BANCA D'ITALIA
EUROSISTEMA

Mercati, infrastrutture, sistemi di pagamento

(Markets, Infrastructures, Payment Systems)

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Evidence from a Mystery Shopping Exercise by Banca d'Italia

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Banca d'Italia
Via Nazionale, 91 - 00184 Rome - Italy
+39 06 47921

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ARE STABLECOINS EFFICIENT FOR REMITTANCES? EVIDENCE FROM A MYSTERY SHOPPING EXERCISE BY BANCA D'ITALIA

by Alberto Di Iorio*, Enrica Di Stefano, Michele Mascioli* and Giorgio Trebeschi****

Abstract

This paper examines whether stablecoin-based cross-border transfers are more efficient, in terms of cost and speed, than traditional remittance channels. To this end, we conduct a mystery shopping exercise executing transfers of 200 USDC across ten corridors linking Italy with Argentina, Brazil, South Africa, the United Arab Emirates, and Japan. Stablecoins show no systematic cost advantage over traditional channels: total costs – of which the on-chain transfer accounts for only a marginal share – range from 0.30% to nearly 9% of the transferred amount. Execution speed is similarly heterogeneous and largely determined by the quality of the domestic payment infrastructures. Where instant payment systems exist, end-to-end settlement concludes in under 20 minutes; where standard bank transfers are required, the process extends to one or two business days. On and off-ramp frictions are the main source of cost and transfer duration.

JEL Classification: E42, F24, G15, G18, O16.

Keywords: stablecoins, remittances, cross-border payments, mystery shopping, regulatory fragmentation, on/off-ramp costs, instant payments.

Sintesi

Questo paper esamina se i trasferimenti transfrontalieri effettuati con stablecoin sono più efficienti, in termini di costo e velocità, di quelli realizzati ricorrendo ai canali di rimessa tradizionali. A tal fine è stato condotto un esercizio di mystery shopping, eseguendo trasferimenti di 200 USDC lungo dieci corridoi tra l'Italia e altri cinque paesi – Argentina, Brasile, Sudafrica, Emirati Arabi Uniti e Giappone. Le stablecoin non offrono un vantaggio di costo sistematico: i costi totali variano dallo 0,30% a quasi il 9% dell'importo trasferito e il trasferimento on-chain vi incide solo marginalmente. Anche riguardo alla velocità i risultati sono fortemente eterogenei, in quanto dipendono dalla qualità delle infrastrutture di pagamento domestiche: laddove esistono sistemi di pagamento istantaneo, il regolamento si conclude in meno di 20 minuti; dove sono invece richiesti bonifici standard, il processo si estende a uno o due giorni lavorativi. Le frizioni di on/off-ramp restano la principale fonte di costo e durata dei trasferimenti.

* Directorate General for Payments and market infrastructures, Banca d'Italia.

** Directorate General for Economics, Statistics and Research, Banca d'Italia.

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1. Introduction[1]

The progressive digitalization of the global financial system has reignited debates over the efficiency of cross-border payments, particularly within the market for international remittances. Remittances constitute a crucial financial lifeline for many emerging markets and developing economies (EMDEs), yet they remain structurally expensive (Panetta, 2026). Despite the G20 Roadmap for Enhancing Cross-Border Payments and the United Nations Sustainable Development Goal (UN SDG) 10.c target to reduce global average remittance costs below 3% by 2030, the global average cost remains stubbornly high at around 6.4% (World Bank, 2025). Against this backdrop, stablecoins—crypto-assets pegged to fiat currencies, predominantly the U.S. dollar—have emerged as a potential technological alternative, promising rapid settlement and lower costs due to reduced reliance on correspondent banking networks.

To properly evaluate the systemic impact of stablecoins, a recent and rapidly expanding strand of economic literature has moved beyond theoretical debates and focused instead on the empirical dissection of the stablecoin ecosystem. This empirical turn has developed along distinct but interconnected dimensions. Three of them are particularly relevant: a) the geographical localization of cross-border stablecoin flows, b) the rigorous quantification of genuine economic activity (i.e. isolating transactions that more closely resemble payment activity by excluding non-economic on-chain flows, such as bot-driven activity, high-frequency trading and intra-exchange transfers, prevalent on general-purpose blockchains) and c) the granular assessment of end-to-end transactional efficiency.

Regarding the first strand of literature, which focuses on the geographical localization of stablecoin flows, researchers have mapped the geography of stablecoin adoption, revealing a pronounced footprint in EMDEs. Reuter (2025) estimates that while North America and Asia-Pacific lead in terms of the absolute volume of stablecoins, the highest cross-border stablecoin flows relative to GDP are found in Latin America and the Caribbean (7.7%) and Africa and the Middle East (6.7%). This structural geographic pattern suggests that stablecoins are actively meeting global dollar demand in these regions. This is corroborated by Auer *et al.* (2025), who apply a gravity model to bilateral crypto flows and find that stablecoin adoption largely defies traditional geographical frictions. Instead, cross-border stablecoin transactions are significantly driven by the high costs of traditional remittances, elevated domestic inflation, and bilateral exchange rate volatility.

The second strand focuses on quantifying actual economic activity, addressing the challenge that raw on-chain data greatly overestimate meaningful usage. Batra *et al.* (2025) demonstrate that while gross on-chain transfer volumes are substantial, filtering out bot activity, automated market makers, and internal exchange settlements reveals that payments in real economy amounted to between $350 billion and $550 billion in 2025. Similarly, Aldasoro *et al.* (2026b) report that adjusted stablecoin transaction measures represent only about 1% of unadjusted gross values, with retail-sized transactions under $250 constituting a mere 0.4% to 0.9% of that filtered subset. Despite this small share relative to gross volume, the genuine payment segment is expanding rapidly: according to Shehdula *et al.* (2026), stablecoin payment volume grew by 39% year-over-year in 2025. This growth is driven heavily by business-to-business and consumer-to-consumer

[1] The authors are deeply grateful to Banca d'Italia 's network of financial attachés and overseas representative offices for their invaluable contribution to this paper. In particular, we would like to thank: Raffaele Arturo Cristiano (Abu Dhabi), Raffaele Tartaglia Polcini (Berlin), Guido Borgato and Michele Maltese (Bruxelles), Giuseppe Ciaccio (Buenos Aires), Alberto Coco (Cairo), Sergio Longoni (Istanbul), Marika Cioffi (London), Carlo Adami (New Delhi), Caterina Ciancaglioni (Paris), Anna Maria Germano (Pretoria), Giacomo Scocco (São Paulo), Andrea Gerali and Andrea Perin (Tokyo), Alessio Ciarlone (Washington). The views expressed in this paper are those of the authors and do not necessarily reflect those of Banca d'Italia.

transfers, accompanied by a declining average ticket size that strongly signals a broadening into retail and everyday merchant transactions.

The third strand investigates the efficiency of stablecoin payments, especially for cross-border transactions. Du *et al.* (2026) conceptualize the "stablecoin sandwich," emphasizing that while the decentralized blockchain settlement layer is intrinsically cheap and instant, the complete cross-border transaction requires fiat-to-crypto conversion and crypto-to-fiat reconversion. These fiat endpoints introduce centralized intermediaries, such as crypto exchanges, imposing explicit trading and withdrawal fees that can create significant scale economies and disadvantage small retail transfers. Empirical studies using proprietary platform data, such as Nestor (2025) analyzing 41 million transactions on a digital dollar wallet, confirm that stablecoins can deliver faster settlement times and lower fees for peer-to-peer transfers, yet substantial frictions and high costs remain embedded in certain on-ramp processes. Other industry analyses report that stablecoin efficiency is highly corridor-specific, showing the greatest comparative advantage in EMDEs where traditional rails are particularly slow and expensive (Ingham *et al.* 2025).

This paper contributes to the growing empirical literature on stablecoin payments and to the related policy debate in three main ways.

First, building on the analytical framework of the "stablecoin sandwich" it provides novel evidence on the end-to-end costs and execution times of stablecoin-based remittances across multiple international corridors based on a mystery shopping exercise, an approach employed for the first time in this context, conducted by Banca d'Italia via its network of external representative offices and financial attachés.[2] By tracing the entire transfer chain, we estimate not only overall costs and execution times, but also the contribution of each phase of the transaction. This granular approach makes it possible to identify the cost and time drivers along the transfer process.

Second, the paper sheds light on the role of existing payment infrastructures in shaping the efficiency of stablecoin-based remittances. By observing transactions from origin to destination, we show that the performance of stablecoin transactions depends not only on the underlying blockchain but also on the characteristics of the domestic payment systems that support on- and off-ramp operations.

Third, the paper provides qualitative evidence on how regulatory environments influence the costs, execution times, and practical feasibility of stablecoin-based remittances. Drawing on evidence from corridors operating under diverse regulatory regimes, including jurisdictions with dedicated crypto-asset frameworks, transitional regulatory arrangements, and more restrictive environments, we show that regulation affects market structure, access to service providers, transaction workflows, and ultimately user outcomes. Our findings suggest that regulatory design does not merely define the legal perimeter of stablecoin activity but constitutes a first-order determinant of transfer efficiency by shaping operator choice, on- and off-ramp costs, and operational feasibility.

The paper proceeds as follows. Section 2 analyses the global regulatory and infrastructural landscape within which stablecoin-based remittances operate. Section 3 describes the mystery shopping methodology. Section 4 presents empirical results on cost and execution time across corridors. Section 5 draws conclusions and discusses policy implications.

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2 To find out more about Banca d'Italia's presence abroad, visit: https://www.bancaditalia.it/chi-siamo/organizzazione/estero/index.html

2. The Framework: Regulatory and Infrastructural Asymmetries

The global regulatory landscape for crypto-assets is characterized by pronounced fragmentation. According to the literature this fragmentation is a key determinant of access, cost, and market structure across jurisdictions (Boss, 2025). Understanding this landscape is a precondition for interpreting empirical evidence on stablecoin transfer efficiency because regulatory design shapes market concentration, operator availability, compliance costs, and the extent to which stablecoin activity is integrated with or isolated from the traditional banking system.

2.1 Pioneer and Consolidating Frameworks

The first group of jurisdictions has enacted or is actively implementing comprehensive, purpose-built regulatory frameworks for crypto-asset intermediaries and stablecoin issuers. Within this first group, meaningful differences in maturity and philosophy persist.

In the European Union the Markets in Crypto-Assets Regulation (MiCAR), fully in force since December 2024, is one of the most comprehensive frameworks to date. MiCAR distinguishes between two types of stablecoins: e-money tokens (EMTs), which aim to stabilize their value by referencing only one official currency, and asset-referenced tokens (ARTs), which aim to stabilize their value by referencing another value or right, or combination thereof, including one or several official currencies. Additionally, MiCAR imposes strict reserve requirements and governance standards on issuers and prohibits the payment of interest on stablecoins to prevent deposit substitution (Krause, 2026). The regulation aims to balance innovation with financial stability and monetary sovereignty.

Japan represents the opposite end of the regulatory philosophy spectrum within this pioneer group. Anchored in the Payment Services Act of 2009 and subsequently amended, its approach is defined as "safety-first". Japan is one of the few jurisdictions globally that has finalized comprehensive frameworks for both crypto-asset service providers and stablecoins. However, the rigidity of asset segregation requirements and strict barriers to foreign stablecoin access have produced a strong marginalization effect. Japan's share of global fiat-to-crypto exchange volumes denominated in yen has collapsed from approximately 60% in the mid-2010s to around 4% in 2024. This reflects both the prudential burden as well as the structural shift of the international market toward dollar-pegged stablecoins (Maeda, 2024). The regulatory authorities themselves acknowledge a risk of user migration toward offshore platforms and decentralized finance, an unintended consequence of excessive onshore rigidity (Hernández de Cos, 2026).

The United States is undergoing a paradigm shift. On June 18, 2025, the GENIUS Act was signed into law, establishing the first comprehensive federal framework for payment stablecoins. The framework requires 1:1 reserve backing in specified assets and clarifies that compliant stablecoins are neither securities nor commodities. Compared to MiCAR, the framework is less prescriptive. The prohibition on interest payments applies to issuers but not to intermediaries, which creates potential circumvention paths; redemption fees are permitted; and capital requirements are left to supervisory discretion. A critical difference regarding the composition of these reserves also emerges: while the GENIUS Act focuses on asset quality by prohibiting longer-maturity bonds and not by imposing fixed quotas for bank deposits, MiCAR strictly requires that 30% (or 60% for "significant" tokens) of reserves be held as deposits in credit institutions.[3] Licensing remains fragmented between the state and federal levels and is

[3] A token is considered significant where at least three of the following requirements are met: (a) the number of holders is larger than 10 million; (b) the value of the token issued, its market capitalization or the size of the reserve of assets is higher than EUR 5 billion; (c) the average number and average aggregate value of transactions in that token per day during the relevant period is higher than 2.5 million transactions and EUR 500 million respectively; (d) the issuer is designated as gatekeeper under the Digital Markets Act; (e) the significance of the activities of the issuer on an international scale, including the use of the tokens for payments and remittances;

mandatory only above a $10 billion systemic threshold. The CLARITY Act which addresses the broader digital asset ecosystem, is advancing through Congress to clarify the jurisdictional boundary between the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) in the oversight of digital assets.

Brazil and the UAE are important outliers among emerging markets. In February 2026, Brazil's Banco Central enacted comprehensive regulations that fully integrate stablecoin service providers within the national financial system and subject fiat-to-crypto transactions to foreign exchange regulation. Meanwhile, the UAE operates a layered governance model across federal authorities, individual emirates, and the free zones of Dubai and Abu Dhabi. The Central Bank holds exclusive authority over dirham-pegged stablecoins for domestic payments, while VARA and the free zone regulators authorize foreign-currency stablecoins for more circumscribed uses.[4] This architecture is deliberately designed to attract international operators, and has succeeded in doing so.

2.2 Transitional and Indirectly Regulated Regimes

A second group encompasses jurisdictions that address digital innovation through indirect governance, fiscal instruments, basic Anti-Money Laundering (AML) registries, or partial assimilation of crypto-assets to existing financial product categories, rather than through a purpose-built framework. While some of these countries are moving towards more structured regimes, significant regulatory gaps remain, especially concerning the issuance and use of stablecoins.

India's approach is fundamentally fiscal. Crypto-assets are classified as 'virtual digital assets' and are subject to a flat 30% tax on capital gains and a 1% withholding tax on each transaction. This effectively co-opts platforms as tax collection agents. The Financial Intelligence Unit actively uses registration to sanction and block non-compliant offshore platforms. In 2024, Turkey enacted Law 7518, requiring Crypto-asset Service Provider licensing under Capital Markets Board supervision and mandating that 90% of client assets be held in offline cold wallets.[5] Foreign platforms were required to establish local branches by June 2026 to operate legally. Since 2022, South Africa has classified virtual assets as financial products thereby subjecting intermediaries to FSCA oversight. Argentina's Law 27.739 of 2024 introduced a registry for AML alignment. In all these jurisdictions, however, stablecoin-specific regulation remains absent or embryonic, a gap that produces operational distortions. For example, in Argentina banks are prohibited from participating directly in the crypto market and new traceability requirements are pushing capital from the informal economy toward unregulated DeFi.

2.3 Restrictive and Prohibitionist Regimes

A third group has opted for outright bans, usually to protect monetary sovereignty and contain capital flight. China provides a salient example of a prohibitionist framework, as it enforces extensive restrictions on private stablecoins and decentralized digital assets to safeguard financial stability and mitigate capital flight. These stringent regulations prevent the adoption of

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(f) the interconnectedness of the token or its issuers with the financial system; (g) the fact that the same legal person issues at least one additional ART or EMT, and provides at least one crypto-asset service.

4 Virtual Assets Regulatory Authority (VARA), the regulator overseeing virtual asset activities in the Emirate of Dubai, excluding the Dubai International Financial Centre (DIFC), which is subject to a separate regulatory regime.

5 Cold wallets refer to offline storage solutions for crypto-assets, where private keys are kept disconnected from the internet (e.g. hardware devices), thereby reducing exposure to cyber-attacks and unauthorized access. In contrast, “hot wallets” are online wallets connected to the internet, enabling greater transaction speed and usability but with higher vulnerability to cyber and operational risks.

alternative transfer mechanisms in one of the world's largest remittance markets. Egypt, Algeria, Tunisia, Saudi Arabia, and Kuwait have also prohibited the use, trading, or promotion of crypto-assets, employing various enforcement mechanisms. In Egypt, for example, blacklists of over 140 offshore exchanges were distributed to commercial banks to block transactions. However, empirical evidence consistently shows that prohibitionist policies fail to suppress demand. In Saudi Arabia, the private use of foreign platforms generates an estimated annual volume of approximately USD40 billion. Kuwait's total ban coincides with its recent addition to the Financial Action Task Force (FATF) grey list. This underscores that prohibition redirects flows toward P2P networks, informal OTC brokers, and offshore platforms, increasing rather than reducing AML/CFT risks (BIS FSI, 2020; IMF, 2025). As Hernández de Cos (2026) emphasizes, stablecoins' circulation on public blockchains via un-hosted wallets, which operate largely outside the regulatory perimeter and lack Know-Your-Customer (KYC) identity verification checks, is a major concern for financial integrity because it severely limits the effectiveness of existing AML/CFT approaches.[6] Meanwhile, the Moroccan government is advancing draft legislation to authorize stablecoin service providers, making a shift within the group.

2.4 Payment Infrastructure and Market Integration

The degree of integration between crypto-asset infrastructure and the traditional banking system is a primary determinant of stablecoin transfer efficiency, beyond regulatory architecture. When fiat-to-crypto gateways are directly connected to state instant payment systems, on- and off-ramp costs and times are dramatically reduced. For example, Brazil's PIX system reached over 91% of the adult population (IMF, 2023) and allows major local and international crypto platforms to offer zero-cost, real-time transfers between bank accounts in Brazilian reais and digital wallets. India's Unified Payments Interface (UPI) enables analogous integration for domestic platforms. In Chile, the main fintech platforms operate alongside global exchanges without restrictions on fund transfers.

At the other end of the spectrum are jurisdictions that impose restrictive access conditions on exchange-bank partnerships, generating oligopolistic market structures that incur efficiency costs. For example, South Korea's requirement that crypto platforms partner with traditional banks for client identification has produced a duopoly, with the two largest operators accounting for 96% of trading volumes. In Taiwan, the introduction of the stricter compliance regime (effective from late 2024) reduced the number of registered operators from 26 to 9.

The structural decline of correspondent banking relationships provides a broader context for understanding these dynamics. According to Garatt *et al.* (2024), shifting risk-reward dynamics are prompting banks to re-evaluate their participation in cross-border payment corridors. Data from 2011 to 2022 reveals a worldwide downward trend in both the volume of active relationships and available channels (CPMI, 2023). Emerging markets have been significantly affected by this retreat from correspondent banking, as the resulting increase in expenses acts as a direct drag on real economic performance. In this context, stablecoins may be a response to the retreat of traditional infrastructures.

[6] Un-hosted wallets are crypto-asset wallets controlled directly by users, without the involvement of an intermediary (such as a custodian or exchange). As a result, users retain full control over their private keys and funds. By contrast, hosted wallets are administered by an intermediary, which holds the users' private keys on their behalf and facilitates the storage and transfer of crypto-assets.

3. Methodology

The empirical analysis is based on a mystery shopping experiment. In this methodology, researchers act as ordinary customers to execute actual, real-world transactions, in order to obtain live pricing and service quality data. Mystery shopping has a well-established tradition in financial services research and has been formalized as a supervisory tool by CGAP (2015, 2017) and Wilson (1998). The World Bank's Remittance Prices Worldwide (RPW) database itself relies on this methodology for cost measurement of remittances across corridors.

3.1 Instrument and Amount

The stablecoin selected for the exercise is USD Coin (USDC), issued by Circle and pegged 1:1 to the U.S. dollar. The decision to focus on dollar-pegged stablecoins reflects their overwhelming dominance within the global stablecoin ecosystem, both in terms of market capitalization and international usage, making them the most relevant reference point for cross-border payment applications. Currently, the entire stablecoin segment is valued at around $325 billion, about 98% of which is represented by USD-denominated tokens. The market is also characterized by a high degree of concentration: more than 80% of total capitalization is attributable to the two leading issuers, Tether and Circle, through their respective stablecoins USDT and USDC (see Figure 1a).

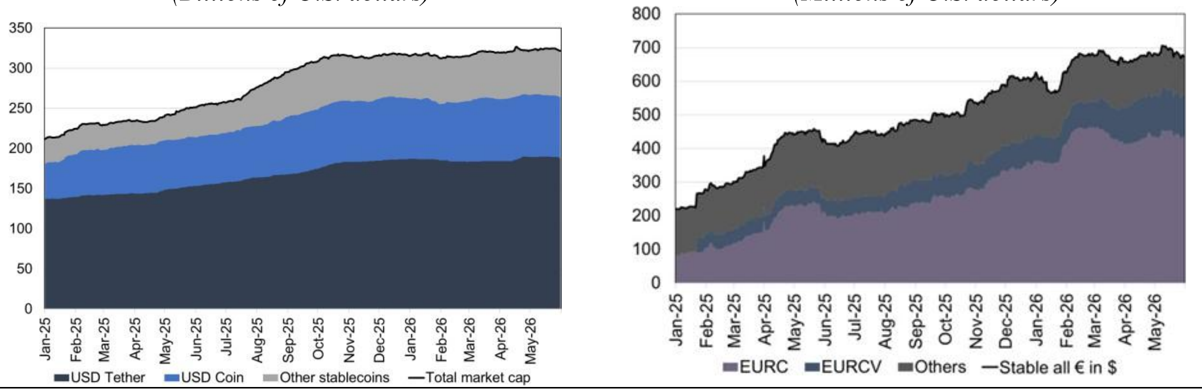
Among dollar-denominated stablecoins, USDC was selected for its wide international diffusion as the world's second-largest stablecoin and its availability through centralized exchanges across all jurisdictions included in our sample. In fact, unlike Tether’s USDT, the other major dollar-denominated stablecoin, USDC could be legally accessed through service providers both in the European Union under the MiCAR framework and in Japan's regulated crypto-asset market, allowing the exercise to be implemented consistently across all jurisdictions considered. It should be acknowledged, however, that the choice of the stablecoin may affect the results. Differences in market liquidity, business models, and regulatory status can lead to materially different transaction costs and operational outcomes across tokens.

Figure 1

Market capitalization of stablecoins

(a) All stablecoins
(Billions of U.S. dollars)

(b) Euro-denominated stablecoins
(Millions of U.S. dollars)



Source: coinmarketcap.com. Daily data, as of 31 May 2026.

Note: The figure illustrates the dynamics of market capitalization since 2025. The pronounced difference in scale between the two panels underscores the marginal role of euro-denominated stablecoins in the global ecosystem, motivating their exclusion from the empirical analysis

A natural alternative would have been the use of a euro-denominated stablecoin, particularly given the European focus of our experiment. However, euro-pegged stablecoins currently represent only a negligible share of the global market (around $700 million, which represents about 0.2% of the total market capitalization, see Figure 1b) and exhibit very limited international circulation.

The transfer amount was set at 200 USDC, consistent with the World Bank RPW standard for remittance cost measurement, thereby ensuring comparability with this benchmark database.

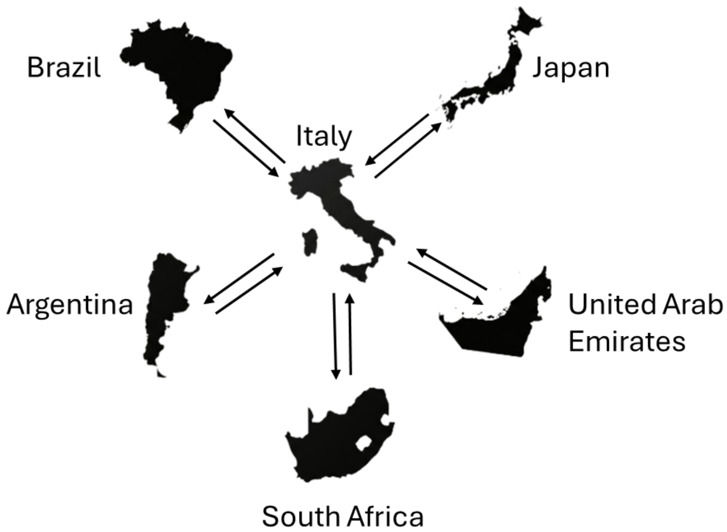
3.2 Geographic Design and Exchange Selection

The exercise follows a hub-and-spoke design with Italy (ITA) at the center and bidirectional corridors with five jurisdictions: Argentina (ARG), Brazil (BRA), the United Arab Emirates (UAE), South Africa (ZAF), and Japan (Figure 2). These countries were selected based on both the relevance of their corridors for potential stablecoin use as an alternative to traditional remittance channels and on operational feasibility, reflecting the presence of Banca d'Italia's network of external representative offices and financial attachés.

For Italy, two globally significant exchanges were used, Binance and Kraken, to provide a more robust pricing baseline and reduce the influence of any single operator's fee structure. In the other jurisdictions involved, the exercise used locally operating exchanges to mitigate bureaucratic registration difficulties encountered with global platforms: Ripio (Argentina), Foxbit (Brazil), BitOasis (UAE), and Valr (South Africa).

Figure 2

Geographic design of the experiment



Note: The figure illustrates the hub-and-spoke structure of the experiment, with Italy as the central node and bidirectional corridors with selected partner countries.

Among the countries covered by Banca d'Italia's network, China and Egypt were excluded due to regulatory prohibitions. Because of operational constraints related to the diplomatic status of financial attachés, who are unable to open exchange accounts under their current documentation, India and Turkey could not be covered in this exercise. Japan's extreme regulatory stringency required methodological adaptations that reduce the comparability of its results; findings for Japan are therefore discussed separately (see Section 4.4).

3.3 Transaction Architecture

Cross-border peer-to-peer transfers via stablecoins typically take the form of a "stablecoin sandwich" (Waller, 2025, Du *et al.*, 2026).[7] In this structure, the actual on-chain transfer of value

[7] The expression "stablecoin sandwich" is generally attributed to Ran Goldi, Senior Vice President of Payments and Network at Fireblocks, who coined the term in 2021 (Ingham *et al.*, 2025).

is “sandwiched” between two fiat conversion steps: an initial fiat-to-stablecoin conversion made by the sender, followed by a final stablecoin-to-fiat reconversion executed by the receiver.

Although widely acknowledged as the standard model, it is not the only one. Industry practices are increasingly witnessing the emergence of the "open stablecoin sandwich", colloquially referred to as the "toast" model (Ingham *et al.*, 2025). In this variation, the receiver opts not to execute the final stablecoin-to-fiat reconversion, choosing instead to hold the received stablecoins in their digital wallet.

This behavior is particularly prevalent in emerging market economies experiencing high inflation and volatile domestic currencies (Aldasoro *et al.*, 2026b). In these contexts, holding U.S. dollar-pegged stablecoins provides an accessible hedge and an advantageous store of value compared to local fiat currencies, catering to a strong underlying demand for U.S. dollars.

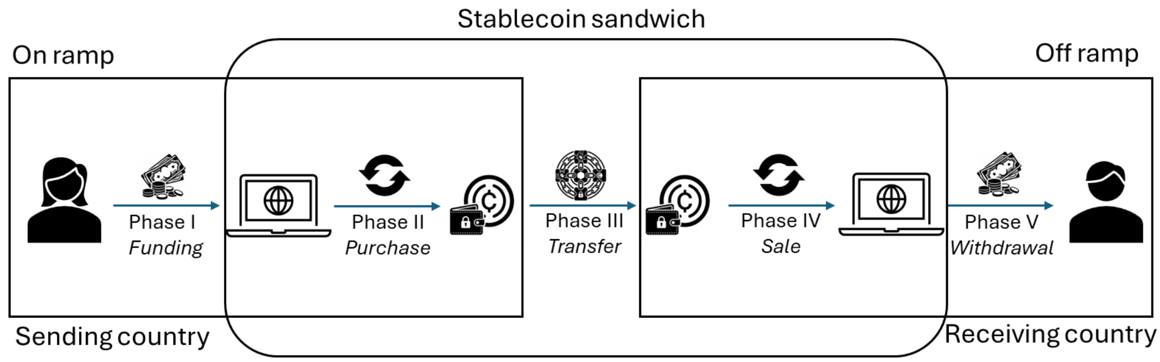
In our experiment, we expanded the full “stablecoin sandwich”; to accurately track and isolate costs, each transaction was decomposed into five sequential phases:

- Phase I, *Funding*: The sender loads local fiat currency funds onto an exchange using traditional payment rails, primarily via instant or standard bank transfers, or payment cards.
- Phase II, *Purchase*: The sender converts the credited fiat funds into USDC at the exchange's quoted rate and the newly acquired stablecoins are credited to their exchange wallet.
- Phase III, Transfer: The sender transfers the USDC from their exchange wallet to the recipient’s exchange wallet via a public blockchain (Ethereum, in our baseline setup).
- Phase IV, *Sale*: The recipient sells (or converts) the incoming USDC for their local fiat currency on the destination exchange.
- Phase V, *Withdrawal*: The recipient transfers the obtained fiat funds from the exchange to their local bank account.

Collectively, Phases I and II allow the sender to enter the crypto ecosystem and are referred to as the “on-ramp” process. Conversely, Phases IV and V represent the exit points from this ecosystem, commonly known as the “off-ramp” process. Figure 3 summarizes the payment chain as structured in our experiment.

Figure 3

Stablecoin payment chain



Note: The figure illustrates a stylized stablecoin transfer decomposed into five operational phases. The “stablecoin sandwich” denotes the crypto-native segment of the transaction (purchase–transfer–sale), while the on- and off-ramp phases capture the interaction with the traditional financial system.

Box 1: Transaction costs on Ethereum blockchain

On Ethereum, transaction costs are determined by a fee mechanism based on gas, a unit that measures the computational resources required to perform an operation on the network. Each on-chain transaction consumes a certain amount of gas (*gas used*), depending primarily on its complexity. In the case of transfers between exchanges, the movement of funds may involve multiple on-chain interactions. In particular, funds are often first transferred to deposit addresses and subsequently consolidated into the exchange's wallet.

The gas price is market-determined and reflects prevailing network conditions, in particular congestion and demand for transaction priority. Gas prices are quoted in gwei, a subunit of Ether (ETH), where 1 gwei equals 10^{-9} ETH. The total transaction fee expressed in U.S. dollars can therefore be computed as:

$$Transaction\ fee\ (USD) = \ gas\ used \times \ gas\ price\ (in\ gwei) \times \ ETH\ price\ (USD/ETH) \times \ 10^{-9}$$

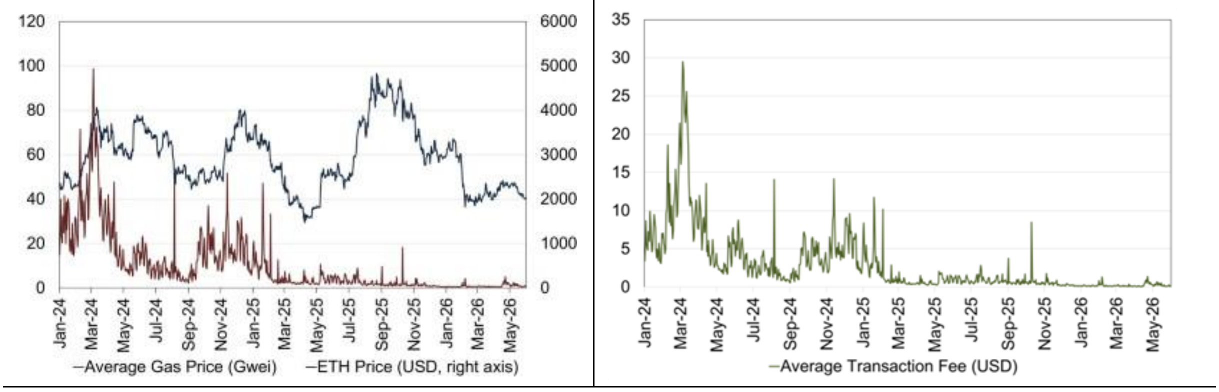
Although gas consumption may vary across transfers, temporal variations in transaction costs are largely driven by changes in gas prices and the ETH price. As a result, transfers of comparable size and complexity may incur significantly different costs over time.

Figure A

Ethereum transaction costs and their drivers

(a) Average Gas price and ETH price *(Gwei; U.S. dollars)*

(b) Average transaction fee *(U.S. dollars)*



Source: Etherscan; CoinMarketCap. Daily data, as of 31 May 2026.

Note: Average Gas prices are expressed in Gwei. ETH prices are reported in U.S. dollars. The right-hand axis in panel (a) refers to ETH prices, while gas prices are shown on the left-hand axis. Panel (b) reports the average transaction fee per transaction on the Ethereum network, expressed in U.S. dollars. The figure highlights that transaction costs vary over time due to changes in both network congestion (gas prices) and the market price of ETH.

Figure A illustrates this time variability by reporting the evolution of gas prices, ETH prices and average transaction fees. Periods of elevated network congestion are associated with sharp increases in transaction costs, as in March 2024, whereas in low-congestion periods, like since March 2025, fees remain comparatively low.

This evidence suggests that the contribution of the on-chain component to the end-to-end cost of stablecoin transfers may depend on prevailing market conditions.

A further consideration concerns the distinction between observed on-chain costs and the fees effectively faced by users for on-chain USDC transfer. Blockchain data captures the underlying transaction cost, while we access the network through exchanges. These intermediaries apply their own pricing structures and often do not adjust one-to-one with fluctuations in gas prices. In addition, transactions may be batched, allowing intermediaries to distribute on-chain costs across multiple users. As a result, user-facing fees can be only weakly correlated with the corresponding on-chain costs (Coinbase, 2025).

Costs associated with the Funding, Purchase, and Transfer steps are borne by the sender, while Sale and Withdrawal costs are incurred by the recipient. All these components cumulatively determine the end-to-end transaction cost.

To measure the costs specifically associated with distributed ledger settlement, sender and receiver exchanges were selected to be distinct entities in each corridor. This design excludes the possibility of 'on-us' settlement, where a transfer between two users on the same platform resolves merely as an internal accounting entry without traversing the blockchain.

Regarding the blockchain layer, the Ethereum network was selected for all on-chain transfers (except for the Italy-Japan corridor, see Section 4.4). This choice reflects Ethereum's dominant role in USDC circulation, serving as a proxy for high end-user adoption. It also ensured the feasibility of the experiment, as it was the only network universally supported for USDC transfers across all participating exchanges. We acknowledge that Ethereum is not the most cost- or speed-efficient network; alternative Layer-1 blockchains like Tron and Solana, or Ethereum Layer-2 protocols[8] offer significantly lower gas fees and higher throughput. However, as discussed in Box 1, Ethereum transaction costs are driven by network congestion, implying that fees can vary over time. As our subsequent analysis demonstrates, the Ethereum on-chain transfer's contribution to both total costs and overall execution time remains limited.

3.4 Cost and Time Measurement

The end-to-end cost is calculated as the difference between the total amount paid by the sender and the amount effectively received by the recipient, both expressed in U.S. dollars and normalized by the reference transfer amount of 200 USDC:

$$Total\ cost\ (\%) = \frac{A^{USD}_{total\ paid} - A^{USD}_{received}}{200} \times 100$$

where $A^{USD}_{total\ paid}$ denotes the amount paid by the sender in local currency to get 200 USDC converted into U.S. dollars using the official exchange rate and $A^{USD}_{received}$ is the amount effectively received by the beneficiary into their bank account at the end of the entire process, also converted into U.S. dollars.

To convert local currencies into dollars we used official exchange rates published by Banca d'Italia on the settlement date.[9]

Execution times are recorded for each phase and classified into discrete intervals: under 1 minute, under 15 minutes, under 30 minutes, approximately 1 business day, and approximately 2 business days. Transactions were conducted on 24 and 26 March 2026, during a period of low Ethereum network congestion; execution times and gas fees could have been different under higher congestion conditions.

The benchmarks for cost comparison are: (i) World Bank RPW average sending costs by country (Q1 2025, the latest available granular data at the time of writing); and (ii) a simulated transfer via Wise, one of the largest global Money Transfer Operators (MTO), conducted for an equivalent of 200 USD across the same corridors.[10] Since MTO rates are generally below those of banks and post offices, Wise data represent a conservative lower bound for traditional channel costs.

[8] Layer-2 protocols are scaling solutions built on top of a Layer-1 blockchain (such as Ethereum) that process transactions off the main chain while ultimately relying on it for security and settlement, thereby reducing transaction costs and increasing throughput.

[9] For Argentina, the official retail exchange rate published by the central bank is used.

[10] The simulation on Wise website was conducted on 14 April 2026.

4. Empirical Evidence: The Real Efficiency of Stablecoins

4.1 Cost Structure Across Corridors

Table 1 presents the disaggregated cost structure for all eight bilateral corridors (as Japan will be treated separately).

Table 1

Transfer Costs via USDC by Phase and Corridor (% of 200 USD)

Phase \ Corridor	ITA→ ARG	ARG→ ITA	ITA→ ZAF	ZAF→ ITA	ITA→ UAE	UAE→ ITA	ITA→ BRA	BRA→ ITA
Funding	0.00%	0.00%	0.00%	0.00%	0.58%	6.17%*	0.58%	0.00%
Purchase	2.64%	5.36%	2.59%	1.67%	0.53%		0.64%	1.02%
Transfer	0.30%	0.25%	0.29%	0.36%	0.40%	1.40%	0.40%	0.01%
Sale	-2.64%	2.78%	1.70%	2.84%	2.28%	0.81%	1.08%	0.60%
Withdrawal	0.00%	0.58%	0.00%	0.58%	3.40%**	0.58%	0.00%	0.58%
Total	**0.30%**	**8.96%**	**4.58%**	**5.44%**	**7.20%**	**8.95%**	**2.70%**	**2.21%**

Source: Banca d'Italia mystery shopping exercise. Transactions conducted on 24 and 26 March 2026.

*Note: * For the UAE→ITA corridor, funding occurred via credit card, generating a combined funding/purchase fee of 6.17%; no separate funding phase was identified. ** Withdrawal cost estimated from exchange transparency documentation; actual withdrawal was not completed due to operational constraints.*

The most striking finding is the enormous variance across corridors: total costs range from 0.30% for the ITA→ARG transfer to 8.96% for the reverse ARG→ITA corridor. This range alone, spanning from well below the 3% G20/UN SDG target to far above the current global average, illustrates the difficulty of generalizing about stablecoin efficiency.

The remarkably low cost of the ITA→ARG transfer must be interpreted with caution. The cost calculations, in fact, rely on the official retail exchange rate published by the Argentine central bank.[11] Yet, in the Argentine context, official exchange rates often diverge from those prevailing in actual economic transactions. Due to structural scarcity of U.S. dollars, legal access to the official rate has been historically heavily restricted, leading to the emergence of parallel exchange rates.

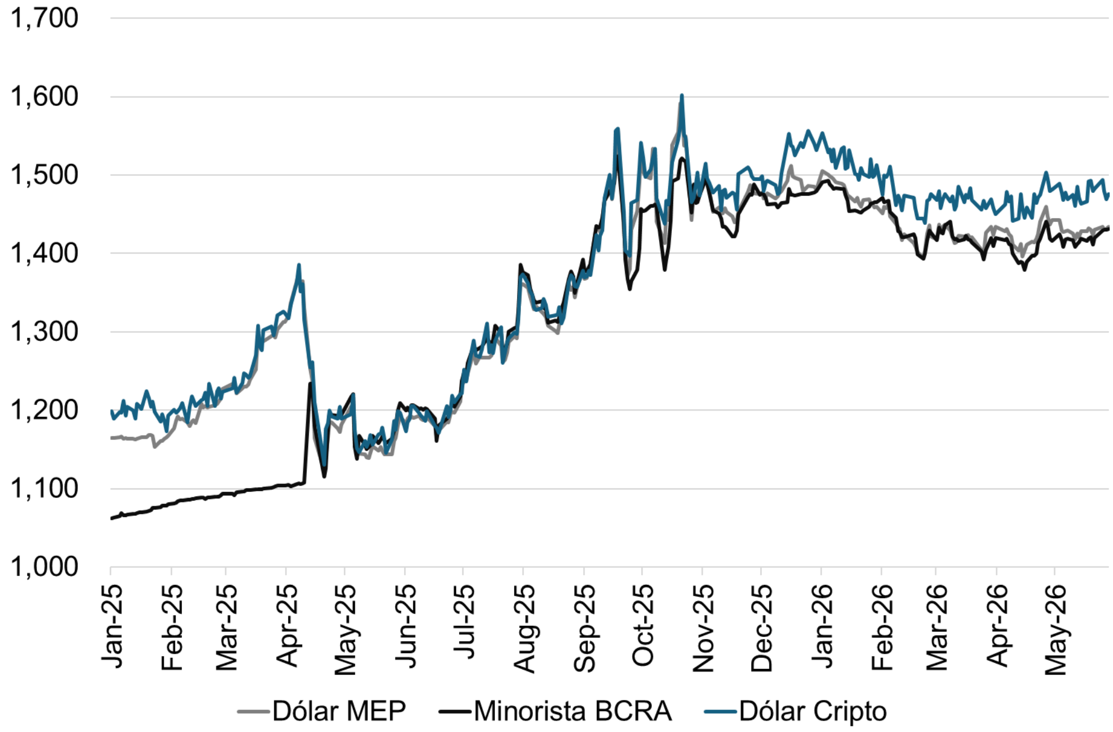
These parallel rates are determined by local supply and demand conditions and are typically higher than the official rate (i.e., reflecting a more depreciated local currency). In such a system, the official rate is often considered to be an administratively determined benchmark, while the parallel rate provides a closer approximation of the effective cost of foreign currency for households and firms. The gap between the official and the parallel rates dramatically decreased after April 2025, when the government lifted most of the forex (FX) restrictions. However, it has not disappeared: in the first five months of 2026 the so-called dollar MEP (Mercado Electrónico de Pagos, or Dólar Bolsa),[12] for example, was still quoted on average 1% higher than the official retail exchange rate (down from a 20% gap last year).

[11] Unlike our general approach, which relies on the official exchange rates available on Banca d'Italia website, for Argentina we resorted to the Central Bank of Argentina (BCRA) website. This exception was necessary because the Argentine system features two distinct official rates: a wholesale rate (*tipo de cambio mayorista*) and a retail rate (*tipo de cambio minorista*). For our analysis, we employed the retail exchange rate.

[12] The dollar MEP is the dollar exchange rate accessed through the concurrent purchasing and liquidation of specific Argentine bonds quoted in both pesos and dollars. Investors purchase the security in pesos and liquidate it in its dollar equivalent (or vice versa). This rate varies daily and is widely published across national financial media

Figure 4

Exchange rates in Argentina



Source: investing.com and Refinitiv

Note: The figure reports the value of one U.S. dollar in Argentine pesos (ARS) across different exchange rates: the official retail exchange rate published by the Central Bank of Argentina (Minorista BCRA), the financial parallel rate (Dolar MEP), and the exchange rate implicit in USDC/ARS transactions (Dólar Cripto).

Importantly, evidence suggests that the exchange rate implicit in USDC/ARS (transactions also referred to as Dólar Cripto) is even higher than the dollar MEP (Figure 4).[13]

The divergence between the official fiat exchange rate that we employed in our analysis (Minorista BCRA) and the Dólar Cripto directly explains the negative cost (-2.64%) registered in the "Sale" phase of the ITA→ARG corridor:[14] the local sale of USDC yielded a higher amount of pesos than implied by the official exchange rate, offsetting the upfront transaction costs. Consequently, the apparent cost advantage of the ITA→ARG transfer would be reduced if the peso amount received were translated back into U.S. dollars at a different (and likely more realistic) market conversion rate.[15] Symmetrically, the staggering cost of the reverse ARG→ITA corridor (8.96%) would appear lower, as the high peso-cost paid to acquire USDC during the "Purchase" phase (5.36%) would be partially offset when evaluated against the effective market rate rather than the official benchmark.

[13] Evidence of such deviations is consistent with recent literature, which documents persistent price differentials between crypto-based and traditional foreign exchange markets, particularly in the presence of market frictions and capital controls (Aldasoro *et al.*, 2026a). A prominent example is the so-called "Kimchi Premium" in South Korea (Makarov and Schoar, 2020).

[14] The mystery shopping exercise for Argentina was conducted on March 24, 2026. On that day the official retail exchange rate (USD/ARS) on the BCRA website was 1,410 pesos per dollar (mid-rate). In contrast, the effective exchange rate applied to the USDC transaction (USDC/ARS) was approximately 1,450 pesos per USDC, representing an immediate premium of roughly 3% over the official benchmark.

[15] If the Dólar MEP were used, the total cost for the ITA→ARG corridor would have been 0.5%, while that for the ARG→ITA corridor would have been 8.5%. We assume a MEP rate of 1,413 pesos per dollar, computed as the average of the rates observed on 20 and 25 March, as 24 March was a public holiday and no data are available for that day.

This consideration highlights an important limitation of cost comparability in environments with multiple exchange rate regimes. Measured costs may reflect not only the characteristics of the payment instrument but also distortions embedded in the underlying foreign exchange framework. More generally, the Argentine case illustrates how macroeconomic conditions, including currency controls, inflation dynamics, and dollar scarcity, can generate apparent efficiency gains or losses that are unrelated to the technological properties of stablecoin infrastructure.

The on-chain transfer phase (Phase III) is consistently the least expensive component of the "stablecoin sandwich", averaging 0.4% across all corridors and reaching as low as 0.01% for the BRA→ITA transfer. This is consistent with the view that distributed ledger settlement is typically low-cost, although observed costs may vary with network conditions; most inefficiencies arise elsewhere in the transaction. The dominant cost drivers are the on-ramp (Phases I and II) and off-ramp (Phases IV and V), the fiat conversion points. As Du *et al.* (2026) document in their analysis of the "stablecoin sandwich", exchange trading fees and fixed fiat funding/withdrawal charges materially affect all-in costs.

A notable example in our data is the UAE→ITA corridor, where the sole available funding method, credit card payment,[16] attracted a 3.8% surcharge, inflating the total transfer cost to approximately 9%. In most cases funding via bank transfer was free, although some exchanges applied deposit fees.

Another finding emerging from our analysis is the presence of withdrawal fees, which are operator-specific: some platforms charge them, others do not. These fees can represent a significant source of cost, especially for small transactions. The choice of both the funding instrument and the service provider therefore constitutes a first-order determinant of overall costs.

4.2 Benchmarking Against Traditional Channels

Table 2 compares the cost of transferring USDC against the average sending costs by country of origin, as published by the World Bank in the RPW.

Table 2

Cost Comparison: Stablecoin (USDC) vs. World Bank RPW Average (% of 200 USD)

Sending country	World Bank RPW	Stablecoin (USDC)
Brazil	9.96%	2.21%
Italy	8.45%	3.69%
South Africa	15.23%	5.44%
UAE	2.65%	8.95%

Source: World Bank RPW Issue 53 (Q1 2025) and Banca d'Italia mystery shopping exercise.

Note: RPW data represent average outbound costs regardless of destination; the stablecoin figure represents the cost of the single Italy-bound transaction from each country, except for Italy (average of four outbound corridors).

The comparison reveals that stablecoin transfers are cheaper than the RPW average in all corridors except the UAE. Brazil presents the starkest contrast: the RPW average of 9.96% compares to a USDC cost of 2.21% for the BRA→ITA corridor. South Africa, with the highest RPW average in the sample at 15.23%, also shows a significant stablecoin advantage at 5.44%. For Italy, the comparison is more nuanced: the USDC average of 3.69% across outbound

[16] For completeness, a bank transfer was available as a funding method; however, the sender in the UAE did not have access to a bank account at the time. As a result, the only feasible funding method was a payment card.

corridors beats the 8.45% RPW average substantially, though this includes the "artificially" cheap ITA→ARG transfer; excluding Argentina, the average rises to 4.83%, still significantly below the RPW benchmark.

The UAE constitutes the sole exception: RPW average sending costs of 2.65% are substantially lower than the 8.95% USDC cost recorded for UAE→ITA.

It should be noted that RPW figures represent country-level averages across all destination countries included in the dataset, whereas the stablecoin estimates reported in this study are based on a single transaction in one specific bilateral corridor for each sending country (with the partial exception of Italy, for which multiple outbound corridors were tested). As a result, the two measures are not strictly comparable, and the exercise should be interpreted as providing an indicative benchmark rather than a like-for-like comparison.[17]

To address this limitation, Table 3 compares stablecoin transfer costs with those charged by Wise on the same bilateral corridors and for the same transaction amount, thereby allowing a more granular corridor-level assessment.[18] The USDC transfers and the Wise simulations were conducted on different dates (25–26 March and 14 April 2026, respectively). As market conditions may vary over time, part of the observed differences may reflect timing effects.

Table 3

Sending Cost Comparison: Stablecoin (USDC) vs. Wise (% of 200 USD)

Corridor	Wise	Stablecoin
ITA → ARG	3.20% – 3.80%	0.30%
ARG → ITA*	0.26% – 0.31%	8.96%
ITA → ZAF	5.14% – 5.15%	4.58%
ZAF → ITA	NA	5.44%
ITA → UAE	2.24% – 2.25%	7.20%
UAE → ITA	1.02% – 1.03%	8.95%
ITA → BRA	2.20%	2.70%
BRA → ITA	4.68% – 4.89%	2.21%

Source: Wise simulations conducted on 14 April 2026.

*Note: * The ARG→ITA corridor is listed on Wise but is not actively served; the cost shown may not be indicative of actual rates. The ZAF→ITA corridor is not available on Wise.*

The Wise comparison reveals a more nuanced and less uniformly favorable picture for stablecoins. USDC is cheaper than Wise in three corridors (ITA→ARG, ITA→ZAF, and BRA→ITA), but more expensive in four others (ARG→ITA, ITA→UAE, UAE→ITA, and ITA→BRA). The ITA→ARG result is again driven by the Argentine premium rather than intrinsic efficiency. For BRA→ITA, the USDC cost of 2.21% undercuts Wise's range of 4.68%–4.89%. Conversely, for ITA→BRA, USDC at 2.70% is slightly above Wise's 2.20%, suggesting that in this direction the MTO achieves comparable or superior cost-effectiveness.

There is limited empirical literature to benchmark our findings; however, a high degree of

[17] The Italy–Brazil corridor is the only corridor included in both the transfer exercise and the World Bank RPW database. For this corridor, the cost of the USDC-based transfer amounted to 2.70%, compared with an average cost of 8.70% in the first quarter of 2025 reported by RPW for traditional remittance services.

[18] This can be regarded as a conservative benchmark for traditional remittance costs, since Wise operates as an MTO and MTOs are generally among the least expensive traditional remittance providers (World Bank RPW, 2025).

heterogeneity in the cost advantages of stablecoins is also documented in Ingham (2025). Du *et al.* (2026) demonstrate that the "stablecoin sandwich" introduces a new set of intermediaries, crypto exchanges functioning as the functional equivalent of correspondent banks; competitiveness therefore depends as much on exchange governance and pricing as on blockchain settlement properties. Our empirical evidence confirms that stablecoins do not offer a systematic cost advantage; efficiency depends critically on the specific corridor, operator choice, and funding method.

4.3 Execution Time Analysis

Table 4 presents execution times disaggregated by phase and corridor. The pattern is clear and consistent: the on-chain transfer (Phase III) is fast in all corridors, under 15 minutes for seven of eight corridors, and approximately 30 minutes for ZAF→ITA. Blockchain settlement is not the bottleneck.

Table 4

Execution Time by Phase and Corridor

Phase\ Corridor	**ITA→ ARG**	**ARG→ ITA**	**ITA→ ZAF**	**ZAF→ ITA**	**ITA→ UAE**	**UAE→ ITA**	**ITA→ BRA**	**BRA→ ITA**
Funding	<1 min	<1 min	<1 min	1–2 d	<1 min	<1 min*	<1 min	<1 min
Purchase	<1 min	<1 min	<1 min	<1 min	<1 min		<1 min	<1 min
Transfer	<15 min	<15 min	<15 min	~30 min	<15 min	<15 min	<15 min	<15 min
Sale	<1 min	<1 min	<1 min	<1 min	<1 min	<1 min	<1 min	<1 min
Withdrawal	<1 min	<1 min	1–2 d	<1 min	~1 d**	<1 min	<1 min	<1 min
Total	**<20 min**	**<20 min**	**~1–2 d**	**~1–2 d**	**~1 d**	**<20 min**	**<20 min**	**<20 min**

Source: Banca d'Italia mystery shopping exercise. Transactions were conducted on 24 and 26 March 2026.

*Note: * For UAE→ITA, purchase occurred via credit card simultaneously with funding; a single time entry covers both phases. ** Withdrawal time for ITA→UAE estimated from exchange documentation; actual withdrawal not completed due to operational constraints.*

The bottleneck is instead found in the fiat-side phases, funding and withdrawal, whose duration is determined by the efficiency of the host country's domestic payment infrastructure. In jurisdictions with instant payment systems (Italy via TIPS, Brazil via PIX, Argentina via Transferencias 3.0), both funding and withdrawal complete in under one minute (for instance, PIX settles in 3 seconds on average; IMF, 2023), enabling end-to-end settlement in under 20 minutes.

South Africa, which relies on standard bank transfers for both the funding and withdrawal phases, produces a total settlement time of one to two business days, entirely attributable to the fiat side, not the blockchain transfer. This eliminates the speed advantage of stablecoin settlement in that corridor: the end-to-end time is comparable to conventional wire transfers. The UAE→ITA corridor lands in an intermediate position at approximately one day, driven by the withdrawal step, whose estimated duration is based on exchange transparency documentation rather than direct observation.

The implication is stark and has immediate policy relevance: the efficiency of stablecoin-based remittances is co-determined by the quality of the surrounding traditional payment infrastructure. Stablecoins require efficient traditional systems to function competitively.

4.4 The Japanese Case Study

Japan's results cannot be directly compared to those of other corridors due to significant operational constraints imposed by the regulatory environment. The regulatory framework restricts retail access to dollar-pegged stablecoins to a single domestic operator, and that operator does not permit direct outbound transfers to foreign exchanges. The exercise therefore required the use of an un-hosted wallet as an intermediate step, a level of operational complexity that is incompatible with ordinary retail use.

The total cost for the JPY→ITA corridor was 1.6%, apparently competitive. However, this figure must be contextualized: the transfer required time-consuming fragmentation due to stringent quantitative limits, and end-to-end execution times cannot be meaningfully measured. Unlike the other corridors examined in this study, the Japanese case could not be implemented through a fully comparable transaction chain because of the use of an un-hosted wallet as an intermediate step. Given this departure from the baseline methodology, the reverse transfer (ITA→JPY) was conducted using the Solana blockchain rather than Ethereum. While Ethereum was selected throughout the main exercise because of its broad availability across the exchanges and service providers considered, the Japanese case provided an opportunity to obtain indicative evidence on transaction costs using an alternative and generally more efficient blockchain infrastructure. For the reverse transfer (ITA→JPY), conducted without completing the off-ramp, the total cost was 1.3%, of which 0.15% was attributable to the on-chain transfer.[19]

The Japanese case clearly shows that overly stringent regulatory requirements can effectively eliminate the practical use of stablecoin transfers even when the cost is low. Regulation that forces users into un-hosted wallets and fragments transfers over time does not suppress stablecoin demand, it drives it toward offshore platforms and decentralized finance, precisely the outcome the regulation seeks to avoid.

5. Conclusions and Policy Implications

This paper has presented, to the best of our knowledge, the first empirical mystery shopping exercise on stablecoin-based remittance costs and execution times conducted by a major central bank across multiple international corridors. A caveat regarding the scope of the exercise is nevertheless warranted. The analysis covers a limited number of jurisdictions and focuses on a single stablecoin, implying that the findings cannot be readily generalized to the broader universe of stablecoin-based remittance arrangements. Differences in market structures, regulatory frameworks, and the characteristics of individual stablecoins may lead to different outcomes in other settings. At the same time, the paucity of empirical evidence in this field enhances the value of the exercise. Despite its scope limitations, the study provides novel evidence on an under-researched topic, contributes to the growing literature on stablecoin-based remittances, and offers useful insights for the ongoing policy debate. Against this backdrop, our findings offer several contributions to both the academic literature and the policy discussion.

First, we show that stablecoins do not offer a systematic cost advantage over traditional remittance channels. Total costs vary dramatically across corridors, from 0.30% to nearly 9% of the transferred amount, and depend primarily on the fiat conversion phases rather than on the distributed ledger transfer itself. The on-chain transfer consistently contributes a marginal 0.4% to total costs. The conclusion echoes that of Du *et al.* (2026): the "stablecoin sandwich" introduces intermediaries whose pricing behavior is at least as important for determining total

[19] While no formal comparison between blockchains can be drawn from a single observation, especially given that relative network fees may vary significantly over time, the evidence remains consistent with the broader findings of the paper. Even on a blockchain generally regarded as more cost-efficient than Ethereum, the on-chain component accounted for only a small fraction of total remittance costs, suggesting that intermediary fees may play a more important role in determining overall costs.

cost as the technical properties of the blockchain. A careful choice of exchange operator can substantially reduce costs, but users require financial and digital literacy to navigate this landscape, consistent with Ante (2025)'s finding on the role of literacy in stablecoin adoption.

Second, the efficiency of stablecoin-based transfers is critically contingent on the quality of the host country's domestic payment infrastructure. Where instant payment systems exist, Brazil's PIX, Argentina's Transferencias 3.0, Italy's TIPS, end-to-end settlement concludes in under 20 minutes, making stablecoin corridors genuinely competitive in speed. Where fiat transfers rely on standard bank processing, as in South Africa, settlement extends to one or two business days, eliminating the speed advantage. This finding suggests that stablecoin-based remittances and domestic instant payment infrastructure are complements, not substitutes. The policy implication is significant: investment in domestic instant payment infrastructure may directly enhance the competitiveness of stablecoin-based cross-border transfers. This raises the question of whether stablecoin-based solutions could emerge as a competitive alternative to bilateral interlinking agreements between domestic instant payment systems, currently regarded as one of the most promising policy responses to cross-border payment inefficiencies.

Third, our analysis of the global regulatory landscape reveals that regulatory design is a first-order determinant of stablecoin transfer efficiency, market structure, and even operator availability. Prohibitionist regimes fail to suppress demand in full and instead push flows into unregulated channels, increasing AML/CFT risks and reducing the transparency and oversight of financial flows. Similarly, excessively restrictive regimes can achieve low nominal costs but impose operational complexity that renders retail use impractical, driving users toward offshore alternatives.

Finally, there is clear policy relevance for monetary authorities: the on/off-ramp conversion requirement is the single greatest constraint on stablecoin efficiency. If stablecoins could be spent directly in the real economy, for goods and services, rents, or school fees, without reconversion into local fiat currency, the economic advantages of stablecoin-based transfers would be substantially higher. This may be particularly relevant in economies where there is already widespread demand for U.S. dollar-denominated assets. In these contexts, greater use of dollar-pegged stablecoins may reinforce the very currency substitution dynamics that partly underpin their adoption. This, in turn, may have significant implications for monetary sovereignty and financial stability.

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