border coordination, insolvency protection, and mechanisms to balance financial stability with innovation. Additionally, exploring how public-private partnerships can contribute to building a secure, resilient, and innovative financial system will provide policymakers with actionable insights for effectively integrating stablecoins into Ukraine's financial market while safeguarding national interests.

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## ADDITIONAL INFORMATION

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## CONFLICT OF INTEREST

*The Authors declare that there is no conflict of interest.*

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## СТАБІЛЬНІСТЬ БЕЗ КОНСЕНСУСУ: ПРАВОВІ ПІДХОДИ ДО РЕГУЛЮВАННЯ СТЕЙБЛКОЇНІВ У ЄС, ВЕЛИКІЙ БРИТАНІЇ, СІНГАПУРІ ТА ЯПОНІЇ

Автори досліджують правові та регуляторні підходи до стейблкоїнів у чотирьох ключових юрисдикціях: Європейському Союзу (ЄС), Великій Британії, Сінгапурі та Японії. Аналіз демонструє суттєві відмінності в стратегіях, що зумовлені різними правовими традиціями, економічними пріоритетами та інституційною архітектурою. Попри спільну мету – забезпечення стабільності стейблкоїнів – держави не дійшли консенсусу щодо того, якими саме юридичними засобами її слід досягати. У той час як ЄС через регламент MiCAR акцентує на прозорості й стабільності, це супроводжується надмірною жорсткістю норм. Японія гарантує фінансову безпеку шляхом жорстких вимог до резервів і зберігання активів, Сінгапур натомість заохочує інновації через гнучке регулювання, що створює ризики викупу в кризових умовах. Велика Британія прагне до збалансованого підходу, поєднуючи ліквідність, захист інвесторів і сегрегацію активів.

У дослідженні підкреслено, що навіть серед провідних економік світу не сформовано єдиного правового підходу до регулювання стейблкоїнів: кожна країна адаптує свою модель відповідно до власного контексту й профілю ризиків. У зв'язку з цим стаття обґрунтовує необхідність розроблення в Україні національної стратегії регулювання стейблкоїнів, яка збалансуватиме інновації, фінансову стабільність і захист інвесторів. Зважаючи на міжнародну практику, зокрема британські вимоги до ліквідності та відокремлення активів, а також на глобальні ініціативи координації, такі як Project Guardian, Україна може забезпечити довіру до цифрових активів і гармонізувати свої підходи з актуальними світовими стандартами. Запропоновані рекомендації формують практичну правову основу для безпечної та адаптивної інтеграції стейблкоїнів у фінансову систему України.

**Ключові слова:** правове регулювання, цифрові активи, захист інвесторів, неплатоспроможність, стейблкоїн, фінансова стабільність, вимоги до ліквідності, інновації

**JEL Класифікація:** K29, G18, O31