Centre for International
Governance Innovation

Policy Brief No. 200 — March 2025

Policy Pathways for Integrating Fast Payment Systems with Digital Currencies

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Key Points

- **Cooperation is key:** The potential for coexistence between fast payment systems (FPSs) and digital currencies presents a significant opportunity to enhance the global digital financial ecosystem.
- **Unified regulatory framework:** Harmonizing regulations for FPSs and digital currencies is crucial for compliance, security and seamless integration.
- **Technological interoperability:** Investments in digital infrastructure and the development of open application programming interfaces (APIs) will support communication between FPSs and blockchain platforms.
- **International cooperation:** Global standards and cross-border agreements are essential to enable smooth international transactions using both systems.
- **Public-private partnerships (PPPs):** Collaboration between governments, central banks, and fintech and blockchain developers will accelerate innovation and ensure a secure, inclusive global financial ecosystem.

Introduction

The rapid evolution of digital finance has fundamentally reshaped how transactions are conducted, fostering more inclusive, efficient and cashless economies. Among the key developments in this domain are FPSs such as India's Unified Payments Interface (UPI) and Brazil's Pix, which have revolutionized everyday transactions by offering real-time payments, accessibility and low-cost solutions. These systems have greatly contributed to financial inclusion, providing millions with access to seamless digital transactions and pushing both India and Brazil toward predominantly cashless economies.

The emergence of digital currencies, including stablecoins and central bank digital currencies (CBDCs), has introduced a new wave of financial innovation. These digital assets address a distinct need and provide benefits that extend beyond the capabilities of fast payments. Whether backed by stable assets or issued by central banks, digital currencies are based on two core tenets of decentralization (though their adherence to these tenets can differ from case to case) and programmability through the integration of smart contracts. Thus, unlike FPSs, digital currencies promise to streamline cross-border payments, enhance monetary control, drive economic integration and, in the case of stablecoins, provide a mechanism to

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participate in the financial system independently of traditional banking systems. However, the possibility of substitutive dynamics must also be acknowledged, particularly in contexts where one solution outpaces the other in adoption and functionality. As these two models of digital finance coexist, a critical question arises: Can FPSs and digital currencies operate harmoniously? This policy brief explores the potential for this coexistence and outlines policy recommendations to facilitate integration.

FPSs are digital platforms that facilitate instant, secure and low-cost transactions, providing a seamless way for individuals and businesses to transfer funds. These networks are characterized by real-time payments, 24/7 availability and widespread accessibility, offering users the ability to send and receive money instantly at any time of day. With minimal transaction fees, FPSs are designed to be inclusive, promoting financial access for underbanked populations and supporting broader economic participation.

One of the most successful examples of a fast payment network is India's UPI. Launched in 2016, UPI integrates with banks and fintech platforms, allowing users to link multiple bank accounts and make instant transfers. Its ease of use and integration with various mobile apps have made it the backbone of India's digital payments landscape, reaching millions of users across both urban and rural areas.

Similarly, Brazil's Pix system, introduced in 2020, has rapidly become a cornerstone of the country's digital economy. Pix provides real-time payments that are secure, fast and accessible for both consumers and businesses. Its adoption across various sectors — from retail to government services — has strengthened Brazil's transition to a cashless economy.

Digital currencies, particularly stablecoins and CBDCs, are another innovation in the global financial landscape and offer a new method for transferring value. Stablecoins are digital currencies pegged to stable assets (for example, fiat currencies such as the US dollar to minimize volatility). These coins are designed to maintain a fixed value, providing a stable medium of exchange. Stablecoins have gained prominence for their role in cross-border payments, decentralized finance (DeFi) and remittances. By enabling fast, low-cost international transfers, stablecoins purport to

offer an efficient alternative to traditional banking systems, particularly for those without access to conventional financial institutions. Popular examples include USD Tether (USDT) and USD Coin (USDC), which are both widely used in cryptocurrency markets and across decentralized platforms.

CBDCs serve as digital versions of a country's national currency, issued and regulated by central banks. Unlike decentralized cryptocurrencies, CBDCs function as official legal tender, offering a digital alternative to cash. These currencies are centrally controlled and can be used for everyday transactions, while providing greater transparency and efficiency in the financial system. Both stablecoins and CBDCs offer numerous potential benefits, particularly in promoting greater financial inclusion by reaching populations with limited access to traditional banking services. They also lower the costs associated with remittances, providing faster and cheaper methods for international money transfers. Additionally, CBDCs have the potential to influence monetary policy by enhancing the central bank's ability to implement and monitor policy measures. Their impact depends on key design choices, such as whether they are token-based or account-based, which affect the efficiency of monetary transmission mechanisms. For instance, an account-based CBDC could enable direct and precise monetary interventions, such as targeted liquidity provision or negative interest rate implementation, potentially improving the central bank's capacity to stabilize the economy and achieve monetary objectives. It is important to note that while central banks in advanced economies are still in the exploratory phase, certain emerging economies (such as Nigeria, with its eNaira and China's, with its digital yuan) have deployed retail CBDCs (rCBDCs) to address financial inclusion gaps. China's digital yuan is designed to complement cash and aims to improve payment efficiency and reduce dependence on private digital payment platforms. Together, stablecoins and CBDCs are reshaping the future of money and how it is transferred across borders and platforms.

The potential for integration between FPSs and digital currencies is significant. These two technologies, while based on different infrastructures, could complement each other in ways that address existing gaps in both domestic and cross-border payments, ultimately enhancing global financial systems. Integration would combine the user-friendly, real-time capabilities of FPSs with the security, decentralization and programmable features of digital currencies, creating a seamless financial ecosystem.

One of the most promising areas for integration lies in the interoperability between traditional FPSs and blockchain-based digital currencies. FPSs, such as UPI and Pix, are already widely trusted for domestic transactions and could act as user-friendly front-end systems. Blockchain technology could complement these systems by enabling secure and efficient settlement for cross-border transactions or transactions involving digital currencies.

However, the question of governance is central to this integration. If the blockchain is operated by the same authority as the FPS (for example, a central bank or a consortium of banks), this ensures unified oversight and compliance with existing regulatory frameworks. Alternatively, if the blockchain is decentralized or run by a third party, questions arise about who regulates it, enforces standards and resolves disputes. Addressing these governance issues requires clear agreements on interoperability standards, regulatory jurisdiction and the accountability of entities managing the blockchain infrastructure. Policy makers and regulators will need to establish frameworks that ensure trust, security and compliance across both systems.

Cross-border payments remain a persistent challenge in traditional financial systems, primarily due to the involvement of multiple intermediaries, fragmented infrastructure, high fees and delays. Blockchain-based currencies, particularly CBDCs, present a potential pathway to address some of these issues by enabling direct, near-instant transactions between different currencies. However, achieving seamless cross-border payment integration is far more complex than it might initially appear, as highlighted by the Bank of International Settlements (BIS) (BIS Committee on Payments and Market Infrastructures et al. 2022). While the integration of FPSs with rCBDCs could theoretically simplify international transactions, significant hurdles remain. Enabling a seamless transfer between systems such as India's UPI and Brazil's Pix, for example, with blockchain technology facilitating the conversion between the digital rupee and digital real, requires more than technical interoperability. Key challenges include the need for interoperability across distinct national CBDC systems, alignment of regulatory frameworks, and the resolution of issues related to foreign exchange management and compliance

with anti-money laundering (AML) and combatting the financing of terrorism standards. For instance, while rCBDCs could enable users to send money internationally as easily as domestically, such transfers require harmonized technical standards and coordinated central bank policies. Without these measures being put in place, cross-border transactions risk becoming fragmented or creating regulatory blind spots.

While initiatives such as the BIS's Project mBridge and Group of Twenty's cross-border payments road map have made progress in tackling these challenges, the pathway to seamless global integration remains long. Policy makers, central banks and technology providers must collaborate closely to address these systemic and technical hurdles. A key feature of blockchain-based digital currencies, especially CBDCs, is programmability. Programmable digital currencies allow for the execution of smart contracts or self-executing contracts with the terms directly written into code that trigger automatic payments when predefined conditions are met. This programmability is a significant advancement over traditional payment networks, which are typically limited to basic transactional functions. By integrating programmable CBDCs with FPSs, governments and businesses could revolutionize the way that they manage complex financial processes. For example, programmable CBDCs could automate payroll, insurance payouts or loan disbursements. In these scenarios, FPSs could function as the interface that ensures user-friendly access, while the actual payments and contracts are overseen by the underlying CBDC infrastructure. For businesses, this could streamline supply chain payments, where funds are automatically released upon delivery confirmation, creating more efficiency and transparency.

The integration of private stablecoins such as USDT or USDC into FPSs could allow users to transact in stablecoins without needing to engage directly with cryptocurrency exchanges or complicated blockchain platforms. For instance, users could deposit their USDT funds into their UPI account, where the funds are automatically converted into stablecoins for cross-border transfers. This model would take advantage of the price stability of stablecoins, while reducing the high fees and delays typically associated with international remittances. Recipients in different countries could either keep their stablecoins or convert them into local currency through local FPSs, providing a fluid and efficient process. This system would also revolutionize international e-commerce. Consumers and businesses often face high transaction fees and currency conversion issues when purchasing goods or services from abroad. An integrated system would allow a buyer using UPI in India to seamlessly pay a merchant in Brazil using Pix with the transaction settled via stablecoins, eliminating the need for costly intermediaries.

While FPSs and digital currencies offer significant opportunities for cooperation, the regulatory environment presents a significant challenge to their coexistence. FPSs are deeply integrated within the existing regulatory frameworks of traditional banking systems. These systems are designed to operate under the oversight of national governments and central banks, which regulate them to ensure financial stability, prevent fraud and maintain consumer protection. Conversely, digital currencies such as stablecoins and CBDCs operate on fundamentally different infrastructures, often decentralized or blockchain-based, creating significant regulatory friction.

Divergent Regulatory Approaches

FPSs are tightly regulated by national authorities and financial institutions, subject to established legal frameworks for AML, know-your-customer (KYC) requirements and consumer protections (Reserve Bank of Australia 2024). These systems also rely on central banks for monetary policy alignment, ensuring that all transactions within a country are governed by local laws.

However, stablecoins often operate outside traditional financial systems. Despite being pegged to fiat currencies, stablecoins face fragmented regulatory oversight, as they are issued by private entities and traded globally, making it difficult for any single regulatory authority to exert full control. Stablecoins currently are predominantly used as on-ramps for cryptocurrency trading and not yet widely accepted as a means of payment. The BIS argues that calling stablecoins "currencies" may be premature, given their limited role in everyday transactions (Aurazo et al. 2024). CBDCs, while issued by central banks and fully regulated, are a

relatively new concept and require entirely new regulatory frameworks to govern their issuance, use and impact on existing financial systems.

Inconsistent Global Regulations

One of the primary difficulties in ensuring the coexistence of these systems is the inconsistent regulatory environment across different jurisdictions. FPSs are designed to comply with the national laws of the countries in which they operate. These laws are typically well-defined, ensuring that transactions are traceable and compliant with local regulations.

Digital currencies, due to their decentralized nature, are harder to regulate and supervise across borders. Different countries have adopted varying stances on the regulation of digital currencies. For example, some nations, such as the United Arab Emirates (UAE) and Switzerland, have embraced digital currencies, while others, such as China, have outright banned their use. In this fragmented landscape, ensuring interoperability between digital currencies and FPSs becomes difficult, as the regulatory requirements vary significantly from one jurisdiction to another.

Complexity of Regulatory Harmonization

The lack of international coordination further complicates the regulatory landscape. Integrating blockchain-based digital currencies with existing FPSs requires harmonizing not only technical standards but also legal and regulatory frameworks across different countries. For CBDCs, this harmonization could mean creating bilateral or multilateral agreements between nations to enable cross-border transactions using their respective digital currencies. This process could be slow and complex, particularly in the absence of established international standards for digital currencies.

Moreover, stablecoins, which are often issued by private entities and are not subject to the same stringent government controls, face additional scrutiny from regulators who are concerned about their potential to disrupt existing monetary systems. For stablecoins to coexist with FPSs, regulators would need to address concerns related to financial stability, market integrity and AML compliance. Addressing these concerns could require introducing new regulations that govern stablecoin issuance, trading and cross-border use.

Consumer Protection and Risk Management

Another significant regulatory hurdle involves consumer protection. FPSs operate under strict consumer protection laws, offering remedies for fraud, transaction disputes and data breaches. In contrast, the regulatory frameworks for digital currencies remain fragmented and, in some jurisdictions, underdeveloped. For instance, the decentralized nature of stablecoins presents challenges for regulators to monitor transactions, prevent fraud or provide redress in cases of security breaches or asset losses.

While central banks could ensure robust oversight, integrating CBDCs with existing FPSs introduces new risks. Cyberattacks or technical failures in such a system could propagate disruptions across digital and traditional financial systems. These risks highlight the need for a unified regulatory framework that addresses consumer protection, technical resilience and operational continuity.

In developed economies, where financial infrastructure and regulatory systems are more mature, the introduction of a CBDC would likely require a unified domestic framework that integrates existing consumer protection measures with those specific to CBDCs. Such frameworks would need to address liability in cases of system outages, clarify redress mechanisms for CBDC-related disputes and ensure the protection of user data. Furthermore, cross-border interoperability of CBDCs in developed economies necessitates international coordination, as fragmented regulatory regimes could hinder adoption and undermine trust. In developing economies, the situation is more nuanced. While CBDCs offer opportunities to enhance financial inclusion and address gaps in existing payment

systems, regulatory frameworks for consumer protection often remain weak or inconsistent. Integrating CBDCs with FPSs in these contexts requires capacity building for regulators, robust cybersecurity measures and legal provisions to protect users from fraud and systemic risks. Moreover, cooperation with international standard-setting bodies is crucial to harmonizing cross-border transactions and aligning domestic regulations with global standards.

Regulatory Competition and Fragmentation

The emergence of CBDCs introduces an element of regulatory competition. As more countries develop their own CBDCs, national governments may prioritize the adoption of their digital currencies over FPSs. This competition between different regulatory approaches could lead to fragmentation, where different regions enforce incompatible regulations for digital currencies and FPSs. And it could also hinder efforts to establish a global standard for interoperability and ultimately prevent the coexistence of these systems. Although in Canada, the Bank of Canada seems to be shifting focus away from rCBDCs to prioritize FPSs in order to meet evolving consumer needs. This strategy reflects the belief that well-developed FPSs, governed under unified regulatory oversight, may offer a more immediate solution to domestic payment challenges than a CBDC (Singh 2024).

The coexistence of FPSs and digital currencies is contingent upon addressing significant regulatory challenges. To facilitate effective integration, governments, central banks and international organizations must collaborate to establish an aligned and comprehensive regulatory framework that safeguards the stability, security and fairness of the digital financial ecosystem. Achieving seamless integration between these systems necessitates policy makers' focus on developing a comprehensive regulatory framework, encouraging technological innovation and fostering international cooperation.

Develop a Unified Regulatory Framework

Harmonize Regulations

Harmonizing regulations across jurisdictions is a critical step toward integrating FPSs and digital currencies while ensuring security, stability and compliance. However, this process requires a coordinated effort involving multiple actors at the international, national and regional levels. Governments can focus on aligning the regulatory frameworks that govern both FPSs and digital currencies, ensuring that both systems adhere to similar standards for compliance and security. A key area of alignment is in AML and KYC requirements, which are crucial toward combatting financial crimes such as money laundering, terrorism financing and fraud. By harmonizing these regulations, authorities can create a unified system that applies equally to traditional payment methods, FPSs and digital currencies:

- **Cross-agency coordination:** National financial regulatory bodies, such as central banks, financial regulatory authorities and law enforcement agencies, should seek to work together to draft unified AML/KYC regulations. These regulations should encompass digital currencies and FPSs, ensuring that compliance obligations are consistent across the board.
- **International collaboration:** Governments could engage in dialogue with international organizations such as the Financial Action Task Force and the International Monetary Fund (IMF) to develop globally accepted standards for AML/KYC practices. This collaboration is particularly important for cross-border transactions involving digital currencies, which often operate beyond the jurisdiction of any single country.
- **Consumer protection:** Governments may develop comprehensive and stringent consumer protection legislation for both FPSs and digital currencies, ensuring that users have recourse in cases of fraud, cybersecurity breaches or technical failures. These protections should include mechanisms for dispute resolution, fraud detection, refund policies and cybersecurity protocols. Without proper consumer protection, users may be reluctant

to adopt new digital systems, which could hinder the progress of both these technologies.

- **Centralized oversight bodies:** Establish an independent agency or strengthen the role of existing financial oversight institutions to monitor compliance with consumer protection standards. These bodies can enforce regulations, investigate breaches and ensure that users have access to remedies such as chargebacks, dispute resolution or compensation for losses.
- **Public awareness campaigns:** Governments and financial institutions should seek to actively educate the public about the security features and potential risks of using FPSs and digital currencies. Informing consumers about best practices for cybersecurity, such as avoiding phishing scams and using strong authentication methods, will help mitigate risks.

Licensing Schemes

Licensing mechanisms could be established for stablecoin entities operating within the digital finance ecosystem. These mechanisms will ensure that these entities are subject to the same regulatory scrutiny as traditional financial institutions, promoting financial stability and consumer trust. Licensed entities must meet specific criteria related to capital reserves, cybersecurity protocols, transparency and operational risks:

- **Tiered licensing structure:** Governments could introduce a tiered licensing system that distinguishes between diverse types of digital currency providers, such as stablecoin issuers, digital wallet providers and DeFi platforms. Each tier would have specific capital requirements, risk management obligations and reporting standards depending on the scale and complexity of their operations.
- **Cross-border coordination:** Given the global nature of digital currencies, countries should work together to create harmonized licensing frameworks that apply internationally. Collaborative efforts between central banks and financial regulatory bodies in different countries could create a “passporting” system, where a licensed entity in one jurisdiction is recognized in others. Such a system would simplify cross-border operations while maintaining consistent oversight standards.
- **Regulatory audits:** Regular audits will ensure licensed entities comply with established regulations, including holding sufficient capital reserves, implementing strong cybersecurity measures and following AML/KYC protocols. Both national regulators and third-party independent auditors should conduct these audits.
- **Cross-border coordination:** Given the global nature of digital currencies, countries should work together to create harmonized licensing frameworks that apply internationally. Collaborative efforts between central banks and financial regulatory bodies in different countries could create a “passporting” system, where a licensed entity in one jurisdiction is recognized in others. Such a system would simplify cross-border operations while maintaining consistent oversight standards.

Promote Technological Interoperability

Invest in Digital Infrastructure

Governments play a critical role in building the foundational infrastructure necessary for integrating FPSs with CBDC and stablecoin systems. Prioritizing investments in this area entails:

- **Upgrading payment systems:** Modernizing existing FPSs to ensure that they are compatible with emerging technologies, such as blockchain and distributed ledger systems.
- **PPPs:** Collaborating with the private sector to fund and implement digital infrastructure projects, leveraging industry expertise while ensuring alignment with public policy goals.
- **Dedicated research and development:** Allocating resources for central banks and fintech firms to pilot innovative solutions such as blockchain-based settlement layers for cross-border payments.

Open APIs and Standards

To ensure interoperability, governments and regulatory bodies should focus on establishing open standards and APIs that allow different systems to communicate effectively, which would involve:

- **Defining API specifications:** Governments and regulatory agencies should work with industry stakeholders to define the technical requirements for APIs that facilitate seamless integration between FPSs and digital currencies.
- **Certification and compliance:** Regulatory bodies can establish a certification program to ensure APIs meet stringent security and operational standards. Certified APIs would provide assurance that connected systems adhere to best practices in areas such as data protection and transaction integrity.
- **Global standardization efforts:** Organizations such as the International Organization for Standardization (ISO) and the BIS could take the lead in formalizing global standards for API development and adoption. For instance, the ISO 20022 standard could serve as a foundation for harmonizing data formats across regions.

The integration of India's UPI with Singapore's PayNow demonstrates the feasibility of connecting domestic FPSs. Governments can emulate such bilateral efforts, scaling them to a regional or global level.

International Cooperation and Standardization

Establish Global Standards

Global standards such as ISO 20022 have already become a cornerstone for enhancing interoperability in FPSs. Governments, in collaboration with international organizations such as the IMF and the BIS, should focus on expanding the scope of these standards to encompass digital currencies, including CBDCs and stablecoins. Specific actions include:

- **Integrating digital currency specifications:** Extend ISO 20022 to include fields and protocols specific to digital currencies, enabling seamless data exchange between traditional financial systems, FPSs and blockchain-based platforms.
- **Supporting adoption across jurisdictions:** Provide technical and financial assistance to ensure the adoption of ISO 20022, particularly in developing economies, to create a globally consistent foundation for digital payments.
- **Facilitating multisystem interoperability:** Use ISO 20022 as a common language for linking domestic FPSs with CBDCs, creating a unified standard for both centralized and decentralized payment mechanisms.

Adopt Cross-Border Agreements

While ISO 20022 provides a technical basis for integration, cross-border payment efficiency also depends on regulatory and operational agreements. Governments should prioritize fostering multilateral and bilateral agreements that align domestic and regional payment systems with global standards.

Regional CBDC Collaboration

Governments in geographically close or economically integrated regions (for example, the European Union and the Association of Southeast Asian Nations) should explore regional CBDC collaboration. This collaboration would involve creating frameworks where digital currencies can flow seamlessly across borders, supported by shared infrastructure and regulatory reciprocity.

- **Example:** The mBridge project led by the BIS involves multiple central banks, including those from China, Hong Kong, Thailand and the UAE, working together to pilot cross-border payments using CBDCs (BIS Committee on Payments and Market Infrastructures et al. 2023).

Establish Bilateral and Multilateral Payment Agreements

Governments should engage in bilateral and multilateral negotiations to simplify the regulatory and technical hurdles for cross-border digital currency payments. These agreements would:

- harmonize tax and regulatory frameworks for digital currencies;

- establish mutual recognition of digital currency platforms and ensure compatibility between national FPSs and digital currencies; and
- simplify currency conversion processes by using digital currencies to bypass costly foreign exchange intermediaries.

Adopt Universal Messaging Protocols

Establishing universal messaging protocols, similar to the Society for Worldwide Interbank Financial Telecommunication's (SWIFT's) system used for traditional international transfers, can ensure that digital currencies are easily transferable between countries. These protocols would enable FPSs in different countries to communicate seamlessly, facilitating real-time cross-border settlements with minimal costs.

- **Example:** SWIFT GPI is already working to modernize international payments; it could be adapted to work with CBDCs, allowing FPSs to plug into this global messaging system and facilitate rapid, secure cross-border transactions (Currencycloud 2020).

Focus on Reducing Remittance Costs

Multilateral agreements should focus on incentivizing financial institutions and payment service providers to adopt these technologies and pass savings on to consumers.

- **Example:** The United Nations Sustainable Development Goal 10.c aims to reduce the cost of remittances to less than three percent by 2030 (United Nations 2019). Integrating digital currencies into existing payment systems could be a key driver toward achieving this goal by eliminating intermediaries and automating cross-border transfers.

Encourage Public-Private Collaboration

PPPs

Governments should encourage collaboration between central banks, private fintech companies and blockchain developers to build integrated financial systems.

Governments and central banks, private fintech companies and blockchain developers could come together to form a decentralized autonomous organization (DAO) or governance body. These key players could facilitate the development of technical standards for integration, initiate and fund pilot projects to assess innovations, develop a treasury managed and deployed through smart contracts to allocate funds to these pilot projects, and reward contributors based on successful implementation and adherence to governance guidelines. One of the core strengths of a DAO is its ability to transcend borders; thus, it can serve as a platform for central banks and financial institutions from different countries to create a global framework for financial innovation and regulatory alignment.

Pilot Sandbox Programs

Governments can introduce pilot programs in sandbox environments that evaluate the integration of FPSs with stablecoins or CBDCs in specific sectors, such as remittances or cross-border e-commerce, to identify best practices and address challenges.

Ensure Data Security and Privacy

Strengthen Cybersecurity Measures

As digital currencies and FPSs converge, governments must invest in cybersecurity to protect against fraud, hacking and data breaches. These security measures include ensuring robust encryption protocols and implementing real-time monitoring systems. With the rise of quantum computing, future-proof encryption

methods must be explored and implemented, and thus governments should support research into quantum-resistant cryptography to ensure long-term data security. Encryption is only as strong as the security of the keys used to decrypt the data. Implementing secure key management systems, such as hardware security modules, will further ensure that decryption keys are securely stored and protected from breaches.

- **Data privacy standards:** Policy makers must also enforce strict data privacy standards to ensure that personal information is protected while enabling the seamless operation of integrated payment systems.
- **User consent and transparency:** Digital currency platforms and FPSs should be required to obtain clear and explicit consent from users before collecting or sharing personal data. Establishing consent in advance ensures transparency and gives users more control over their data.
- **Data minimization principles:** Governments should encourage or mandate that only the minimum amount of personal data necessary for a transaction is collected by payment platforms, thus reducing the risk of data breaches and misuse.
- **Anonymization and pseudonymization:** Sensitive personal information should be anonymized or pseudonymized to reduce the risk of privacy breaches. By ensuring that identifiable data is not easily accessible, even if a breach occurs, user privacy can be preserved.
- **Data protection officers (DPOs):** Governments should require companies handling digital payments and currencies to appoint DPOs responsible for ensuring compliance with data privacy regulations.
- **Breach notification:** In the event of a data breach, platforms should be required to notify users and regulators promptly. Governments should enforce penalties for delayed notifications and poor data-handling practices to incentivize better compliance.

Ultimately, the future of digital finance should be to create an inclusive, efficient and secure digital payment infrastructure that serves both local and global needs, ensuring financial accessibility, stability and innovation for the digital economy.

The potential for coexistence between FPSs and digital currencies presents a significant opportunity to enhance the global digital financial ecosystem. While competition may arise between these systems — particularly as CBDCs gain traction — collaboration would yield far greater benefits by combining the strengths of both technologies. This hybrid model could address the diverse needs of both consumers and businesses across the world while maintaining the security and trust provided by central banks and governments.

Acronyms and Abbreviations

AML	anti-money laundering
APIs	application programming interfaces
BIS	Bank for International Settlements
CBDCs	central bank digital currencies
DAO	decentralized autonomous organization
DeFi	decentralized finance
DPOs	data protection officers
FPSs	fast payment systems
IMF	International Monetary Fund
ISO	International Organization for Standardization
KYC	know your customer
PPPs	public-private partnerships
rCBDCs	retail central bank digital currencies
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UAE	United Arab Emirates
UPI	Unified Payments Interface (India)
USDC	USD Coin
USDT	USD Tether

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About CIGI

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