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Understanding Stablecoins

Prepared by Tobias Adrian, Parma Bains, Marianne Bechara, Eugenio Cerutti, Stephanie Forte, Federico Grinberg, Alessandro Gullo, Martina Hengge, Agnija Jekabsone, Kathleen Kao, Tommaso Mancini Griffoli, Soledad Martinez Peria, Marcello Miccoli, Marco Reuter, and Nobuyasu Sugimoto

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Executive Summary

The purpose of this IMF Departmental Paper is to explain and document the phenomenon of stablecoins, and present their potential benefits, while providing a holistic view of risks, policy frameworks, and emerging regulations. Stablecoins, a type of crypto asset, have experienced significant growth and received increasing attention in recent years. This work provides a comprehensive overview of stablecoins, focusing on those backed by financial assets denominated in currency (so called "fiat-backed"), which represent most of the market. It discusses their characteristics, market developments, use cases, potential benefits, associated risks, and the evolving international regulatory landscape. It builds on previous IMF analysis and largely summarizes the state of play without developing new policy lines.

The main messages are:

Stablecoins, unlike other crypto assets, aim to maintain a fixed parity relative to a specific currency. Stablecoins have commonality and differences with other crypto assets ("unbacked crypto assets"). Like unbacked crypto assets, they are issued on distributed ledgers, typically blockchains. Unlike unbacked crypto assets, they are generally issued and operated in a centralized manner by entities such as crypto firms or financial institutions, which aim to maintain a fixed parity relative to a specific currency, and have backing assets. Indeed, stablecoin issuers usually back the stablecoins in circulation 1:1 with short-term, liquid financial assets. The large majority of currently existing stablecoins is denominated in United States dollars.

Stablecoins are currently mostly used for crypto trades, although they have the potential to be used in other payment transactions. Stablecoin issuance has doubled over the past two years, driven by their use in crypto trades—acting as a bridge between volatile unbacked crypto assets and fiat currencies—albeit with an expansion in use cases to include cross-border payments. The future demand for stablecoins could arise from other use cases—like use in domestic payments—building on greater incentives and confidence provided by enabling legal and regulatory frameworks. Estimates on stablecoins' future growth vary widely.

Stablecoins differ from existing forms of traditional and tokenized assets in several dimensions. Stablecoins are part of the broader trend of asset tokenization—the representation of assets on distributed ledgers, providing a new infrastructure and process through which assets are recorded, issued, and transferred—although stablecoins differ from traditional and tokenized assets in several key ways. Unlike central bank money and deposits (and their potential tokenized form), stablecoins could offer less stability if regulatory frameworks do not address the potential market and liquidity risk of their backing assets and generally provide—at the current juncture—more limited redemption rights. Unlike money market funds (and their tokenized version), stablecoins do not pay returns, at least not directly. Unlike some other tokenized assets, but similarly to unbacked crypto assets, stablecoins generally offer peer-to-peer transferability on public blockchains.

Stablecoins offer several potential benefits. Through tokenization, stablecoins could increase efficiency in payments— particularly cross-border transactions, including by reducing the costs and enhancing the speed of remittances—and widen access to digital finance through increased competition. For some users, they could also offer a more comprehensive user experience by integrating with the crypto world while still being used in other transactions.

Stablecoins could also carry significant risks—in the absence of adequate regulations and backstops—that would be more pronounced in countries with weaker macroeconomic fundamentals and institutions. These risks

are related to macrofinancial stability, operational efficiency, financial integrity, and legal certainty. The risks would mostly arise in the absence of adequate laws, regulations, supervision, and backstops, and if adoption of stablecoins increases. Stablecoins value can fluctuate due to the market and liquidity risks of their reserve assets. If users lose confidence in stablecoins—especially if redemption rights are limited—this could potentially trigger sharp drops in value. If stablecoins are widely adopted, runs on stablecoins could trigger fire sales of the underlying reserve assets, potentially impairing market functioning. Stablecoins may contribute to currency substitution, increase capital flow volatility by circumventing capital controls, and fragment payment systems unless interoperability is ensured. These risks could be more pronounced in countries experiencing high inflation, in countries with weaker institutions, or in countries with diminished confidence in the domestic monetary framework.

The regulatory landscape for stablecoins is evolving. The IMF, the Financial Stability Board (FSB), and international standard-setting bodies (SSBs) have issued comprehensive policy recommendations to address risks from crypto assets, including stablecoins. These include (1) safeguard monetary sovereignty and stability by strengthening monetary policy frameworks; (2) maintain the effectiveness of capital flow management measures; (3) address fiscal risks; (4) adopt FSB's high-level recommendations with target measures if appropriate; (5) confirm legal treatment and provide clear guidance; (6) implement and enforce Financial Action Task Force (FATF) standards and address market integrity issues; (7) establish international collaborative arrangements; (8) monitor the impact of crypto assets on the stability of the international monetary system; and (9) strengthen global cooperation.

Many authorities have started implementing international standards for stablecoins, but the landscape remains fragmented. Emerging regulations and robust implementation would mitigate operational, financial integrity, legal, and macrofinancial risks. However, a comparative analysis of legal and regulatory frameworks in Japan, the European Union, the United States (yet to be fully implemented), and the United Kingdom (still in the proposal stage) highlights different approaches in several important areas, including the type of entities allowed to issue stablecoins, approaches toward foreign stablecoin issuers, segregation and custody requirements, and proportionality toward systemically important issuers. This may create regulatory arbitrage opportunities that could affect the overall effectiveness of the regulations. Moreover, the possibility for some stablecoins to be held through unregulated entities, including unhosted wallets, could limit the effectiveness of regulations.

The cross-border nature of stablecoins adds complexity for regulators and data compilers, highlighting the need for stronger collaboration, both nationally and internationally. Effectively managing macrofinancial risks—such as currency substitution, volatile capital flows, and payments fragmentation—requires additional measures and enhanced cooperation. As stablecoins operate globally, this also increases the potential for conflicts between domestic policies, making international cooperation even more essential. Moreover, unlike existing financial instruments, stablecoin issuers generally do not have visibility into the residence or nationality of their token holders, which creates significant challenges for data-driven decision making.

The IMF continues to closely monitor developments and the evolving impact of stablecoins on the international monetary system, offering analysis, guidance, technical assistance, and policy advice to member countries on crypto assets, including stablecoins. As stablecoins continue to develop and integrate into the global financial system, policymakers, regulators, and industry stakeholders need to collaborate and ensure that the potential benefits of stablecoins materialize while addressing increasing risks. This collaborative approach will help create a more resilient and inclusive financial ecosystem, paving the way for innovative financial solutions that can support economic growth.

Acronyms and Abbreviations

AML	anti-money laundering
BIS	Bank for International Settlements
BoE	Bank of England
CASP	crypto asset service provider
CBDC	central bank digital currency
CDD	customer due diligence
CFT	countering the financing of terrorism
CFM	Capital Flow Management Measure
CNAV	constant net asset value
CPMI	Committee on Payments and Market Infrastructures
CSD	central security depository
DeFi	decentralized finance
ETF	exchange-traded fund
EMDE	emerging market and developing economy
EU	European Union
FATF	Financial Action Task Force
FCA	Financial Conduct Authority
FSB	Financial Stability Board
FTSP	fund transfer service provider
GDP	gross domestic product
HKD	Hong Kong Dollar
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
MAS	Monetary Authority of Singapore
MFS	Monetary and Financial Statistics
MiCA	EU markets in Crypto Assets Regulation
MMF	money market fund
ML	money laundering
PFMI	Principles for Financial Market Infrastructures
PF	proliferation financing

RTGS	Real Time Gross Settlement System
SSB	standard-setting body
TF	terrorism financing
UNIDROIT	International Institute for the Unification of Private Law
USD	United States dollar

Introduction

Stablecoins have risen in prominence in recent years. The issuance of these assets has doubled over the past two years, primarily due to their function as settlement instruments in crypto assets transactions and their potential to "farm for yields" within the crypto world.[1] Several jurisdictions have recently introduced legal and regulatory frameworks in response to this growth, further intensifying global attention on the ecosystem and its technology, the blockchain. Indeed, the heightened attention directed toward stablecoins has also generated greater interest in asset tokenization, a process that involves representing assets on a distributed ledger, usually a blockchain

The objective of this paper is to provide a basic understanding of stablecoins. The paper offers an overview of existing stablecoin arrangements and use cases, examines their potential benefits and risks, and outlines ongoing international efforts to develop policy frameworks. The work builds on previous IMF analysis and reiterates policy positions from the IMF's "Elements of Effective Policies for Crypto Assets" (IMF 2023) and the work of standard-setting bodies (SSBs)—such as IMF–FSB (2023). It also provides an overview of emerging laws and regulations in selected countries.

The paper begins by defining stablecoins and provides a conceptual framework based on economic characteristics, noting similarities and differences with other financial assets and liabilities. It then presents market developments, discusses use cases, and considers factors that could contribute to future demand for stablecoins. It examines potential benefits and opportunities and highlights risks to policy objectives. The paper continues with a survey of international policy guidance and standards (with a focus on IMF, FSB, and SSB recommendations) and provides an overview of emerging stablecoin legislation and regulation in selected jurisdictions (Japan, European Union, United States, and United Kingdom).

[1] Yield farming is similar to depositing funds to gain an interest in traditional finance. It typically involves depositing tokens into decentralized exchanges and liquidity protocols. In return, the investors earn rewards, typically through interest, transaction fees, and governance tokens of the protocol.

Definition and Conceptual Framework

Stablecoins are crypto assets that aim to maintain a stable value relative to a specified asset or a pool or basket of assets.[2] This section describes properties and functions of current stablecoins, which may be subject to change after proper implementation of regulation and supervision. Stablecoins have seven key characteristics:

- Issuer: private entities.
- Denomination: commonly in an existing currency, such as the US dollar or euro, but in some cases also in a different unit of account.[3]
- Value: the price of a stablecoin is expressed in its unit of denomination.
- Stability mechanism: backed with "reserve" assets, which may comprise financial assets, commodities, or other crypto assets. A few stablecoin issuers aim to maintain a stable value by purchasing and selling their stablecoins on the market (known as algorithmic stablecoins).[4]
- Remuneration: none directly.
- Transferability: peer-to-peer and through intermediaries.[5]
- Infrastructure: commonly public blockchains are used to record ownership and settle the transfer of stablecoins. Stablecoins are commonly referred to as "on-chain assets," although many transfers occur "off-chain."

Stablecoins differ from unbacked crypto assets, like Bitcoin, in two main ways. Unlike unbacked crypto assets, which are valued in their own units and have no stability mechanism, stablecoins are designed to serve as a stable on-chain means of payment and a store of value. Both types are transferable peer-to-peer and through intermediaries and exist on-chain.

This paper discusses so-called "fiat-backed" stablecoins; these are denominated in existing currencies and backed by financial assets in those currencies. These stablecoins make up most of the market and are meant to be supported 1:1 by safe, liquid, and short-term financial assets, although major issuers also hold other asset types.[6]

Stablecoins are issued, recorded, and transferred on blockchains. Blockchain is a type of distributed ledger technology that allows the recording and transfer of assets on a shared, trusted, and programmable ledger.[7] As such, blockchains are part of the financial infrastructure underpinning stablecoins. Such on-chain assets are

[2] FSB (2020); IMF (2023).

[3] One issuer may issue more than one stablecoin, for instance, in different denominations.

[4] Algorithmic stablecoins typically do not have dedicated reserve assets, and even if they do have those, the assets may include crypto assets. Many algorithmic stablecoins have also proven to be volatile, and many regulators don't allow them to be qualified as "regulated stablecoins" (for example, MiCA regulation in the EU). One algorithmic stablecoin, TerraUSD, collapsed in May 2022, wiping out tens of billions of dollars in market value (Briola and others 2023).)

[5] In practice, users often use intermediaries, see the section on potential benefits for more details.

[6] The market for stablecoins evolved from considering own denomination backed by a pool of assets (for example, the project Diem by Meta, formerly Libra) to stablecoins denominated in an existing currency and backed by assets denominated in the same currency. However, the trend could reverse.

[7] In general terms, a blockchain is a system of physically distributed computers running a copy of a shared ledger, open to anyone to access and read, while recording is subject to specific rules. Sharedness refers to the capacity of transacting parties to possess, acquire, and transfer assets on the ledger. Trust depends on the accuracy of asset ownership and the predictability of transaction orders. Trust is needed for agents to willingly transact on the ledger. Programmability means that assets—the financial applications associated with them, such as repos and swaps—and the conditions for transactions, including the investors permitted to hold certain assets, can all be hard coded into, and executed by, the ledger (Agur and others 2025).

commonly referred to as digital tokens and allow peer-to-peer transfers without third-party certification and settlement. While most stablecoins are traded on public blockchains, proprietary blockchains and other forms of distributed ledgers are being developed.[8] Early blockchain platforms consumed significant energy, but newer versions are more efficient.[9]

The stablecoin ecosystem includes digital wallets, exchanges (centralized or decentralized), asset custodians, and blockchain validators. The issuer's governing body sets and enforces rules for the stablecoin. Digital wallets let users access, hold, and transfer stablecoins; these digital wallets may be controlled by users ("unhosted") or provided by third parties such as standalone wallet companies or crypto exchanges ("hosted"). Centralized and decentralized exchanges are marketplaces for trading crypto assets, either matching supply and demand or acting as market makers. Asset custodians, typically licensed financial institutions, safeguard reserve assets. Validators support the consensus mechanism on the blockchain.[10]

Stablecoin issuers do not directly remunerate holders; however, indirect remuneration is possible. Regulations, where present, generally prohibit stablecoin issuers from providing direct compensation to holders. Nonetheless, wallet providers and decentralized exchanges that facilitate access to stablecoins may provide incentives, sometimes as a part of an agreement with stablecoins issuers.[11] These incentives can closely approximate the returns earned by stablecoin issuers on their reserve assets.

Stablecoin issuers mint stablecoins on demand, promising to redeem them at par, though this action is not always guaranteed. Buyers send funds to the issuer, who then mints stablecoins and adds these funds to reserves. Par redemption means one stablecoin swapped for its pegged value, but issuers often set minimums and charge fees, limiting retail redemptions.[12] Holders may sell stablecoins through centralized exchanges or peer-to-peer, but prices can vary from par due to market forces. Although there is no direct evidence of issuers directly intervening in secondary markets to influence stablecoins' price, recent research highlighted arbitrageurs as key players in maintaining the peg (Ma, Zeng, and Zhang 2025)—similar to authorized participants of exchange-traded funds (ETFs), which operate in secondary markets and are permitted to redeem directly from the issuer and thus have an incentive to buy stablecoins below par.

Stablecoins are part of a broader trend toward the tokenization of financial assets and money. Tokenization refers to the creation of assets or representations of assets on a shared, trusted, and programmable ledger, usually a blockchain. Tokenization does not change the fundamental economic characteristics of assets but alters the infrastructure and process on which assets are recorded, issued, and transferred, bringing potential efficiency improvements (Box 3). Central banks are exploring the possibility of issuing currency or central bank

[8] See, for instance, Introducing Arc: An Open Layer-1 Blockchain Purpose-Built for Stablecoin Finance and Tether Creates "Stable" Blockchain Built Just for USDT Economy.

[9] According to the Ethereum foundation, which manages one of the largest blockchains on which stablecoins are issued, energy consumptions decreased by 99.98 percent with novel technology features Ethereum Energy Consumption | ethereum.org. In addition, the use of "Layer 2" solutions (a separate protocol built on top of the main blockchain) improved scalability by moving transaction processing off the main "Layer 1" blockchain, thereby reducing congestion, lowering costs, and increasing transaction speed.

[10] See also IMF–FSB (2023). The consensus mechanism is the process through which validators agree on adding and recording new information to the blockchain (Bains 2022 and 2025).

[11] For instance, Circle, the issuer of one of the largest stablecoins, USDC, provides financial incentives to holders through centralized exchanges (for example, Coinbase). See Circle pre-IPO regulatory filing, page 154 and Coinbase Form 10-K, page 9.

[12] Stablecoin issuers usually promise to redeem stablecoins at par, but there are some limitations. For instance, both USDC and USDT require registration on their platforms and a fee (Circle 2025, section 13). USDT also requires a minimum redemption of $100,000 (Redeem Tether Tokens to Fiat Currency). Holders that do not register have as their only options to exchange stablecoins on the centralized platforms or peer-to-peer, though the value can deviate from par. See also Ma, Zeng, and Zhang (2025).

reserves on a digital ledger, known as central bank digital currency (CBDC) (Box 1). Central bank reserves (and currency in circulation) are the most liquid and (nominally) safest form of money, often referred to as the "M0" monetary aggregate. Commercial banks are exploring the option of making their deposits ("M1") available on blockchains, known as tokenized bank deposits.[13] Deposit tokenization does not affect a bank's maturity or credit transformation functions, but it enables depositors to transition from an account-based deposit system to a tokenized, blockchain system. Additionally, tokenized money market funds (MMFs), such as BlackRock's BUIDL—part of "M2" or "M3" category, in short "M+"—offer investors exposure to asset classes typically found in prime or government MMFs.[14] As with existing traditional MMFs, such tokenized structures could be subject to MMF regulations, including investor protection, disclosure, liquidity requirements, and certain redemption rules such as gates.[15] Tokenized investment funds or vehicles could eventually, if allowed by regulation, offer tokenized fund-of-funds structures that invest in a mix of tokenized M0, M1, and M+, and even offer weighted exposure to broader asset classes. Some analysts expect asset tokenization to reach $16 trillion or 10 percent of global GDP by 2030 (Agur and others 2025).

Box 1. Central Bank Digital Currencies

Central banks are experimenting with central bank digital currencies (CBDCs) both for retail and wholesale payment purposes, with the latter often referred to as "tokenized reserves." Three countries have launched a retail CBDC (The Bahamas, Jamaica, and Nigeria); others are in advanced stages of exploration (China, the euro area).[1] Several jurisdictions—including the euro area, Hong Kong SAR, and Switzerland—are actively experimenting with tokenized reserves. A 2024 Bank for International Settlements (BIS) survey found that 85 out of 93 central banks were exploring a retail CBDC, a wholesale CBDC, or both (Illes, Kosse, and Wierts 2025). According to the BIS survey, work on CBDCs is accelerating in response to developments in stablecoins to provide a convenient alternative. Some other countries have, however, halted retail CBDC exploration (the United States) or scaled down work on it (Canada).

Retail CBDCs could be qualified as a digital form of a country's official currency, issued and regulated by the central bank. They aim to provide a convenient, electronic form of central bank money, with the safety and liquidity that it entails. Central banks state that they are looking into retail CBDCs issuance with the goal to provide a digital form of cash in the face of declining cash use, support faster and cheaper payments, including cross-border transactions, and broaden financial inclusion. Wholesale CBDC is being pursued to increase payment system efficiency and align with the trend in asset tokenization, providing tokenized central bank money for settlement. Indeed, historically, central bank money has been the preferred settlement asset for most systemic payments given its nominal stability and liquidity. CBDC, however, also poses risks, including operational, financial integrity, consumer protection, and financial stability risks if not properly designed and regulated.

Both CBDC and stablecoins could be used for payments. They could compete against each other if they are seen as close substitutes. The more stablecoins are safe and integrated with the payment system, the more

[13] The extent to which these would be governed by the same framework applicable to traditional commercial bank deposits is still being explored.

[14] Retail money market funds (MMFs) are usually part of M2 and institutional MMFs part of M3.

[15] Currently, these tokenized MMFs have a cash/liability leg that is on-chain, but the investment and settlement are off-chain in traditional (that is, not tokenized) asset markets. In the future, a fully tokenized MMF could have both legs on-chain. For a further discussion see Box 1.2 in the October 2024 *Global Financial Stability Report*.

stablecoins can be seen as a substitute for CBDC. This could happen, for instance, if stablecoin issuers have access to the central bank payment system, and even more so if they are allowed to be fully backed by central bank reserves. Stablecoins and CBDC could also co-exist if they focus on different use cases, dictated by their different economic, legal, and technological characteristics. Indeed, stablecoins and CBDC differ in issuer, risk, legal status, transferability, and potential use for illicit activities. In addition, technology can be different. Stablecoins are always issued on a blockchain. Wholesale CBDC is based on blockchain technology, but not necessarily a public blockchain, and retail CBDC can be issued with different technologies. As such, retail CBDC would not constitute an "on-chain" asset for crypto trades.

The IMF has been supporting countries in their evaluation of CBDC by providing capacity development and policy analysis .The IMF CBDC Virtual Handbook aims to collect and share knowledge, lessons, empirical findings, and frameworks to address policymakers' most frequently asked questions on CBDCs.

[1] Some countries' adoption of CBDC has been lackluster (Ree 2023). Regarding wholesale CBDC, the ECB's Governing Council has approved a plan that will enable settling DLT transactions using central bank money. The initiative follows a two-track approach: the first track "Pontes" provides a short-term offering to the market—including a pilot phase—and the second track "Appia" focuses on a potential long-term solution. Work on the retail CBDC, the digital euro, is ongoing.

Stablecoins resemble these tokenized and traditional forms of assets and their economic characteristics are currently closest to tokenized government MMFs. Like CBDC, stablecoins can be transferred peer-to-peer. Like constant net asset value MMFs, stablecoins aim to maintain par value relative to a known currency and back their issuance generally with safe and liquid assets to ensure stability. Like government MMFs, they invest in short-term and high-quality debt instruments issued by a sovereign. In addition, similar to MMFs, existing stablecoin issuers can impose redemption restrictions.

However, stablecoins also exhibit clear differences from money and other traditional and tokenized assets, effectively requiring a conceptual category of their own. Unlike CBDC, stablecoins may not always offer nominal value stability. Also, stablecoins could be held by unhosted wallets, which is not a functionality that has been widely explored in a CBDC context due to financial integrity requirements. Different from bank deposits, whose stability in value is supported by comprehensive regulatory and resolution regimes, deposit insurance schemes (where available) and access to central bank liquidity, stablecoins, at least at the moment, lack some of these stabilization features. In addition, while redemption at par is often expected by the investors, this may not be always guaranteed for all stablecoin holders and most will need to rely on exchanges to sell their stablecoins, where the value of the latter may deviate from par. And unlike traditional and tokenized MMF shares, the stablecoin issuer does not directly compensate stablecoin holders with dividends or interest. Importantly, stablecoins can be transferred peer-to-peer much more easily, and have higher potential as payment instruments, than shares in MMFs similarly to ETFs. This may reduce the redemption pressure and liquidity risks to the issuer itself, although it requires robust market makers or otherwise it would create price volatility to the secondary markets. Similarities and differences of stablecoins relative to other forms of money are captured in Table 1.

Stablecoins share similarities with e-money, though e-money is not tokenized and deployed on distributed ledgers. Both are issued by private entities, denominated in an existing currency, and aim for stable value by prudent reserve management. Although both can be used for payments (but there are currently limited

examples in practice for stablecoins),[16] e-money regulation usually requires redemption at par at any time under clear contractual terms and reasonable fees, and e-money is denominated in local currency and transferable mostly within the same issuer's customer base. Stablecoins, meanwhile, are mainly tied to major reserve currencies such as the US dollar or the euro.

Table 1. Selected Characteristics of Stablecoins versus Traditional and Tokenized Forms of Money

	Issuer	Value	Stabilization Mechanism	Remuneration	Transferability
Stablecoin	Private	Traded value, aiming at par to reference assets	1:1 short-term and liquid assets as backing, with constrained redemption rights	None (directly) (1)	Peer-to-peer and through intermediaries, potentially globally
Currency, central bank digital currency (CBDC), and central bank reserves	Public	Nominal value stability	Power to issue central money and to regulate currency exchange rates; legal tender laws (2)	None for currency, for central bank reserves depends on jurisdictions and scope, for CBDC depends on design choices	Peer-to-peer for currency (but limited by physical proximity); for CBDC could be peer-to-peer, but subject to customer due diligence requirements
Demand deposits	Private	Fixed value, at par to currency	Relies on assets backing, regulation and supervision, deposit insurance	Yes, when carrying positive rate of interest	Not freely transferable on a peer-to-peer basis (3)
Money market fund shares (CNAV)	Private	Fixed value, at par to reference assets	Relies on regulation and supervision, enforcing, among other things,1:1 short-term and liquid assets as backing, with redemption rights subject to liquidity management tools	Yes	Not transferable (4)
E-money	Private	Fixed value, at par to currency	Relies on client funds segregation in banks or central bank	Depends on regulation	Transferable mostly within the closed system of the e-money issuer

Source: IMF Staff analysis.

Note: This comparison (i) considers existing stablecoins practices, which might change with implementation of regulations, and (ii) assumes that stablecoins and other assets are denominated in the same currency; most stablecoins are denominated in US dollars, while traditional forms of money are primarily denominated in local currencies. (1) Some stablecoin issuers provide monetary incentives to investors through intermediaries to maintain their exposure, albeit this remuneration is not organic to the structure. (2) Some legal frameworks require some backing of the currency in circulation in foreign exchange and precious metals. (3) In most jurisdictions, deposit balances represent claims depositors have against their banks and legal transfers of these claims typically require the banks' involvement for the execution and settlement rather than direct peer-to-peer transfer. (4) Potentially peer-to-peer, but subject to money market fund approval in order to satisfy customer due diligence requirements. CNAV = constant net asset value.

[16] For instance, the e-commerce platform Shopify in the United States allows USDC as a means of payment. AMC Theatres and Regal Cinemas, US movie theater chains, accept US dollar-pegged stablecoins.

Stablecoins are being integrated into the legal and regulatory architecture. Unlike unbacked crypto assets that have decentralized issuance and operation, stablecoins are issued by specific legal entities with a balance sheet and reserves. This centralized structure allows stablecoins and stablecoin issuers to be integrated more easily into the regulatory perimeter. However, challenges remain as stablecoins span regulatory jurisdictions. Regulatory frameworks are emerging, both at the domestic and international level, although most jurisdictions are still in the process of developing and implementing their regulations (see the section presenting the international work on stablecoin policy frameworks).

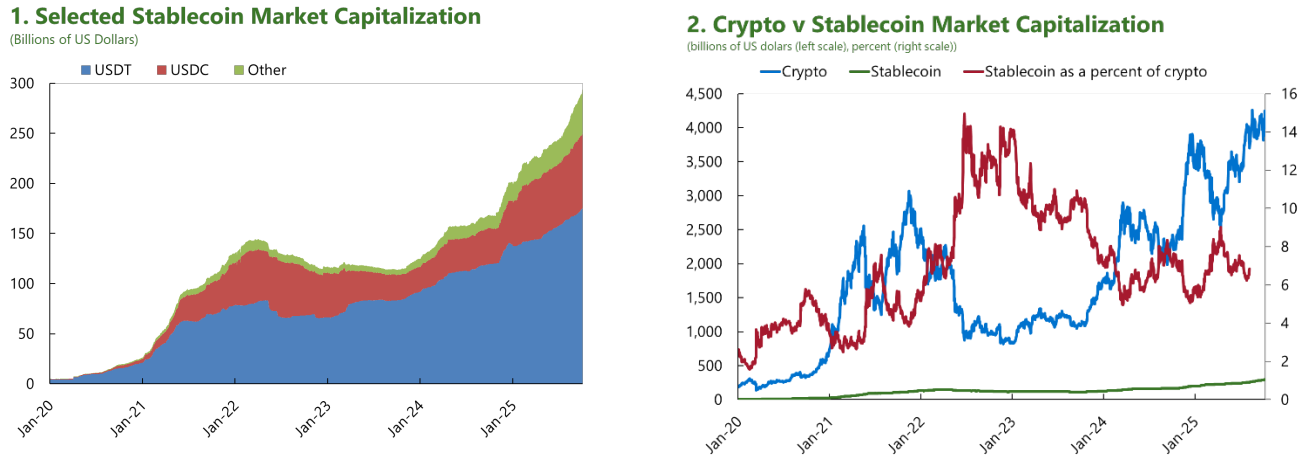
Recent Developments, Current Use Cases, and Potential Demand

Market Development and Use Cases

Stablecoin issuance has increased rapidly in recent years, though it still represents a fraction of the wider crypto asset capitalization (Figure 1). The first stablecoins were issued in 2014, but interest in them emerged only a few years later. During 2022–23, the market entered the so-called "crypto winter," associated with instances of fraud in the crypto ecosystem and higher interest rates in many countries, raising the cost of funding to invest in crypto assets. Stablecoins' issuance increased rapidly, doubling in size since 2024, to reach about $300 billion in September 2025. Notwithstanding the recent large growth, stablecoins represent only about 7 percent of the capitalization of all crypto assets—about half as much as they did in 2022—and only 0.5 percent of the capitalization of the stock market in the United States.

Current use cases focus on crypto trades, but cross-border payments are increasing. Stablecoins are currently used mostly to pay for crypto assets or hold liquidity between crypto investments. In fact, approximately 80 percent of stablecoin transactions are conducted by bots and automated systems for arbitrage and rebalancing.[17] Use for cross-border payments, however, is increasing (McKinsey & Company 2025; FXC Intelligence 2025).

Figure 1. Stablecoin and Crypto Market Capitalization



Sources: CoinGecko and IMF staff calculations

Most stablecoins are denominated in US dollars, and the two largest stablecoins (USDT and USDC) represent about 90 percent of the market. USDT, issued by Tether, is domiciled in El Salvador, while USDC, issued by Circle, is domiciled in the United States. USDT and USDC trading volume amounted to $23 trillion in 2024, a 90

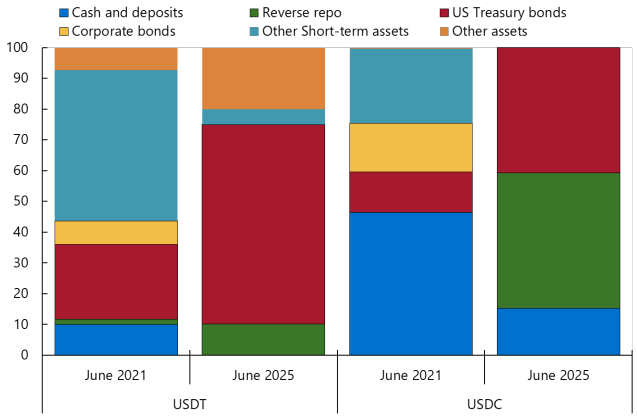
[17] Visa Onchain Analytics Dashboard, data retrieved in November 2025 for transactions over the previous 3 months.

percent increase since 2023. Stablecoins pegged to the US dollar represent 97 percent of issuance. The remaining share consists mostly of stablecoins denominated in euros. Although their share remains small, growth in euro-pegged stablecoins has been substantial in recent years.

USDC and USDT are backed mostly by short-term US treasuries, reverse repo collateralized with US treasuries, and bank deposits (Figure 2). The reserve assets of USDC consist of short-terms US Treasury bills (40 percent), overnight reverse repos with US treasuries as collateral (45 percent), and deposits in financial institutions. According to BlackRock, which manages Circle's reserves, the average weighted maturity is 14 days, with a yield of about 4 percent.[18] Tether holds nearly 75 percent of its reserves in short-term US treasuries, including through reverse repos; however, it also holds about 5 percent in Bitcoins and a similar amount in gold.[19]

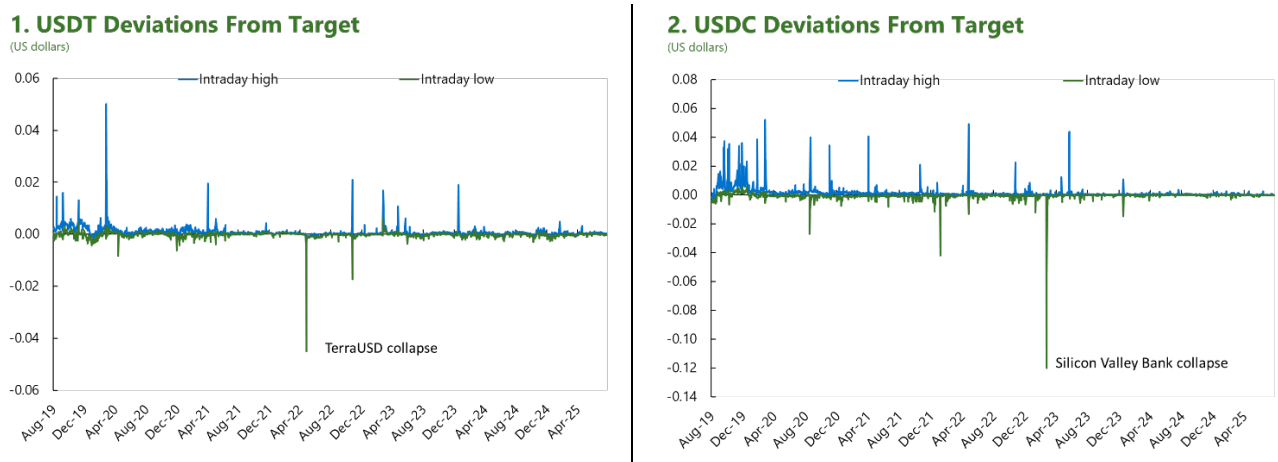
The largest stablecoins have exhibited some significant volatility in value, but deviations from par are usually short-lived (Figure 3).

Figure 2. USDT and USDC Asset Backing
(Percent)



Sources: BDO's Independent Auditors' Report on the Financial Figures and Reserves Report (Tether), Deloitte's Independent Accountants' Report (Circle), and IMF staff.

Figure 3. USDT, USDC, Deviations from TargetFT



Sources: CoinDesk and IMF staff calculations

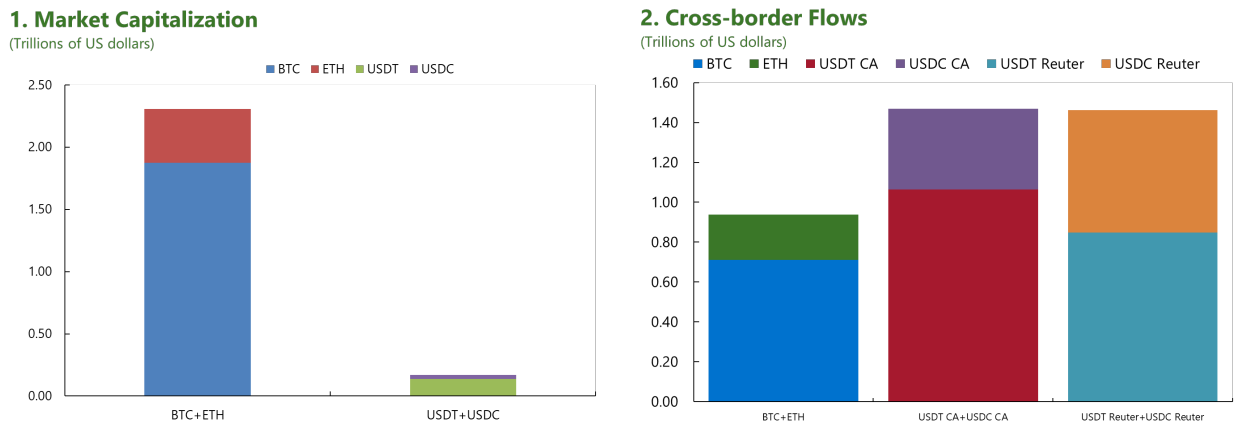
[18] BlackRock Circle Reserve Fund.

[19] Tether "Transparency." The disclosures in the past years showed that Tether has reallocated their reserve assets toward safer assets, which mitigated potential regulatory impact on their asset allocations.

About 99 percent of intraday deviations from target have been within 1 percent of the dollar value, with significant exceptions. In March 2023, USDC traded at 12 percent below parity, following the collapse of Silicon Valley Bank, where it had large deposits. USDT also broke parity in May 2022, in the wake of the collapse of the algorithmic stablecoin TerraUSD. In both cases, the value of the stablecoins remained consistently below par for about two days.

Emerging evidence suggests that stablecoin cross-border flows are already sizable relative to unbacked crypto assets. Although stablecoins account for a small share of total crypto asset market capitalization, their use in cross-border transactions is more substantial (Figure 4). Stablecoin cross-border flows surpassed those of unbacked crypto assets in early 2022, and the gap has widened thereafter (Figure 5) (Cerutti and others, forthcoming; Reuter 2025). There is substantial variation across countries in stablecoins' usage (Box 2).[20]

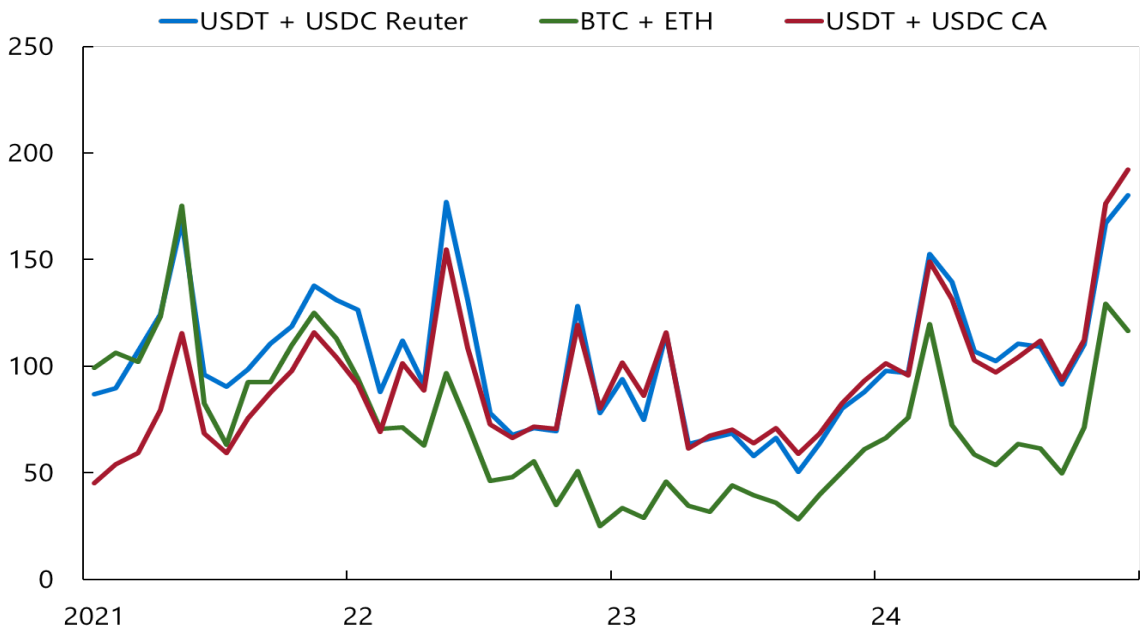
Figure 4. Stablecoin Market Cap and Cross-Border Flows, 2024



Sources: Cerutti and others, forthcoming; Chainalysis; and Reuter 2025.
Note: CA refers to cross-border flows from Chainalysis. Reuter refers to flows measured following the methodology in Reuter (2025) and do not include intra-region flows, which may or may not be cross-border flows, and therefore are a lower bound. Reuter (2025) records USDT + USDC flows of $2 billion including intra-region flows. BTC and ETH flows are converted to US dollars. Stablecoin flows are measured in USDT and USDC. BTC = Bitcoin; ETH = Ethereum.

[20] Measuring stablecoin cross-border flows is challenging, because public blockchains are pseudonymous. Similar to unbacked crypto assets such as Bitcoin, the residency of transacting parties is not directly observable for stablecoins. Accordingly, all existing estimates rely on allocation assumptions that differ across methodologies. See Cerutti, Chen, and Hengge (2025), Cardozo and others (2024), and Reuter (2025) for specific assumptions and a more detailed discussion on the measurement of crypto cross-border inflows and outflows.

Figure 5. Evolution of Stablecoin Cross-Border Flows
(Billions of US dollars)



Sources Cerutti, and others (forthcoming); Chainalysis; and Reuter (2025).
Note: CA refers to cross-border flows from Chainalysis; Reuter refers to flows measured following the methodology in Reuter (2025) and do not include intra-region flows, which may or may not be cross-border flows, and therefore are a lower bound. BTC and ETH flows are converted to US dollars. Stablecoin flows are measured in USDT and USDC. BTC = Bitcoin; ETH = Ethereum.

Box 2. Regional Patterns in Stablecoin Usage

Regional patterns in stablecoin usage vary considerably. In absolute terms, the Asia and Pacific region leads with the highest volume of stablecoin activity, followed by North America. However, when measured relative to GDP, Africa and the Middle East, as well as Latin America and the Caribbean, stand out. In terms of net flows, stablecoins flow overwhelmingly from North America to other regions, where they could be satisfying local demand for stablecoins as a store of value, in addition to being used for cross-border payments (Reuter 2025).

There is also substantial heterogeneity across payment corridors, with EMDEs featuring more prominently in stablecoin cross-border flows than traditional flows. Stablecoin cross-border payment flows (about USD 1.5 trillion, as shown in Figure 4) represent only a small fraction of the global cross-border traditional and crypto payment market, which approached a value of about one quadrillion dollars in 2024 (Cerutti, Firat, and Hengge 2025). Stablecoin flows between emerging market and developing economies account for the largest share by value. Flows from emerging market and developing economies to advanced economies, and vice versa, also represent a significant portion of total stablecoin cross-border activity. This pattern contrasts with traditional cross-border payments routed through systems such as SWIFT, where within-advanced economy cross-border flows play a clear dominant role (Cerutti and others, forthcoming).

Future Demand for Stablecoins

Several factors could affect the future demand for stablecoins. These include the attractiveness of the underlying currency vis-à-vis the local currency, new use cases, enabling legal and regulatory frameworks, and ease of access.

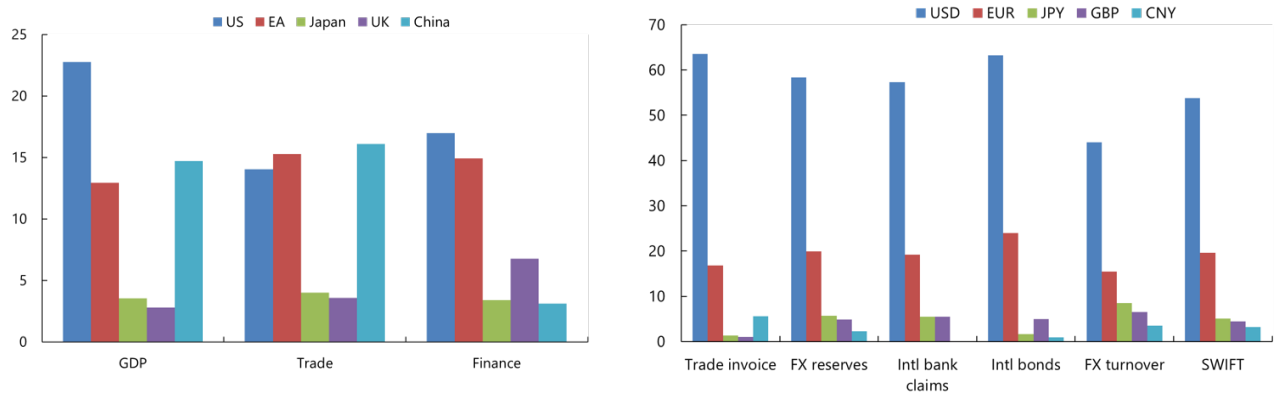
The demand for stablecoins is closely linked to the demand for their currency of denomination. As the vast majority of stablecoins are currently denominated in US dollars, their growth will likely hinge on the continued dominance of the dollar in trade, foreign exchange reserves, international loans, international debt, foreign exchange turnover, and global payments. In turn, the availability of dollars at a relatively low cost through stablecoins could support each of these factors (IMF 2025 External Sector Report, chapter 2). The share of the dollar in these areas considerably exceeds US economic weight in global GDP, trade, and finance (Figure 6). Macroeconomic factors could add to the demand for stablecoins. In regions with high inflation and volatile local currencies, stablecoins denominated in stable currency could be used as a hedge.

Dollar demand is underpinned by the strength of the US economy, the quality of its institutions, and the depth of its financial markets. These dynamics are reinforced by strong network externalities—as users benefit from using the same currency— and strategic complementarities across the dollar's various international functions.

New use cases can also support higher demand for stablecoins. Currently, stablecoins are used as on- and off-ramps from unbacked crypto assets and to some degree for cross-border payments. Going forward, these use cases could grow. Moreover, new use cases could emerge. First, stablecoins could be used to pay for tokenized financial assets. Their wider adoption in this case depends on the growth of the tokenized sector. Second, they could expand into domestic retail payments for goods and services. The latter would likely require deeper integration with existing payment rails and broader merchant acceptance, which may find greater traction in countries with underdeveloped payment systems, where they could offer a lower-cost and more convenient alternative payment method.

Figure 6. Share in Global Economy and Currency Composition, 2023

(Percent)



Source: 2025 IMF External Sector Report, Chapter 2.

Note: See Online Annex 2.4 of the 2025 IMF External Sector Report for more details on data sources and assumptions. CNY = Chinese yuan; EA = euro area; EUR = euro; FX = foreign exchange; GBP = British pound sterling; JPY = Japanese yen; SWIFT = Society for Worldwide Interbank Financial Telecommunications; UK = United Kingdom; US = United States; USD = US dollar.

The widespread adoption of stablecoins also depends on legal and regulatory clarity. Recent initiatives (such as those discussed in the last section of this paper) could support both greater issuance of stablecoins and wider adoption by providing higher legal and regulatory certainty and enhanced user protection. Key areas of focus that could underpin confidence in, and demand for, stablecoins include robust holders' rights regarding redemption or issuers or custodians' insolvency, the quality of reserve assets, operational resilience, and robust governance, among others.[21]

To the extent that stablecoins provide easier access to foreign currency for firms and individuals in emerging markets with weak currencies and high inflation, the demand for these instruments could increase further (see discussion on currency substitution below).

Private and public sector estimates of stablecoin growth until 2030 are materially significant but vary widely—from $0.5 trillion to $3.7 trillion. Comparing these estimates is difficult given incomplete and divergent assumptions and methodologies.[22]

[21] FSB (2023).

[22] Standard Chartered's April 2025 note on "Stablecoins, USD Hegemony, and UST Bills" estimates that stablecoins will reach approximate $2 trillion by 2028. Citi institutes estimate stablecoins in a range between $0.5 and $3.7 trillion, with a based scenario of $1.5 trillion by 2030. Conversely, J.P. Morgan expects stablecoin growth to reach only $500 billion by 2028. The US Treasury in April 2025 estimated that the stablecoin market could reach a market cap of $2 trillion by 2028. On June 18, US Treasury Secretary Scott Bessent mentioned on social media that the stablecoin market could grow to a $3.7 trillion market cap by the end of the decade.

Potential Benefits

Stablecoins could facilitate cheaper and quicker payments, particularly across borders and for remittances—supporting economic growth——although the effects are uncertain. In traditional payment systems, centralized entities such as banks and payment service providers carry out the verification that the buyer has sufficient funds and that these funds are not being used multiple times, often charging fees for their services. Such fees reflect the costs of identity verification, legal exposure, broader operational risks, and the competitive environment in which the service providers operate. Blockchains can provide a single source of information verification through a shared, immutable ledger, which reduces the need for reconciliation between institutions and systems (Box 3). While tokenization can eliminate the need for some of the existing intermediaries, stablecoins still require various intermediaries, as noted earlier (such as wallet providers, exchanges, and blockchain validators), which add to end-to-end transaction costs.[23] Moreover, costs of on- and off-ramp services, as well as foreign exchange settlement, also need to be factored in (CPMI 2023; FXC Intelligence 2025).[24] Moreover, to the extent stablecoins can foster interoperability, integration in payments could increase.

Stablecoins could make retail digital payments more accessible to underserved customers and, through increased competition, drive innovation. Similar to other forms of digital money, such as e-money or CBDC, stablecoins could facilitate digital payments in remote areas, where it is costly for financial institutions to establish necessary infrastructure, such as ATMs and bank branches. They could also pose a competitive threat to established payment service providers. This increased competition could lead to lower costs, spur innovation, and enhance product diversity, reflecting synergies between digital payments and other digital services. For instance, access by payment service providers to payment data could lead to more informed creditworthiness evaluations and improve credit allocation, particularly for newer businesses with limited credit histories.[25]

Stablecoins could offer a simpler and more comprehensive user experience. As the experience with traditional financial assets becomes increasingly digital and directly controlled through mobile applications, some consumers may prefer digital wallets over traditional bank accounts and brokerage accounts. They might seek a single app through which to trade stablecoins, tokenized securities, tokenized ETFs, open-ended funds, and crypto assets. However, it may also generate complexity from intermediaries and wallets, raising issues for user protection (see next section on risks and systemic implications).

Integrating stablecoins with smart contracts could reduce counterparty risk, although it creates liquidity risks and costs. Smart contracts—computer programs that automatically check information and execute transactions in the blockchain—facilitate atomic settlement, that is, assets and payments are exchanged only if certain conditions apply. This minimizes counterparty risk and decreases reliance on intermediaries such as custodians

[23] For instance, validators, when transactions are peer-to-peer and are directly registered on the blockchain, that can add to transaction costs. Other intermediaries, such as exchanges and custodial wallet providers, might require a fee in order to access and transact in stablecoins.

[24] Anecdotical evidence points to on- and off-ramp fees being quite substantial, though competition in some corridors is emerging that is bringing these fees down, to the point that in some corridors, sending money through stablecoins is on par with if not cheaper than established service payment providers (FXC Intelligence 2025). Adams and others (2023) provide an early comparison of cross-border transfer costs between stablecoins and traditional rails. They conclude that sending $500 through stablecoins could cost between $5 and $10, compared to $20 to $30 through traditional rails.

[25] This will likely require enabling regulation and consent by users to access the data. Due to pseudonymity of blockchain, crypto asset lenders have limited information and data on the credit worthiness of the counterparties and tend to rely on overcollateralization for credit risk mitigation. Some jurisdictions are also prohibiting stablecoin issuers from conducting any other activity and sharing information and data with third parties.

and central security depositories. However, while smart contracts can mitigate counterparty risk, they may require participants to have liquidity always available, so that atomic settlement can take place when pre-programmed conditions arise, which could increase costs. Additionally, it exposes participants to risks associated with the underlying settlement asset, higher operational and cyber risks, as well as legal risks, as discussed in the next section.

Some technologies could enhance privacy, but challenges remain. When stablecoin transactions occur on public blockchains, they are generally visible to everyone, even if the real identity of the owner is not shown. Still, tools can be added to make it harder for outsiders to see flows. These tools can be built into the whole network or just added to the stablecoins themselves. Limiting transparency for the entire network can be complex because of coordination issues among validators. On the other hand, stablecoin issuers can add tools just to their own stablecoins, with resulting performance benefits. An example of privacy technology that can be integrated in stablecoins are zero-knowledge proofs, which can help users show they are allowed to make a transaction without sharing their personal information.[26] Other methods allow people to keep transaction amounts private except to those directly involved.[27] However, these privacy technologies have not been fully tested on a large scale, and may impact speed, cost, and keeping transactions safe—issues that have already appeared in some cases.[28]

Tools can also support monitoring of stablecoins transactions for suspicious activities. This involves integrating technologies with centralized features like whitelisting, blacklisting, and other compliance mechanisms directly into the smart contracts of their tokens. Such tools allow stablecoin issuers to monitor suspicious activities and take action, such as freezing funds, when necessary.

Some further benefits of stablecoins could arise from their integration with asset tokenization. Some of the benefits and risks specific to asset tokenization are presented in Box 3.

[26] A zero-knowledge proof is a cryptographic method that allows a user to demonstrate to another user that they know a statement is true, without revealing the actual information itself see Bains and Gaidosch (2025).

[27] Secure multiparty computation enables joint computations by multiple parties who are unwilling to reveal their own data to the others. Homomorphic encryption allows the processing of encrypted data directly, without first decrypting it by making use of encryption and an algebraic system.

[28] For example, the Central Bank of Brazil faced challenges in developing its proposed central bank digital currency due to issues around privacy and the performance of certain privacy technologies.

Box 3. Benefits and Risks of Asset Tokenization[1]

Tokenization—the process of digitally representing assets on shared, programmable, and trusted ledgers—has the potential to significantly improve financial market efficiency. By automating processes across the asset lifecycle (issuance, trading, servicing, and redemption), tokenization can reduce transaction costs, eliminate reconciliation delays, and enable instantaneous settlement. This leads to lower counterparty risk and improved liquidity. Shared ledgers enhance transparency and accessibility, while programmability allows for tailored financial instruments and streamlined compliance. These features can democratize market access, reduce reliance on intermediaries, and foster innovation.

Tokenization is particularly beneficial in areas with high operational friction, such as cross-border transactions and complex asset servicing. It simplifies workflows, reduces manual errors, and lowers barriers to entry for smaller institutions and retail participants. The ability to embed rules and logic directly in the smart contract also supports more efficient governance and risk management.

Some countries have been experimenting with bond tokenization. The United Kingdom is piloting the Digital Gilt Instrument, the Hong Kong Monetary Authority has successfully assisted the Hong Kong SAR Government to issue multi-currency tokenized bonds, and Thailand launched a sandbox project for issuing tokenized government bonds directly to the public.

However, tokenization introduces new risks. Greater interconnectedness and faster transaction speeds may amplify systemic vulnerabilities, accelerating the transmission of financial shocks. The ease of access and automation could encourage excessive leverage and speculative behavior. Operational risks may increase if shared ledgers are not adequately secured, especially when widely accessible. The immutability of blockchains (once information is stored in the blockchain, it is virtually impossible to delete it) can lead to vulnerabilities, especially in cases of human error or fraudulent activities where transactions need to be reversed. Smart contracts and lack of interoperability among the platforms create additional liquidity risks. Continuous 24/7 operation may increase the operational demands on the infrastructure and participants. It also poses challenges for network operators in processing updates and fixing bugs in the underlying blockchain. Legal risks could also arise due to uncertainties including in relation to assets ownership, validity of transfers, or settlement finality.

The overall impact of tokenization depends on how its core features—sharedness, programmability, and trust—are implemented. While the efficiency gains are substantial, realizing them requires thoughtful design, robust infrastructure, and adaptive regulation.[2]

[1] Agur and others (2025).

[2] The Committee on Payments and Market Infrastructures, Financial Stability Board, and International Organization of Securities Commissions are collaborating to assess how asset tokenization—including tokenized deposits, stablecoins, digital securities, and real world ("off-chain") assets—could reshape financial market infrastructures. See, for instance, FSB (2024).

Risks and Systemic Implications

While stablecoins are still not widely used in critical financial functions supporting the real economy (such as payments), their adoption is growing rapidly. Stablecoins could pose risks to different policy objectives, including macrofinancial stability, the safety and efficiency of stablecoin operations, financial integrity, and legal certainty. Some of the macrofinancial risks, such as currency substitution and capital flow volatility, could be more pronounced for emerging markets and developing economies (EMDEs).[29] This section discusses potential risks taking a holistic approach and abstracting from emerging regulation. The following section presents international standards and emerging regulations for stablecoins that could help mitigate some of the risks, provided they are applied consistently and effectively across jurisdictions.[30] Also, the materiality of some of these risks depends on adoption size and interconnectedness with the financial system.

Macrofinancial Stability

Volatility in Value and Runs

Stablecoins are exposed to volatility in value due to market, liquidity, and credit risks of reserve assets, as well as operational and governance risks. Market, liquidity, and credit risk of the reserve assets can lead to fluctuation in their value and thus in the price of the stablecoin on exchanges. To the extent stablecoins are considered money, deviation from par could undermine “singleness of money”, so that a unit of money would have different values between stablecoins and bank deposits, or currency.[31] Prudent choice of the assets in reserves can mitigate these risks. However, other factors can amplify risks. For instance, the possibility to rehypothecate[32] assets could increase returns on assets held as reserves but build leverage in the stablecoin issuer. Fragilities in governance, design, and reserve management of the stablecoin arrangement’s infrastructure, among other factors, could lead to volatility in value (Bains and others 2022). Investor profiles (retail, institutional investors, their locations—advanced economies, EMDEs or low-income countries) and their investment goals (speculation, payment, hedge against inflation) would also affect their redemption behaviors.

Existing stablecoins are vulnerable to run risks during stress periods. Currently major stablecoin issuers do not provide redemption rights to all holders and under all circumstances. Thus, holders might need to rely on secondary markets to divest. Uncertainty of treatment in case of insolvency of stablecoin issuer may also accelerate runs. These circumstances create first mover advantages when confidence crises arise, which may result in those investors being willing to sell their coins even below par in prolonged stressed periods. Stablecoins could be subject to crises of confidence or triggered by other factors (for example, by international investors). In case of large redemption demands, the issuer would need to sell large amounts of reserve assets, possibly at fire-sale prices (see below), affecting the stablecoin’s value.

[29] Please also see the October 2025 *Global Financial Stability Report* for a discussion of risks to financial stability of stablecoins.

[30] One reason that could limit effectiveness of regulation is the use of unhosted wallets, which are likely to escape regulatory enforcement

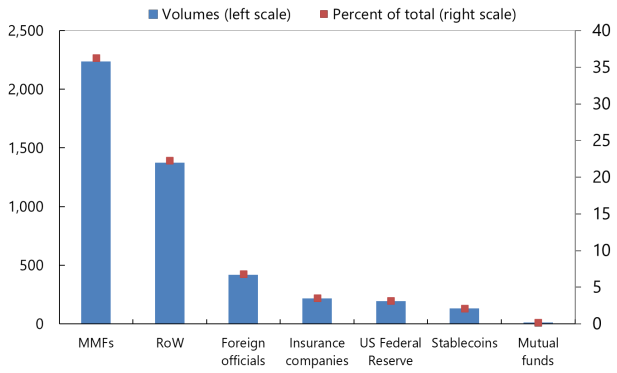
[31] Bailey (2023).

[32] Without proper regulation, stablecoin issuers may use their reserve assets as collateral to borrow at low costs and invest the proceedings for additional investment returns. The Financial Stability Board recommends that “(r)eserve assets should be unencumbered” and emerging regulations to implement the recommendation prohibit rehypothecation of the reserve assets or limit it for specific purposes.

Impairment in Market Functioning of Reserve Assets

Stablecoins' demand for short-term assets could compress yields of underlying reserve assets in the case of wide adoption.[33] Currently, stablecoins hold about 2 percent of the outstanding US T-bills, far less than the share held by MMFs (Figure 7). However, if stablecoins grow to become as sizable as some private sector forecasts indicate (previous section), yields in the T-bill market could be compressed. The impact on yields could be mitigated if (1) stablecoins' demand for T-bills is a substitute for existing sources of demand, for instance, whether stablecoins are seen as a substitute for MMFs (or bank deposits) and therefore replace their demand of T-bills and (2) issuance of T-bills increases, for instance to take advantage of compressed yields.[34]

Figure 7. Selected Holders of US Treasury Bills
(Billions of US dollars, left scale; percent, right scale)



Sources: The Federal Reserve, U.S. Treasury, BDO's Independent Auditors' Report on the Financials Figures and Reserves Report (Tether), Deloitte's Independent Accountants' Report (Circle), and IMF staff calculations.
Note: percentages do not sum up to 100 due to data only representing selected holders.

During runs on stablecoins, fire sales of the underlying reserve assets could occur, impairing market functioning. The extent of market impairment would depend on several factors, including the size of the stablecoins which are facing a run, and the availability of other investors to absorb such a large supply of assets in a short amount of time. However, in the case of large holdings in other countries, large volume of cross-border flows may create challenges as these could be harder to predict. In the case of existing stablecoin arrangements, the two markets most severely affected would be those for T-bills and repos. Both markets are important for the transmission of monetary policy, as they represent the first chain in the interest rate channel of monetary policy transmission. Severe impairment in these markets could potentially require intervention by the central bank (see also Box 5). Additionally, impairment in the T-bill market could negatively impact the ability of the government to raise funds.

Disintermediation of Banks

Stablecoins may affect financial intermediation by offering an alternative to bank deposits, though banks may respond in various ways and limit the impact. Disintermediation in retail deposits could increase costs for banks, reduce stable sources of funding, and thus impact their lending provision. The extent of disintermediation depends on whether (1) stablecoins are remunerated, (2) banks' responses to deposit competition, and (3) stablecoin reserves are held as domestic bank deposits. Although most regulatory frameworks do not permit stablecoin issuers to pay interest, remuneration may occur indirectly through third parties (such as lending platforms). Banks can address competitive pressures by increasing deposit rates or seeking alternative funding sources, which might reduce profit margins or increase funding volatility. Alternatively, banks could enhance

[33] Preliminary estimates—though potentially less reliable under conditions of sustained or outsized demand growth—indicate that a $3.5 billion increase in stablecoin issuance matched with an equal increased demand for T-bills would reduce T-bill yields by 2 basis points, while a decrease in issuance of the same size would increase yields by 6 to 8 basis points. Also, the effect is concentrated on short term bonds, with limited to no spillovers to 2–5 years maturity and only modest, delayed effects at 10 years maturity (Ahmed and Aldasoro 2025).

[34] Increased shorter-term issuance heightens short-term interest rate risk for the government and could increase challenges for monetary policy implementation.

their services, such as by offering tokenizing deposits if permitted by regulations. If stablecoin reserves are held with commercial banks, deposits may not fall, although funding volatility could increase. Demand for foreign stablecoins could lead to a greater reduction in deposits, especially if issuers hold reserves in overseas banks rather than domestic banks. The effects on lending availability and conditions may also be limited, depending on factors such as banks' ability to absorb additional costs and competition in lending markets. Generally, stablecoins and bank deposits could coexist to the extent they provide different services and focus on non-overlapping use cases (for instance, crypto trading versus store of value).

Interconnections with the Financial System

Banks' exposure to stablecoins brings risks to both stablecoin issuers and banks. Stablecoin issuers might concentrate deposit holdings in just a few banks. That could be for convenience and operational simplicity, or due to unwillingness by some banks to engage with stablecoin issuers because of financial integrity concerns. The resulting concentration risk on both sides—asset concentration in stablecoin issuers and funding concentration in commercial banks—could generate financial stability concerns. A sudden withdrawal of deposits by stablecoin issuers, possibly due to a run on the stablecoin, may create liquidity pressures on the banks where reserves are held.[35] Vice versa, concerns about banks' financial condition might reverberate to stablecoins.[36]

Counterparty risks can arise when stablecoins are used for payment and settlement purposes. To the extent that stablecoins are also used for settlement by banks or nonbank financial intermediaries—such as in transactions involving tokenized assets—the potential volatility in the value of stablecoins could increase counterparty risk to the extent that they substitute for alternative settlement assets that have more stable market value, such as central bank fiat money. In addition, credit deterioration of stablecoins would create contagion risks for various counterparties, including stablecoin market makers and crypto exchanges that play an important role in meeting the redemption needs of stablecoin investors.

As practices continue to evolve, assessing the contagion risk of stablecoins remains a challenge, and depends on the extent of integration with the financial system and measures taken by financial sectors to mitigate exposure to stablecoin risks. Interconnections of stablecoins with the traditional financial system could increase through additional channels, potentially raising systemwide risks. For example, banks could start offering stablecoin custody services, taking on operational risks. Banks could also start accepting stablecoins as collateral when evaluating lending decisions.[37] Contagion could also affect banks and nonbanks—such as investment funds and insurance companies—that either hold stablecoins as assets or are exposed to them through lending to crypto investors. SSBs, including the FSB and the Basel Committee on Banking Supervision (BCBS) have highlighted the risks from crypto exposures.[38] In particular, the FSB (2025) noted growing linkages between crypto assets and the traditional financial system through exchange-traded products (ETPs) and the purchase of equity in listed firms that hold large quantities of crypto assets on their balance sheet. Large global

[35] For instance, the share of crypto firms' deposits in Silvergate Bank reached more than 98 percent at the end of 2021.

[36] In March 2023, Silicon Valley Bank (SVB) collapsed after a run on its deposits. Circle, issuer of the USDC stablecoin, had concentrated deposits (about $3.3 billion of its reserves) in SVB. SVB's failure triggered USDC fire sales, causing USDC to temporarily lose its $1 peg—dropping to about $0.88—until the Federal Deposit Insurance Corporation guaranteed all deposits at SVB.

[37] Reportedly, J.P. Morgan in the United States is evaluating whether to accept crypto as collateral.

[38] The FSB (2025) noted that "While financial stability risks from crypto assets appear limited at present, growing interlinkages with the traditional financial system and the expanding use cases for stablecoins highlight the need for close monitoring of developments and activity and robust regulatory oversight. Recent developments in these markets reflect both their significant growth and their increasing integration into financial systems, which, if left unchecked, could amplify vulnerabilities and introduce new risks to financial stability.".

banks' exposures to and custody of crypto-assets have also increased significantly, albeit from a low base. An increasing number of major financial institutions have announced products or partnerships to integrate stablecoins into payment and settlement services, issue proprietary stablecoins, or provide investment services for crypto-assets, thus increasing their exposure to the crypto-asset ecosystem.

Currency Substitution

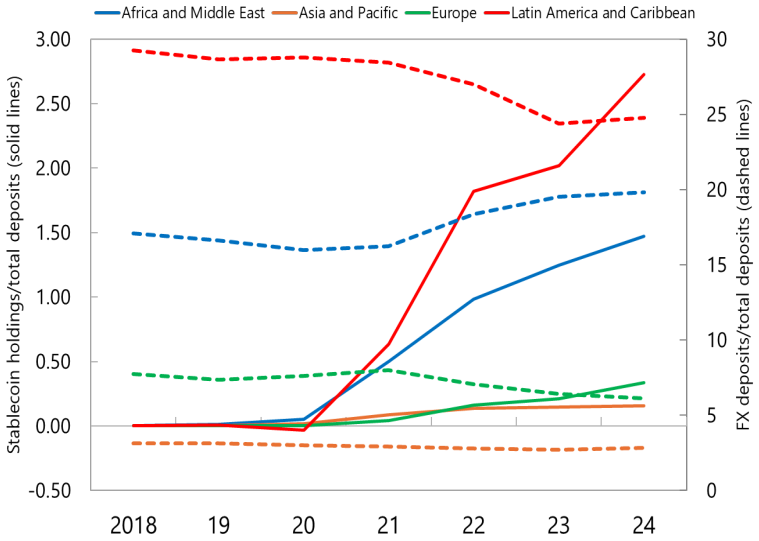
Currency substitution facilitated by stablecoin adoption would impinge on monetary sovereignty—a country's ability to exercise full control over its own currency and monetary policy. Currency substitution denotes the use of a foreign currency either in lieu of, or in conjunction with, the domestic currency. This typically arises from the pursuit of monetary stability, particularly in countries facing high inflation, institutional fragilities, or diminished confidence in the national monetary framework.[39] Inefficiencies in payment systems and limited access to financial services in the domestic currency can also be a driver of currency substitution. If a significant share of economic activity were to shift to foreign currency-denominated stablecoins, the central bank's control over domestic liquidity and interest rates could weaken the transmission of monetary policy (IMF 2023). In addition, the central bank, given reduced demand for local currency, might see a fall in seigniorage income, lowering dividend payments to the government.

Foreign currency-denominated stablecoins could intensify currency substitution due to their accessibility, potential efficiency gains, and network effects. Unlike traditional dollarization, which requires physical cash or bank accounts denominated in foreign currency, foreign currency-denominated stablecoins can penetrate an economy rapidly via the internet and smartphones. Stablecoins are globally transferable, operate 24/7, and settle near instantly at potentially low cost. If they facilitate domestic payments or cross-border payments, network effects—the fact that the value of the means of payments increases as more people use them—can accelerate the replacement of local currencies, making it harder for local alternatives (such as CBDCs or local currency-denominated stablecoins) to compete unless they offer similar utility and integration.

Stablecoin holdings in Africa and the Middle East and Latin America and the Caribbean remain small relative to both FX deposits and total deposits but are rising rapidly (Figure 8). Since 2020, stablecoin holdings relative to total deposits in these regions have risen from virtually zero to 1.5 percent and 2.7 percent, respectively, by 2024. However, FX deposits are still significantly larger—amounting to 20 percent and 25 percent of total deposits, respectively—as many countries in these regions are partially or fully dollarized. This trend could intensify in the future, attracting funds away from traditional local and foreign currency deposits.

[39] In this sense, the presence of stablecoins could also be seen as a competitive element incentivizing governments in pursuing sound policies, in order to avoid loss of monetary authority.

Figure 8. Stablecoin Holdings Relative to Deposits
(percent)



Source: IMF Staff calculations. IMF International Financial Statistics.
Note: The figure displays stablecoin holdings relative to foreign exchange (FX) deposits (left scale, solid lines) and FX deposits relative to total deposits (right scale, dashed lines). Stablecoin holdings are calculated as cumulative net flows of stablecoins, based on Reuter (2025). FX deposits and total deposits are obtained from IMF International Financial Statistics

Reshaping Capital Flows

Stablecoins, by potentially reducing cross-border payment frictions, could significantly reshape capital flow and exchange rate dynamics. A stylized open-economy model (Reuter and others 2025) suggests that lower frictions in cross-border payments—such as reduced costs or shorter international transfer time—are expected to reduce deviations from uncovered interest rate parity and increase capital flows.[40] Additionally, lower frictions can impact capital flow and exchange rate volatility. In the model the nature of this impact depends on the type of shock: in response to real shocks, lower frictions tend to increase capital flow volatility while dampening exchange rate volatility; in contrast, for financial shocks, they amplify exchange rate volatility and have an ambiguous effect on capital flow volatility.

Stablecoins could be used to circumvent capital flow management measures (CFMs). The implementation of CFMs relies on established financial intermediaries. By providing an avenue for capital flows outside of the common rails, stablecoins could be used to effectively undermine the implementation of CFMs (Cardozo and others 2024; He and others 2022; IMF 2023). Indeed, some evidence points to crypto, including stablecoins, being used as a marketplace for capital flight (Graf von Luckner, Koepke, and Sgherri 2024). Regulations can help but have limits. Regulations could be imposed on stablecoin issuers, centralized exchanges, and digital

[40] In terms of costs, the cross-border flow increases could be sizable for emerging market and developing economies that are large remittance recipients and face expensive transaction costs (Cerutti, Melih, and Perez-Saiz 2025).

wallet providers, but enforcement of CFMs could be limited due to unhosted wallets, which could fall outside of the regulatory perimeter. In such cases, one possibility for implementing CFMs would be through regulated intermediaries, banks, and payment service providers, which are the "on-" and "off-ramp" to stablecoins from domestic currency (He and others 2022). However, these actions can create challenges, since regulated intermediaries would need to screen and block those transactions aimed at exchanging currency for stablecoins.[41] Another possibility would be to rely on the technology itself, for instance with smart contracts on the blockchain that implement CFMs and ensured transactions occur between regulated wallets (He and others 2023).[42] Even when regulation can be implemented, the super-national nature of stablecoins requires more data availability, analytical capabilities, and coordinated exchange of information and execution across countries.[43] Challenges are compounded by the pseudo-anonymity features of stablecoins, and the lack of information on nationality of holders, which prevent the collection of complete statistics on cross-border flows (see Box 6).

Stablecoins could also have far-reaching implications for the international monetary system, both as a novel payment medium and as a potential disruptor of the existing architecture. Lower frictions in cross-border payments could reduce settlement time and lower costs while bypassing correspondent banking networks. US dollar-denominated stablecoins could reinforce the global dominance of the dollar.

Stablecoins risk increasing fragmentation of global payments. Stablecoin issuers are free to choose on which blockchain to operate. The proliferation of new stablecoins across different blockchains and exchanges raises concerns about inefficiencies due to potential lack of interoperability. Moreover, this can introduce differences and roadblocks among countries, due to different regulatory treatment and transaction hurdles. Indeed, stablecoins cannot by default be exchanged one-to-one across different networks or issuers (BIS 2025). Moving funds between two stablecoin networks may require holders to resort to crypto centralized or decentralized trading platforms or other intermediaries to swap one coin for another or for currency, introducing fees or delays. Also, stablecoin issuers could potentially exclude users in some countries.[44] In the absence of arbitrageurs, all these issues could compound into prices of stablecoins being different across exchanges, further creating fragmentation in global payments.[45]

[41] Moreover, stablecoins are cross-border by nature, and stablecoins denominated in one currency might be used in markets that use a different unit of account. Issuers might be headquartered in one jurisdiction and market their services globally (Bains and others 2022). Availabilities and affordability of Virtual Private Networks are creating more challenges to identify the locations of the users.

[42] The idea is similar to programmable compliance or policy wrappers. See Project Mandala ((BIS Innovation Hub with Reserve Bank of Australia, Banque de France, Reserve Bank of India, Central Bank of Kuwait, Bank Negara Malaysia, Bangko Sentral ng Pilipinas and Monetary Authority of Singapore) which explores the feasibility of encoding jurisdiction-specific policy and regulatory requirements into a common protocol for cross-border use cases.

[43] The case of Japan is illustrative. Regulations introduced in 2023 aimed at preventing the use of crypto assets including stablecoins to circumvent sanctions. The rules require the originating crypto-asset exchange service provider to share with the counterparty foreign exchange the transaction information, including the names of the customer and the party to whom it is being sent, akin to the requirements for banks and in line with the FATF standards. However, the number of jurisdictions that have implemented this requirement is still limited (FSA 2024), leaving a loophole for exchanges whose countries have yet to implement such requirements (Cardozo and others 2024).

[44] Cross-chain "bridges"—special protocols to transfer tokens across blockchains—could be used to allow interoperability, but in some cases, these have been subject to operational and security failures (hacks, bugs), representing another vulnerability. Another approach is the use of closed-loop networks or permissioned ledgers, which can result in fragmented liquidity.

[45] Arbitrage opportunities can decrease in the presence of borrowing constraints for arbitrageurs, or high transaction costs, or in times of stress.

Safety and Efficiency

Stablecoin users are exposed to operational and fraud risks. Users face operational risks from flawed processes, system failures, human errors, governance lapses, data breaches, and other external disruptions. Smart contracts may include coding errors and security flaws, leading to unauthorized transfers or loss of funds. Resolving these issues is difficult due to transaction immutability and legal challenges. Custodial wallets may be connected to the internet and thus increase cyber risks, while noncustodial wallets require highly operational risk management skills and still could result in loss or theft of the private key. These risks are exacerbated when consumers and investors are unaware of, or do not comprehend the risks associated with, stablecoins. They stem from inadequate governance, limited recourse when there is insufficient regulation, volatility, fraud, or cyber attacks (IMF 2023). Crypto asset service intermediaries often provide multiple services (such as issuing of stablecoins, custody, clearing, market making, dealing and brokerage) within the same group. Potential conflict of interest can arise from performing these multiple functions

Finality of settlement will vary depending on a blockchain's validation technology.[46] Settlement finality refers to the legally defined point at which the transfer of an asset or financial instrument becomes irrevocable and unconditional. Settlement using stablecoins carries many of the risks associated with the underlying blockchain infrastructure. One key concern is that some blockchains do not guarantee the irrevocability of a specific transfer; instead, they offer only a high probability that the transaction will not be reversed. As a result, finality in blockchain systems is inherently probabilistic rather than absolute.[47] Ultimately, achieving finality within blockchain systems may require enabling legislation, or stablecoins recorded on common or shared ledgers that guarantee finality may emerge.

Financial Integrity

Stablecoins may present risks to financial integrity. Without proper regulation, stablecoins, like other crypto assets, can be misused to commit serious crimes, such as money laundering (ML), terrorism financing (TF), and financing the proliferation of weapons of mass destruction (PF).[48] As with other crypto assets, stablecoins are attractive to criminals due to their pseudonymity, low transaction costs, and ease of cross-border use. They can be transacted through unhosted wallets that fall outside any regulatory perimeter. As such there could be no entities usually applying controls to mitigate ML/TF/PF risks, such as customer due diligence, sanctions screening, applying targeted financial sanctions, recordkeeping, and reporting suspicious transactions. Like other forms of crypto assets, anonymity-enhancing tools and methods (such as mixers and cross-chain bridges) can also be used with stablecoins to obfuscate the source, ownership, and destination of funds, which facilitates ML, TF, sanctions evasion, and other illicit activity.[49] Criminals can move significant value in stablecoins across borders quickly, and bypass detection and regulatory safeguards by exploiting gaps in regimes across

[46] Settlement risk is defined as the risk that a trade does not get settled due to limitations of infrastructure, an operational glitch, legal uncertainty, insufficient funds from one of the counterparties, or—importantly—the volatility of the settlement asset.

[47] The nature of the issue lies in how the blockchain achieves consensus among participants to add new transactions to the ledger. This is called the consensus mechanisms (Bains 2022).

[48] "Proliferation of weapons of mass destruction" refers to the development, manufacture, possession, transport, or use of nuclear, chemical, or biological weapons. FATF Recommendation 7 requires countries to implement targeted financial sanctions to freeze the funds and other assets of, and to ensure that these are not available to or for the benefit of, any person or entity designated under United Nations Security Council resolutions relating to the prevention and disruption of the financing of proliferation of weapons of mass destruction.

[49] A mixer is a tool designed to hide the origin and destination of crypto transactions. A cross-chain bridge is a protocol that enables crypto assets to move between different blockchains

jurisdictions. These factors, coupled with the speed and irreversibility of blockchain-based transactions, complicate efforts by law enforcement agencies to investigate and trace illicit transactions involving stablecoins, as well as freeze, seize, or confiscate them. In response, some stablecoin issuers have attempted to prevent the application of anonymity-enhancing tools and methods to their stablecoins.[50] A range of solutions are also available to assist stablecoin issuers in mitigating ML/TF/PF risks, including tools to monitor activity involving their stablecoin, identify wallets associated with illicit actors or activities, and flag potentially suspicious transactions, in addition to the capability of issuers to freeze or block wallets involved in illicit activity.

Compared to other crypto assets, stablecoins can pose heightened ML/TF/PF risks due to their perceived stability and potential for mass adoption. Stablecoins are less volatile than unbacked crypto assets, making it more likely that they will be used widely for payments, thus potentially increasing their attractiveness for illicit use. Mass adoption of stablecoins could also elevate ML/TF/PF risks and fiscal risks.[51] Some jurisdictions and international bodies have already observed a shift from unbacked crypto assets to the use of stablecoins for on-chain illicit activity, including for TF/PF purposes.[52] This underscores the need for countries to mitigate the risks by implementing the Financial Action Task Force standards in an effective manner.

Legal Certainty

Legal uncertainty around the classification and treatment of stablecoins can pose significant risks. A major source of uncertainty lies in the absence of a clear legal classification of stablecoins. Under private law, stablecoins may be categorized as intangible properties or contractual claims against the issuers. Under financial law, the range of possible classifications is even broader, including deposits, e-money, securities, or commodities. For instance, if stablecoins are treated as bank deposits or securities, they would be subject to applicable rules that may run counter to the economic function of stablecoins. These uncertainties over how stablecoins are classified and treated can lead to different risk exposures for the parties involved, since each legal category entails different rights, obligations, and protections for holders.

Stablecoins can also pose legal risks in the event of an issuer or custodian's insolvency. In such scenarios holders of stablecoins may be treated as unsecured creditors or as having a property claim ("right in rem") over the reserve assets, resulting in, respectively, a weak or strong position for such holders. To protect holders, robust segregation requirements over reserve assets are essential. Also, clear legal authority is needed for a swift and orderly insolvency regime tailored for stablecoin issuers and custodians, including ensuring prompt repayment to stablecoin holders. These risks are amplified in the case of systemic stablecoin issuers or custodians operating across multiple jurisdictions, where cross-border legal cooperation is needed to address different redemption rules as well as prompt availability of such assets. These challenges are further compounded when a stablecoin issuer is located in a jurisdiction different from that of the currency to which the stablecoin is pegged, complicating the insolvency and redemption regimes.

Further, if financial laws and regulations fail to clearly define the classification and treatment of stablecoins, these instruments may fall outside regulatory oversight. This legal ambiguity can create opportunities for

[50] For example, Circle and Tether blacklisted the cryptocurrency mixing service Tornado Cash and froze funds linked to addresses of US-sanctioned persons and entities.

[51] Higher adoption of stablecoins could affect tax revenue collection and compliance. Decentralized peer-to-peer activities increase the reliance on voluntary compliance and self-reporting.

[52] See for example, FATF (2025, 2024); EBA (2025).

regulatory arbitrage and weaken the ability of authorities to respond to financial stability risks. It can also hinder innovation, due to unpredictable supervision, and may expose regulators to legal challenges, stemming from unclear mandates or powers.

Finally, legal risks are heightened with the use of new technologies and in cross-border settings. The use of distributed ledger technology introduces new questions regarding applicable law, asset ownership, and the enforceability of rights. Similarly, the use of smart contracts in crypto asset transactions raises additional legal uncertainties and risks. For example, without clear legal rules connecting automated actions to a specific person or entity, courts may rule that transfers based on agreements formed via smart contracts are not valid stablecoin transfers.[53] These legal risks are particularly acute in cross-border transactions, especially in decentralized settings, where applicable laws and classifications may vary between jurisdictions. For instance, legal uncertainty could arise on whether claims from holders in one jurisdiction (such as home jurisdiction in the stablecoin issuer) would be prioritised over those in other jurisdictions.

[53] Garrido and Lui (2022).

International Work on Stablecoin Policy Frameworks

The IMF, in close coordination with standard-setting bodies, has been supporting the effective implementation of comprehensive policies to address the risks of stablecoins. The IMF's February 2023 paper "Elements of Effective Policies for Crypto Assets (including stablecoins)" (IMF 2023) provides guidance on key elements of an appropriate policy response and regulatory approaches. The September 2023 IMF-FSB "Synthesis Paper on Policies for Crypto Assets" provides comprehensive guidance to help authorities address macroeconomic and financial stability risks (Box 4). Both papers draw on the FSB's "High-level Recommendations for the Regulation, Supervision and Oversight of Crypto-asset Activities and Markets" and the FSB's "High-level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangements." The synthesis paper also considers the International Organization of Securities Commissions' (IOSCO) "Policy Recommendations for Crypto and Digital Asset Markets" and the BCBS's "Prudential Treatment of Crypto Asset Exposures." The FATF has provided guidance for the public and private sectors on the application of the International Standards on Combating Money Laundering and Financing of Terrorism and Proliferation to stablecoins, while the Committee on Payments and Market Infrastructures (CPMI), together with IOSCO, offered guidance on the application of the Principles for Financial Market Infrastructures (PFMI) to stablecoins.

International Policies and Standards

The IMF has recommended policies to address macrofinancial risks. To mitigate macrofinancial risks arising from crypto assets, jurisdictions should safeguard monetary sovereignty, strengthen monetary policy frameworks, and guard against excessive capital flow volatility (IMF 2023). Robust macroeconomic policies and credible institutional frameworks are the first line of defense to protect monetary sovereignty and stability. Weak monetary policy frameworks, combined with fiscal deficits and pressures for central bank financing, undermine monetary credibility and instigate currency substitution (Adrian and others 2021). A credible and effective monetary policy framework is transparent, coherent, and consistent. Further, crypto assets should not be granted official currency or legal tender status. Policymakers should take steps to counter CFMs' potential erosion caused by the adoption of crypto assets. If CFMs become less effective, because of crypto asset adoption, jurisdictions may need to consider greater exchange-rate flexibility, balancing the three competing objectives of monetary autonomy, exchange rate stability, and financial openness.

The FSB's High-level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangements include comprehensive prudential requirements for stablecoin issuers. They call for "robust requirements for the composition of reserve assets consisting only of conservative, high quality and highly liquid assets" with particular attention to "duration, credit quality, liquidity and concentration" and ensuring that "reserve assets should be unencumbered." In addition, issuers should be subject to prudential requirements including capital and liquidity requirements. The FSB also calls for "a robust legal claim" and "timely redemption" "without undue costs for the user," and for effective arrangements for the potential failure of stablecoins.

Box 4. Key Insights: Elements of Effective Policies for Crypto Assets and IMF-FSB Synthesis Paper

In February 2023, the Executive Board of the IMF discussed a board paper on "Elements of Effective Policies for Crypto Assets" (IMF 2023) that provides guidance to IMF member countries on key elements of an appropriate policy response to crypto assets (including stablecoins). The paper sets forth a framework of nine elements for a comprehensive, consistent, and coordinated policy response. The nine elements—or policy actions—are the following:

1. Safeguard monetary sovereignty and stability by strengthening monetary policy frameworks and do not grant crypto assets official currency or legal tender status.
2. Guard against excessive capital flow volatility and maintain effectiveness of capital flow management measures.
3. Analyze and disclose fiscal risks and adopt unambiguous tax treatment of crypto assets.
4. Establish legal certainty of crypto assets and address legal risks.
5. Develop and enforce prudential, conduct, and oversight requirements to all crypto market actors.
6. Establish a joint monitoring framework across different domestic agencies and authorities.
7. Establish international collaborative arrangements to enhance supervision and enforcement of crypto asset regulations.
8. Monitor the impact of crypto assets on the stability of the international monetary system.
9. Strengthen global cooperation to develop digital infrastructures and alternative solutions for cross-border payments and finance.

In September 2023, at the request of the Indian G20 Presidency, the IMF, and the Financial Stability Board (FSB) developed a paper to synthesize IMF and FSB (alongside standard-setting bodies') policy recommendations and standards. The collective recommendations provide comprehensive guidance to help authorities address the macroeconomic and financial stability risks posed by crypto-asset activities and markets, including those associated with stablecoins and those conducted through so-called decentralized finance. The paper describes how the policy and regulatory frameworks developed by the IMF and FSB (alongside standard-setting bodies) fit together and interact with each other. The paper looks at the key risks to macroeconomic stability, financial stability, and other areas (such as legal, financial integrity, and market integrity-related risks) posed by crypto-asset activities. It then presents policy responses to these risks in the areas of macrofinancial policies, financial stability regulation, and other policies and regulations. The paper acknowledges elevated macrofinancial risks that emerging market and developing economies are facing and discusses additional measures that go beyond the global regulatory baseline to address specific risks.

Notably, authorities should require global stablecoins to have appropriate recovery and resolution plans to support the recovery, resolution, or orderly wind down under the applicable legal (or insolvency) frameworks,[54] including continuity of any critical functions and activities, and to prevent spillovers to the financial system. How continuity could be preserved with a systemic stablecoin issuer will need to be worked out by authorities—

[54] See the discussion on legal frameworks for insolvency in the previous section.

including ensuring adequate loss-absorbing capacity for recovery and resolution, prudent ring fencing of reserve assets (including across borders), and careful consideration of how stablecoin investors could be safeguarded.

No international guidance has been issued with respect to potential access of systemic stablecoin arrangements to other elements of the financial safety net. Although general considerations applicable to systemic nonbank financial institutions may be relevant with regard to access to central bank liquidity (Box 5),[55] specific challenges may arise for stablecoin issuers, including the absence of central bank counterparty arrangements and oversight of stablecoin issuers and custodians. On deposit insurance, some countries (for example, the United States)

Box 5. Access to Central Bank Liquidity: Key Considerations

If the stablecoin sector were to become systemic, market-wide support may need to be considered under certain circumstances. Central banks could be forced to intervene if stablecoin deleveraging risked impairing reserve assets market functioning. Such interventions generally involve asset purchases aimed at preventing fire sales that could lower asset prices and threaten financial stability. Central bank purchases, by targeting fire sale dynamics directly, could enable central banks to unwind the reserve assets of stablecoin issuers. Although emergency interventions could minimize market disruptions, they must be balanced against the possibility of encouraging risk taking in the reserve portfolio of issuers. In principle, these interventions can be conducted through central banks' usual counterparties, such as primary dealers and banks—which would purchase securities from stablecoin issuers and then sell to the central bank—or conducted directly with stablecoin issuers if sufficient market access is not available through traditional channels. Such interventions help central banks fulfill their mandates of maintaining financial and price stability by safeguarding the flow of credit and averting fire sale dynamics.[1] An example of such intervention is the U.S. Federal Reserve's support for money market funds in 2020.[2] Providing central bank liquidity to unregulated stablecoin issuers—particularly those backed by illiquid or risky assets—generally does not align with central banks' mandates, because it may encourage excessive risk-taking and create moral hazard. However, a number of countries are considering central bank liquidity access to certain types of regulated stablecoin issuers. As regulatory frameworks for stablecoins evolve, greater clarity on eligibility for central bank liquidity and oversight will emerge. Established guidelines for central bank lending recommend that loans be fully collateralized, with appropriate haircuts applied to reduce risk, and priced so that a significant portion of the risk remains in the market, thereby helping to limit moral hazard. For example, asset purchases may have a capped price set above a risk-free reference, such as the overnight indexed swap curve. Operational preparedness of central banks for such circumstances is a key precondition for financial stability. The Bank of England (BoE) is considering providing access to a standing backstop lending facility for eligible, solvent, and viable sterling-denominated systemic stablecoin issuers.[3] Another option to provide access to central bank reserves, though for different purposes, is to give intraday access to the payment system, similar to what discussed recently by Federal Reserve Governor Waller, who asked staff to explore the idea of a "payment account" to provide basic Federal Reserve payments services for all institutions that are legally eligible for an account and could be beneficial for those focused primarily on payments innovations. [4]

[1] King and others (2017).
[2] Money Market Mutual Fund Liquidity Facility established by the Federal Reserve in March 2020, which covered Prime, Single State, or Other Tax Exempt money market funds.
[3] Bank of England (2025).
[4] Waller (2025).

[55] See April 2023 *Global Financial Stability Report*, Chapter 2.

have taken the view that stablecoins should not be insured, as the relationship between the issuer and the user is not a deposit, although pass-through deposit insurance may apply to reserves deposited with banks, as may be the case with e-money.[56] Other countries (for example, the United Kingdom) have noted the challenges in extending deposit insurance to stablecoins without explicitly ruling it out.[57]

IOSCO has also released its finalized policy recommendations for crypto and digital asset markets. The recommendations cover the range of activities in crypto-asset markets that involve crypto asset service providers (CASPs) from offering, admitting to trading, ongoing trading, settlement, market surveillance and custody as well as marketing and distribution (covering advised and non-advised sales) to retail investors. Some recommendations are relevant to stablecoins, such as disclosure and custody of reserve assets. Moreover, stablecoin arrangements rely heavily on the wider crypto ecosystem, particularly CASPs, to meet redemption needs, enhance price stabilization mechanisms, and ensure operational resilience of wallet services provision. Therefore, effective and robust functioning of CASPs would also improve the sound and robust operation of stablecoin arrangements.

The FSB and IOSCO both conducted thematic peer reviews focused on the implementation of their respective policy recommendations and published their findings in October 2025. The FSB peer review noted that jurisdictions are making progress in implementing their recommendations, albeit the implementation of stablecoin regulation has been slower than regulation on broader crypto asset markets and activities, with few of the current stablecoin frameworks found to be fully aligned with their recommendations even as jurisdictions' efforts are ongoing.[58] The FSB found critical gaps in areas like risk management practices, capital buffers, and recovery and resolution planning, noted cross-border cooperation and coordination as currently fragmented, inconsistent, and insufficient relative to the global nature of crypto asset markets. The IOSCO peer review found significant progress in relation to the implementation of their recommendations, particularly around custody, even though risks related to investor protection and market integrity need to still be fully addressed.[59]

The BCBS prudential treatment of crypto asset exposures established requirements for stablecoins to be subject to lower capital charges than other crypto assets. Those include effective stabilization mechanisms, legal enforceability, settlement finality, and adequate regulation. Although banks' exposure to stablecoins remains limited and the BCBS requirements do not apply to stablecoin issuers themselves, they can affect their behavior indirectly, as banks will be more willing to gain exposure to stablecoins that meet the requirements for capital relief. Circle recently announced the creation of a permissioned blockchain, which would better align with requirements under the BCBS standard.[60]

CPMI-IOSCO offered guidance on the application of the Principles for Financial Market Infrastructures (PFMI) to stablecoins. The guidance aims to clarify how PFMI apply to systemically important stablecoin arrangements, particularly those serving as payment infrastructure. It does not introduce new standards but rather helps stablecoin arrangements and authorities interpret existing PFMI standards considering stablecoins' unique features—for example, the use of nonbank money, decentralized governance, and emerging technologies such as distributed ledger systems. It guides stablecoin arrangements in PFMI observance across four key areas: (1)

[56] See Dobler and others (2021).
[57] BoE (2022).
[58] FSB (2025).
[59] IOSCO (2025).
[60] Introducing Arc: An L1 Blockchain for Stablecoin Finance.

governance, to ensure clear responsibility and accountability by a legal entity as well as human oversight; (2) comprehensive risk management, addressing interdependencies and novel risks; (3) settlement finality, ensuring clarity on the point when transfers become irrevocable; and (4) money settlements, emphasizing transparency and safety even when using nontraditional settlement assets. The guidance applies when a stablecoin arrangement performs a transfer function (such as a financial market infrastructure) and is deemed systemically important by the relevant authorities. In such cases, it must adhere to all relevant PFMI principles, even those not specifically addressed in the guidance.

No international guidance or recommendation is available concerning access to payment systems for stablecoin issuers. In general, if a stablecoin issuer would offer payment services, conditions for access to payment systems would be the same as for other nonbank payment service provider subject to being licensed and properly regulated and supervised.

The FATF International Standards on Combating Money Laundering and Financing of Terrorism and Proliferation apply to stablecoins. Stablecoins are covered under the FATF standards as either virtual assets or traditional financial assets.[61] Depending on the level of centralization of a stablecoin arrangement, entities in a stablecoin arrangement may be obligated to apply AML/CFT measures where they are virtual asset service providers (VASPs) or financial institutions and carry out activities involving stablecoins captured by the FATF standards, such as issuance, redemption, transfer, and custodial functions.[62] These obligations include assessing the ML/TF risks of their business activities relating to stablecoins, implementing AML/CFT controls including customer due diligence, monitoring transactions, reporting suspicious transactions, collecting and transmitting information on transfers, keeping or maintaining records, applying targeted financial sanctions relating to TF and PF, and providing documents and information for investigations and related actions.

Global implementation of the FATF standards is critical, along with measures to address the ML/TF/PF risks of stablecoin transactions via unhosted wallets.[63] As with other types of crypto assets, mitigating the ML/TF/PF risks of stablecoins depends on effective regulation and risk-based AML/CFT supervision of VASPs, and financial institutions carrying out activities involving stablecoins. Additionally, the cross-border reach of stablecoins necessitates effective international cooperation among AML/CFT supervisors, law enforcement agencies, and other authorities with an AML/CFT mandate. Peer-to-peer (P2P) transactions via unhosted wallets raise an additional challenge, as these do not involve an intermediary with AML/CFT obligations under the FATF Standards. To mitigate the risks associated with P2P transactions, the FATF guidance recommends that countries consider and implement measures such as (1) establishing controls to facilitate visibility of transactions between AML/CFT-obliged and non-obliged entities; (2) requiring VASPs to facilitate transactions only with AML/CFT-obliged entities; (3) placing additional AML/CFT requirements on VASPs that allow transactions with non-obliged entities (for example, enhanced due diligence and recordkeeping); and (4) issuing guidance and advisories on the risks of P2P transactions, supported by risk assessments and typologies.[64] Countries and the private sector are also exploring approaches to improve stablecoin monitoring and analytics,

[61] The FATF Standards use the term “virtual assets” to refer to crypto assets and other digital assets that do not function as legal tender.
[62] For a detailed consideration, see FATF (2021), Box 1, pp 54, 86–89, 249 and FATF (2020), pp 40–66 (which notes that the extent to which entities involved in managing the issuance, redemption, stabilization, or transfer functions of stablecoins have AML/CFT obligations will depend on the functions or activities they undertake and whether they are part of a central governance body or standalone entities).
[63] IMF (2023).
[64] FATF (2021).

including programmability in the smart contracts of stablecoin issuers to allow for more effective monitoring of stablecoin activity involving their stablecoin in circulation, and capability for freezing or blocking transactions.[65]

The FATF is deepening its analytical work on stablecoins. The FATF has already issued guidance and several reports that address the application of the FATF standards to stablecoins and track developments in the use of stablecoins for illicit activity.[66] In continuation of this work, the FATF will publish a report in 2026 focusing on ML/TF/PF risks associated with stablecoins, with the purpose of assisting authorities to implement measures to mitigate these risks.

The International Institute for the Unification of Private Law (UNIDROIT) Principles on Digital Assets and Private Law provide guidance for private law issues arising in key transactions involving digital assets, including stablecoins.[67] The principles are designed to facilitate key transactions related to digital assets—including "linked digital assets" (that is, stablecoins)—such as their transfer, custody, and creation of security interests thereto. The principles establish that defined digital assets are capable of being the subject of proprietary rights, thereby providing better protection to holders and acquirers under the lens of the law. They also propose connecting factors to determine applicable law in cross-border contexts, tailored to the intangible nature of digital assets. In addition, the principles clarify the circumstances under which a person is acting as a custodian and specify that digital assets maintained by a custodian on behalf of clients are not part of the custodian's assets available for distribution to its creditors if the custodian enters into an insolvency proceeding. Further, the principles provide that proprietary rights made effective against third parties are generally effective against an insolvency representative. The specific legal reforms proposed by the principles would help increase legal certainty in key areas related to digital assets transactions, minimize inefficiencies and costs, and ultimately allow for greater consistency among jurisdictions.

[65] FATF (2025).

[66] See FATF (2020); FATF (2021); FATF (2023); FATF (2024); and FATF (2025).

[67] The International Institute for the Unification of Private Law (UNIDROIT) Principles on Digital Assets and Private Law, published in 2023, offers guidance to legislators, judicial officers, and users in digital economy.

Ongoing Implementation of Policy Frameworks and Standards

This section provides an overview of ongoing implementation of standards on stablecoins and describes key elements of emerging legislation and regulation in selected jurisdictions: the European Union, Japan, the United Kingdom, and the United States, summarized in Table 2.

Overview of Ongoing Implementation of Standards

Many authorities have started implementing international standards for stablecoins. The October 2024 IMF–FSB status report, "G20 Crypto-Asset Policy Implementation Roadmap," found that nearly all FSB member jurisdictions have plans in place to develop new or revise their existing regulatory frameworks for stablecoins. All FSB members have existing laws and regulations applicable to at least part of crypto asset activities, although applicability to stablecoins is generally lower. In addition, many non-FSB members are considering stablecoin regulations, often within the context of broader crypto regulatory efforts. The FSB recently completed a thematic peer review to assess progress with the implementation of its global regulatory framework for crypto-asset activities among FSB members and selected non-member jurisdictions (FSB 2025).

Effective implementation of agreed standards will help mitigate many but not all the above-mentioned risks. Robust regulation and strict supervision will help address risks to safety while ensuring consumer protection and maintaining financial integrity.[68] They will also help reduce data gaps, which would allow integrating cross-border stablecoin flows into the broader capital flow measurement, with systematic and more comparable statistics (Box 6). Stability in value and risks of runs, as well as risks related to the interconnectedness to financial markets could be mitigated by adequate regulation and supervision. However, certain macrofinancial risks will remain. Notably, addressing the risks of currency substitution, capital flight, and payment system fragmentation will require additional action by policymakers, including sound macroeconomic policies and coordinated actions.

Implementation is especially challenging in EMDEs and low-income countries due to limited capacity. IMF technical assistance reveals that authorities face major obstacles: lack of timely, consistent and reliable data; a slow, complex process for legislative and regulatory change; ongoing capacity gaps in public and private sectors to implement regulations and improve compliance; and limited consumer awareness of risks.

[68] However, the use of unhosted wallets may hinder regulatory enforcement. Some regulators and central banks, such as the Hong Kong Monetary Authority, are addressing the challenge of unhosted wallets by requiring regulated stablecoins to be compatible exclusively with registered and regulated wallets, thus making it impractical or impossible to use unhosted wallets with such coins.

Box 6. Data Challenges and G20 Data Gaps Initiative 3

The use of stablecoins creates significant challenges for the compilation of macroeconomic statistics and consequently for data-driven decision making. The lack of information on residency and institutional sectors of holders particularly affects external sector and monetary and financial statistics (MFS), impacting the quality of the international investment position and balance of payments data for the economy of stablecoin holders, as well as the quality of MFS data such as monetary and liquidity aggregates. For the economy of stablecoin issuers, there are similar challenges, affecting, for example, the estimates of overall external debt.

The key challenge in compiling accurate statistics on stablecoins is the need for information on the residence and sector of stablecoin holders. Unlike traditional payment instruments, stablecoin issuers generally do not have visibility into the residence/sector or nationality of their token holders. Although all transactions and positions should be recorded on the blockchain, the real challenge is to allocate stablecoin holders (and their holdings and transactions) to specific economies. Consequently, compilers must complement data from stablecoin issuers with data collected from financial intermediaries, crypto exchanges. For example, in the case of Tether, it is reasonable to assume that most liabilities circulate outside the issuer's country of incorporation (El Salvador), but adjustments based on holdings data from domestic financial institutions are necessary to refine estimates. In the case of Circle, the situation is much more challenging, as it is a US-based company with significant domestic holdings of US dollar Coins.

Further, traditional data collection tools and limited granularity of data reported by stablecoin issuers exacerbate challenges for compilers. Although major stablecoin issuers usually publish monthly reports, these data often lack critical details such as maturity breakdowns, currency composition, transaction flows, and counterpart information, especially holders' residence. Unfortunately, this information is not directly available from blockchains either. Pseudonymity and sophistication of transactions on the blockchains shape informational value of on-chain analytics. These limitations require national compilers to heavily apply statistical techniques for estimating missing data, and use of alternative data sets, including on-chain analytics. While key dimensions such as residence and counterpart sector of holders/transactors on the blockchains can be proxied with a set of assumptions, the off-chain activity remains uncovered.

To help overcome some of these challenges, the IMF is working with international partners to establish a test data collection in the context of the G20 Data Gaps Initiative 3, in particular Recommendation 11. This work aims at closing the data gaps on stablecoins, unbacked crypto assets, and central bank digital currencies, by designing harmonized data templates and conducting test data collection using a wide variety of data sources. Work under Recommendation 11 will also facilitate international data sharing among the reporting economies to help identify holders' residence and sector. In addition, the IMF is developing Compilation Guidance on Crypto Assets, which will support compilers of macroeconomic statistics with methodological and practical advice on how to compile data related to crypto assets, including stablecoins.

Authorities have taken different approaches to cross-border activities of stablecoins. Four sampled jurisdictions (European Union, Japan, the United Kingdom, and the United States) have taken different approaches to foreign-issued stablecoins as described below. The authors also found noticeable differences in the approaches taken by the authorities with international financial centers. For example, in Hong Kong SAR, only entities licensed by the Hong Kong Monetary Authority (HKMA) can issue Hong Kong dollar (HKD) denominated stablecoins outside Hong Kong or actively market their issuance to Hong Kong users. Entities marketing their

issuance of non-HKD-denominated stablecoins to Hong Kong users must also obtain a license by the HKMA. Singapore takes a different approach. Foreign-issued stablecoins are subject to the Digital Payment Token regime (along with unbacked crypto assets) that focuses primarily on AML/CFT risks; however, these stablecoins cannot imply Monetary Authority of Singapore (MAS) endorsement or use the "MAS-Regulated Stablecoin" label and are treated similarly to unbacked crypto assets. These stablecoins are not subject to key requirements related to value stability imposed onto "MAS-Regulated Stablecoin" under MAS' upcoming stablecoins framework and thus commercial entities are discouraged from using them for payment services.

Closer international cooperation remains key. Existing mechanisms of cross-border cooperation (such as Memorandums of Understanding) are primarily used for enforcement and licensing purposes and rarely extend to broader supervisory objectives, such as prudential purposes, or financial stability monitoring arising from the rapid growth of stablecoins. The FSB recently noted that "cross-border cooperation and coordination is fragmented, inconsistent, and insufficient to address the global nature of crypto-asset markets, due in part to the fact that implementation efforts are still ongoing. Authorities are leveraging existing mechanisms for enforcement and licensing purposes, but these mechanisms rarely extend to broader supervisory objectives or financial stability monitoring."[69] These challenges impede effective information sharing and create regulatory arbitrage opportunities. Different redemption requirements among the jurisdictions may create higher redemptions in more investor friendly jurisdictions as investors can also relocate and request redemption in different jurisdictions. These challenges constrain effective and comprehensive oversight of cross-border stablecoin activities and delay coordinated responses to potential systemic risks. The FSB and IOSCO thematic reviews both highlighted the importance of enhanced international regulatory cooperation to address regulatory arbitrage and ensure comprehensive and consistent oversight. The IMF and FSB, together with SSBs, will continue to support and promote cross-border cooperation and the comprehensive and consistent implementation of international standards on stablecoins.

Stablecoin Regulation across Selected Jurisdictions

Emerging stablecoin legal and regulatory regimes address several common areas. Key similarities include (1) requiring issuers to be legal entities authorized by the supervisor, (2) mandating full 1:1 backing of stablecoins with high-quality liquid assets in the denomination of the stablecoin (reserves), (3) imposing segregation and safeguarding of these reserves from issuers' creditors, (4) granting statutory redemption rights to holders, and (5) prohibiting issuers from paying interest to the holders.

However, a comparative analysis indicates that jurisdictions have taken different stances in specific areas. Those areas include (1) some jurisdictions allow only non-bank to issue stablecoins while others allow commercial banks to issue stablecoins[70]; (2) the scope of some frameworks extends to foreign stablecoin issuers based on consumer targeting or currency referencing, while others are limited to domestically registered or equivalent regulated entities[71]; (3) redemption mechanisms vary in timeliness, fee structures, and enforceability, with some jurisdictions requiring same-day redemption and fee waivers, while others permit

[69] FSB (2025).

[70] Genius Act does not allow commercial banks (except uninsured national banks and federal branches of foreign banking organizations) to issue stablecoins and only allow them to issue through a subsidiary dedicated to stablecoin business. On the other hand, MiCA allows credit institutions to directly issue stablecoins.

[71] For instance, MiCA requires an EU based-legal entity to issue stablecoins and operate within the EU, while Genius Act allows a foreign entity with certain conditions (such as comparable regulation in the home jurisdiction).

charges or lack specify timeframes[72]; and (4) some jurisdictions have, in addition to requiring segregation of the reserves from the issuer' estate, explicitly given holders priority claims over the issuer's estate[73]; and (5) some regimes have explicitly imposed additional and enhanced requirements on issuers deemed systemically important[74]. It remains to be seen how these differences will play out in preserving financial stability in the case of a stablecoin run or in fostering cross-border collaboration.

Table 2. Selected Requirements of Stablecoin Regulations

	Eligible Reserve Assets	Redemption Rights and Restrictions	Prudential Requirements	Application to Foreign-Issued Stablecoins
Japan	50 percent of reserves in short-term government bonds, redeemable time deposits; remainder must be in demand deposits[75]	Redemption without delay	Fixed minimum	Service provider needs to secure the reserves for Japanese holders
European Union	30 percent (60 percent for significant issuers) minimum deposits in credit institutions	Redemption with no delay at par without fees until the recovery plan is activated	Risk based + supervisory discretion	A separate legal entity and reserve assets in EU
United States	Cash, demand deposits, money standing to the credit of an account with a Federal Reserve Bank[76], T-bills, Treasury reverse repo	Timely redemption with clear policies	Risk based[77]	Reserves in a US financial institution sufficient to meet liquidity demands of US holders
United Kingdom (proposed)	"Core backing assets," which includes short-term cash deposits (minimum 5 percent) and government debts	Redemption at par with limiting the max fees at the latest by the end of the next business day	Risk based	Under consultation
	For systemic stablecoins, the UK proposes at least 40 percent are held as deposits at the central bank with up to 60 percent held in short-term sterling-denominated UK government debt securities.	For systemic stablecoins, redemption at par by the end of day on which a valid redemption request is made, and in real time wherever possible while fees should be proportionate to costs incurred and free of charge where possible		

[72] For instance, MiCA requires timely redemption without fees until recovery plan is activated where redemption can be suspended, while Genius Act requires stablecoin issuers to have redemption policies that allow for timely redemption and publicly disclose these policies. The Genius Act allows the Office of the Comptroller of the Currency (OCC) to set up rules to define aspects of redemption policy, potentially including the meaning of "timely redemption".

[73] For instance, while both MICA and Genius Act require segregation of the reserves from the issuer's estate, the Genuis Act directly amends the bankruptcy code to also grant holders priority rights (among others) with respect to required payment stablecoin reserves.

[74] For instance, MiCA requires higher prudential requirements (such as higher capital and deposit requirements) to significant issuers. While. the Genius Act does not establish a designation process for significant issuers, it empowers the regulators to impose prudential requirements on a proportionate basis.

[75] The amendment to the Payment Services Act enacted in June 2025 is to come into effect within one year. Besides, stablecoins issued by fund transfer service providers (FTSPs) allow government bonds, and so on, as reserve assets.

[76] The GENIUS Act does not impose a reserve requirement or give access to Federal Reserve facilities to a permitted stablecoin issuer, although a stablecoin issuer could receive access via an uninsured OCC license or similar state depositary institution license.

[77] The prudential regime is not yet final as the Act specifically mandates the regulators to develop risk-based prudential requirements for stablecoin issuers.

The global nature of stablecoins casts a new dimension to the possible tensions among domestic regimes and heightens the need for international cooperation. Jurisdictions are taking legitimate steps to preserve domestic financial stability without hindering cross-border financial services. Some countries permit foreign stablecoins issuers to operate in their country if they are subject to equivalent requirements abroad, while others require issuers to establish a local entity. In certain cases, reserves must be held locally by domestic entities to cover redemptions by holders, whereas a different approach allows foreign custodians as long as issuers have in place measures to ensure timely access to reserve assets in case of redemption requests. Legislation extends regulatory reach over foreign issuers through different techniques, such as targeting local users or referencing the local currency. Caps and limits may apply to stablecoins in the domestic markets, including foreign currency denominated stablecoins. Differences in domestic frameworks—for instance on redemptions, segregation, and insolvency regimes—will interact with these rules aimed at preserving domestic financial stability. International cooperation will be essential in ensuring effective oversight of stablecoins across borders, including for contingency planning in times of distress.

Japan

In June 2022, Japan amended the Payment Services Act to establish a regulatory framework for stablecoins, which came into effect in June 2023. Stablecoins are classified as electronic payment instruments. Stablecoin issuance requires a license that can only be obtained by banks, fund transfer service providers (FTSPs), trust companies, and trust banks. Banks may only issue tokenized deposits using permissioned blockchains. FTSPs and trust companies have a transfer limit of 1 million yen per transaction; provided, however, that a trust company is not subject to such transfer limit once it obtains authorization for its business implementation plan.

The law was further amended in June 2025, which requires safe and liquid assets to support the reserve while mitigating concentration risks. Currently, FTSPs must hold reserve assets as bank demand deposits, assets with bank guarantees, or in trusts. Trust companies and trust banks currently must hold reserve assets as bank deposits. Once the amended law starts in-force, they will be required to hold term deposits and government bonds maturing within three months, in line with international standards and their implementation in other jurisdictions.

Japan relies on foreign regulation of the issuer's country, although domestic intermediary service providers are subject to reserve assets requirements. When brokers provide intermediary or exchange services for foreign-issued stablecoins in Japan, the issuer must have the necessary licenses in the country of issue, and the reserve assets for holders must be managed safely. The brokers are also subject to domestic regulations regarding the domestic brokering of stablecoins issued overseas. There are no specific requirements regarding reserve assets or capital, and issuance is subject to regulations in the country of issuance. Instead, domestic intermediary service providers must also reserve an amount equal to the tokens held by customers in their own accounts, in addition to the issuer's reserve assets.

European Union

The EU Markets in Crypto Assets Regulation (MiCA) applies to all crypto markets and activities, including stablecoins. MiCA entered into force in June 2023, although transitional arrangements for full implementation are in place for many member states. The EU approach distinguishes between "e-money tokens" (single-currency stablecoins) and "asset referenced tokens" (all other stablecoins excluding algorithmic stablecoins). It also distinguishes between significant and non-significant stablecoins, which impacts whether the stablecoin issuer is regulated at a national or EU level. This classification is based on quantitative thresholds such as

market capitalization (€5 billion), number of holders (10 million), and transaction volume (2.5 million transactions, or €500 million per day). MiCA clarifies the interaction with other financial instruments by explicitly excluding them from the definitions of deposits, securities, pension, and insurance products, thereby delineating their distinct legal classification. The regulation prohibits stablecoin issuers and crypto asset service providers from paying interest or other benefits to stablecoin holders.

Stablecoin issuers are subject to comprehensive prudential requirements, operational and legal segregation requirements, and redemption-related obligations. They are subject to simple capital[78] and liquidity[79] requirements. Reserve assets backing stablecoins must be high quality, liquid, and diversified to mitigate concentration risk. They must be unencumbered, and their pledging as financial collateral is prohibited except under limited conditions. Redemption must occur in a timely manner, although no strict deadline is provided. The regulation requires issuers to lay out recovery and redemption plans and gives supervisory authorities the power to limit redemption for financial stability reasons. Stablecoin issuers must segregate client funds operationally from their own assets and submit independent audits verifying the 1:1 backing of tokens every six months. For significant e-money tokens, reserves held in custody must be legally and operationally segregated from custodian's own funds.

Stablecoin-based payment systems are subject to payment oversight. The Eurosystem oversight framework for electronic payment instruments, schemes, and arrangements (PISA framework), developed by the European Central Bank, applies to both stablecoins and e-money when these are used for retail or wholesale payments. Under PISA, stablecoin arrangements that enable the transfer of value between users are treated similarly to traditional payment schemes, meaning the entire arrangement—including the governance body, issuers, wallet providers, and underlying settlement mechanisms—may fall under oversight. The framework is technology- and business model-neutral, ensuring that stablecoins meet the same safety, efficiency, and reliability standards as established payment solutions. PISA applies when a stablecoin arrangement is of systemic or relevant scale in the euro area, potentially affecting monetary policy, financial stability, or smooth payment functioning. This ensures risks such as operational resilience, governance, and settlement are addressed.

Access to central bank-operated payment systems is defined under the harmonized policy for nonbank payment service providers, which applies also to stablecoins. The Eurosystem defined its harmonized policy to allow nonbank payment service providers (PSPs) to access central bank-operated payment systems in 2024. Under this policy, both payment institutions and e-money institutions, which include e-money token (stablecoin) issuers under MiCA, are considered non-bank PSPs.

MiCA requires foreign stablecoin issuers to obtain a local license and establish an entity in the EU, while allowing interoperability with the coins distributed to global investors. All stablecoins issued by or marketed to EU users (domestic or foreign denomination) are subject to licensing requirements within the EU, although there are carve-outs for reverse solicitation.[80] Interoperability between tokens issued by the EU legal entity and the

[78] Issuers must have own funds consisting of common equity tier 1 instruments, equal to the greatest of either €350,000, a quarter of the fixed overheads for the previous year, or 2 percent of the average amount of reserve assets (3 percent for systemic stablecoins). Where the risk is deemed to be higher, regulators have the power to impose up to 20 percent higher own funds requirements.
[79] At least 30 percent of the reserve must be held in cash or cash equivalents, including demand deposits with credit institutions or short-term government debt (60 percent for systemic stablecoins). In addition, at least 20 percent of reserve assets must have daily maturity (40 percent for systemic stablecoins), and 30 percent must mature within one week (60 percent for systemic stablecoins).
[80] Reverse solicitation is when a product, service, or activity is provided at the client's own exclusive initiative.

group foreign entity is allowed, although the EU licensed legal entity is required to meet MiCA's requirements for the tokens issued by the EU legal entity or held by EU investors.

United States

US legislation (GENIUS Act) requires "payment stablecoins" to hold reserves as liquid assets such as short-term Treasury bills, money standing to the credit of an account with a Federal Reserve Bank, demand deposits, government MMFs, and certain reverse repos. The reserve assets cannot be encumbered or pledged in principle, and rehypothecation is only allowed exceptionally (for short-duration repo and for liquidity management purposes). It mandates regular reporting to ensure compliance and allows state-level regulatory regimes for small stablecoin issuers (that is, those with market capitalization under $10 billion). Capital, liquidity, and diversification requirements (to mitigate reserve assets concentration risk) will be further clarified and tailored to the business models and risk profile of the stablecoin issuers by the relevant US authorities. The Act does not give access to stablecoins issuers to the payment system, however the Federal Reserve is exploring the possibility to institute "payment accounts" for all institutions that are legally eligible for an account and could be beneficial for those focused primarily on payments innovations.[81]

The Act provides for consumer protection through disclosure requirements, operational and legal segregation of reserves, redemption-related obligations, and safeguards to prevent fraud. Reserves held by custodians are operationally and legally segregated from custodian's assets—subject to some exceptions—and custodians must be supervised by US authorities. The law enhances the US Department of the Treasury's ability to monitor and address illicit activities involving payment stablecoins and requires monthly certification of asset holdings that are examined by a public accounting firm. It defines a stablecoin issuer as one that is obligated to convert, redeem or repurchase the stablecoins for a "fixed amount of monetary value." To that end, stablecoin issuers must have redemption policies that allow for timely redemption of stablecoins and publicly disclose them in plain language.

The Act clarifies the regulatory architecture and their legal classification. The Act outlines the roles of federal agencies[82] and establishes a coordination mechanism to ensure consistent implementation between federal and state authorities. Commercial banks are explicitly permitted to issue payment stablecoins, but these activities must be segregated into a subsidiary that is subject to the same regulations as provided in the Act. The law also clarifies that "payment stablecoins" are not classified as deposits (including those in tokenized form), securities, and commodities.

Foreign issuers of US dollar-payment stablecoins must be subject to comparable regulatory and supervisory regimes in their home jurisdictions if they wish to apply for the ability to offer and sell through digital asset service providers in the US. The reserves sufficient to meet liquidity demands of US customers need to be held by a US-based custodian. These requirements are important, as the largest US dollar stablecoin issuer, Tether, is domiciled in El Salvador and not subject to a full, independent audit or 1:1 backing (that is, full backing by reserves) at this time.[83]

[81] Waller (2025).
[82] The GENIUS Act assigned the OCCOCC to the regulation and supervision of federal qualitied payment stablecoin issuers. For a subsidiary of an insured depository institution, the Act assigned the primary federal regulator of the parent-insured depository institution.
[83] The Genuis Act does not oblige the firm to register for US regime solely by the fact that Tether is denominated by US dollar.

United Kingdom

The Financial Services and Markets Act 2023 has expanded the regulatory remits of the BoE, the Financial Conduct Authority (FCA) and the Payments Systems Regulator (PSR) to include stablecoins and payment systems using stablecoins. Moreover, the HM Treasury submitted to Parliament draft legislation that will clarify the regulatory perimeter around stablecoins issued and used in the UK. At the same time, the Bank of England and the FCA are consulting on their detailed regulations. These consultations cover a broad spectrum of topics, including prudential requirements, reserve asset composition, access to payment systems, custody and trading rules, disclosures, clarity over legal classification, and redemption rights.

Systemic stablecoins used for everyday payments— that is, those that have wide use for domestic and/or cross-border retail and corporate payments—will be jointly regulated by the Bank of England and the FCA. The FCA will be solely responsible for non-systemic stablecoins. The BoE has published a proposed regulatory regime for sterling-denominated systemic stablecoins and the FCA is consulting on stablecoin regulation with a focus on non-systemic single currency stablecoins.[84]

Comprehensive prudential requirements aim to address credit, liquidity, and concentration risks. The FCA proposes minimum simple capital[85] and liquidity requirements[86] for stablecoin issuers. Reserve ("backing") assets for stablecoins should be demand deposits and government debt instruments with a maturity of less than one year.[87] Client assets must be segregated from the firm's own assets and held in trust for the benefit of stablecoin holders with daily reconciliation. Redemption at par must occur within one business day. Stablecoin issuers are required to conduct a full, independent review by a qualified auditor to ensure a 1:1 backing. Stablecoin issuers must monitor any concentration risks, both in terms of reserve assets and custody of funds.

Under the Bank of England's proposed regime, sterling-denominated systemic stablecoin issuers, which include payment system or service providers issuing the stablecoin, would be subject to stricter requirements that aim to ensure trust and confidence in stablecoins as a form of money and to mitigate against run risks of stablecoins in a 'multi-money' system.[88] Reducing run risks would also mitigate the risks of impairment in market functioning of reserve assets. Some key provisions to this effect are:

- At least 40 percent of reserves must be held as unremunerated deposits at the central bank, and up to 60 percent held in short-term sterling-denominated UK government debt securities.
- Systemic stablecoins issuers would be subject to capital and shortfall reserves requirements to cover general business risks, financial risks and potential insolvency/wind down costs. Backing assets and shortfall reserves requirements must be segregated from the firm's own assets and held in trust for the benefit of stablecoin holders.

[84] Bank of England (2025)

[85] The capital requirement would be set as the greater of £350,000, a quarter of relevant expenditure on overheads the previous year, or 2 percent of the value of stablecoin in issuance.

[86] The liquidity requirement would be set as the sum of one-third of the amount of fixed overhead requirements and 1.6 percent of the total amount of liabilities to clients.

[87] Issuers can notify the FCA if they want to expand backing assets to include government debt instruments with a longer maturity, certain repo and reverse repo agreements, and some limited MMFs, but at least 5 percent of assets should be in demand deposits and at least 16 percent should be held in core backing assets (comprised of short-term deposits and short-dated government debt).

[88] The BoE will consider different recognition criteria and indicators when assessing whether a stablecoins should be considered systemic or not. These include, among others, the number and value of the transactions, the value of the services that the payment service providers provide, the nature and risk profile of an entity's activity, the wholesale or retail nature of transactions, whether the payment system or service provider is substitutable (BoE 2025).

- Redemption at par must occur by the end of day on which a valid redemption request is made, and in real time wherever possible. Redemption should be free of charge, where possible, but fees proportionate to the costs incurred could be charged.
- Systemic stablecoins would have a deposit account at the BoE and be expected to access payment system directly rather than through a sponsoring participant. The BoE is also considering providing access to a standing backstop lending facility for eligible, solvent, and viable systemic stablecoin issuers.

In order to mitigate risks of bank disintermediation the BoE proposes to institute holding limits for systemic stablecoins, while the BoE will consider further whether the practice of offering incentives for usage by payments providers would be permitted.[89]

The BoE emphasizes that stablecoin-based payment systems should meet comparable standards to traditional payment infrastructures, including adherence to the PFMI, to also access the Real Time Gross Settlement System. Key payment-specific requirements include robust transfer functions and settlement safety, clear governance, and obligations for wallet providers and other service providers in the chain. Once designated as systemic, operators—and potentially wallet providers or issuers—could be required to implement resilience measures and enable wind-down planning to safeguard financial stability.

The FCA has invited views on how risks of foreign currency-denominated stablecoins (which are foreign issued) could best be managed. The BoE has clarified that, for non-sterling denominated stablecoins that are used widely for payments in the UK, its preference is to rely on the regulation and supervision of home authorities where the latter's regimes deliver similar outcomes to the Bank's regime, and there are strong cooperation arrangements in place with the home authorities. Non-UK based, sterling denominated systemic stablecoin issuers would need to set up a subsidiary in the UK. That subsidiary should hold the backing assets and assets funded by capital in the UK and be subject to all the requirements otherwise applicable to systemic sterling-denominated stablecoins.

[89] The per-coin holding limits would be GBP 20,000 for individuals and GBP 20 million for business, with exemptions for business that requires balances above it in the course of doing normal business.

Conclusions

Stablecoins' issuance has increased rapidly in recent years, though it represents less than 10 percent of the wider crypto asset capitalization. Stablecoins are types of privately issued crypto assets that aim to maintain a stable value. They have potential benefits while also posing risks to macrofinancial stability, safety and efficiency, financial integrity, and legal certainty. The IMF and the FSB (along with SSBs) have developed a global framework of policy recommendations and standards. The regulatory framework helps guide authorities' policy actions to address risks to financial stability, financial integrity, market integrity, investor protection, as well as prudential and other risks associated with stablecoins. The IMF has developed a broader policy framework for crypto assets that also covers monetary policy, fiscal policy, capital flow management, and broader macroeconomic policy issues. The IMF and FSB have published a synthesis paper in 2023 that incorporates both regulatory and broader crypto policy aspects.

Although jurisdictions have made progress implementing these policy and regulatory frameworks, a fragmented landscape persists. The EU's MiCA currently leads in terms of comprehensiveness of implementation, showing leading practices for other jurisdictions. The United States finalized the federal legislation, aiming to establish a framework that addresses key risks while fostering innovation. The legislation may also have material international implications due to the global role of the US dollar. Japan, having enacted its framework earlier, focuses on restricting issuance to licensed institutions with strict reserve requirements. The United Kingdom is cautiously integrating stablecoins into its financial services regulation, prioritizing issuance and custody while leaving room for future development, particularly around payments. This reflects its focus on the potential of stablecoins to be widely used as money in the future, not just in their current uses. All those jurisdictions are taking different regulatory approaches toward foreign-issued stablecoins, which may create regulatory arbitrage opportunities and also result in uneven allocations of liquidities among local entities.

The cross-border nature of stablecoins presents elevated legal, regulatory, and supervisory challenges for authorities. While the flexibility allowed in international standards facilitates prompt implementation of agreed international standards, the divergence in approaches could hinder its effectiveness and lead to regulatory arbitrage. Many regulators are facing complex challenges in striking a balance between fostering innovation and mitigating risks, with increasing political and industry pressures calling for growth opportunity and a level playing field across jurisdictions. Stablecoin issuers and arrangements can easily relocate their headquarters and main activities to other jurisdictions where regulations could be less robust, which makes these challenges even more difficult. The use of foreign currency-denominated stablecoins, especially in cross-border contexts, could lead to currency substitution and potentially undermine monetary sovereignty, particularly in the presence of unhosted wallets. Although regulation of stablecoins helps authorities address these risks, strong macro-policies and robust institutions, as outlined in IMF (2023), should be the first line of defense. In addition, fragmentation in payments can arise if stablecoins or their networks are not interoperable, especially if there are inconsistencies among relevant applicable laws and regulations. International coordination remains key to solving these issues.

The growth in stablecoins could be rapid and increase momentum for other financial institutions to adopt distributed ledger technology, including banks, financial market infrastructures, and asset managers. For more than a decade, major financial institutions, infrastructures, and payment service providers have been exploring the usage and deployment of distributed ledger technology, aiming at asset tokenization, clearing and settlement, and privacy preservation. Those efforts may translate increasingly into concrete conversions of pilots into product launches against the backdrop of stablecoin growth. Asset tokenization, including ETF and MMF

tokenization, has been underway for some time. A number of major financial market infrastructures have been experimenting with blockchain-based clearing and settlement mechanisms. And many banks are actively pursuing deposit tokenization projects. Hence policymakers globally should continue to focus on developing policy frameworks for tokenization and privacy preserving technologies, and the IMF is ready to engage with its members via surveillance, capacity development, and its convening powers to support its membership.

The IMF and BIS have been actively developing frameworks for the private and public sectors to deploy blockchain technology in a manner that enhances efficiency, ensures stability, and preserves privacy. The IMF published the conceptual framework for A Multi-Currency Exchange and Contracting Platform (Adrian and others 2022), which presents a vision for a multilateral platform for cross-border payments and financial contracting that leverages tokenization, privacy preservation, and clearing and settlement efficiency for public policy objectives. The platform features a common ledger with smart contracts and encryption to generate gains to market efficiency and access, as well as to transparency, safety, and privacy preservation. The BIS (2023) proposed a Unified Ledger and has been engaging with global banking organizations on the project Agora to develop a blockchain-based technological upgrade to correspondent banking. Other arrangements are possible for the development of interoperable financial platforms allowing the transfer of tokenized money and securities, as discussed in an IMF Note to the G20 (IMF 2024). The growth of stablecoins may spur further developments in global financial market infrastructure along such lines.

The IMF continues to closely monitor developments and the evolving impact of stablecoins on the international monetary system, offering analysis, guidance, and policy advice to member countries on crypto assets, including stablecoins. The IMF has been providing targeted advice to countries on the implications for monetary and fiscal policy from stablecoins, as well as support on legal and financial integrity issues, as part of the IMF's lending, surveillance, and capacity development activities. The IMF is also actively coordinating with the FSB and SSBs to implement and promote a globally coordinated and comprehensive regulatory approach to stablecoins, including contribution to ongoing thematic peer reviews assessing the implementation of crypto-related recommendations by the FSB and IOSCO. The IMF is further progressing in monitoring stablecoin cross-border flows, through both enhanced data collection and analytical work.

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