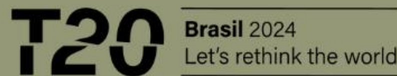
T20 Policy Brief



Task Force 03

REFORMING THE INTERNATIONAL FINANCIAL ARCHITECTURE

Stablecoins, Distributed Ledger Technology, and the Future of Global Finance: Navigating Regulatory Challenges and Opportunities

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Abstract

This policy brief explores the transformative potential of stablecoins, a category of crypto-assets crafted to mitigate price volatility, in streamlining financial transactions within Distributed Ledger Technology (DLT) platforms. It also evaluates their impact on global financial stability when embraced worldwide and used as international private money. Stablecoins, often pegged to fiat currencies like the US dollar, can offer enhanced liquidity, accessibility, and efficiency to financial transactions within DLT systems, but pose regulatory challenges due to their borderless nature and the current lack of harmonized rules across jurisdictions. This document contrasts stablecoins with eurodollars, emphasizing differences in regulatory oversight and legal frameworks. It calls for comprehensive data collection, harmonized regulatory frameworks, and risk management to ensure financial stability. Integrating stablecoins into existing regulatory systems is a possible institutional approach. Adopting these policy measures would create a more transparent and stable regulatory environment, enhancing the integration of stablecoins into the global financial system while mitigating associated risks.

Keywords: stablecoins, Distributed Ledger Technology (DLT), eurodollar, international private money.

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Diagnosis

In recent years, financial and capital markets have experienced substantial changes due to the rapid digitization of money worldwide. At the heart of this transformation lies "tokenization," the process of encapsulating rights or values into digital tokens, powered by Distributed Ledger Technology (DLT), such as blockchain. This technological evolution is set to significantly impact the architecture of global financial markets.

A token, or a crypto-asset,[1] is a digital representation or incorporation of a right or value that can be transferred and stored on a DLT platform. This system uses a decentralized infrastructure to record, share, and synchronize data across multiple nodes in a network, without a centralized administrator. Within financial markets, tokens can represent or incorporate various types of assets, such as currencies, commodities, securities, or real estate. The tokenization process has the potential to enhance liquidity, accessibility, and efficiency in the trading of financial assets at national and global levels.

Yet, for this tokenized ecosystem to operate effectively, it requires a token-based currency as an on-chain medium of payment, referred to as "monetary tokens" (Facklmann, Sevilha, and Duran, 2024). Just like traditional financial infrastructures, economic transactions benefit from a type of money that could be used as the "payment leg" in Delivery versus Payment (DvP) operations, but *within* DLT platforms.

This is where stablecoins - a special type of international private money - come into play, as they already perform this payment role in on-chain operations. In DvP transactions within DLT, a monetary token facilitates the secure exchange of financial assets for payments, thereby avoiding the need for off-chain mechanisms, such as fiat

[1] In this policy brief, we use both terms interchangeably.

currencies on legacy systems. This DLT-based process, known as programmability of money, ensures that both components of the transaction are executed simultaneously and irrevocably, according to predefined conditions and rules, reducing the need for intermediaries. It is a key technological driver for market demand for stablecoins, which are not yet offered by traditional settlement systems.

A stablecoin is a token designed to minimize price volatility. It can achieve this aim through various mechanisms, typically by being pegged to one or more fiat currencies (e.g., US dollar), a commodity (e.g., gold), or a basket of assets including other crypto-assets.[2] As of December 2023, they had a combined market capitalization of approximately US$ 130 billion, and 98% of stablecoin volume is pegged to the US Dollar (ESMA, 2024). In April 2024, the daily trading volume of stablecoins was estimated to be approximately US$85 billion.[3] Comparing this data with the latest Over-The-Counter (OTC) Foreign Exchange Turnover (BIS, 2022), stablecoins would rank as the 17th most traded currency globally, surpassing the volumes of Brazil's Real, Denmark's Krone, and South Africa's Rand.

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[2] This policy brief will not consider stablecoins that base their stability on supply regulation through an algorithm, as the TerraUSD collapse significantly diminished market interest in this type of stablecoin.

[3] The most used platforms to measure stablecoins trading volumes are CoinGecko (most recent data available at https://www.coingecko.com) and CoinMarketCap (most recent data available at https://coinmarketcap.com). These platforms read the information provided by DLT in which the stablecoins are issued and negotiated, displayed in aggregated format. In 2022, stablecoins processed over $11 trillion on-chain, nearly rivaling Visa's volume ($11.6 trillion) (Brevan Howard Digital Report, 2023, p. 4).

Indeed, stablecoins have the potential to replace fiat currencies as a medium of exchange, a store of value, or even a unit of account, particularly in countries dealing with substantial inflation and exchange rate fluctuations (BIS, 2023a), a phenomenon coined as "cryptoization" (IMF, 2023). They can also channel capital flows across jurisdictions. However, data on crypto activities come from on-chain blockchain data and off-chain data reported by market participants. This data is, therefore, dispersed, leading to a lack of transparency, consistency, and reliability in basic indicators (BIS, 2023b).

Stablecoins represent a new regulatory frontier within global financial markets and tends to challenge its existing *status quo*, challenging conventional frameworks of financial regulation and monetary governance. By their borderless nature and their ability to facilitate transactions across jurisdictions, combined with their lower costs and potential broad reach, could signify a paradigm shift in settlement systems, raising profound questions on global financial stability.

At the heart of the stablecoin phenomenon is a reassessment of the concept of international private money. Currently, the legal framework of global money is based on eurocurrency. A eurocurrency is any currency held on deposit by international banks operating outside the home market of that currency. The most significant international money is the eurodollar, which refers to US dollar-denominated deposits in banks located outside the United States, the issuing country.

Created in the 1950s, the eurodollar market is the key legal institution channeling capital flows across different jurisdictions, that become increasingly important with financial globalization. The size of this market was estimated at US$ 14 trillion in 2016 (ECB, 2023). It operates under a decentralized governance framework of regulatory and private laws, where global banks issue liabilities denominated in a sovereign currency. Although the eurodollar market is sometimes referred to as "unregulated," this term is

imprecise. It is not the absence of regulation but rather a framework that includes an implicit delegation to various agents, typically regulated entities and their contractual mechanisms (Duran, 2020). It is not the lack of norms but rather the complexity of the legal infrastructure that underpins it.

A eurodollar is subject to rules from different jurisdictions simultaneously: US monetary laws (which regulate the value of the currency), and regulatory norms and private laws (such as property and contract laws) of the jurisdiction where the bank is located. During times of crisis, the resilience of this framework is tested, and consistently since the 2008 financial crisis, a lender of last resort for this form of private money has been established. Central bank cooperation among advanced economies has constructed a legal infrastructure based on a network of currency swaps to strengthen the international uses of the US dollar, within the eurodollar market (Duran, 2020, Mehrling, 2015).[4]

[4] As part of a permanent arrangement of central bank swaps in US dollar, the exclusive club is composed of the monetary authorities of the United States, Canada, the United Kingdom, Japan, the Eurosystem, and Switzerland.

TABLE 1. International Private Money: Eurodollar v. Stablecoins

International Private Money: Key Institutional Features	Eurodollar	Stablecoins
Issuer	Private Commercial Banks	Regulated and non-regulated entities, including BigTechs
Denomination	US dollar	Different units of account, but 98% of volume in US Dollar
Legal nature	Bank liability (unsecured debt; international deposit contract)	Liability of the issuer (contractual right of redemption and conversion into underlying assets)
Legal Promise	Offshore par settlement of financial obligations	On-chain par settlement of financial obligations
Regulatory Supervision	Homogenous across different jurisdictions	Inconsistencies in supervision or regulatory standards across jurisdictions
Exchange	Centralized (circulation as bank money)	Decentralized (circulation as bearer instruments)
Asset backing	Foreign cash reserves (fractional reserve; legal obligation in accordance with regulatory rules)	Assets held by the issuer to fulfill redemption orders equal to or greater in value than the issued tokens (in the absence of regulatory rules, it is only a contractual obligation)
Lender of Last Resort	US dollar-denominated central bank swaps	Absence

Source: Elaborated by the authors.

As of today, stablecoins significantly differ from the eurodollar. Stablecoin issuers are often unregulated entities operating across borders without supervision. Additionally, they do not have access to a lender of last resort during crises, posing potential risks to global stability if their adoption reaches a global scale.

However, similar to eurodollars, they can function as international private money. They represent promises of on-chain par settlement, similar to how eurodollars signify promises for offshore par settlement of financial transactions (Aldasoro et al., 2023). Additionally, they have the technical capability to direct capital flows across jurisdictions and even circumvent capital flow management measures, which is particularly risky during periods of capital flight, as unregulated stablecoins operate outside traditional market infrastructure. In fact, crypto-asset trading volumes tend to be higher in countries with stricter capital controls (IMF, FSB, 2023).

Presently, few countries regulate stablecoins, with many of these rules incompatible with each other and the majority either are not yet in force or have limited implementation (PwCHK, 2023; BIS, 2023a). The European Union (EU) Markets in Crypto-Assets Regulation (MiCA)[5] is a unique global precedent. It distinguishes itself as an extensive framework under EU law aimed at harmonizing market norms for crypto-assets throughout the region, with specific emphasis on the issuance and circulation of stablecoins.[6]

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[5] Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets.

[6] EU MiCA governs two categories of stablecoins: asset-referenced tokens (ART) and e-money tokens. While the latter is pegged solely to one official currency, the ART is pegged to one or more official currencies and/or other financial assets.

In the absence of regulatory norms, legal claims related to the circulation of stablecoins depend solely on the private commitments made by their issuers (i.e., contractual arrangements). The legal recognition of these claims may also differ among jurisdictions, contingent upon their respective private legislation. While major stablecoin issuers claim that their tokens are fully backed by cash or low-risk and liquid equivalents, Tether, the issuer of the most widely used stablecoin, the USDT (which accounts for approximately 70% of the market, according to ESMA [2024]), states merely that holders of their tokens may be refunded "in-kind" in its "Terms of Use." [7] Furthermore, certain stablecoin issuers try to hide their jurisdiction, complicating efforts to regulate their activities and seek legal recourse for fraud or mismanagement in Court. Hence, legal uncertainties remain considerable within the stablecoin market.

[7] Tether provides details on the assets backing its emissions and outlines its exchange and refund procedures on its website. The relevant information can be found at https://tether.to/en/transparency/#reports and https://tether.to/en/legal/, respectively [Access on May 15th, 2024].

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Policy Recommendations

1. Expand Data Collection and Analysis on Stablecoins with Global Reach. To address the lack of comprehensive data on stablecoins, it is crucial to expand the mandate of international organizations under the G20 leadership. The standardization of the type and scope of data is needed to effectively monitor the stablecoin market. This process is key to build evidence-based policies that can effectively address the impact of the growing use of stablecoins on global financial stability.

2. Establish Comprehensive Regulatory Frameworks. There is no universally agreed-upon regulatory definition for stablecoins. Legal frameworks are fragmented, formed by global recommendations from standard-setters like the Financial Stability Board (FSB), the International Monetary Fund (IMF),[8] the Basel Committee on Banking Supervision (BCBS),[9] and the Financial Action Task Force (FATF) regarding anti-money laundering and terrorist financing rules,[10] alongside a few national and regional regulations. Therefore, it is crucial to develop and implement harmonized regulatory frameworks across G20 nations to ensure consistency and prevent regulatory arbitrage. This includes aligning with frameworks such as the EU's MiCA. Highlighting the key

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[8] For example, we can refer to the FSB (2020; 2023) and IMF, FSB (2023).

[9] Notably, the BIS, BCBS (2022).

[10] Yet, according to the FATF report (2023), the majority of jurisdictions (73 out of 98) are only partially or not compliant with the FATF's requirements on crypto-assets. In fact, only 24 jurisdictions (25%) have achieved a largely compliant status, with a single jurisdiction standing out as fully compliant.

role of a prominent G20 member, the United States, is crucial in endeavors to enhance the regulatory standing of stablecoin issuers. Any effective resolution to the challenges presented must garner the support and action of the US authorities to have a meaningful impact, given the worldwide prominence of monetary tokens denominated in US dollars.

3. Enhance Legal and Contractual Frameworks. The G20 countries should ensure that the legal frameworks governing stablecoins and other crypto-assets provide certainty and enforceability of contracts, including cross-jurisdictional recognition of legal claims. Given that stablecoins circulate as bearer instruments, it is imperative to establish consistent rules governing private transactions across different jurisdictions, mirroring past efforts like the Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes. The UNIDROIT Principles on Digital Assets and Private Law (2023) offer an advanced model for international standardization and merit consideration by G20 countries as a blueprint for updating national private laws.

4. Ensure Financial Stability Through Cooperation. G20 countries must establish risk management frameworks to diligently monitor and mitigate potential financial stability risks associated with stablecoins, particularly those witnessing widespread adoption. They should explore collectively mechanisms aimed at providing a lender of last resort for specific types of stablecoins, thereby bolstering their resilience during crisis. One conceivable institutional design involves integrating stablecoins into the regulatory framework governing money and financial assets. It would allow their access to central bank support and competent supervision in each jurisdiction. As the usage of stablecoins continues to expand and intertwine with traditional financial markets, serious consideration should be given to fully implementing prudential rules tailored to

stablecoins. These norms would serve to mitigate the transmission of issuer risk across G20 nations, drawing on established guidelines such as those proposed, for instance, by the BCBS (BIS, BCBS, 2022).

Outcomes

Stablecoins, a form of international private money leveraging technological advancements, hold the promise of enhancing efficiency in financial services by acting as a monetary token for DvP transactions, including across borders. However, since they are not yet fully regulated, their widespread adoption could pose a threat to global financial stability. Although the risks are currently limited due to their small scale, this situation could change over time.

Standardizing data collection on stablecoins would enhance transparency and consistency, enabling evidence-based policymaking within G20 countries. Harmonized regulatory frameworks across G20 nations would ensure consistency, prevent regulatory arbitrage, and create a level playing field. The alignment of standards would also bolster compliance with various regulatory requirements, such as anti-money laundering rules and, notably significant for emerging market economies, capital flow management measures.

Ensuring legal certainty and the enforceability of contracts, including cross-jurisdictional recognition, would reduce legal uncertainties. A uniform legal framework for crypto-assets would facilitate smoother cross-border transactions and legal recognition. Establishing robust risk management frameworks would enhance the resilience of the financial system and provide mechanisms such as a lender of last resort for specific types of stablecoins. Integrating stablecoins into existing regulatory frameworks would allow for central bank support and competent supervision, thereby reducing systemic risks. Implementing prudential rules tailored to stablecoins would ensure their stability and mitigate issuer risk across G20 nations.

Overall, adopting these policy recommendations would lead to a more transparent, consistent, and stable environment for stablecoins. This would enhance their integration

into the global financial system, alongside the eurodollar market, while mitigating associated risks.

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