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Surviving the Phantom Menace of Dollar Stablecoins: KRW Stablecoin Strategy*

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The proliferation of dollar-denominated stablecoins challenges national monetary sovereignty, necessitating strategic responses. This paper advocates for a strategically designed KRW-based stablecoin to protect Korea's monetary sovereignty and bolster its role in the digital economy. A four-pillar institutional foundation is proposed: first, a flexible regulatory policy ensuring user trust and competitive ease of access; second, issuance discipline for purchasing power stability and fiscal soundness; third, a credible, diversified reserve asset strategy, including Bitcoin, to build international trust; and fourth, diverse use cases amplified by an expanded issuer scope, including technology firms, to leverage network effects for widespread adoption. Implementing this framework aims to counter currency substitution threats and establish the KRW stablecoin as a key digital monetary instrument, enabling Korea to proactively shape its monetary future.

Key Words: stablecoins, monetary sovereignty, digital economy, digital dollarization

Ⅰ. Introduction

Amid concerns over monetary sovereignty triggered by the rise of dollar-denominated stablecoins[1], discussions surrounding the issuance of a KRW-based stablecoin have gained momentum. Monetary sovereignty, in this context, refers to a nation's capacity to control its currency, manage monetary policy effectively (e.g., influencing interest rates and credit conditions), and maintain financial stability. The widespread adoption of dollar stablecoins could potentially erode this sovereignty by diminishing seigniorage revenue, complicating the management of capital flows, reducing the effectiveness of domestic monetary policy transmission mechanisms, and challenging the central bank's role as the lender of last resort.

Dollar stablecoins were initially used by capital holders in countries with strict capital controls or by informal traders. However, recent moves by the U.S. government to in-

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stitutionalize and expand the market for dollar stablecoins have heightened vigilance among central banks around the world. This increased caution is evidenced by proactive initiatives such as the European Central Bank's intensive investigation phase for a digital euro, the People's Bank of China's ongoing e-CNY pilot programs, and numerous research and development projects on CBDCs and stablecoin oversight frameworks by institutions like the Bank for International Settlements (BIS) Innovation Hub. These efforts aim to ensure national monetary systems remain robust.

Viewing stablecoins merely as a matter of technological competition is insufficient. As highlighted in analyses by international institutions and prominent academics, the widespread adoption of such stablecoins could pose significant challenges to the Bank of Korea's monetary policy function and, ultimately, influence national currency sovereignty (Adrian & Mancini-Griffoli, 2021; BIS, 2021). This risk, often termed 'digital dollarization' or 'currency substitution', arises if a foreign stablecoin becomes a prevalent unit of account or store of value, thereby diminishing the central bank's control over domestic monetary conditions (Brunnermeier, James, & Landau, 2019). Therefore, understanding dollar stablecoins and establishing a well-designed KRW stablecoin system is an imperative of strategic economic policy.

From the U.S. perspective, institutionalizing dollar stablecoins relates closely to its government bond market. Weak demand for U.S. Treasury bonds in May 2025, leading to higher yields, signaled weakening demand for U.S. debt. As stablecoins often use U.S. Treasury bonds as collateral, expanding their global use can be seen as creating new demand for U.S. debt. While other U.S. motivations like fostering innovation or maintaining USD dominance exist, the potential impact on U.S. debt demand is significant for other nations. Ultimately, stablecoin demand depends on usability as a medium of exchange, offering lessons for a KRW stablecoin. This paper proposes four strategic pillars for its development: regulatory policy, issuance discipline, reserve asset strategy, and use case diversification.

II. Foundational Pillars for a National KRW Stablecoin Strategy

2.1 Pillar 1: Regulatory Policy - Fostering Competitive Access and Flexibility

An appropriate regulatory framework is paramount, not only to foster stablecoin adoption but, critically, to build and maintain user trust in KRW stablecoins. However, achieving this trust does not necessitate a regime that is more restrictive than dollar stablecoins. The essence of Korea's strategic approach should be competitive ease of access and transactional flexibility. Dollar stablecoins, often leveraging decentralized blockchain technology, have historically offered a degree of freedom

from single-country surveillance, making them useful in cross-border capital flows or informal trade (FSB, 2023). It is crucial to note, however, that many dollar stablecoins are issued by centralized entities, rendering them subject to their home country's jurisdiction and evolving regulatory reach.

The evolving U.S. regulatory landscape for dollar stablecoins exemplifies this. If the U.S. Congress enacts stricter stablecoin regulations (e.g., on licensing, reserves, AML/CFT[2]), as suggested by officials like Yellen (Yellen, 2022), increased oversight, while aiming to enhance safety, might paradoxically reduce some aspects of their current usability by diminishing their perceived 'permissionless' nature or increasing transactional friction. This global context presents an opportunity for Korea. While the Korean framework must be robust enough to ensure stability and engender trust, its degree of regulation should strategically aim to be no more cumbersome—and where prudently possible, comparatively more streamlined—than those eventually governing dollar stablecoins. This is key to ensuring KRW stablecoins are relatively easier and more attractive to access and use internationally.

Korea could gain a significant competitive edge by adopting a more agile, principles-based, and flexible legal and regulatory framework. Such regulatory flexibility does not imply lax oversight or compromising on essential safeguards like AML/CFT compliance and consumer protection. Rather, it points to a more targeted, risk-based, and tiered approach. For instance, low-volume, low-risk cross-border stablecoin payments could face lighter, more automated supervisory processes, with stricter surveillance reserved for high-volume transactions or lending platforms. This tailored oversight can significantly enhance the usability and cross-border accessibility for the majority of users and use cases, moving beyond purely domestic technical efficiency.

Additionally, well-structured sandbox programs could allow Korean fintechs and even potential new entrants like Big Tech firms (as will be discussed in Pillar 4) to test innovative international use cases of KRW stablecoins under temporary, clearly defined regulatory relaxations. Learning from international frameworks like the EU's MiCA or Singapore's licensing regime is valuable, not just for understanding robust controls, but also for identifying ways to implement regulation that is efficient, clear, and avoids imposing undue burdens that could stifle the intended flexibility and competitive positioning of KRW stablecoins.

2.2 Pillar 2: Issuance Discipline, Purchasing Power Stability, Fiscal Soundness, and Monetary Policy Integration

Beyond technical design, a stablecoin's functionality as a viable currency ultimately hinges on its ability to offer stable purchasing power. Even if a stablecoin's nominal value is reliably pegged to the KRW, users will not trust it as a consistent medium of exchange or store

of value if the amount of goods and services it can acquire fluctuates significantly. This outcome—stable purchasing power for the KRW stablecoin—depends on two critical factors: first, the stablecoin issuer's robust mechanisms to ensure the stablecoin consistently maintains its peg (i.e., redeemability at par with the KRW), and second, the Bank of Korea's success in ensuring general price stability for the KRW itself. This shared dependency implies that while stablecoin issuers are directly responsible for peg maintenance, they operate within, and must align with, the broader monetary policy framework aimed at national price stability.

Historically, instability in the purchasing power of money due to monetary policy failures has caused significant economic disruption. Excessive money issuance has led to hyperinflation (e.g., Weimar Republic), eroding purchasing power, while overly restrictive policies contributed to deflation and recession (e.g., post-1929 Great Depression in the U.S. where the gold standard constrained monetary supply (Eichengreen, 1996)). KRW stablecoins, if widely used, must be designed and managed to avoid contributing to such instabilities and instead support overall economic stability.

Discussions by the Bank for International Settlements (e.g., BIS, 2021) and comprehensive analyses from publications such as the *Annual Review of Financial Economics* (e.g., Adrian & Mancini-Griffoli, 2021) highlight the growing recognition that systemically important stablecoins can function akin to existing monetary instruments. While not always explicitly calling for immediate inclusion in M1 or M2, these analyses suggest that their characteristics and potential scale necessitate careful consideration for their treatment in monetary statistics and their impact on monetary conditions. This reflects an understanding that stablecoins at scale can influence money supply, velocity, and monetary policy effectiveness, thereby impacting overall price stability and the purchasing power of all forms of money, including stablecoins. Korea should prepare to statistically track and categorize KRW stablecoins within official monetary statistics.

Once systemically important stablecoins are recognized as having such monetary relevance, a robust framework linking KRW stablecoin issuance to monetary policy objectives becomes necessary. Adapting principles from rules like the Taylor rule (Taylor, 1993), the total issuance of systemically important KRW stablecoins could be guided by macroeconomic indicators like inflation gaps, ensuring their growth aligns with conditions conducive to stable purchasing power. This would elevate stablecoins from private tokens to instruments with macroeconomic policy relevance.

Alongside managing issuance volume, the composition and management of collateral assets are crucial for the fiscal soundness. If government bonds are predominantly used, stablecoin credibility may be tied to the issuing country's fiscal risk. Therefore, institutional

flexibility to dynamically adjust collateral ratios (e.g., more cash during fiscal stress, a lower bond allocation) based on macroeconomic conditions is essential. By institutionalizing rules for both issuance volume and collateral structure, KRW stablecoins could function as a currency with stable purchasing power while safeguarding fiscal soundness.

2.3 Pillar 3: Reserve Asset Strategy – Securing International Trust and Diversification

Securing international trust in the Korean won is essential for a robust KRW stablecoin, and this trust is partly a reflection of the credibility and resilience of the Bank of Korea's (BOK) balance sheet. Currencies are backed by issuer credibility, fiscal soundness, and the promise of convertibility to reserve assets. The U.S. dollar's status was built on gold reserves and guaranteed convertibility under Bretton Woods (Bordo & Eichengreen, 1998). Although gold convertibility ended in 1971, U.S. financial dominance continues, supported by a trust-based system and deep financial markets. Central bank foreign exchange reserves reflect this confidence.

The Bank of Korea has historically focused reserves on gold and U.S. dollars. However, increasing concerns about over-reliance on a single foreign currency, driven by factors such as the geopolitical use of financial sanctions and the potential for a more multipolar international monetary system, are prompting central banks globally to explore greater diversification. This search for diversification is leading some to consider novel assets.

In this context, Bitcoin has emerged as a leading candidate for a new class of digital reserve asset. The growing institutional adoption of Bitcoin by major corporations and investment funds signals its maturation as a macro-financial asset. Fed Chair Jerome Powell has characterized Bitcoin not as a dollar competitor, but as a speculative asset competing with gold (Powell, 2024), lending credence to its narrative as "digital gold". The arguments for a central bank holding a strategic Bitcoin reserve are compelling. As a truly non-sovereign, apolitical asset with a mathematically fixed supply, it offers a unique form of diversification away from assets tied to the policies and political risks of other nations. Holding Bitcoin can be seen as a hedge against the debasement of major fiat currencies and a safeguard in a world of increasing geopolitical fragmentation.

A novel strategy could integrate these considerations. In scenarios where Korea experiences significant capital inflows that risk appreciating the KRW, the BOK could conduct a modern form of sterilized intervention. Instead of selling KRW for foreign currency and then buying USD or foreign bonds, the BOK could absorb these inflows through the issuance of fully-backed KRW stablecoins. It could then use a portion of the acquired foreign currency to build its strategic Bitcoin reserve. This innovative approach could simultaneously stabilize the exchange rate, limit domestic monetary expansion, and advance

the diversification of its reserve portfolio.

2.4 Pillar 4: Use Case Diversification and Expanded Issuer Scope

A KRW stablecoin's success hinges on a phased strategy that first achieves scale and liquidity before diversifying its use cases. Drawing lessons from the global market, where dollar stablecoins like USDT and USDC grew in tandem with exchanges like Bitfinex and Coinbase, the most immediate and powerful launchpad for a KRW stablecoin resides within Korea's established domestic crypto exchanges like Upbit and Bithumb. These platforms already command millions of users and hold substantial KRW deposits, representing a ready-made ecosystem for introducing a trusted, regulated KRW stablecoin as a primary trading and settlement asset. Partnering with or licensing these exchanges to issue or be primary distributors of a KRW stablecoin would be the fastest way to achieve the critical mass necessary for it to become a viable monetary instrument. This initial step of achieving 'at-scale' domestic liquidity is the prerequisite for the next phase: global expansion.

Following the establishment of a robust liquidity base on domestic platforms, the crucial second phase is to secure listings on major global crypto exchanges such as Binance and Coinbase. This step is essential for a KRW stablecoin aspiring to international relevance. Listing on these global venues would instantly make the KRW stablecoin accessible to a worldwide user base, placing it in direct competition with dollar stablecoins for international trading, remittances, and decentralized finance (DeFi) applications. It would provide the necessary global liquidity rails to support the Hallyu content strategy, allowing international fans and consumers to easily acquire and use the KRW stablecoin without friction. Achieving this global presence is the bridge between being a successful domestic digital asset and becoming a meaningful instrument in the international digital economy.

Once this foundational liquidity and user base are established through the exchange ecosystem, the strategy can then expand to the diversification of use cases, leveraging Korea's unique global strengths. Korea's globally competitive digital content industry (Hallyu) presents a unique opportunity. If Korean cultural content (music, video, games) consumed globally via mobile platforms can be transacted with KRW stablecoins, demand could expand significantly beyond Korea's borders. Hyoung-Goo Kang has proposed Hallyu as a viable pathway for KRW stablecoins to function as a global payment instrument, as digital content is instantly transmitted worldwide, potentially bypassing traditional channels[3]. Moreover, if digital content platforms adopt blockchain infrastructure, it could reduce intermediary costs and improve royalty distribution transparency. In the long term, KRW stablecoins could become a common currency in the digital content ecosystem, enhancing Korea's monetary influence in a soft power domain.

To fully realize this potential and to ensure the deepest possible penetration of KRW stablecoins within the digital and mobile ecosystems, Korea should strategically consider broadening the scope of entities permitted to issue them. While conventional financial institutions would play a role, allowing major domestic technology companies with vast existing user networks, such as Samsung (with its mobile devices and Samsung Pay) or Naver (with its extensive online services and Naver Pay), to issue or deeply integrate KRW stablecoins into their platforms could significantly accelerate uptake and daily utility. This strategic allowance could further extend to global technology firms with a substantial operational footprint and user base in Korea, such as Google Korea or Apple Korea, enabling KRW stablecoins to become deeply embedded in the operating systems and application environments frequented by millions.

Such an inclusive approach to issuers would be a powerful strategy to harness powerful network effects, rapidly expanding the reach and acceptance of KRW stablecoins. By leveraging the established trust and daily engagement users have with these major technology players, KRW stablecoins could achieve far greater ubiquity than if issuance were restricted to traditional financial actors alone. This strategy directly combines the goals of Pillar 4 with the necessities of Pillar 1, as such an expansion would require the agile and risk-sensitive regulatory framework previously outlined. This framework would need to be capable of accommodating diverse issuer types—from banks to Big Tech—ensuring appropriate safeguards, interoperability standards, and a level playing field, while tailoring oversight to the specific activities and risks presented by each.

Ⅲ. Conclusion

Stablecoins are rapidly evolving beyond mere technological innovations to become instruments with profound macroeconomic policy implications. If Korea is to effectively navigate this evolving landscape and defend its monetary sovereignty through a robust KRW stablecoin, it must build a resilient and forward-looking institutional foundation. This foundation should rest securely on four synergistically reinforcing strategic pillars: a flexible regulatory policy designed for competitive access; disciplined issuance mechanisms ensuring purchasing power stability and fiscal soundness; a credible reserve asset strategy; and a dynamic approach to use case diversification, critically amplified by an expanded scope of permissible issuers and distributors—including crypto exchanges and technology firms—to leverage network effects and embed KRW stablecoins within the global digital economy.

Successfully implementing this multi-faceted strategy will undoubtedly face challenges, including achieving international regulatory

coherence and adapting to rapid technological advancements. Furthermore, future research should address specific technical implementation challenges, such as ensuring robust interoperability between different issuer systems and developing secure, user-friendly wallet technologies that can scale to a national level. However, by strategically designing its KRW stablecoin framework around these pillars, Korea can not only counter the potential currency substitution threat posed by dollar stablecoins but also establish the KRW stablecoin as a respected digital monetary instrument. This will enhance Korea's global economic position and allow it to proactively shape its monetary future in an increasingly digitized world.

Endnotes

[1] For the purpose of this paper, we define key terms based on common functional distinctions, drawing from frameworks like Adrian & Mancini-Griffoli (2021). A stablecoin refers to a privately-issued digital asset designed to maintain a stable value by pegging to a sovereign currency, like USD or KRW, and promising redeemability at par. This distinguishes it from digital assets like Bitcoin, which are not backed by such claims. Furthermore, both are distinct from Central Bank Digital Currencies (CBDCs), which would be a direct liability of the central bank itself.

[2] Anti-Money Laundering/combating the Financing of Terrorism

[3] Remarks by Hyoung-Goo Kang at a policy seminar at National Assembly of Korea on May 21, 2025.

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달러 스테이블코인의 위협과 원화 스테이블코인의 대응 전략

김태봉*

요 약

달러 스테이블코인의 확산은 한 국가의 통화 주권에 중대한 위협이 되고 있으며, 이에 대한 전략적 대응이 필요하다. 본 논문은 우리나라의 통화 주권을 보호하고 디지털 경제에서 그 역할을 강화하기 위한 원화(KRW) 기반 스테이블코인의 대응 전략을 제안한다. 첫째, 사용자 신뢰를 확보하면서도 접근 수용성을 보장하는 유연한 규제 정책을 마련해야 한다. 둘째, 물가 안정과 재정 건전성을 보장할 수 있는 발행 규모에 대한 준칙을 확립해야 한다. 셋째, 국제 금융시장에서의 신뢰성 확보를 위해 비트코인을 포함하는 준비자산 비축 전략을 구축해야 한다. 넷째, 기술 기업을 포함해 발행 주체 범위를 확대하고 다양한 거래소에 상장하여 디지털 경제의 네트워크 효과와 광범위한 채택을 촉진하는 사용성 극대화 전략이 동반되어야 한다. 이와 같은 전략을 통해 통화주권의 위협에 대응하고, 디지털 경제를 통한 국제 금융시장에서의 지위를 보다 안정적으로 유지할 수 있을 것으로 기대한다.

주제어: 테이블코인, 통화 주권, 디지털 경제, 디지털 달러화

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