ASIAN DIGITAL MONEY: CBDC–DEPOSIT TOKEN CONVERGENCE AND NON-USD STABLECOIN STRATEGY

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TABLE OF CONTENTS

1. Entering: Asia Is Converging on CBDCs and Deposit Tokens 3

2. Digital Currency Overview 5

2.1 Three Digital Currencies: CBDC, Deposit Token, Stablecoin 5

2.2 The BIS Vision: Integration and Pluralism in Digital Money 9

3. Digital Currency Developments by Country 12

3.1 China: A State-Led Model Where CBDCs Absorb the Role of Bank Deposits 12

3.2 Japan: A Three-Track Model With CBDC, Deposit Tokens, and Stablecoins All Open 16

3.3 Korea: A Model Designed Around Deposit Tokens With Stablecoins as a Complementary Layer 21

3.4 Singapore: A City-State That Treats Stablecoins as a Financial Hub Strategy 26

3.5 Hong Kong: A Stablecoin Bypass for Chinese Capital Under One Country, Two Systems 30

3.6 India: A Financial Inclusion Experiment Layering CBDC on Top of UPI 35

3.7 Kazakhstan: A Portfolio Strategy Embracing Both CBDC and Crypto 39

3.8 Summary: Three Models of Asia's Digital Currency Strategy 43

4.1 Reason 1: The Fourth Front of De-Dollarization 49

4.2 Reason 2: Structural Differences in Banking Systems and Payment Infrastructure 56

4.3 Reason 3: Institutional Friction, Stablecoin Was a Bug to Begin With 61

4.4 Reason 4: Technically, There Is Almost No Implementation Gap 66

4.5 Summary: CBDCs and Deposit Tokens as Internal Settlement Networks, Stablecoins as External Liquidity Networks 69

5. Outlook: Where Do Asian Stablecoins Survive? 71

5.1 Dollar Standard Rail Access: Domestic-Currency Stablecoins Become Gateways to the Global Dollar Network 73

5.2 Multi-Country Payments: Onchain FX Connecting Local Currencies to Global Settlement 76

5.3 Onchain Capital Markets: Domestic-Currency Capital as a Cash Leg Connecting to Onchain Credit Markets 79

6. Closing: Policy Intent and Markets Do Not Always Move in the Same Direction 83

1.
ENTERING: ASIA IS CONVERGING ON CBDCS AND DEPOSIT TOKENS

Asia is the most advanced region in the world for digital payments. WeChat Pay processes over one billion transactions per day, India's UPI has surpassed Visa's network in daily transaction volume (Visa averages roughly 639 transactions per day), and Korea's cash usage has fallen below 15%, placing it among the most cashless economies globally.

What is changing now, however, is not the method of payment but money itself. Stablecoins, deposit tokens, and CBDCs represent a new category of money: programmable, capable of handling ownership transfer and settlement finality on a ledger, and enabling atomic settlement mechanisms such as DvP.

Of the digital currencies to emerge, stablecoins have grown the fastest, surpassing $300 billion in market capitalization. Roughly 99% of stablecoins are USD-pegged, with dollar stablecoins effectively dominating the entire market. Asian currencies, by contrast, represent a negligible share. KRW, CNY, and INR are essentially at 0%, and while JPY and SGD each account for about 1.5%, that share is marginal relative to Asia's economic weight.

The reason is straightforward. Asia's vibrant digital payments did not change money itself, they changed how money moves. Alipay transactions settle in CNY deposits; UPI transfers move INR bank balances; KakaoPay sends KRW. The interface changed. The money did not. In other words, Asia became the world's most efficient region for digital payments, but those payments still run on 20th-century money.

That does not mean Asia has stood still. Asian countries are developing digital currencies, but in a distinctly different way. The People's Bank of China (PBOC) has processed 3.48 billion e-CNY transactions; the Reserve Bank of India (RBI) has enrolled over 6 million participants (as of March 2025) in its digital rupee (e₹) pilot; Japan's three megabanks are pursuing a joint yen stablecoin issuance; and the Bank of Korea is testing a combination of wholesale CBDC and deposit tokens through Project Hangang.

Asia has taken a different path from the public stablecoin model. The United States has institutionalized private digital dollar issuance through the GENIUS Act, and Europe is building its digital currency foundation around euro stablecoins (EURC) issued by banks and e-money institutions under MiCA. Both regions treat stablecoins on public blockchains as the default form of digital money. Asian countries, by contrast, are centering their approach on CBDCs controlled by central banks and deposit tokens operating within the banking system.

This report proceeds from two premises: that Asia's digital money will converge on CBDCs and deposit tokens rather than stablecoins, and that the market position of non-dollar stablecoins remains ambiguous.

To examine this, the report analyzes the digital currency strategies of seven Asian countries, covering their regulatory frameworks and key projects, the structural factors driving their preference for CBDCs and deposit tokens over stablecoins, and the role stablecoins may retain in markets that CBDCs and deposit tokens cannot reach.

2.
DIGITAL CURRENCY OVERVIEW

Comparing strategies across Asian countries requires a common framework. The Bank for International Settlements (BIS) classification system provides a useful starting point. The BIS framework divides digital currencies into three categories by issuer:

- Central bank-issued CBDCs (Central Bank Digital Currency)
- Commercial bank-issued deposit tokens
- Non-bank Privately issued stablecoins

This chapter covers the definitions of the three digital currency types, their interrelationships, and the BIS blueprint.

2.1
Three Digital Currencies: CBDC, Deposit Token, Stablecoin

Three criteria distinguish the three types:

1. **Whose liability is it?** All money is a liability recorded on the issuer's balance sheet. A 10,000 won banknote is a liability of the Bank of Korea; a bank account balance is a liability of a commercial bank. The issuer's identity determines the capacity to honor that obligation and the safety net behind it. A central bank cannot default, as it can issue domestic currency without limit. Commercial banks can fail, and deposit insurance compensates for this. Private stablecoin issuers have neither deposit insurance nor a lender of last resort.
2. **Can it transfer directly between holders (bearer instrument)?** This refers to whether a transaction can be completed without intermediary involvement. Cash and stablecoins are bearer instruments: handing over a banknote completes the transfer; a stablecoin moves directly from one wallet to another. Deposit tokens are not. When a deposit token is sent, it is burned at the sending bank and re-issued at

the receiving bank, with interbank settlement required in between.

3. **Does it operate inside or outside the banking system?** When a central bank raises rates, commercial bank deposit and lending rates follow. This is the basic channel through which monetary policy reaches the real economy. Deposit tokens, as commercial bank liabilities, sit inside this channel; CBDCs sit under central bank control. Stablecoins sit outside it. A rate hike has no direct effect on a USDT holder, and lender-of-last-resort intervention is not available during a liquidity crisis.

These three axes determine credit risk, regulatory scope, and monetary policy transmission. Each type is examined in turn below.

2.1.1 CBDC: The Digitization of Central Bank Liabilities

A CBDC is the digital form of legal tender issued by a central bank. As a central bank liability, it carries no issuer credit risk and is typically issued on a permissioned ledger under central bank control. CBDCs offer three properties not available in conventional money:

1. **Programmability:** Payment conditions can be automated through smart contracts.
2. **Composability:** Different assets and payments can be combined on a single platform.
3. **24/7 operation:** The constraint of conventional RTGS (Real-Time Gross Settlement) systems tied to business hours no longer applies.

When these three properties combine, atomic settlement becomes possible, with ownership transfer and payment executing simultaneously. This eliminates the counterparty risk and liquidity inefficiency that arise under the current T+2 settlement cycle. CBDCs are further classified by recipient: retail CBDCs (rCBDC) for the general public and wholesale CBDCs (wCBDC) for interbank settlement.

rCBDC: Digital Cash and the Disintermediation Dilemma

An rCBDC carries no issuer default risk and can be used anywhere from offline payments to conditional transfers. China's e-CNY and India's e₹ are the leading examples.

rCBDCs are stable and immediately transferable, but a structural dilemma underlies them. The modern monetary system operates on a two-tier structure: the central bank supplies reserves to commercial banks, which in turn extend credit to households and businesses. An rCBDC is a central bank liability, not a commercial bank deposit.

If the public holds rCBDCs instead of bank deposits, money flows directly to the central bank rather than through commercial banks. As rCBDC adoption spreads, commercial banks lose their lending base and credit creation contracts. An rCBDC is theoretically the safest digital money, but it sits uneasily within the existing banking system.

wCBDC: Central Bank Money for Interbank Settlement

A wCBDC is a wholesale CBDC issued by central banks exclusively to financial institutions. It shares the same issuer (central bank) and technical foundation (permissioned ledger) as a retail CBDC, but distributes only to institutions rather than individuals. This preserves the two-tier structure and avoids the disintermediation problem of rCBDCs.

Major central banks have been shifting their emphasis toward wCBDCs. According to a 2024 BIS survey, 91% of 93 central banks are researching CBDCs, with wholesale pilots advancing faster than retail. Recent major experiments, including Project Hangang (Korea) and Project Agorá (BIS), have all adopted structures that use wCBDC as the settlement layer.

2.1.2 Deposit Tokens: Tokenized Bank Deposits

A deposit token is a tokenized form of a commercial bank deposit and is a commercial bank liability. Like conventional deposits, deposit insurance applies and they operate within the fractional reserve system.

The most significant difference from stablecoins lies in the reserve structure. A stablecoin issuer must hold $100 of collateral to issue $100 worth of stablecoins, with reserves held fully in external assets (government bonds, cash). Deposit tokens, by contrast, operate under fractional reserve banking: issuing $100 of deposit tokens does not require $100 of collateral. Money can be created through lending.

This structure requires one condition: deposit tokens cannot settle interbank transactions on their own. For tokens issued by different banks to exchange at par, a common trusted entity must handle interbank settlement. Just as central bank reserves play this role in the existing monetary system, wholesale CBDC is envisioned as the settlement layer in a digital currency environment. This is why major Asian experiments are designed as paired systems, with wCBDC and deposit tokens working together.

2.1.3 Stablecoins: Money Outside the Banking System

Stablecoins are privately issued digital currencies pegged to fiat. Depending on the regulatory jurisdiction, they can be issued by non-banks and operate primarily on public blockchains. They are backed 100% by external assets (government bonds, cash, etc.) and can transfer directly between holders, enabling flexible distribution.

Stablecoins' strength lies in the openness of public blockchains: permissionless access, 24/7 operation, and direct interoperability with DeFi protocols. For cross-border remittances, they offer dramatically lower fees and faster settlement than SWIFT. These properties have made dollar stablecoins the de facto standard for global payments.

Nonetheless, the BIS (BIS AER 2025) argues that stablecoins fail to satisfy three key properties:

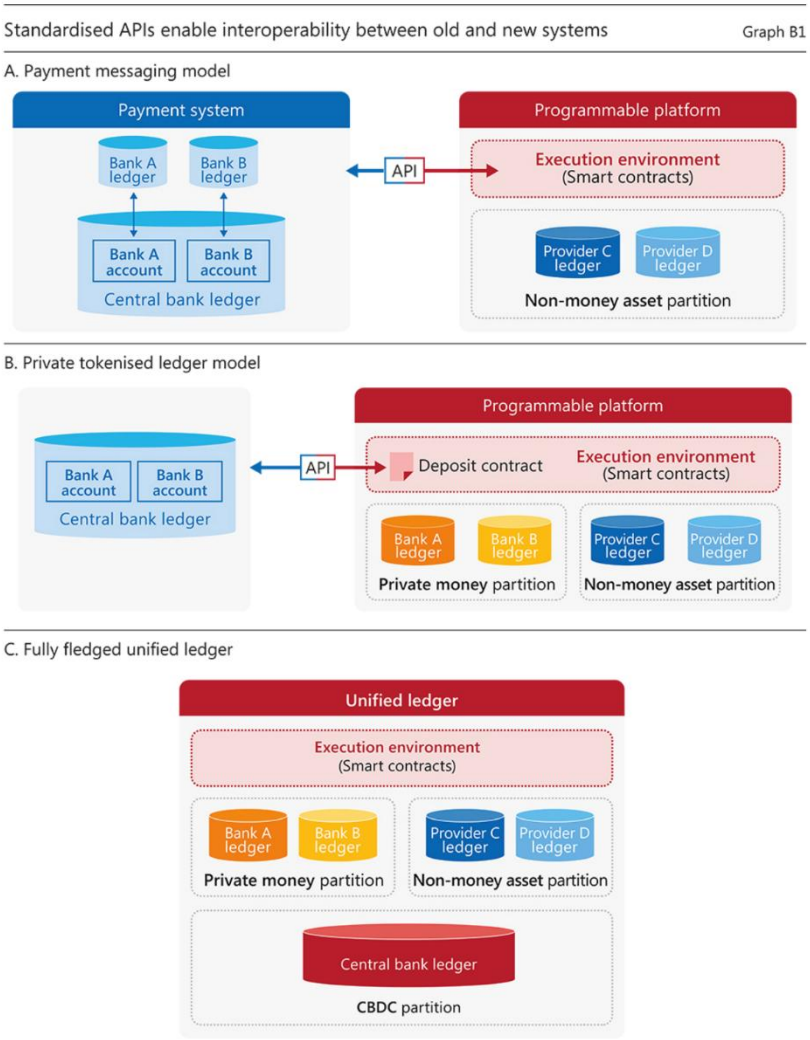
1. **Singleness:** The guarantee that different forms of money exchange at par.
2. **Elasticity:** The ability of a central bank to intervene as lender of last resort during a liquidity crisis.
3. **Integrity:** The control of money laundering and financial crime.

The supporting evidence is substantial. Deposit token holders have deposit insurance and central bank emergency liquidity as a safety net in the event of bank failure; stablecoin holders do not. USDC's depeg to $0.87 during the SVB crisis in 2023 demonstrated this vulnerability, and smaller depeg incidents have continued since.

That said, the BIS critique warrants a nuanced reading. The BIS is an institution with over 60 central bank members. Stablecoin growth reduces the role of central bank money and weakens monetary policy transmission. The BIS position reflects an interest in preserving the central bank-centric monetary system.

2.2
The BIS Vision: Integration and Pluralism in Digital Money

2.2.1 The Unified Ledger and Project Agorá



Source: BIS

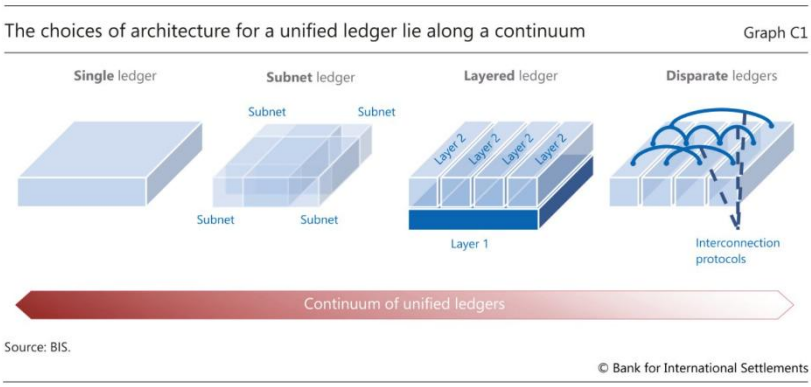
What does the BIS envision as the future of digital money? The BIS presents this vision through the concept of a unified ledger: an infrastructure that places tokenized central bank reserves, commercial bank money, and government bonds on a single programmable platform, integrating messaging, reconciliation, and settlement into a single operation.

In this construct, (1) central bank reserves serve as the trust anchor guaranteeing singleness and final interbank settlement, (2) commercial bank money (deposit tokens) serves as the payment instrument maintaining credit creation within the two-tier system, and (3) government bonds serve as safe assets for collateral management and monetary policy operations. When this tokenization trilogy sits on a shared platform, payment instructions, ledger reconciliation, and final settlement, currently processed sequentially across separate systems, can be bundled into atomic transactions.

Project Agorá applies this concept to cross-border wholesale payments, with participation from seven central banks (France, Switzerland, Japan, Korea, Mexico, the UK, and the New York Fed) and 43 private financial institutions including Visa, Mastercard, JPMorgan, and SWIFT. The project is running multiple tests to validate how tokenized central bank money and commercial bank deposits can combine in multi-currency payments.

2.2.2 Why Convergence Is Toward Multiple Ledgers, Not One

The BIS does not assume the unified ledger will be implemented as a single global platform. Regulatory environments, financial systems, and attitudes toward monetary sovereignty differ across countries. Central banks must retain final authority over access to their domestic currency and balance sheet; data protection laws vary by jurisdiction and may require data to be physically stored within national borders. In cross-border contexts involving multiple currencies, asset classes, and regulators, these requirements become considerably more complex.



Source: BIS

The BIS's envisioned future therefore assumes national diversity and presents the unified ledger architecture as a spectrum. At one end is a single shared ledger for all participants; at the other, separate ledgers connected by bridges. Between them sit subnet ledgers partitioned by jurisdiction and layered ledgers with a shared L1 supporting multiple L2s. Single ledgers offer greater composability but less governance autonomy; heterogeneous ledgers offer the reverse.

In practice, countries are positioning themselves at different points on this spectrum. The US has prohibited CBDC development while the New York Fed participates in Agorá only for research purposes. China operates mBridge, an independent cross-border CBDC platform, separately from the BIS. Korea's Project Hangang, Japan's DCJPY and BOJ CBDC experiments, and Singapore's Project Guardian are all designed as individual pilots on independent ledgers tailored to each country's environment.

The ways in which countries are building their digital currency ecosystems are diverging significantly depending on monetary policy priorities. The next chapter examines the specific paths chosen by seven Asian countries.

3.
DIGITAL CURRENCY DEVELOPMENTS BY COUNTRY

Digital money in Asia is pluralizing. CBDCs function as a unified platform processing all retail payments in China but serve a supplementary role on top of UPI in India. Stablecoins have opened a competitive market in Japan where both megabanks and non-banks issue them, while Korea is preparing legislation that assumes bank-led issuance. Singapore has opted for a private stablecoin hub over a CBDC.

These differences do not reflect varying stages of technological adoption. They reflect divergent regulatory philosophies, geopolitical positions, and conceptions of what digital money is for. China prioritizes reclaiming payment control ceded to private BigTech; Japan seeks yen internationalization; Singapore aims to reinforce its position as a digitized global hub; India pursues financial inclusion for 1.4 billion people; Korea emphasizes bank-based stability. Hong Kong provides an offshore channel for Chinese capital to access global markets; Kazakhstan bets on both CBDCs and crypto simultaneously.

The seven countries are analyzed below across four dimensions: (1) digital currency structure, (2) regulatory framework, (3) key projects, and (4) what to watch.

3.1
China: A State-Led Model Where CBDCs Absorb the Role of Bank Deposits

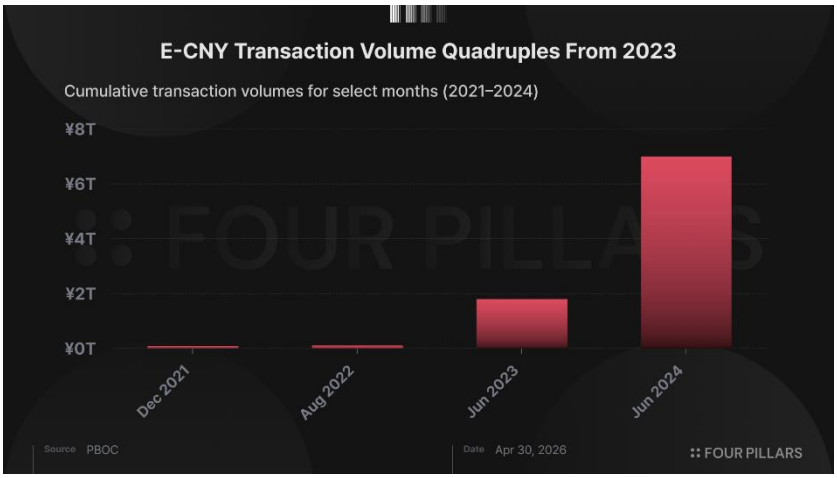
China is the world's second-largest economy and home to the world's largest banking system. Total banking assets stood at 444.6 trillion yuan (approximately $62 trillion) as of end-2024, roughly 210% of GDP. The four major state-owned banks, ICBC, CCB, ABC, and BOC, form the backbone of the system and collectively dominate global rankings by assets.

In payments, Alipay and WeChat Pay control around 90% of retail transactions. Mobile payment users number over 900, with 88% of consumers using mobile payments. The transition to a cashless economy is effectively complete. In this environment, the PBOC's e-CNY initiative serves two purposes: domestically, it is a strategy for the central bank to reclaim

payment control ceded to private BigTech (Alipay, WeChat Pay); externally, it is an effort to build an independent payment rail that bypasses the dollar settlement network.

3.1.1 Digital Currency Structure: e-CNY Spanning Retail, Wholesale, and Cross-Border

China's digital currency converges on a single instrument: the PBOC-issued e-CNY. Stablecoins and deposit tokens have no legal existence. The PBOC operates retail payments, wholesale settlement, and cross-border payments on a single platform. This approach differs sharply from other Asian countries, which treat CBDCs, deposit tokens, and stablecoins as separate tracks.



In retail, e-CNY integrates into the underlying payment infrastructure rather than replacing Alipay and WeChat Pay. The QR code integration is the clearest example. Over 90% of Chinese mobile payments use QR codes. Alipay and WeChat Pay originally operated separate QR code systems with no interoperability, but the PBOC mandated a unified QR code standard, enabling payment across multiple apps with a single code. With e-CNY integrated into the same QR code framework, consumers increasingly settle retail transactions in e-CNY without being aware of it.

In wholesale, the aim is to restructure the liability structure of the banking system. Under a framework effective January 2026, e-CNY wallet balances held by commercial banks are included in reserve requirement calculations and covered by deposit insurance, formally incorporating e-CNY into bank balance sheets. New smart contract functionality has also been added, accelerating B2B and B2G use cases including conditional payments, carbon credit settlement, and automated supply chain settlement.

In cross-border, the PBOC opened an e-CNY International Operations Center in Shanghai in September 2025, establishing a dual operating structure that separates domestic retail infrastructure from offshore RMB payment expansion. Cross-border e-CNY pilots with Singapore and Thailand are also underway.

The strength of this e-CNY-centric approach is control. With a single platform spanning retail, wholesale, and cross-border, the PBOC's policy enforcement capacity is maximized. When liquidity demand from Chinese firms surged amid the 2025 tariff shock, for instance, the possibility of the PBOC supplying conditional liquidity to specific industries directly through e-CNY contracts was discussed. The weakness is the flip side of this: the closed structure leaves no room for private-sector innovation. The kind of privately led tokenization ecosystem taking shape elsewhere is unlikely to develop in China.

3.1.2 Regulatory Framework: PBOC-Unilateral System Blocking Private Stablecoins and RWA

China's digital asset regulation is structured as a unilateral PBOC-led system. Since the blanket crypto ban in 2021, the regulatory perimeter has tightened each year. In 2025, seven major financial industry associations (including the China Internet Finance Association, China Banking Association, and China Securities Association) issued a joint warning explicitly classifying real-world asset tokenization as an illegal virtual asset activity, alongside stablecoin issuance, mining, and airdrops. A provision stipulating criminal liability for mainland employees involved in such activities through offshore entities closed the offshore workaround as well.

The e-CNY management framework effective in early 2026 follows the same logic. It reclassified e-CNY from M0 (cash) to M1 (broad money including demand deposits) and permitted commercial banks to pay interest on verified e-CNY wallet balances. Simultaneously, it imposed a 100% reserve requirement on e-CNY balances held by non-bank payment institutions (Alipay, WeChat Pay, etc.). Private digital payments are permitted, but the underlying asset must be held as PBOC-issued e-CNY.

China's regulatory logic is to control privately led digital assets while absorbing their functions into e-CNY, issued by the state and operated by the banking system. The intent is to block stablecoins, RWA, and crypto while establishing interest-bearing, deposit-insured e-CNY as the sole legitimate digital currency. PBOC Governor Pan Gongsheng has maintained the position that while stablecoins and CBDCs are accelerating the transformation of global payments, the decentralization logic is incompatible with China's state-led monetary governance.

3.1.3 Key Projects: e-CNY 2.0 and mBridge

- **e-CNY 2.0:** The PBOC's reclassification of e-CNY as a bank liability made it the world's first interest-bearing CBDC. Deposit insurance and reserve requirement rules apply, with an interest rate set at 0.05%.

- **mBridge:** A multilateral CBDC cross-border payment platform enabling direct transactions in yuan, baht, dirham, and riyal without routing through SWIFT or the dollar. The PBOC, HKMA, and the central banks of Thailand, UAE, and Saudi Arabia participate. Cumulative transaction volume has reached $5.55 billion (as of November 2025), with e-CNY accounting for over 95% of total volume. The BIS formally withdrew in 2024, but the project continues under Chinese leadership. The absence of Western central banks makes the geopolitical significance of the platform explicit.

3.1.4 What to Watch: rCBDC's Trial and Error and the Evolution Toward a Deposit Token-Like CBDC

What deserves attention in the Chinese model is the path e-CNY took through trial and error. China launched with an rCBDC but failed to achieve adoption. In an environment where mobile payments were already convenient, there was no incentive to use a digital currency that paid no interest. At the same time, making e-CNY more attractive risked accelerating bank disintermediation: a more appealing CBDC draws deposits away from commercial banks and reduces their lending base.

The PBOC addressed both problems by classifying e-CNY as a bank liability. Interest was introduced to create an incentive, but the rate was set at a low 0.05% to minimize competition with bank deposits. In form it remains a CBDC, but its substance, bearing interest as a bank liability with deposit insurance and reserve requirements, is effectively closer to a deposit token. Whether this restructuring is sustainable, and whether e-CNY can embed itself in the mobile payment ecosystem, are the key questions for the Chinese model going forward.

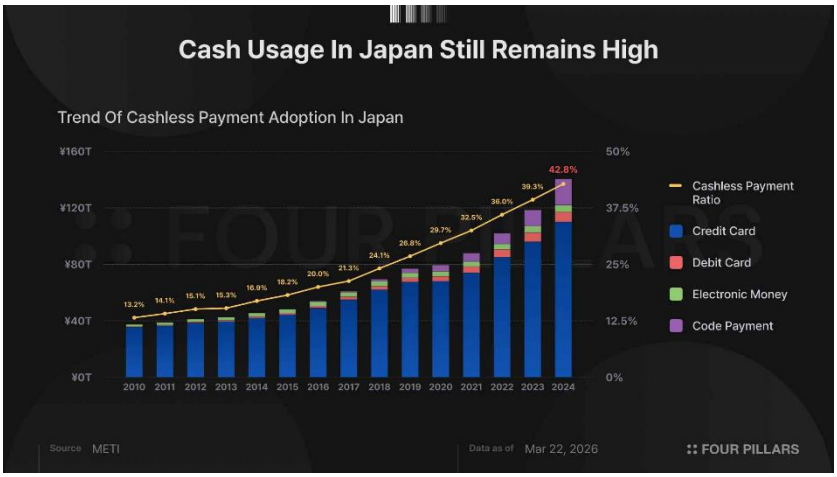
3.1.5 Takeaways

1. **An rCBDC launched as retail CBDC can converge toward a deposit token through the adoption process:** The retail CBDC may prove to be a failed experimental model. It is developing in a direction that absorbs the attributes of bank deposits.

2. **Layering CBDCs on top of BigTech payment platforms is the realistic path to adoption:** The standalone e-CNY app failed to gain traction, but embedding e-CNY payment options into Alipay and WeChat Pay expanded the user base to 900 million.

3.2
Japan: A Three-Track Model With CBDC, Deposit Tokens, and Stablecoins All Open

Japan is the world's third-largest economy, and its three megabanks, MUFG, SMBC, and Mizuho, each rank within the global top ten by assets. Total banking assets exceed 180% of GDP, placing Japan among the more financially intensive economies in Asia relative to the size of its real economy.



The payment environment is an outlier among major Asian economies in its unusually high cash usage. The cashless ratio stood at 42.8% in 2024 by METI figures, roughly half the levels seen in China (over 90%) and Korea (over 85%). Decades of low inflation and deflation following the collapse of the bubble economy kept the opportunity cost of holding cash low, and Japan's world-leading aging rate has slowed the shift to digital payments.

Even so, government cashless promotion policies have delivered results. The 40% cashless target set for 2025 was reached a year ahead of schedule. Credit cards (83.5%) are driving the transition, with QR code payments (PayPay, LINE Pay, Rakuten Pay) growing rapidly and now accounting for 8.6% of all cashless transactions.

3.2.1 Digital Currency Structure: Three Tracks Serving Different Markets in Parallel

Japan may be a latecomer to cashless payments, but it leads the world in digital asset regulation. The debate has moved past whether to permit digital assets. The current question is how far to extend the interface between digital assets and traditional finance within the regulatory perimeter.

The legal framework began in 2016, when Japan became the first country to legally define crypto assets, following the Mt.Gox hack of 2014. Exchange regulation was tightened after the Coincheck hack of 2018, and stablecoin-specific regulation was introduced in 2022.

Japan has built its legal framework incrementally, and the resulting regulatory clarity has produced Asia's most layered digital currency landscape. Non-bank stablecoin JPYC, megabank-issued stablecoins, deposit token DCJPY, and Bank of Japan (BOJ) CBDC experiments are all proceeding simultaneously.

3.2.2 Regulatory Framework: Separate Legal Regimes by Asset Type



Japan's three-track structure is underpinned by separate legal regimes for each asset type. Rather than privileging or excluding any particular form of digital currency, the framework provides distinct regulatory pathways for stablecoins, crypto assets, and deposit tokens to operate within the regulatory perimeter:

- 2016 Payment Services Act (PSA) amendment: Following the Mt.Gox hack (2014, approximately 850,000 BTC stolen), Japan became the first country to legally define crypto assets (virtual currencies). Exchange registration requirements with the FSA and user protection rules were introduced.

- 2019 simultaneous amendment of PSA and the Financial Instruments and Exchange Act (FIEA): Following the Coincheck hack (2018, approximately $500), mandatory segregation of customer assets was strengthened, and frameworks for crypto derivatives and ICO/STO regulation were introduced.

- 2022 stablecoin regulation: A PSA amendment created a new category called Electronic Payment Instruments (EPI). Issuers are restricted to banks, trust

companies, and fund transfer service providers, with 100% reserve requirements mandatory.

- 2023 FATF travel rule implementation: An amendment to the Act on Prevention of Transfer of Criminal Proceeds required all virtual asset service providers (VASPs) to transmit sender and recipient information.

- 2025 additional PSA amendment: Up to 50% of stablecoin reserves may be invested in Japanese government bonds, a new crypto asset brokerage license was created, and the government gained authority to order exchanges to hold assets domestically.

The FSA declared 2026 the "Year of Digitalization" and is expanding all three tracks simultaneously on this multi-regime foundation. As part of this effort, the regulatory pathways have been reorganized to add clarity. Stablecoins are regulated under the PSA as electronic payment instruments, while crypto assets are being moved under the FIEA framework to apply regulation closer to investment products.

Japan is thus building a regime of separate legal frameworks by asset type: stablecoins under the PSA, crypto assets under the FIEA, and deposit tokens under the Banking Act. The structure draws a clear line between the licensed and unlicensed perimeters, blocking unlicensed foreign exchange apps and restricting the domestic distribution of unlicensed stablecoins, while opening pathways for licensed operators to issue stablecoins, broker crypto assets, and experiment with deposit tokens.

3.2.3 Key Projects: JPYC, DCJPY, and Megabank Stablecoins

- **Non-bank stablecoin JPYC:** The first FSA-regulated yen stablecoin, issued on a public blockchain by a non-bank entity (JPYC Inc.), launched in 2025. Reserves are fully backed by yen-denominated assets (government bonds and bank deposits).

- **Deposit token DCJPY:** A bank-issued deposit token operated by Decurret DCP, with over 60 participating companies. Japan Post Bank (120M accounts, $1.29 trillion in deposits) is scheduled to adopt it in 2026, and Hokurikubank is developing a SoftPOS-based merchant payment solution. SBI Shinsei Bank is also pursuing DCJPY-based cross-border payments through JPMorgan's Partior network.

- **Megabank stablecoins:** Japan's three megabanks are each pursuing direct stablecoin issuance on public chains under their own names. MUFG is targeting 1 trillion yen in issuance by 2028 through the Progmat platform. SMBC is preparing to issue a stablecoin in partnership with Ava Labs and Fireblocks.

- **SBI Group:** Starting from online securities (SBI Securities) and internet banking (SBI

Sumishin Net Bank), and having since acquired a traditional bank (SBI Shinsei Bank), SBI is the only Japanese financial group covering the full digital asset value chain. Beginning with its 2016 investment in Ripple, SBI has built an ecosystem connecting liquidity, payments, investment, and tokenization, spanning institutional market-making (acquisition of B2C2 in the UK), stablecoins (USDC distribution via Circle joint venture, yen stablecoin JPYSC development), and tokenization (investment in Singapore's DigiFT, SBI Onchain joint venture).

- **BOJ CBDC:** A pilot launched in April 2023 with 64 private companies participating. In 2026, BOJ Governor Kazuo Ueda announced a sandbox project to experiment with blockchain-based settlement of central bank reserves, signaling a shift toward wholesale CBDC. The decision on whether to issue a retail CBDC is expected in 2026.

3.2.4 What to Watch: The Three-Track Coexistence Under Test

The first inflection point for the Japanese model is Japan Post Bank's adoption of deposit token DCJPY. Japan Post Bank is the only financial institution with 120 million accounts matching Japan's total population and a nationwide network of 24,000 post offices. If the adoption proceeds, it will be the first case in Asia of deposit tokens operating at meaningful scale.

The second inflection point is the megabank stablecoins. MUFG Progmat, SMBC-Ava Labs, and the SBI-Ripple alliance are each developing yen stablecoins through different paths. If any one of them secures meaningful onchain liquidity, a competitive dynamic with JPYC will form and the contest for leadership in Japan's yen stablecoin market will be decided.

The third inflection point is the BOJ's CBDC direction. If a retail CBDC is issued, role coordination with JPYC and DCJPY will be necessary. If a wholesale path is chosen, a Japan-style two-tier structure, with DCJPY handling the retail layer, solidifies. The BOJ's decision will finalize the allocation of roles across all three tracks.

The three-track coexistence does carry a structural vulnerability. If the same yen liquidity is divided among JPYC, DCJPY, and megabank stablecoins, the network effect of each format weakens and liquidity fragments. Whether the three tracks serve distinct use cases as designed, or end up competing over the same users and the same payment demand, will determine the success of the Japanese model.

3.2.5 Takeaways

1. **Regulatory clarity determines the speed of market formation:** Once the FSA confirmed issuance requirements, JPYC's launch and the megabank announcements followed in sequence. This contrasts with Korea, where stablecoin legislation has stalled and zero won stablecoins exist.

2. **Stablecoins and deposit tokens are not substitutes:** A structure is forming in which JPYC handles 24/7 DeFi and cross-border liquidity, DCJPY handles domestic corporate payments and municipal subsidies, and megabank stablecoins handle interinstitutional settlement.

3.3
Korea: A Model Designed Around Deposit Tokens With Stablecoins as a Complementary Layer

Korea is the world's 12th-largest economy, with GDP of approximately $1.7 trillion. The banking system is dominated by five major banks, KB, Shinhan, Hana, Woori, and NH NongHyup, with total banking assets exceeding 200% of GDP.

The payment environment is among the most advanced globally. Cash usage has fallen below 15%, KakaoPay, Naver Pay, Toss, and Samsung Pay dominate everyday payments, and all of these services are linked to bank accounts. Super-app culture, in which money transfers, stock investing, and insurance are all handled within a single app, is well established. Korea's payments are already digital; what is now beginning in earnest is the conversion of money itself.

3.3.1 Digital Currency Structure: Deposit Token Experiments Leading, Stablecoin Legislation Delayed

Korea's digital currency structure is developing along two tracks. One is Project Hangang, the Bank of Korea-led deposit token initiative; the other is the won stablecoin market, which has yet to be legislated.

Project Hangang is a real-transaction experiment validating the combination of CBDC and deposit tokens. The Bank of Korea builds the wholesale CBDC infrastructure; commercial banks issue deposit tokens and distribute them to consumers. The central bank handles settlement; commercial banks maintain the customer interface.

Phase 1 (2023 to 2025) produced 70,000 electronic wallets across seven banks and 110,000 transactions. Smart contract-based tests were conducted for Seoul's Youth Culture Pass, Busan scholarships, and Daegu childcare vouchers. However, average transactions per wallet fell below two, and assessments noted that the practical utility to users was low compared to existing simple payment services.

Phase 2 (launching in 2026) expands participating banks to nine and adds peer-to-peer (P2P) transfers, biometric authentication payments, and automatic deposit-to-deposit-token conversion. A pilot applying deposit tokens to the execution of 110 trillion won in national treasury funds is also included.

Won stablecoins remain in a legal vacuum. As of April 2026, no won stablecoin has been legally issued or distributed. Private-sector players are moving ahead without waiting for regulatory certainty, however. (1) Among financial holding companies, KB Financial, Shinhan Financial,

and Hana Financial have each established permanent stablecoin organizations and are forming consortia. (2) In BigTech and fintech, Kakao has activated a won stablecoin task force, and Naver is pursuing the full acquisition of Dunamu (operator of Upbit) as a wholly owned subsidiary of Naver Financial, integrating payments and the exchange. (3) Among global issuers, both Circle and Tether have completed Korean trademark filings and are waiting for legislation.

3.3.2 Regulatory Framework: DABA Legislation and the Issuer Eligibility Debate

No stablecoin-specific law exists as of April 2026. The Virtual Asset User Protection Act, effective July 2024, is a first-stage law focused on exchange regulation and investor protection. The Digital Asset Basic Act (DABA), the second-stage legislation covering stablecoin issuance and token issuance, has not yet passed the National Assembly.

Multiple bills are pending in the Assembly. The Financial Services Commission (FSC) prepared a draft government proposal in March 2026 and is coordinating with the ruling party, but as of April 2026 the prospect of passage remains uncertain. Unresolved supervisory jurisdiction between the FSC and the Bank of Korea (BOK), and partisan disagreements over exchange major shareholder equity restrictions, remain as legislative bottlenecks.

The central controversy is issuer eligibility. The Bank of Korea's position is that only consortia in which banks hold a minimum 51% stake should be permitted to issue won stablecoins. The FSC counters that this requirement restricts fintech participation and delays market formation, pointing to non-bank issuers licensed under EU MiCA and the non-bank issuer JPYC Inc. in Japan as counterexamples.

Behind this debate lies Korea's financial-industrial separation regulation. Industrial capital is in principle restricted from holding more than 4% of a bank's equity (34% for internet-only banks), making it structurally difficult for BigTech to directly own banks. If the 51% requirement is enforced, solo issuance by platform companies such as Kakao, Naver, and Toss becomes effectively impossible. Naver's alliance with Hana Financial and Kakao's plan to utilize KakaoBank's banking license read as designs intended to meet the consortium requirement within these constraints.

3.3.3 Key Projects: Project Hangang and the Private-Sector Pipeline

- **Project Hangang Phase 2:** Three tasks define Phase 2: (1) applying deposit tokens to the execution of 110 trillion won in national treasury funds, tracking the flow of government subsidies to recipients via smart contracts and automatically blocking off-purpose use; (2) reinforcing retail payment utility through P2P transfers, biometric authentication, and automatic deposit-to-deposit-token conversion; (3) exploring future use cases including AI agent payments and tokenized securities settlement. Interoperability with BIS Project Agorá for cross-border payment connectivity is also planned. Notably, the three major internet banks, KakaoBank, K bank, and Toss Bank, are not participating in Phase 2, leaving the connection to private platforms as an outstanding challenge.

- **KB Financial:** KB Kookmin Card is exploring a stablecoin payment model on the Avalanche public blockchain. The structure links a digital wallet to an existing credit card, drawing on stablecoin balances first and billing the shortfall to the credit card.

- **Shinhan Financial:** Shinhan has conducted nine proof-of-concept (PoC) tests, the most in the industry, covering digital asset-backed lending, card payments, and global remittances. In Project Hangang, it piloted deposit token payments in its own delivery app and travel insurance.

- **Kakao:** A dedicated won stablecoin task force has been activated, integrating KakaoPay (36 million users), KakaoBank, and KakaoTalk. KakaoPay has also joined the x402 Foundation, the AI agent micropayment standard. Given that KakaoTalk is simultaneously integrating ChatGPT and building its own AI agents, this reads as a plan to connect x402-based agent payments with a won stablecoin.

- **Naver and Dunamu (Upbit):** Naver is pursuing a comprehensive share exchange to make Dunamu a wholly owned subsidiary of Naver Financial. Combining Naver Pay and Upbit would create a structure that secures large-scale distribution simultaneously with won stablecoin issuance. A three-way partnership linking Naver (BigTech), Dunamu (blockchain), and Hana Financial (bank) is also under discussion.

- **Toss (Viva Republica):** Toss announced entry into the stablecoin business with the publication of a Money 3.0 concept paper. A dedicated stablecoin task force is operating across Toss Bank, Toss Securities, and Toss Payments. Plans include building an offline stablecoin payment infrastructure through Toss Place payment terminals.

3.3.4 What to Watch: The Role Differentiation Between Deposit Tokens and Stablecoins

The first inflection point for the Korean model is the effectiveness of Project Hangang Phase 2. Phase 1 confirmed that the full lifecycle of deposit tokens works technically. The most notable experiment in Phase 2 is the application of deposit tokens to the execution of 110 trillion won in national treasury funds. In Korea, where simple payment services are already highly developed, driving adoption through retail payments alone is difficult. Starting with public finance execution, where the utility of conditional payments and purpose tracking is clear, is a realistic path.

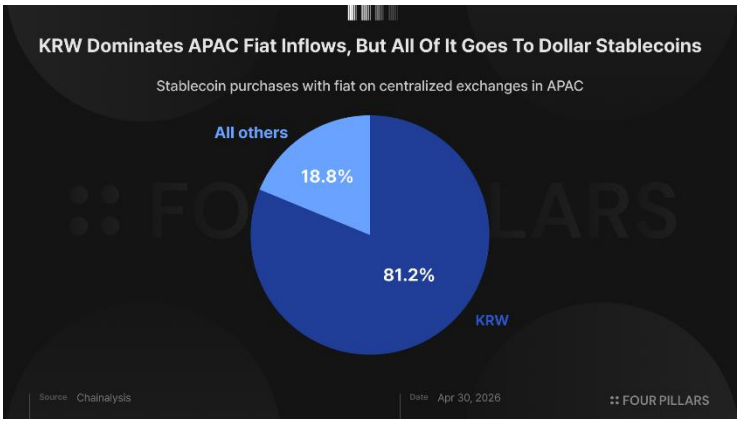
The second inflection point is the passage of the Digital Asset Basic Act. The issuer eligibility requirement will determine the character of Korea's digital currency ecosystem. If the Bank of Korea's 51% rule is applied, won stablecoins will effectively become quasi-deposit tokens operated by bank consortia. If the FSC model is adopted, a relatively open stablecoin market led by platform companies such as Kakao and Toss becomes possible. Either way, the finalization of the legislation will be the launch trigger for the private-sector pipeline waiting in the wings.

The third inflection point is how deposit tokens and stablecoins differentiate their roles. In a 2025 report, the Bank of Korea outlined a multilayered structure in which wholesale CBDC handles interbank settlement, deposit tokens handle domestic retail payments, and stablecoins handle cross-border payments. The concept of stablecoin issuers holding reserve assets in deposit token form was also included.

This direction is becoming more explicit under the Bank of Korea's new leadership. Governor Hyun Song Shin [led CBDC and tokenization discussions at the BIS for 12 years](https://www.bis.org/publ/arpdf/ar2025e3.htm#:~:text=The next-generation monetary and financial system (00%3A19,by Hyun Song Shin) and has consistently held that stablecoins have difficulty satisfying monetary singleness. In his National Assembly confirmation hearing, he expressed support for introducing won stablecoins while maintaining that CBDCs and deposit tokens should be at the center of the digital currency ecosystem. Korea's digital currency structure is converging on deposit tokens as the central axis, with stablecoins permitted as a complementary layer in limited areas such as cross-border payments and tokenized asset settlement.

3.3.5 Takeaways

1. **The value deposit tokens can deliver in a mature simple-payment market is well-defined:** In an environment where KakaoPay, Toss, and Naver Pay already offer low cost and high convenience, deposit tokens will not be adopted for retail payments. This is precisely why Korea chose the 110 trillion won national treasury execution as its test target. The differentiation of deposit tokens lies not in faster payment but in the programmable functions required for conditional subsidies, purpose tracking, tokenized securities settlement, and automated clearing.



2. **The longer regulatory delay persists, the more dollar stablecoins fill the gap:** 81.2% of stablecoin purchases from fiat on centralized exchanges use KRW. Korea's stablecoin demand is the highest in Asia by a wide margin, but all of these transactions are purchases of USDT/USDC with won, not won stablecoins. Demand is substantial, but the absence of lawful supply means dollar stablecoins occupy that position. The longer legislation is delayed, the more entrenched this pattern becomes, and the harder it will be to reverse established dollar stablecoin usage habits once a won stablecoin eventually launches.

3.4
Singapore: A City-State That Treats Stablecoins as a Financial Hub Strategy

Singapore is a city-state of 6 million people, but financial services account for roughly 13% of GDP, and the combined assets of DBS, OCBC, and UOB total $1.64 trillion. Singapore ranked third globally in both the Global Financial Centres Index (GFCI) and foreign direct investment (FDI) inflows in 2024. This standing rests not on Singapore's domestic market size but on the scale of capital and transactions routed through it.

The payment environment is mature. The PayNow instant payment system handles real-time interbank transfers; digital wallets such as GrabPay and DBS PayLah! support everyday payments. QR code interoperability with neighboring countries, including India, Thailand, and Malaysia, extends the network to cross-border retail payments.

Singapore's digital currency strategy is consistent with this financial hub positioning. The goal is to become the Asian gateway for stablecoin issuance and distribution by prioritizing global regulatory credibility over the defense of its own currency.

3.4.1 Digital Currency Structure: A Strategy That Prioritizes a Stablecoin Hub Over a CBDC

Singapore's digital currency strategy starts from a different point than other Asian countries. Where China, Japan, and Korea focus on defending monetary sovereignty or converting domestic payment infrastructure, Singapore's priorities are the global capital flows routed through it rather than its domestic market. Just as Singapore has served as the gateway for Asian capital in traditional finance, its strategy in digital money is to position itself as the hub for stablecoin issuance and distribution.

The center of gravity in digital assets is therefore stablecoins, which offer advantages for cross-border capital movement, rather than CBDCs. Singapore has also adopted an open structure that permits multi-currency issuance within Singapore, not just SGD-pegged. On this foundation, Singapore fintech firm StraitsX has issued the SGD stablecoin XSGD and the USD stablecoin XUSD, accepted at GrabPay merchants and Alipay+ stores. Paxos, which issues PayPal's PYUSD, chose Singapore as its third issuance base after the US and UAE. Ripple and Circle have also secured licenses.

Programmable money experiments, including conditional payments, are also underway, but through a different mechanism. While other Asian countries implement programmable features on top of retail CBDCs or deposit tokens, Singapore runs the same experiments on private stablecoins. Project Orchid assigned conditions to stablecoins via smart contracts, including permitted use cases, expiration dates, and transfer restrictions, implementing a structure that

functions like a voucher. Pilots were conducted using Amazon vouchers and Grab payments.

The choice of private stablecoins rather than central bank or commercial bank-issued money as the foundation for programmable money is consistent with Singapore's priorities not being the replacement of domestic payment infrastructure. The strategy is to extend the same position Singapore has held as a hub for asset management and trade finance in traditional finance to digital money, with Singapore as the Asian base for stablecoin issuance and distribution.

3.4.2 Regulatory Framework: The MAS Framework Permitting Multi-Currency Stablecoins

MAS finalized its Single-Currency Stablecoin (SCS) regulatory framework in 2023. The Payment Services Act was amended to establish "stablecoin issuance service" as an independent regulated activity. The framework applies to all stablecoins pegged to SGD or a G10 currency and issued in Singapore.

The framework is designed as a dual structure of MPI licensing and MAS labeling. Non-bank issuers with total stablecoin circulation exceeding 5 million SGD must obtain a Major Payment Institution (MPI) license. The MPI is a comprehensive license for providing payment services above a certain scale in Singapore, covering not only stablecoin issuance but also remittance, e-money, and digital payment token services. Banks may issue stablecoins without a separate license but are subject to the same reserve segregation and disclosure requirements.

Holding an MPI license does not automatically confer the "MAS-regulated stablecoin" label. This label is MAS's certification that a given stablecoin meets all of MAS's requirements for value stability, reserve assets, redemption, and disclosure. To receive the label, the following additional requirements must be satisfied:

1. Hold 100% of circulating stablecoins in cash, cash equivalents, or government securities with remaining maturity of three months or less.
2. Redeem at par value within five business days of a user request.
3. Maintain minimum capital (the greater of 1 million SGD or 50% of annual operating expenses).
4. Submit to monthly independent audits and annual external audits, with results publicly disclosed.
5. Refrain from ancillary activities such as lending or staking involving stablecoin issuance.

This regulatory framework applies equally to multi-currency stablecoins. As noted, Singapore permits stablecoin issuance pegged to G10 currencies including USD, EUR, and JPY, as well as SGD. This makes Singapore a base from which global stablecoin issuers entering Asian markets can cover multiple currencies under a single license, reducing the burden of obtaining separate approvals in each country.

3.4.3 Key Projects: StraitsX, Project Guardian, and Project Orchid

- **StraitsX (XSGD/XUSD):** The leading MAS-labeled stablecoin issuer in Singapore. XSGD holds over 70% of the non-USD stablecoin market share in Southeast Asia. StraitsX does not operate a consumer app directly but provides B2B payment infrastructure. As a Visa BIN sponsor, it provides infrastructure enabling partners such as RedotPay and UPay to issue stablecoin-based cards, with XSGD handling FX conversion and settlement in the backend. Users pay through existing payment apps (GrabPay, Alipay+) without needing to be aware of stablecoins.

- **Project Orchid:** A MAS-led programmable money project. Its objective is to implement a Purpose Bound Money (PBM) protocol, wrapping digital money in a smart contract that specifies permitted use, expiration, and transfer conditions, and allowing recipients to unwrap the underlying money once conditions are met. Orchid also proposes the concept of Orchid Compatible Ledgers, enabling different forms of digital money to settle on common infrastructure. Phase 1 involved DBS, OCBC, UOB, and Grab, with applications including government vouchers, commercial vouchers, and Amazon escrow payments. Phase 2 tested cross-acceptance of tokenized deposits issued by different banks between OCBC and UOB, and a pilot in which Ant International and Grab applied PBM to GrabPay merchant payments for Alipay users.

- **Project Guardian:** A MAS-led asset tokenization collaboration program launched in 2022. Over 40 global financial institutions, including JPMorgan, DBS, and Standard Chartered, participate, experimenting with the issuance, trading, and settlement of tokenized bonds, funds, FX, and insurance-linked securities. More than 15 pilots across six currencies were conducted through 2024, some of which have transitioned to live transactions. In 2025, UBS, Swift, and Chainlink jointly completed a pilot connecting tokenized fund subscriptions and redemptions to existing payment infrastructure.

- **Project BLOOM:** A cross-border payments project announced in 2025. Where Guardian addresses standards for tokenized asset issuance and trading, BLOOM builds the layer for real-time settlement of those assets and digital currencies across borders.

- **MAS Tokenized Government Securities:** MAS announced a pilot issuance of tokenized government securities in 2025. One use case is expected to be as reserve assets for stablecoin issuers. Attracting global issuers through multi-currency issuance and having them hold MAS government securities as reserves would raise the trust foundation of stablecoins to the central bank level while securing stable demand for Singapore government bonds.

3.4.4 What to Watch: Can Singapore Be the Exception to the Deposit Token Convergence Thesis?

Singapore is building the full stack of digital finance by sequentially layering Guardian (tokenized asset standards), Orchid (programmable money standards), BLOOM (cross-border settlement), and tokenized government securities (reserve asset foundation). What is notable is that in this stack, the foundation for settlement and payment is private stablecoins rather than CBDCs or deposit tokens.

MAS designs regulation and standards, while execution is handled by non-bank issuers such as StraitsX and Paxos, with public blockchain adoption and multi-currency issuance permitted. This stands in contrast to other Asian countries converging on bank-led deposit tokens. Behind this lies the special character of a city-state: the incentive to defend its own currency is relatively weaker than in large economies, and attracting global stablecoin issuers as a financial hub is more aligned with national strategy.

A more important variable is the durability of the first-mover regulatory advantage. Hong Kong, discussed below, enacted its Stablecoins Ordinance in 2025 and now has a similarly open framework. The US GENIUS Act, once enacted, opened a lawful domestic path for dollar stablecoin issuers. The advantage of the MAS label is maximized when comparable regulation is absent elsewhere. As major jurisdictions complete their regulatory frameworks, the first-mover advantage erodes and the incentive to route through Singapore diminishes.

3.4.5 Takeaways

1. **The form of digital money reflects a country's positioning:** While other major countries are moving toward bank-led deposit tokens, Singapore has chosen private stablecoins as its central axis. This shows that digital money is not converging on a single form but diverging based on economic size, sensitivity to monetary sovereignty, and financial system structure.

2. **Design as connected infrastructure, not isolated experiments:** In most countries, CBDC, stablecoin, and tokenized asset projects proceed independently. Singapore has connected issuance (Guardian), payment (Orchid), settlement (BLOOM), and reserve assets (tokenized government securities) as a single pipeline.

3.5
Hong Kong: A Stablecoin Bypass for Chinese Capital Under One Country, Two Systems

Hong Kong is a Special Administrative Region of 7.5 million people, but its financial system far exceeds its economic scale. The Hong Kong Exchanges and Clearing (HKEX) market capitalization stands at approximately $3.7 trillion, sixth globally, and FDI inflows rank in the top three worldwide. This reflects Hong Kong's role as the gateway through which mainland Chinese capital flows out and international capital flows into Asia.

In payments, the Faster Payment System (FPS) built by the Hong Kong Monetary Authority (HKMA) in 2018 supports real-time transfers in both HKD and RMB. The Octopus card dominates transport and retail payments. In 2025, Payment Connect, linking FPS with the mainland's internet banking payment system, launched, enabling real-time cross-border payments between Hong Kong and the mainland.

Hong Kong's digital currency strategy rests on both identities: building a global stablecoin license hub as an international financial center, while providing a path for Chinese companies to enter the global digital currency market by routing around mainland regulations.

3.5.1 Digital Currency Structure: The Regulatory Arbitrage Created by One Country, Two Systems

Understanding Hong Kong's digital currency structure requires the context of One Country, Two Systems. Virtual asset trading and stablecoin issuance are entirely prohibited on the mainland. Hong Kong, however, maintains an independent legal system, currency (HKD), and financial regulator (HKMA) under One Country, Two Systems. Two different financial regulatory regimes coexist within the same country. This legal separation creates a path for stablecoins, prohibited on the mainland, to be legally issued through Hong Kong entities.

In practice, JINGDONG Coinlink Technology, the Hong Kong subsidiary of JD.com (China's second-largest e-commerce company), applied for a stablecoin license. Alipay, the payments arm of Ant Group, China's largest fintech company, also participated in the sandbox. The structure enables pursuit of a business category that is entirely banned on the mainland through a separate jurisdiction.

This path is not without obstacles. Reports emerged that Ant Group and JD.com temporarily suspended their license pursuits following informal pressure from mainland authorities. From Beijing's perspective, Chinese companies issuing digital currency through channels outside its control is an uncomfortable arrangement. This tension between Hong Kong's openness and Beijing's control is the most important variable in Hong Kong's stablecoin hub strategy.

3.5.2 Regulatory Framework: Open Licensing With Conservative Reserve Requirements

The HKMA enacted the Stablecoins Ordinance in August 2025. An HKMA license is required to issue fiat-pegged stablecoins in Hong Kong, or to handle stablecoins pegged to the Hong Kong dollar even if issued overseas.

Like Singapore, Hong Kong's regulation is designed as an open framework.

1. **Issuers are not restricted to banks:** Any company incorporated in Hong Kong may apply for a license regardless of sector. Global banks, Chinese BigTech, telecoms, and Web3 companies compete for the same license.

2. **No restriction on the pegged currency:** Where Singapore limits issuance to SGD and G10 currencies, Hong Kong permits HKD, USD, and CNH.

This currency neutrality is not purely a result of regulatory flexibility. Given Hong Kong's role as the offshore renminbi hub outside the mainland, it reads more as a deliberate opening for CNH (offshore renminbi) stablecoins. CNH is renminbi traded outside mainland China, centered in Hong Kong, and not directly subject to mainland capital controls. If a CNH stablecoin were issued, a path would open for renminbi to circulate globally on a blockchain around the clock. This would support renminbi internationalization while potentially conflicting with the mainland's capital control structure, making it the most significant variable in Hong Kong's stablecoin framework.

The open framework does not mean a low entry threshold. Hong Kong requires 100% of reserves to be held in high-quality liquid assets (cash, central bank deposits, short-term government bonds, etc.) and mandates par value redemption within T+1 (the next business day) of a user request. Minimum capital is HK$25 million (approximately KRW 3.2 billion), and reserve assets must be fully segregated from the issuer's own assets and custodied at an HKMA-authorized bank. Compared to Singapore's five-business-day redemption requirement, the redemption timeline is considerably shorter and reserve asset requirements more conservative.

In practice, 36 formal license applications were filed following the ordinance's enactment, but only two received initial approval: HSBC and Anchorpoint Financial. HSBC is one of Hong Kong's banknote-issuing banks; Anchorpoint is a consortium involving Standard Chartered, HKT, and Animoca Brands. This indicates that Hong Kong's stablecoin market is opening not as an unlicensed public issuance market but as a strictly licensed market centered on banks and consortia.

Deposit tokens are regulated separately under the Banking Ordinance rather than the Stablecoins Ordinance. The HKMA is conducting real-transaction experiments with deposit tokens through Project Ensemble. Seven banks, including Bank of China (Hong Kong), China

Construction Bank (Asia), and Standard Chartered Hong Kong, are participating, testing real-time settlement of money market funds using tokenized deposits. In November 2025, the project expanded to a live-transaction environment with EnsembleTX. The HKMA's long-term aim is to convert Hong Kong's HKD RTGS system into a 24/7 tokenized settlement infrastructure.

3.5.3 Key Projects: The License Race and Project Ensemble

- **HSBC Stablecoin:** One of the first HKMA-licensed issuers. HSBC plans to integrate its stablecoin into PayMe and HSBC HK Mobile Banking for use in peer-to-peer transfers, merchant payments, and tokenized investments.

- **Anchorpoint Financial:** The second of the first HKMA-licensed issuers. Anchorpoint plans to begin stablecoin distribution to selected institutional clients. Initial use cases are likely closer to intercompany settlement, cross-border payments, and tokenized asset settlement than retail payments. The concept is to extend Hong Kong stablecoins as a settlement asset between institutional finance and onchain markets, connecting Standard Chartered's corporate banking network with Animoca Brands' Web3 ecosystem.

- **Project Ensemble Live Transaction:** On November 13, 2025, the day EnsembleTX launched, HSBC completed the first live transaction, transferring approximately HK$3.8 million (roughly $490,000) in Ant International's HKD tokenized deposits to another bank. On the same day, Standard Chartered processed an intra-group tokenized deposit transfer for Ant International and a tokenized money market fund subscription for Futu Securities. Global asset managers including BlackRock and Franklin Templeton are also participating, testing the issuance, distribution, and settlement structure for tokenized assets.

- **Tokenized Green Bonds:** Green bonds are bonds issued to finance environmentally friendly projects. The HKMA has been issuing tokenized Hong Kong government green bonds on blockchain since 2023. In November 2025, it issued the world's largest digital bond, the third Digital Green Bond, through HSBC's tokenization platform Orion. Tokenized retail money market funds and gold tokens have also been approved, with plans underway to build settlement infrastructure connecting these assets to the tokenized deposits in Project Ensemble.

3.5.4 What to Watch: Between Hong Kong's Openness and Beijing's Control

The variable in Hong Kong's stablecoin strategy lies less in technology or regulatory design than in the relationship with Beijing. The structure of pursuing through a Hong Kong entity what is banned on the mainland is lawful as long as the legal separation under One Country, Two Systems holds. However, reports that Ant Group and JD.com temporarily suspended their Hong Kong stablecoin plans suggest that Beijing's informal influence is already operating.

CNH stablecoins are accordingly the most significant variable in the Hong Kong model. If CNH circulates globally on a blockchain around the clock, it supports renminbi internationalization but conflicts with the mainland's capital control structure. The more Hong Kong functions as a global digital currency bypass for Chinese capital, the greater Beijing's incentive to intervene. Whether Hong Kong's currency-neutral framework can actually extend to CNH stablecoins remains uncertain.

The first licensing results indicate that Hong Kong is opening the initial market conservatively. The first approvals went to HSBC and Anchorpoint, led by Standard Chartered. A banknote-issuing bank and a bank-led consortium, not Chinese BigTech, were chosen first. This signals that Hong Kong intends to open a stablecoin hub while initially prioritizing bank credibility and HKD-centered use cases over BigTech-led CNH stablecoins, which could heighten mainland control concerns.

3.5.5 Takeaways

- **A large economy's digital asset ban creates regulatory arbitrage for adjacent hubs:** China is the only major economy to have banned stablecoins outright, but the capital demand of the world's second-largest economy does not disappear. Ant Group and JD.com applying for licenses through Hong Kong entities demonstrates this. As the reports of both companies suspending their plans suggest, however, this path depends on mainland authorities' acquiescence, and legal permissibility and political stability are separate matters. India, discussed below, has effectively imposed economic blockades on crypto, and the adjacent hubs of Singapore and Dubai are already benefiting from a similar pattern of regulatory arbitrage. The pattern in which large-economy bans drive growth in adjacent hubs is a defining feature of Asia's digital currency landscape.

- **Competition for issuers does not always lead to regulatory relaxation:** Intensifying competition for stablecoin issuer attraction generally tends to lower license requirements and reduce entry barriers. However, the stablecoin competition between Singapore and Hong Kong shows a different pattern. Both countries have kept the scope of eligible issuers and pegged currencies open in order to attract global issuers, while simultaneously setting strict requirements for reserves, redemption, custody, and audits. After Singapore opened the issuance path with its 2023 MAS framework, Hong Kong differentiated itself with a shorter T+1 redemption timeline and more conservative reserve asset requirements. This shows that Asia's stablecoin strategy is not unconditional openness but selective openness premised on institutional credibility.

3.6
India: A Financial Inclusion Experiment Layering CBDC on Top of UPI

India is the world's fifth-largest economy (GDP of approximately $3.7 trillion in 2024) and its fastest-growing major economy. Only 35% of adults held bank accounts in 2011, but following the PMJDY (Pradhan Mantri Jan Dhan Yojana) initiative, over 80% now do as of 2024. Even so, 190 million adults remain unbanked, and the financial gap between rural and urban areas remains significant.

The payment environment has been transformed by UPI (Unified Payments Interface). Annual UPI transaction volume exceeded 200 billion in 2025 with effectively zero fees. Some 300 million individuals and 50 million merchants currently use UPI.

India's CBDC, the e₹, is best understood as a project designed to extend financial inclusion through digital money to the segments UPI cannot reach (the informal economy, rural subsidy recipients), while also countering the monetary sovereignty erosion caused by dollar stablecoins.

3.6.1 Digital Currency Structure: Retail CBDC Combined With UPI, Wholesale CBDC for Financial Markets

Understanding India's digital currency structure requires starting with UPI. Launched in 2016 by the National Payments Corporation of India (NPCI) under the RBI, UPI is an instant payment system that allows fund transfers, payments, and bill payments in real time from a single mobile app regardless of the user's bank. Usage fees are close to zero.

Private apps including Google Pay, PhonePe, and Paytm compete on top of UPI. Monthly transaction volume reached approximately 19 billion as of 2025. Given that Visa's global monthly transaction volume is approximately 19.2 billion (639 million per day), a single-country payment network has grown to match Visa's entire global throughput.

If UPI solved the everyday payment problem, the e₹ targets a different problem. UPI is ultimately a system that intermediates transfers between bank accounts, so it does not reach India's 190 million unbanked population. Even when subsidies are disbursed via UPI, tracking how recipients use the funds is difficult. The e₹ is designed to address these gaps. As a digital token issued by the central bank, it can be held without a bank account, and programmable features allow the permitted use and expiration of subsidies to be specified, blocking off-purpose spending.

The RBI's retail CBDC e₹ is therefore designed not as a separate alternative to the UPI ecosystem but as an architecture that sits on top of existing UPI infrastructure. The e₹ is integrated with UPI QR codes, allowing payment at existing merchants without separate infrastructure, and private apps including MobiKwik, CRED, and Yes Bank serve as distribution channels. Legally, the e₹ was granted legal tender status by the 2022 RBI Act amendment, so even when distributed through UPI, it retains its character as central bank money rather than a bank deposit.

Paradoxically, UPI's success also makes retail e₹ adoption more difficult. From the user's perspective, the payment experience is not meaningfully different whether paying with UPI or e₹, so the reason to specifically choose e₹ is unclear. The roughly 6 million users as of March 2025 largely onboarded through government subsidy channels rather than through voluntary demand, and assessments indicate the adoption cannot be characterized as organic.

While retail adoption has been slow, there has been more substantive progress on the wholesale side. Experiments applying wholesale CBDC (e₹-W) to interbank government bond transactions and financial market settlement have proceeded, and a deposit tokenization pilot launched in October 2025 is extending the scope to certificates of deposit, bonds, and equity settlement. Where the retail side struggles with differentiation from UPI, the wholesale infrastructure is confirming efficiency gains over existing infrastructure.

3.6.2 Regulatory Framework: Institutionalizing CBDC While Economically Suppressing Crypto

India's digital asset regulation operates without a comprehensive single statute, with multiple agencies sharing jurisdiction. The RBI oversees monetary policy and CBDC; the Ministry of Finance handles taxation; the Financial Intelligence Unit handles anti-money-laundering.

In May 2025, India's Supreme Court publicly noted the absence of comprehensive crypto regulation. In June 2025, the government published a discussion draft (COINS Act 2025) classifying crypto assets as securities, commodities, or currencies, but as of April 2026 it has not been enacted.

The currently operative regulation operates on two main axes:

1. **CBDC institutionalization:** India granted the e₹ legal tender status through the 2022 RBI Act amendment. The e₹ is guaranteed at a 1:1 exchange with cash and is recorded as a liability on the RBI's balance sheet.

2. **Crypto suppression:** India has not legally banned crypto, but has significantly reduced the economic incentive for transactions through aggressive taxation and reporting requirements. The 2022 Finance Act amendment applied a 30% tax rate to virtual asset income and imposed a 1% TDS (tax deducted at source) per

transaction. Loss carryforward deductions are not permitted, making frequent trading economically disadvantageous. From 2023, all Virtual Digital Asset Service Providers (VDASPs) including exchanges were classified as reporting entities under anti-money-laundering law, strengthening FIU-IND registration, KYC, and suspicious transaction reporting obligations. There is no stablecoin-specific law, but this tax and reporting framework applies to all virtual assets and therefore constrains stablecoins as well.

In summary, India has not banned crypto outright as China has, but has chosen an indirect suppression approach that weakens the economic incentive for transactions through taxes and regulatory costs. The method differs, but the result is similar in limiting the room for non-CBDC digital currencies to grow domestically.

3.6.3 Key Projects: Programmable e₹ and UMI

- **Retail e₹:** A pilot launched in December 2022 has expanded to 17 banks and 6 million users as of March 2025. The circulation amount is 101.6 billion rupees, a 334% increase year over year.
- **Subhadra Yojana:** A pilot in Odisha distributing 10,000 rupees annually per woman as e₹ vouchers, with permitted use restricted to convenience stores, pharmacies, and agricultural supply stores.
- **DEEPAM 2.0:** LPG gas subsidies in Andhra Pradesh are disbursed directly in e₹, eliminating the possibility of misappropriation in the distribution chain.
- **UMI (Unified Money Interface):** A wholesale CBDC-based asset tokenization platform announced by the RBI. A pilot issuing negotiable certificates of deposit (CDs) confirmed settlement efficiency improvements; UMI is designed as the third pillar of India's digital public infrastructure (DPI) alongside UPI and ULI.
- **CBDC-based food subsidy (PMGKAY) pilot:** The first application of CBDC to India's largest welfare program, which covers 800 million people. Launched in Puducherry in 2026, food subsidies under the Public Distribution System (PDS) are disbursed as programmable CBDC tokens directly to beneficiary wallets, with the tokens usable only at designated Fair Price Shops.
- **BRICS CBDC Interconnection Proposal:** The RBI proposed building a CBDC interconnection system among member states as an agenda item for the 2026 BRICS summit hosted by India. The attempt to interconnect CBDCs across Brazil, Russia, India, China, South Africa, and others could, if realized, form a multilateral CBDC cross-border payment network that bypasses the dollar. The proposal is accompanied by geopolitical tension, as the US has strongly opposed BRICS attempts to displace the dollar.

3.6.4 What to Watch: The Largest-Scale Testing Ground for Programmable CBDC

The combination of 1.4 billion people and low financial inclusion makes India the largest-scale testbed for digital currency experiments. The RBI is turning this into an advantage. In segments where the inertia of existing payment infrastructure is weak, the e₹ can become the first digital financial access point.

The circulation of the e₹ is still only 0.006% of total banknote circulation. Accordingly, the RBI's focus after 2026 is shifting from expanding transaction volume to validating specific features such as offline NFC payments and user-level programmability. The direction narrows toward areas where UPI falls short, including purpose-restricted subsidies, offline rural payments, and cross-border settlement, rather than replacing general retail payments.

The RBI is looking to cross-border payments as an adoption path for the e₹. India was the world's largest recipient of overseas remittances in 2024 at approximately $129.4 billion. The BRICS CBDC interconnection proposal reflects an intent to extend the e₹ beyond domestic financial inclusion into a cross-border payment infrastructure that bypasses the dollar. Where China's mBridge is yuan-centric, India's proposal aims for a multilateral CBDC structure, which differentiates it. This suggests CBDCs can become instruments for forming geopolitical alignments beyond their function as domestic payment tools.

3.6.5 Takeaways

1. **Financial inclusion is the strongest adoption argument for CBDCs.** In markets such as China, Korea, and Japan, where bank accounts and digital payment infrastructure are already universal, the incentive to adopt CBDCs is limited. India is the only market that simultaneously possesses a massive unbanked and underfinanced population and one of the world's largest digital payment infrastructures in UPI. The infrastructure is already built, but a significant portion of the population still lacks adequate access. This is what makes e₹'s financial inclusion experiment possible. The outcome will serve as a direct reference point for emerging markets in Southeast and South Asia with similar conditions.
2. **India is the largest testing ground for the programmability of digital currency.** Given the structural difficulty of retail payment adoption, state-led projects are largely converging on attempts to implement programmable features. India is demonstrating this across the widest range of policy domains: subsidies, LPG support, food distribution, and more.

3.7
Kazakhstan: A Portfolio Strategy Embracing Both CBDC and Crypto

Kazakhstan is Central Asia's largest economy, with GDP of approximately $250 billion (roughly KRW 340 trillion) and a population of 19 million. Situated geographically between Russia and China, it has a resource-dependent economy with high reliance on oil and gas exports.

The financial system is relatively small, but Kaspi.kz has established itself as a super-app integrating payments, e-commerce, and financial services with approximately 14 million active users (74% of the population). The crypto industry grew substantially after China's mining ban in 2021, when miners relocated in large numbers, raising Kazakhstan's share of global Bitcoin hashrate to 8-12%.

While most countries weight either CBDCs or crypto, Kazakhstan pursues both in parallel. As a smaller economy, the risk of institutional experimentation is relatively low, and the country has already accumulated infrastructure through the crypto mining industry. Combined with policy demand to improve transparency in state fiscal execution through CBDCs, Kazakhstan presents an unusual model of simultaneously experimenting with both CBDCs and crypto within the regulatory perimeter.

3.7.1 Digital Currency Structure: Digital Tenge as the Public Layer, Crypto as a National Wealth Strategy

Kazakhstan's digital currency structure has three components. The digital tenge (CBDC) handles public payments and fiscal tracking; the Alem Crypto Fund accumulates mining revenues as national reserves; and a tenge stablecoin pilot proceeds in the AIFC (Astana International Financial Centre) sandbox. Other Asian countries treat digital currencies (CBDCs, deposit tokens, stablecoins) and crypto assets as entirely separate domains. Kazakhstan is the only case in Asia that incorporates both within a single national strategy.

The first component is the digital tenge (CBDC), issued by the National Bank of Kazakhstan (NBK). The primary use cases are government subsidy tracking and public infrastructure spending. CBDC cards are issued on top of Visa and Mastercard infrastructure, allowing use at existing card terminals. This mirrors India's approach of layering e₹ on top of UPI.

The second component is the crypto national wealth strategy. Kazakhstan became a major mining hub following the influx of miners after China's 2021 ban. President Tokayev directed the construction of a strategic crypto reserve in September 2025, connecting this mining infrastructure to national finances. The result is the Alem Crypto Fund. Kazakhstan has historically been a resource state that accumulated sovereign wealth from oil export revenues. The structure mirrors that model: mining bitcoin and depositing it into a crypto reserve instead of extracting oil and converting it to dollars for a sovereign wealth fund.

The third component is the tenge stablecoin sandbox. Three tenge stablecoin pilots are currently underway in the AIFC digital asset sandbox. A CryptoCity pilot special zone was also announced in May 2025, with plans for an environment in which businesses within a designated area can receive crypto payments.

3.7.2 Regulatory Framework: A Dual Structure of Mainland CBDC and the AIFC Crypto Special Zone

Kazakhstan's digital currency regulation is designed as a dual structure, with the NBK leading, divided between general jurisdiction and the AIFC special zone. Understanding this structure requires background on the AIFC.

The AIFC was designed as items 70-72 of President Nazarbayev's national reform program "100 Concrete Steps" in 2015. It serves as the financial pillar of a long-term vision to bring Kazakhstan into the ranks of the world's top 30 advanced economies by 2050, modeled on the Dubai International Financial Centre. A constitutional law establishing its legal basis was enacted in 2015, and it officially launched in 2018.

The AIFC's most distinctive feature is that it operates under an independent legal framework based on English common law, separate from Kazakhstan's general legal system. The working language is English, and disputes within the AIFC are handled by its own court rather than domestic Kazakh courts, with participation from British judges. Financial licensing is handled by the independent regulator Astana Financial Services Authority (AFSA), and the Astana International Exchange (AIX) uses Nasdaq as its trading platform while the Shanghai Stock Exchange holds a 25% stake. Over 4,000 companies were registered as of June 2025, and 10 crypto exchanges including Binance and Bybit operate with AFSA licenses.

Within this structure, digital currency regulation is clearly bifurcated. In the general jurisdiction, the NBK issues the digital tenge as the sole official digital currency, and crypto asset trading is in principle restricted. Within the AIFC, digital asset exchanges, token issuance, and digital asset funds are permitted under AFSA regulation. This structure, summarized as CBDC in the general jurisdiction and crypto in the AIFC, is functionally similar to Hong Kong's One Country, Two Systems.

The Digital Asset Act scheduled for enactment in 2026 extends the AIFC framework to the national level. When this law takes effect, Kazakhstan becomes one of the few cases in Asia regulating CBDCs, stablecoins, and crypto assets simultaneously within a single national framework.

3.7.3 Key Projects: Digital Tenge, Alem Crypto Fund, and KZTE

- **Digital tenge:** A CBDC with cumulative processing volume of $480 million, having completed eight pilot scenarios by end-2025. These include programmable disbursement for China-bound railway construction funding (funds released only upon confirmed project completion), supply chain tracking through automatic VAT tagging, and school meal budget management. The digital tenge infrastructure is also integrated with BNB Smart Chain, experimenting with connectivity to public blockchains. Cross-border payment tests with Russia, China, and the UAE are running in parallel, and an MOU for joint CBDC research with the PBOC was signed during President Xi Jinping's state visit in July 2024.

- **Alem Crypto Fund:** A national crypto reserve targeting up to $1 billion. Registered within the AIFC and regulated by AFSA, with Binance Kazakhstan as a strategic partner. BNB was purchased as the first investment asset.

- **KZTE tenge stablecoin:** A Solana-based tenge stablecoin jointly announced by Mastercard, Eurasian Bank, and Intebix in September 2025, one of three pilots currently underway in the AIFC digital asset sandbox.

3.7.4 What to Watch: A Coexistence Model for CBDC and Stablecoin

From a digital currency perspective, the most notable point in Kazakhstan is the relationship being established between the digital tenge (CBDC) and the tenge stablecoin (KZTE). The NBK Deputy Governor has defined the two not as competitors but as complements. The digital tenge handles monetary policy execution and interbank settlement; the stablecoin handles practical payments for businesses and consumers.

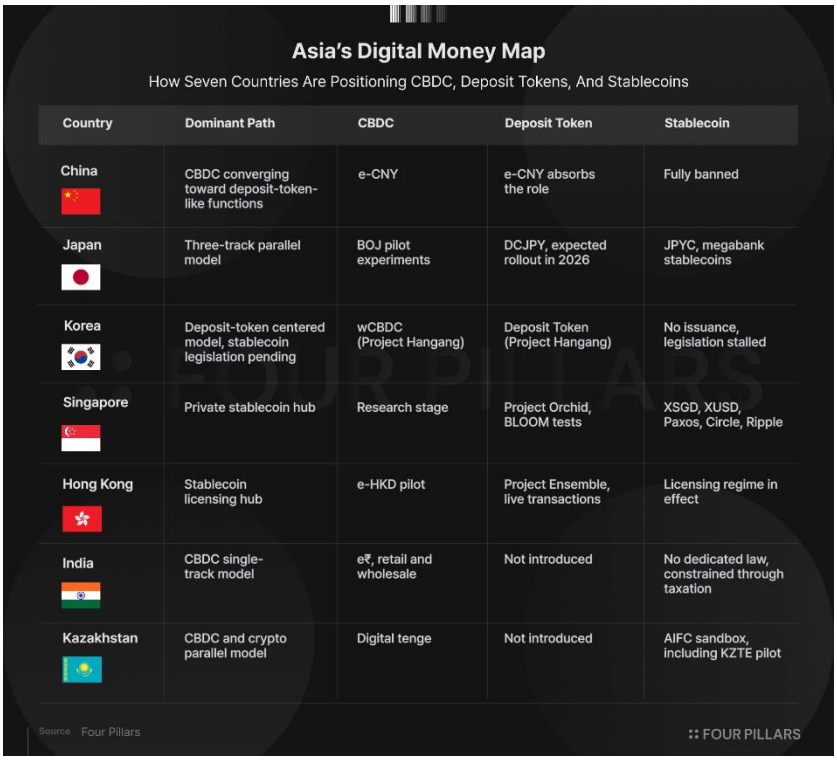
More intriguing is that using the digital tenge as collateral for stablecoins is also being tested. This design raises the trust foundation of the stablecoin to the level of central bank money while extending the distribution reach of the CBDC into private payment channels. The direction is the same as the Bank of Korea's concept of stablecoin issuers holding reserve assets in deposit token form, but Kazakhstan has moved first with an actual pilot.

3.7.5 Takeaways

1. **CBDC collateralization of stablecoins proposes a new coexistence model.** In most Asian countries, CBDCs and stablecoins either compete or have clearly separated roles. Kazakhstan is exploring a path that combines the credibility of central bank money with the flexibility of private stablecoins by using CBDCs as stablecoin reserve assets. If this model works, a new two-tier structure becomes possible: CBDC issuance, stablecoin collateralization, and private-sector distribution.

2. **The openness of a CBDC determines the scalability of the digital currency environment built on it.** The digital tenge is integrated with BNB Smart Chain and has completed interoperability tests with SWIFT, making it the only CBDC in Asia pursuing openness. This contrasts with China's e-CNY, which maintains a closed platform, and India's e₹, which operates only within UPI. For stablecoins or tokenized assets to be layered on top of a CBDC, the platform must connect with the outside world. The degree of this openness determines the scope of the digital currency environment that can be built on it.

3.8
Summary: Three Models of Asia's Digital Currency Strategy

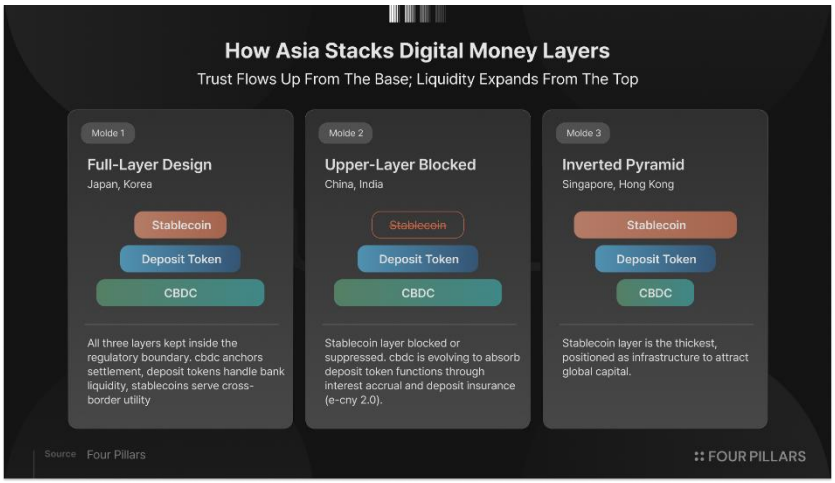


In all seven countries, digital currencies have moved beyond the experimental stage into concrete legislation and projects, but the approaches differ significantly. China integrates retail, wholesale, and cross-border functions through e-CNY 2.0. Japan runs DCJPY, JPYC, megabank stablecoins, and BOJ CBDC experiments in parallel. Korea is simultaneously advancing Project Hangang and won stablecoin legislation. Singapore and Hong Kong have activated stablecoin licensing frameworks. India connects e₹ to UPI and subsidy disbursement. Kazakhstan runs the digital tenge on the mainland and stablecoin pilots separately within the AIFC.

This variety can be organized through the layered design of CBDCs, deposit tokens, and stablecoins.

1. At the base sits the CBDC, responsible for final settlement and monetary singleness.
2. In the middle sit deposit tokens, handling credit creation and institutional payments within the banking system.
3. At the top sit stablecoins, connecting to public chains and cross-border liquidity.

A useful perspective for understanding the order of this pyramid is that trust rises from below and distribution expands from above. By this standard, three distinct models emerge depending on which layer each country builds thickest, which it restricts, and which it opens to the outside.



Asia's digital currency strategies fall into three models:

1. **Full-layer design:** A structure in which CBDCs, deposit tokens, and stablecoins are all designed within the regulatory perimeter. Japan and Korea are closest to this model.

2. **Upper-layer blocking:** A structure that reinforces CBDCs at the base and deposit tokens in the middle while blocking or strongly suppressing the stablecoin layer at the top. China and India are the representative examples.

3. **Inverted pyramid:** A structure in which the stablecoin, tokenized asset, and cross-border distribution layer at the top is thicker than the CBDC or deposit token layers below. Singapore and Hong Kong are closest to this model.

The focus of this classification is not which digital currencies each country has adopted, but how CBDCs, deposit tokens, and stablecoins are each allocated to specific roles.

3.8.1 Full-Layer Design: Korea and Japan Bringing CBDCs, Deposit Tokens, and Stablecoins All Inside the Regulatory Perimeter

Korea and Japan are closest to the full-layer design model in that both seek to bring CBDCs, deposit tokens, and stablecoins all within the regulatory perimeter. The allocation differs, however. Korea is positioning wholesale CBDC and deposit tokens as the central axis, with won stablecoins as a complementary layer for cross-border payments and tokenized asset settlement. Japan, by contrast, is keeping DCJPY, JPYC, megabank stablecoins, and BOJ CBDC experiments all open simultaneously, leaving role differentiation across formats largely

to the market.

Korea has a bank-centric financial system and a highly developed simple-payment environment. In this domestic setting, the role demanded of digital money narrows to conditional payments and purpose tracking that existing payments cannot perform, rather than faster payments. Deposit tokens fill this role, while won stablecoins are positioned not as substitutes for deposit tokens but as an upper layer for cross-border payments and tokenized asset settlement.

Japan represents the most open variant within the full-layer design model. With a cashless ratio of 42.8% and a payment market that has not yet hardened, the FSA's assignment of independent legal frameworks to stablecoins, deposit tokens, and crypto assets opened a structure in which all three tracks compete simultaneously. DCJPY is approaching Japan Post Bank adoption; JPYC has grown into the largest local-currency stablecoin in Asia; and three megabanks are each developing yen stablecoins through different paths.

3.8.2 Upper-Layer Blocking: China and India Reinforcing CBDCs While Suppressing Stablecoins

China and India are closest to the upper-layer blocking model, centering CBDCs and strongly suppressing the stablecoin layer. Both countries do not legally permit private stablecoins, and both are converging on structures in which the functions of digital money are absorbed into state-issued CBDCs.

China has incorporated e-CNY into the underlying payment infrastructure of Alipay and WeChat Pay, which control over 90% of retail payments. The approach leaves the retail interface to private platforms while reclaiming final settlement and policy execution into central bank money. Since the blanket crypto ban in 2021, with stablecoins and RWA also explicitly classified as illegal, China is positioning e-CNY as the effectively sole legitimate digital currency.

India differs from China in maintaining an open payment ecosystem with private apps on top of UPI, but is equally closed on stablecoins. The e₹ is designed to handle financial inclusion for the unbanked population and conditional execution of government subsidies, segments UPI cannot reach. The 30% income tax and 1% TDS have effectively removed the economic incentive for crypto (including stablecoin) transactions.

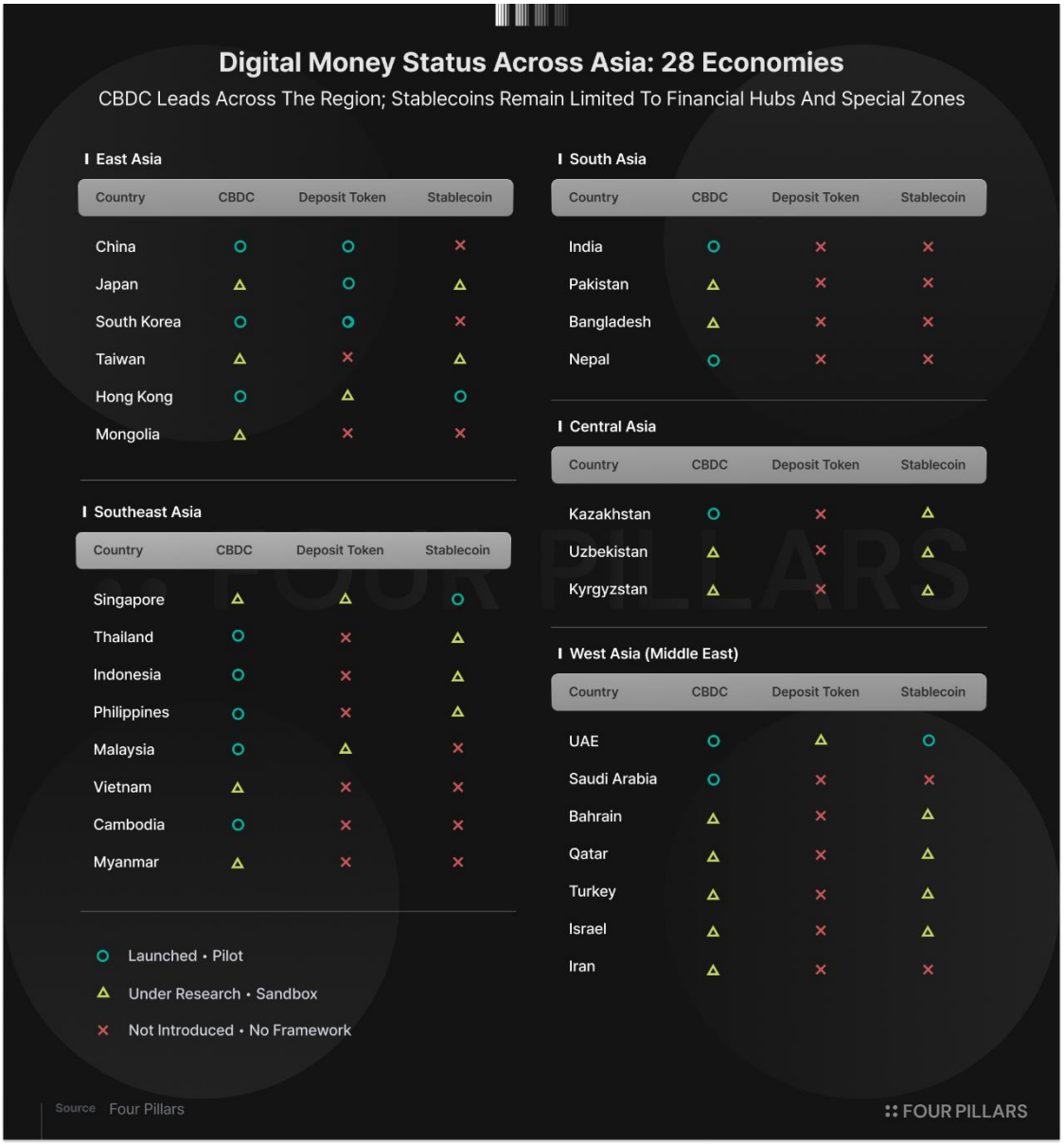
3.8.3 Inverted Pyramid: Singapore and Hong Kong Using Stablecoins as an Export Product of the Financial Hub

Singapore and Hong Kong are closest to the inverted pyramid model, where the stablecoin distribution layer at the top is the thickest. CBDCs remain at the research or pilot stage, deposit token experiments are limited to institutional use, and stablecoin licensing frameworks are already operational.

The background to this path lies in the economic structure of both cities. Singapore and Hong Kong have maintained their financial hub status by intermediating global capital flows and transactions rather than serving domestic markets. The Hong Kong dollar peg and the offshore RMB window characterize Hong Kong; Singapore is positioned as a multi-currency financial hub. For both, stablecoins function not as domestic payment tools but as export products of the financial hub, attracting global issuers and corporate capital to the jurisdiction.

This model is, however, a strategy viable under the specific conditions of city-states and special-zone financial hubs. The domestic payment markets of Singapore and Hong Kong alone are insufficient to generate stablecoin demand. Both countries are therefore building infrastructure that combines stablecoins with institutional finance: tokenized MMFs, government bonds, and cross-border B2B settlement. Singapore's Guardian, Orchid, BLOOM, and tokenized government securities pipeline, and Hong Kong's Ensemble and EnsembleTX, are extensions of this direction.

4. Why Asia Is Converging on CBDCs and Deposit Tokens



The digital currency strategies of the seven countries show that national paths diverge considerably depending on the payment environment, regulatory philosophy, and geopolitical position. Looking across Asia as a whole, however, a common trend emerges: convergence on CBDCs and deposit tokens.



In more detail, roughly 30 of Asia's 48 countries (by UN classification) are pursuing digital currencies, and nearly all of those 30 are pursuing CBDCs or deposit tokens. China's e-CNY, India's e₹, and Kazakhstan's digital tenge have already launched; Korea (Project Hangang), Indonesia (Project Garuda), Thailand, Malaysia, and the UAE are at the pilot stage.

By contrast, only 10 countries, roughly 33% of the total, are also pursuing stablecoins alongside CBDCs. Of these, only four, Japan, Singapore, Hong Kong, and the UAE, have established independent stablecoin legal frameworks. The remaining six, the Philippines, Thailand, Indonesia, Kazakhstan, Uzbekistan, and Kyrgyzstan, remain at the sandbox or pilot level. Asia's digital currency center of gravity sits with CBDCs and deposit tokens; stablecoins are permitted in a limited way, concentrated in city-states, financial hubs, and special zones.

This contrasts sharply with the US and Europe. The US banned CBDC development by executive order in January 2025, and the House passed an Anti-CBDC bill the same year (pending Senate review). Europe is preparing a digital euro but has pushed the issuance decision to 2029 or later, activating the private stablecoin framework through MiCA first. The US also has deposit tokens, such as JPMorgan Kinexys, but these operate in a structure where USDC is directly swappable on public chains, fundamentally different from Asia's two-tier structure of deposit tokens sitting on a wholesale CBDC settlement layer.

Why does this difference exist? On the surface it appears to be a difference in regulatory tendency, but deeper structural factors are at work. Four dimensions explain why Asia structurally favors CBDCs and deposit tokens over stablecoins.

4.1
Reason 1: The Fourth Front of De-Dollarization

Dollar stablecoins are a genuine innovation. For individuals and businesses gaining access to a new global financial system, this represents real economic empowerment. People gain protection from local currency depreciation, access to global payment rails, and the ability to transact in the world's most liquid currency. Small and medium enterprises in emerging markets can now hold and transact in dollars without a US bank account, without correspondent banking relationships, and without gatekeepers.

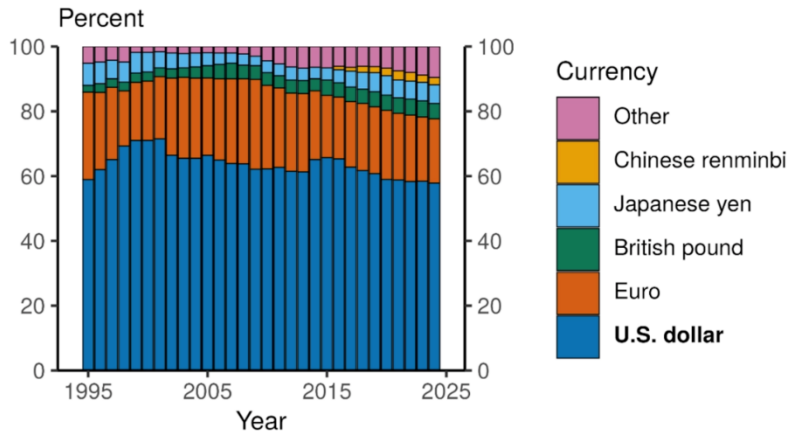
The other side of this, however, is clear. For the United States, dollar stablecoins are a new amplifier of existing dollar dominance. If dollar dominance over the past century was institutionally enforced through the IMF, World Bank, correspondent banking system, and the US Treasury and Federal Reserve, stablecoins now add a more direct and privatized dollar distribution channel. For Asian countries, this is a clear threat.

4.1.1 Asia's De-Dollarization Trend

The dollar has been the global reserve and trade currency since Bretton Woods and is the United States' most powerful geopolitical instrument. In a structure where most international payments are denominated in dollars, access to the dollar payment network is equivalent to participation rights in the global economy. The US can revoke this access through SWIFT exclusion, and has done so:

- **2012, Iran SWIFT exclusion:** Iranian banks were cut from SWIFT over nuclear development. Oil export payment channels were blocked, Iran's economic growth rate collapsed to -7.7%, and the rial lost 51% of its value.
- **2022, Russia SWIFT exclusion:** The same measure was applied to major Russian banks following the invasion of Ukraine.
- **2025, Russia sanctions expanded:** The EU extended SWIFT restrictions on Russia from messaging prohibition to transaction prohibition. It was reconfirmed that dollar payment network exclusion is not a one-off measure but a structure that escalates incrementally.
- **2026, Iran war:** US and Israeli airstrikes on Iran entangled financial sanctions with military conflict. As the Strait of Hormuz closure and energy supply crisis combined, the risks of dollar payment network dependence were made visible once again.

Figure 2. Foreign exchange reserves



Source: IMF COFFER

Countries that have watched these events unfold have begun moving to reduce their dependence on the dollar payment network. Russia activated its ruble payment system SPFS in 2014; China activated its renminbi payment system CIPS in 2015. From that point, de-dollarization has been proceeding on three fronts:

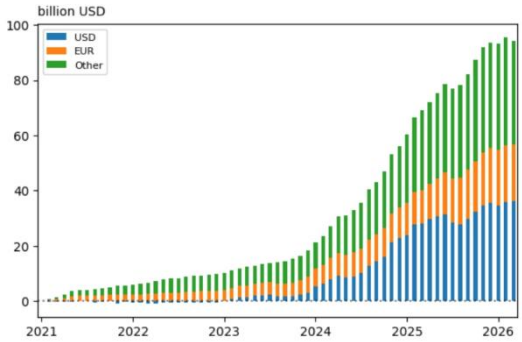
1. **Payment rails:** CIPS has expanded to over 1,400 participating institutions as of 2024, broadening direct yuan payment channels that bypass SWIFT.

2. **Reserve assets:** The dollar's share of global foreign exchange reserves has fallen from roughly 70% in the early 2000s to 58% as of end-2024. Central banks have significantly increased gold purchases.

3. **Trade settlement:** The ruble-yuan direct trade share between Russia and China has surged since 2022, and India has opened channels for settling Russian crude oil in rupees and dirhams, bypassing the dollar.

4.1.2 Dollar Stablecoin Expansion and Digital Dollarization Pressure

Figure 1: Cumulative net inflows from fiat currencies to stablecoins



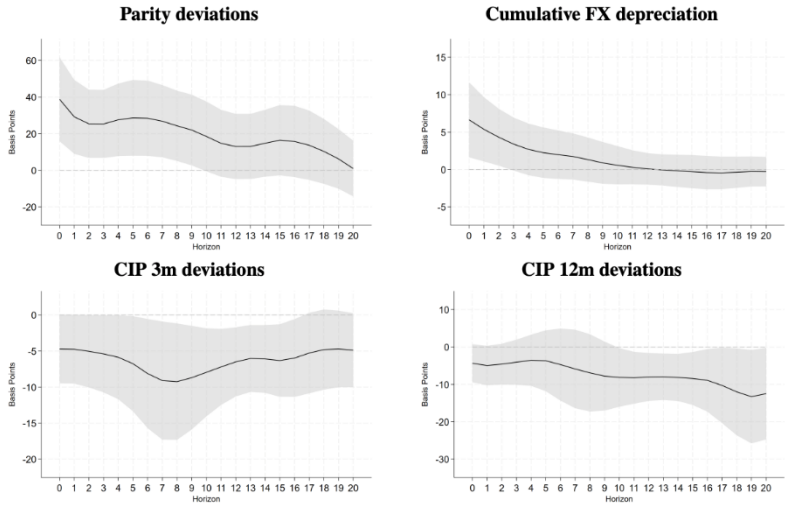
Note: This figure shows the cumulative sum of daily net inflows from fiat currencies into USD-pegged stablecoins (USDT, USDC, DAI, and BUSD), measured in billions of USD. The sample covers all exchanges and fiat currencies available in our dataset from 2021 to 2025.
Source: Authors' calculations based on Crypto Compare exchange-level trading data.

Source: IMF

A phenomenon running counter to this trend is unfolding in the digital currency space: the spread of dollar stablecoins. According to a 2026 joint study by the BIS and IMF, cumulative net inflows from fiat currencies into USD-pegged stablecoins including USDT, USDC, DAI, and BUSD expanded more than fourfold, from approximately $20 billion in early 2024 to roughly $95 billion in early 2026.

What is notable is that the largest share originates not from USD or EUR but from emerging market currencies. From an emerging market perspective, when domestic residents exchange KRW, baht, or rupees for USDT or USDC, the equivalent amount of domestic-currency deposits is converted into US short-term government bonds or MMFs, the reserve assets of stablecoin issuers. From the individual's perspective, this is holding a dollar-denominated digital asset; from a macroeconomic perspective, it is a structure in which domestic currency is drawn into dollar and US bond liquidity via stablecoin issuers.

Figure 5: Effect of a one percent increase in instrumented stablecoin net inflows.



Source: IMF

Stablecoin-driven capital outflows are not merely asset movements; they are events that deliver actual shocks to FX markets. The same BIS and IMF study used data on four USD-pegged stablecoins and 27 fiat currencies to estimate causal relationships, confirming meaningful responses in key FX market indicators when stablecoin net inflows increase 1% exogenously. The results fall into three categories.

1. **A dollar scarcity premium appears immediately:** A 1% increase in stablecoin net inflows widens the parity deviation by approximately 40 basis points immediately after the shock, converging gradually over the following 20 days. Parity deviation is defined as the difference between the implicit exchange rate for buying dollars through stablecoins and the spot FX rate at the same time; a positive spread means buying dollars through the stablecoin channel is more expensive than through the FX market. Accumulated stablecoin conversion demand exerts a direct causal effect on the dollar price in the FX market, immediately raising the cost of acquiring dollars.

2. **The domestic currency actually depreciates:** Under the same shock, the domestic currency depreciates by 5-7 basis points in the short term. Cumulative FX depreciation measures the depreciation pressure that domestic residents' stablecoin conversion demand places on the FX market. The effect does not persist long, but the data confirms the causal relationship: aggregated individual conversion demand actually moves exchange rates.

3. **Dollar funding costs rise over the long term:** The 3-month covered interest parity (CIP) deviation widens by approximately -5 to -10 basis points; the 12-month

deviation widens to -10 to -12 basis points, and the 12-month effect actually accumulates further over time. A CIP deviation measures how much more expensive it is to synthetically obtain dollars by borrowing domestic currency and using FX swaps compared to borrowing dollars directly; a wider negative deviation means synthetic dollar funding is more costly. Pressure on the country's dollar funding market does not end as a short-term shock but becomes structurally embedded over the long term.

These results show that stablecoin conversions no longer remain as transactions purely within the digital asset market. They transmit into actual dollar demand in FX markets and affect real exchange rates, dollar funding costs, and currency-specific liquidity. The fact that the 12-month CIP deviation effect accumulates over time suggests that digital dollarization can exert long-term pressure on emerging markets' dollar funding structures and monetary policy autonomy.

This phenomenon, termed digital dollarization, is also being reinforced at the policy level. The GENIUS Act, effective July 2025, restricted dollar stablecoin reserve assets to US short-term government bonds, cash, and central bank deposits while mandating monthly disclosures and annual audits, providing federal legal grounding for this structure. The equation that dollar stablecoin expansion equals expansion of US government bond demand has been fixed into law.

4.1.3 CBDCs and Deposit Tokens: Settlement Infrastructure Where the Dollar Has No Role

In this context, the move to digitize domestic currencies through CBDCs and deposit tokens becomes the fourth front of de-dollarization. Where the previous three fronts attempted to reduce the dollar's share within existing financial infrastructure, this fourth front is an attempt to build settlement infrastructure in which the dollar has no role from the outset. Where CIPS replaces the dollar with the yuan within the existing correspondent banking structure, CBDC cross-border platforms such as mBridge change the settlement structure itself to distributed ledger-based real-time payments. This attempt is becoming increasingly explicit across geopolitical lines.

- **China:** CIPS is being linked to e-CNY to extend digital yuan payments to Belt and Road countries and Africa. On mBridge, e-CNY already processes over 95% of transactions.

- **Saudi Arabia and UAE:** Both have developed joint CBDCs and joined mBridge. Even oil-exporting countries of the petrodollar system are opening dollar bypass channels in digital payments.

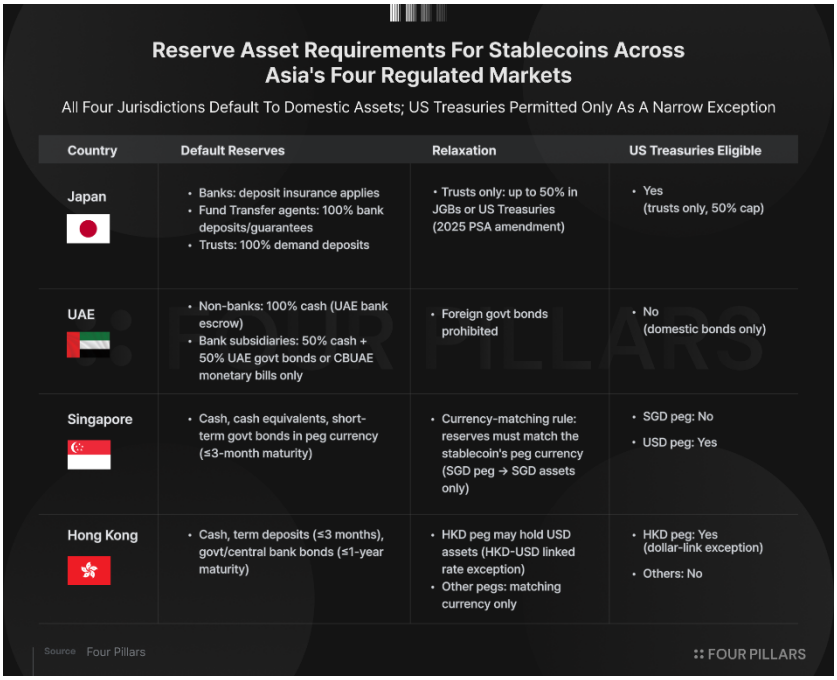
- **India:** The RBI proposed building a CBDC interconnection system among member states at the BRICS summit.

If the goal in cross-border settlement is de-dollarization, however, there is no structural reason it must be a CBDC. Privately issued domestic-currency stablecoins could functionally serve the same role. Yen stablecoins and SGD stablecoins can also process cross-border settlement on public blockchains.

The reason the path narrows to CBDCs nonetheless is that the incentives of private stablecoin issuers are difficult to align with the de-dollarization objective. Stablecoin issuer revenues come from reserve asset management, so their incentives naturally gravitate toward US government bonds, which offer the deepest liquidity and highest yields. In this case, contrary to the original intent of defending monetary sovereignty, domestic liquidity ends up being drawn into the US Treasury market.

Conversely, mandating that reserve assets be held only in domestic government bonds and domestic-currency cash narrows the profitability and liquidity management flexibility of issuers, making it difficult for the market to form in the first place. From the perspective of policymakers with de-dollarization goals, CBDCs and deposit tokens designed within central banks and the banking system are a more stable option than privately issued stablecoins.

Asian countries are aware of this dilemma and are controlling US Treasury exposure through stablecoin reserve asset regulations. This stance is visible in the reserve asset requirements of the four Asian countries that have established independent stablecoin legal frameworks:

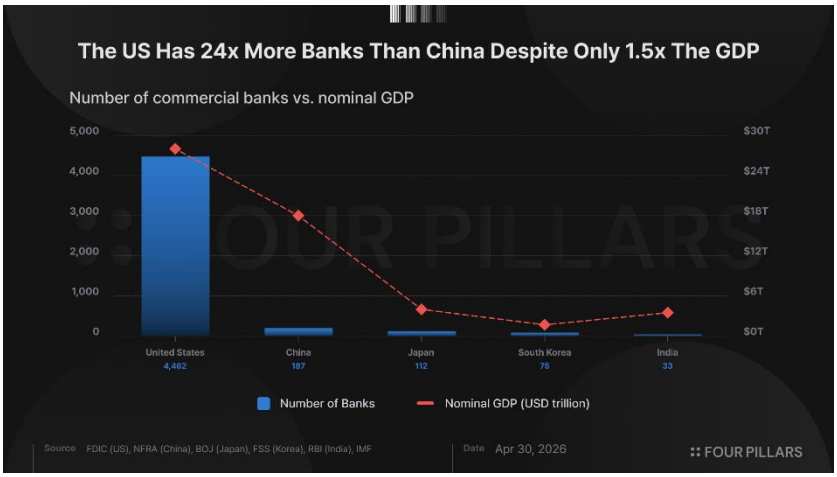


Excluding Hong Kong, whose currency is dollar-pegged, and Singapore, which permits multi-currency issuance, the pattern of defaulting to domestic-currency deposits and domestic government bonds is common across the others. Singapore also restricts SGD-pegged stablecoins to SGD-denominated assets only, recognizing US Treasuries as eligible assets only when issuing USD-pegged stablecoins. Japan's 2025 PSA amendment allowed trust-type issuers to include US Treasuries, but only up to a 50% limit, a partial and constrained relaxation. The UAE restricts even fully bank-owned subsidiaries to domestic government bonds only, excluding US Treasuries. The spectrum runs from full restriction to partial permission, but the underlying disposition to limit US Treasury holdings in reserve assets is common.

4.2
Reason 2: Structural Differences in Banking Systems and Payment Infrastructure

The background to stablecoins expanding into the real economy in the US includes the fragmentation of payment infrastructure. Roughly 3,900 banks operate under different state laws, interbank settlement remains constrained by business days and hours, and the adoption of FedNow, the public instant payment infrastructure, is still in early stages. Stablecoins emerged as a private settlement layer that bypasses this friction. Asia's banking systems and payment networks, however, start from a different position. This difference shapes the form of digital money.

4.2.1 Banking Systems: Fragmentation in the US vs. Concentration in Asia



The US financial system was designed from the founding with decentralization as its premise. In the early republic, Hamilton envisioned a British-style central bank, but Jefferson opposed the concentration of federal power and argued for a state-level distributed model. US banking regulation operated at the state level for a long time, and banks were restricted from opening branches in other states.

As a result, providing financial services in a new region required establishing a new bank outright rather than an existing bank expanding its branches. This structure produced approximately 30,000 banks in the 1920s. Interstate branching was permitted in 1994, but after more than a century of fragmentation, the US still has roughly 3,900 commercial banks operating under different state laws. The contrast is striking: Japan (the world's fourth-largest economy by GDP) has 112 banks; China (second-largest) has 187. US GDP is roughly six times Japan's and about 1.5 times China's, yet the US has 37 times and 22 times as many banks respectively.

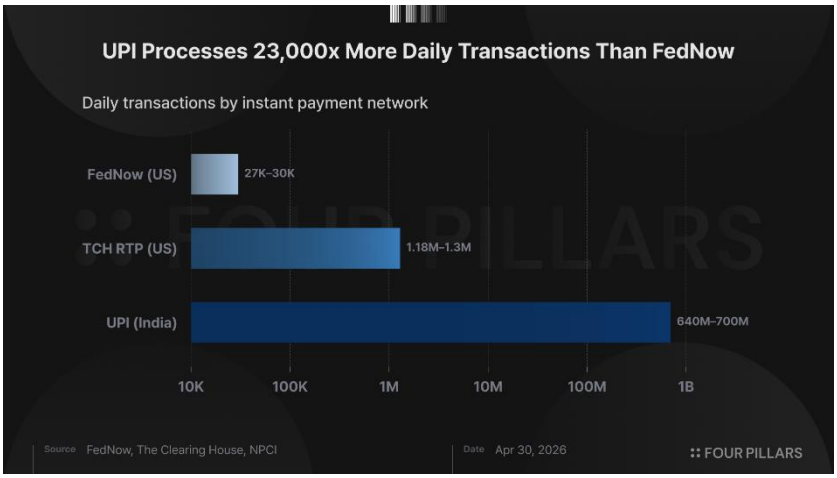
Asia, by contrast, is closer to a structure of a small number of large banks combined with strong central regulators. Korea's five major commercial banks hold over 70% of total banking assets; Japan's three megabanks hold close to half; India's State Bank of India alone accounts for roughly 23% of total deposits. In China, the four major state-owned banks collectively dominate global asset rankings, functioning as the backbone of the banking system.

Asia's banking system is characterized by asset concentration in a small number of large institutions, directly supervised by central regulators such as the Bank of Korea, BOJ, PBOC, and RBI. Policy transmission channels are short and regulatory enforcement operates quickly across the system. In the US, implementing the same policy requires approximately 3,900 banks operating under 50 different state laws to respond individually. This fundamental structural difference shaped the form of payment infrastructure, which in turn produces different choices in digital money.

4.2.2 Payment Infrastructure: US Payment Inefficiency vs. Asia's Integrated Networks

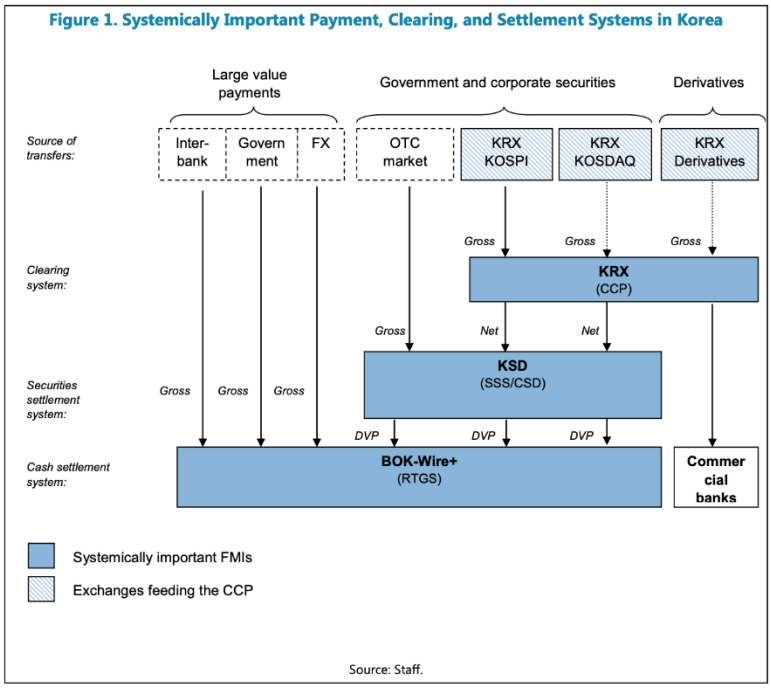
The difference in banking systems is directly reflected in payment infrastructure. The thousands of independent banks and distributed regulatory authority in the US made political consensus for building integrated clearing infrastructure difficult, and the result appears throughout the payment system as friction in time and cost.

Interbank transfers take one to three business days via ACH, and Fedwire costs around $20-50 per transaction. ACH is a batch settlement system built in the 1970s, and Fedwire operates only during business hours, meaning interbank settlement stops on weekends and holidays. From the user's perspective, card payments appear available 24/7, but this is because card networks only process authorization immediately. Actual fund settlement goes through ACH cycles on business days, so merchants typically receive weekend revenues two to three days later.



The Federal Reserve launched FedNow for 24/7 real-time interbank transfers only in 2023. It is functionally similar to Korea's KFTC shared network or India's UPI, but adoption has been far slower. Participating institutions stood at roughly 1,500 as of end-2025, less than half of all banks, and quarterly transaction volume is around 2.1 million. Compared to India's UPI processing 19 billion transactions per month, this is in the earliest stages.

Behind the slow adoption is a conflict of interests between large banks and public infrastructure. In 2017, The Clearing House, involving large banks including JPMorgan, Bank of America, and Wells Fargo, launched its own instant payment network RTP first, preempting the market. Large banks were therefore reluctant to join the Fed's public system, as it could render their existing RTP infrastructure investment irrelevant. Smaller banks excluded from RTP refused to depend on the large bank-dominated private network and demanded a separate public network. FedNow is the late-arriving result of this deadlock.



Source: IMF

Asia, by contrast, built integrated payment networks early. Korea is an example: the Korea Financial Telecommunications and Clearings Institute (KFTC) processes interbank fund transfers through a shared network, with final settlement in Bank of Korea accounts. Whether a user sends via KakaoPay or Toss, the transfer flows instantly through the same banking network.

Open banking introduced in 2019 was decisive. Previously, a fintech providing remittance services had to establish individual contracts with each bank, but open banking opened the KFTC shared network as a standard API. Fintechs can now access all bank accounts through a single entry point, and regardless of which app the user uses, remittances flow through the same infrastructure with net settlement in Bank of Korea accounts.

India's UPI and China's NetsUnion have similar two-tier structures. In India, NPCI under the RBI operates UPI, and private apps such as Google Pay, PhonePe, and Paytm compete on top of it. In China, Alipay and WeChat Pay divide over 90% of mobile payments, but the PBOC established NetsUnion in 2018 to block third-party payment providers from connecting directly to banks and standardized all flows through a single clearing institution.

While the US delayed instant payment network adoption between RTP and FedNow, Asia completed payment network integration through a model of placing private operators on top of a central hub.

4.2.3 Asian Stablecoin Payments: The Inefficiency of Solving Already-Solved Problems

In conclusion, the difference in banking systems and payment rails produces different choices in digital money. In the US, stablecoins emerged as a private settlement layer between a fragmented banking network and slow instant payment adoption. The properties of stablecoins, 24/7 real-time settlement, fees of a few cents per transaction, and direct wallet-to-wallet transfer without cross-app compatibility, precisely bypass US payment friction.

Real payment infrastructure is also moving in this direction. Stripe offers merchants USDC payments at a fixed 1.5% fee, guaranteed instant settlement without weekends or holidays at half the cost of card payment fees. Shopify has introduced USDC payments for merchants in 34 countries, and DoorDash is introducing stablecoin rails for merchant and courier settlement in over 40 countries through its payment-dedicated blockchain Tempo. Stablecoin integration into real payments in the US is not a vague prospect. It offers merchants clear adoption incentives in cost and speed.

In Asia's major economies, the same logic applies more weakly. In an environment where UPI provides free real-time payments and Korea's open banking enables instant transfers from any app, stablecoins cannot replace domestic payment networks on the value proposition of "faster and cheaper" alone. Central clearing institutions and large bank networks already function as integrated settlement layers.

Digital currency necessity in Asia therefore emerges from a different point than payment speed: conditional payments, purpose tracking, atomic settlement, and tokenized asset settlement, all functions that conventional bank transfers struggle to implement. The question is which form of digital money delivers these functions.

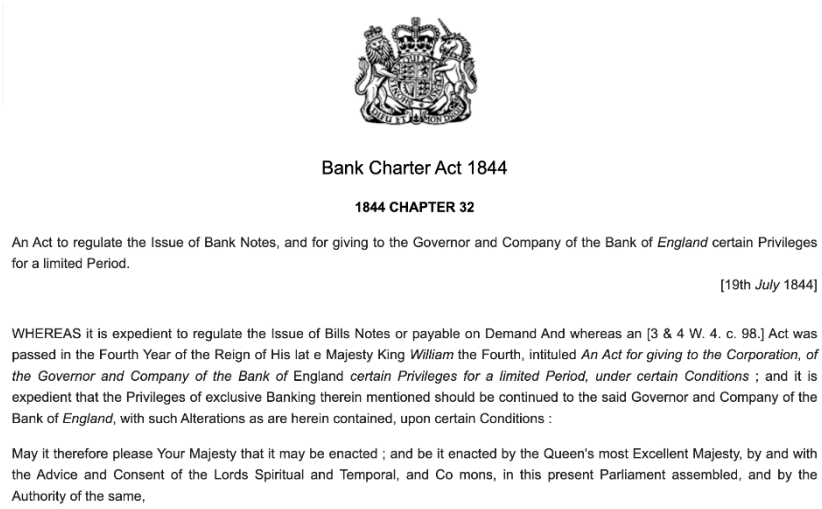
At this point, CBDCs and deposit tokens are the most natural convergence from the perspective of Asian policymakers. Since central bank single clearing hubs and a small number of large banks with nationwide reach already exist, merchants and users do not need to build separate acceptance channels; FX regulation, KYC/AML, depositor protection, accounting treatment, and bank reconciliation can all be handled within existing frameworks.

Domestic-currency stablecoins are functionally possible. However, for private stablecoins to enter retail payments, on-ramps, off-ramps, custody, redemption, and compliance structures must be built separately for both merchants and users, in addition to the existing card, bank, and VAN/PG flows. This amounts to adding another separate layer on top of already integrated infrastructure, an inefficiency of solving problems that are already solved.

This difference is why stablecoins are spreading as a new private settlement layer filling gaps in US payment infrastructure, while CBDCs and deposit tokens, the tokenized versions of existing integrated payment networks, become the more natural choice in Asia. As discussed below, stablecoins retain advantages in certain areas, but those areas are not domestic payment network replacement. They are closer to external networks that permissioned infrastructure cannot easily reach: cross-border liquidity, public chain access, and direct wallet-to-wallet transfers.

4.3
Reason 3: Institutional Friction, Stablecoin Was a Bug to Begin With

If the first two reasons addressed geopolitics and financial system differences, the third is more fundamental. From the perspective of the existing banking system, stablecoin w a bug from the start. At least within the modern financial system, where money issuance has operated as a licensed business. The emergence of new forms of money as technology advances is a natural development, but the social costs of friction with the existing system are difficult to avoid.



Bank Charter Act 1844

1844 CHAPTER 32

An Act to regulate the Issue of Bank Notes, and for giving to the Governor and Company of the Bank of *England* certain Privileges for a limited Period.

[19th *July* 1844]

WHEREAS it is expedient to regulate the Issue of Bills Notes or payable on Demand And whereas an [3 & 4 W. 4. c. 98.] Act was passed in the Fourth Year of the Reign of His lat e Majesty King *William* the Fourth, intituled *An Act for giving to the Corporation, of the Governor and Company of the Bank of* England *certain Privileges for a limited Period, under certain Conditions* ; and it is expedient that the Privileges of exclusive Banking therein mentioned should be continued to the said Governor and Company of the Bank of *England*, with such Alterations as are herein contained, upon certain Conditions :

May it therefore please Your Majesty that it may be enacted ; and be it enacted by the Queen's most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Co mons, in this present Parliament assembled, and by the Authority of the same,

Source: Legislation.gov.uk

The modern monetary system has operated for at least 180 years, since the UK Bank Charter Act, on a structure where central banks supply base money, commercial banks create credit, and regulators oversee these flows. Stablecoins, by contrast, are an exception that arose organically outside this structure. Privately issued money that no government designed or licensed became embedded in the global payment system, and only after the US began post-hoc formalization through the GENIUS Act did stablecoins start to be recognized as a legitimate form of money.

- **2014, USDT launch:** Tether issued USDT to bypass the friction of dollar deposits and withdrawals for Bitfinex traders. Initially, it was nothing more than a settlement tool between exchanges.
- **2018, USDC launch:** Circle and Coinbase issued USDC jointly. Regulatory-friendly positioning attracted institutional capital.

- **2020-2021, DeFi Summer:** Alongside the growth of DeFi protocols including Compound, Aave, and Curve, stablecoins established themselves as the base currency of onchain liquidity. USDT/USDC market cap increased more than tenfold in a single year.

- **2025, market cap surpasses $230 billion:** Transaction volume exceeded Visa's global processing volume, and the GENIUS Act passed, formalizing US post-hoc legalization.

Even the US initially treated stablecoins as a threat that should not be brought into the institutional monetary system. Looking back, from the late 2010s through 2024, US regulators repeatedly attempted to deny the existence of stablecoins or block their issuance:

- **2019-2022, Libra/Diem collapse:** When Facebook announced Libra, a global stablecoin pegged to a currency basket, Congress, the Treasury, and the Federal Reserve uniformly opposed it. Even after scaling back to a single dollar-pegged Diem, the Fed refused to approve banking partners, and the project was completely abandoned in 2022.

- **2022, Presidential Working Group (PWG) report:** The Biden administration recommended to Congress that stablecoin issuance be restricted to FDIC-insured banks, a proposal that would have effectively excluded non-bank issuers such as Tether and Circle from the market.

- **2022-2024, SEC's unregistered securities stance:** SEC Chair Gary Gensler consistently argued that "reserve-backed stablecoins are similar to money market funds and therefore subject to securities law." All stablecoin issuance in the US would have been illegal without SEC registration.

- **2023, BUSD issuance halt:** The New York Department of Financial Services (NYDFS) ordered Paxos to stop new BUSD issuance. The same day, the SEC sent Wells notices treating BUSD as an unregistered security, and the stablecoin, which had a market cap of $23 billion, effectively ceased to exist within a year.

4.3.2 US Post-Hoc Patch: A Case of Absorbing a Fait Accompli Market into the Regulatory Perimeter

When the Trump administration, inaugurated in January 2025, reversed course with pro-crypto policies, the US position flipped entirely. The GENIUS Act passed the same year, legalizing stablecoins under the condition that reserve assets be restricted to highly liquid dollar assets such as US short-term bonds, cash, and central bank deposits. Privately issued money that had been a suppression target was officially incorporated as a new channel for US government bond demand. The result was the convergence of a reality-driven recognition that

a $230 billion market could no longer be left outside the regulatory perimeter and a strategy to absorb it as government bond demand.

US legalization was an advantageous compromise from the government's perspective, but it did not resolve the conflicts with the existing monetary system. The most contentious point is the interest payment provision. The GENIUS Act's explicit prohibition on interest payments by stablecoin issuers was the result of strong lobbying by the major banking sector. The concern is that if stablecoins pay interest, users will shift funds from low-yield bank deposits to USDC earning 4-5%, and a large-scale capital movement would cause banks to lose the deposit base that underlies credit creation.

The White House Council of Economic Advisers (CEA) took the opposing position. The CEA's logic is that stablecoin issuers reinvest reserves in US Treasuries, repo, and money market funds, so even if consumers shift funds to stablecoins, that capital ultimately returns to the banking system. The yield prohibition therefore has minimal effect on expanding lending while the interest income consumers forgo is larger. By its estimates, the additional lending enabled by the prohibition is only $2.1 billion, 0.02% of the $12 trillion total loan book, while the interest income consumers must forgo amounts to $8 billion. The cost outweighs the benefit by a factor of 6.6. The CEA added that with banks holding over $1.1 trillion in excess liquidity, the constraint on system-wide lending is limited.

Potential Deposit Outflow from Community Banks by State					
State	**Community Banks Headquartered in State**	**Community Banks Operating in State**	**Total Deposits Held at Branches**	**Potential Deposit Outflows to Payment Stablecoins**	**Lost Lending to Households and Businesses**
Alabama	93	112	$47 billion	$2.5 billion to $4.9 billion	$1.6 billion to $3.2 billion
Alaska	5	5	$8 billion	$400 million to $800 million	$300 million to $600 million
Arizona	13	38	$10 billion	$500 million to $1 billion	$400 million to $900 million
Arkansas	75	97	$49 billion	$2.6 billion to $5.1 billion	$2.1 billion to $4.2 billion
California	113	135	$168 billion	$8.7 billion to $17.5 billion	$7.7 billion to $15.4 billion
Colorado	66	98	$44 billion	$2.3 billion to $4.6 billion	$1.9 billion to $3.7 billion
Connecticut	28	35	$33 billion	$1.7 billion to $3.5 billion	$1.6 billion to $3.3 billion
Delaware	13	21	$6 billion	$300 million to $700 million	$300 million to $600 million
Florida	83	133	$89 billion	$4.6 billion to $9.2 billion	$3.6 billion to $7.3 billion
Georgia	139	163	$67 billion	$3.5 billion to $6.9 billion	$2.5 billion to $5 billion
Hawaii	5	9	$19 billion	$1 billion to $2 billion	$700 million to $1.5 billion
Idaho	11	18	$9 billion	$500 million to $1 billion	$400 million to $800 million
Illinois	346	377	$200 billion	$10.4 billion to $20.8 billion	$7.9 billion to $15.7 billion
Indiana	90	117	$83 billion	$4.3 billion to $8.6 billion	$3.5 billion to $7 billion
Iowa	235	256	$103 billion	$5.3 billion to $10.7 billion	$4.4 billion to $8.8 billion

Source: American Bankers Association

The American Bankers Association (ABA) countered that the CEA was giving "a precise answer to the wrong question." The real issue is not the effect of the yield prohibition on total lending volume but whether permitting yields accelerates deposit flight from community banks.

The capital reinflows the CEA emphasizes would also likely concentrate in large financial institutions and money markets rather than in the community banks that lost deposits. In that scenario, community banks would need to replace lost deposits with wholesale funding, which translates to higher funding costs, higher lending rates, and credit contraction for small businesses and households. The ABA estimated that if the stablecoin market grows from its current $300 billion to $1-2 trillion, Iowa alone could see a loan reduction of $4.4-8.7 billion.

These conflicts show that while US stablecoin legislation was the product of a fait accompli

market and aligned policy interests in securing government bond demand, it did not resolve the conflicts with the existing banking system.

4.3.3 Asia's Pre-Emptive Design: A Case of Building Within the Banking System from the Start

Asia's starting point is the opposite. Where the US patched a grown stablecoin market ex-post and found the policy incentive of government bond demand in the process, Asia does not yet have a fait accompli stablecoin market. The burden of ex-post adjustment with the existing banking system is therefore smaller. Being in a position to respond with a lag, Asia can build digital money within the banking system from the outset and bypass these conflicts.

From this perspective, the incentive to place private stablecoin issuance on public chains at the center of digital money is limited. It is more natural to preserve the stability of the existing monetary system while bringing only the advantages of tokenization.

That is, CBDCs and deposit tokens that are (1) recorded as liabilities of the central bank or commercial banks, (2) unable to transfer directly between holders, meaning existing regulations such as KYC/AML and sanctions enforcement continue to operate unchanged, and (3) preserve existing monetary policy transmission channels through reserve requirements and rate adjustments, are well-justified from multiple angles.

The most direct effect of this choice is that it preemptively bypasses the conflict with the banking system that appeared in the US. Deposit tokens are bank deposits recorded on a blockchain, so when a user converts deposits to tokens, the funds remain on the issuing bank's balance sheet. The interest payment question is the same. The GENIUS Act's prohibition on stablecoin interest payments was intended to prevent competition with bank deposits; deposit tokens are themselves bank deposits, so the question of interest is handled as an extension of existing deposit rate policy.

National paths differ, but the common thread is designing digital money to circulate within the banking system, reducing the friction of deposit flight and bank disintermediation. China is incorporating e-CNY, which started as a cash-substitute CBDC, into the asset-liability management and deposit insurance framework of commercial banks, absorbing deposit token-like attributes. India's RBI also designed e₹ as non-interest-bearing with holding limits and a two-tier distribution model to avoid direct competition with bank deposits. Japan's DCJPY is operated by private fintech Decurret DCP rather than as state-led public infrastructure, but issuers are commercial banks and it operates within the Banking Act framework.

4.4
Reason 4: Technically, There Is Almost No Implementation Gap

Asian countries are capturing the functional advantages of tokenization through CBDCs and deposit tokens without directly adopting the stablecoin form. The reason this choice is possible is explained from the technical implementation perspective.

The 24/7 settlement, atomic DvP, programmability, and conditional payments frequently cited as advantages of tokenization are not unique attributes of stablecoins. These functions derive from the general properties of distributed ledgers and smart contracts underlying them, not from stablecoins as an upper-level application. USDC settles 24/7 not because it is USDC, but because it is an ERC-20 token deployed on Ethereum. Other tokens on the same ledger can have the same property.

Ultimately, if a distributed ledger with a smart contract execution environment exists, whether the ledger is public or permissioned, and whether the money on top is a CBDC, deposit token, or stablecoin, the implementation gap is not large. The only technical difference reduces to a single point: the openness of ledger access. Whether anyone can run a node and create a wallet (open, as in Ethereum, Solana, Avalanche, etc.) or only pre-authorized participants can access (closed, as in Hyperledger Fabric, Quorum, Corda). Of course this difference creates significant gaps in cross-border scalability and DeFi composability, but for basic functions alone, such as 24/7 settlement, atomic DvP, and conditional payments, both environments can implement them equivalently.

4.4.1 24/7 Settlement

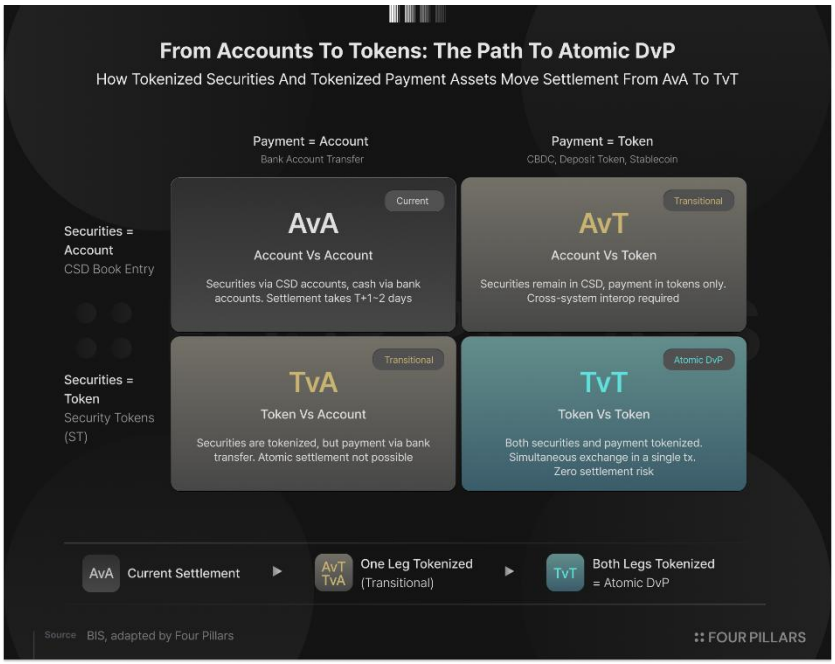
Distributed ledgers confirm blocks through inter-node consensus rather than a central operator's business hours. Block production continues as long as consensus holds, and the concepts of business days, business hours, and clearing cycles do not apply at the protocol level. Unlike conventional RTGS, which is bound to central bank operating hours, and SWIFT, which depends on business-day messaging, settlement on distributed ledgers continues uninterrupted as long as consensus does not stop.

The timing of finality and processing speed differ by chain depending on consensus mechanism. Solana offers fast slot times and finality within seconds; Ethereum has roughly two epochs, around 10 minutes, to finality. Permissioned ledgers also vary from hundreds of milliseconds to several seconds depending on network configuration and consensus mechanism. However, the structure in which a transaction's state is confirmed once consensus holds, and this process repeats continuously as long as nodes are running, is common. No time constraints such as business days or clearing cycles exist at the protocol

level, making 24/7 settlement possible.

24/7 settlement is therefore not exclusive to public chain stablecoins. CBDCs and deposit tokens on permissioned ledgers can implement 24/7 settlement in the same way. The difference is not whether settlement is possible but who can access the ledger and which networks it connects to. This is why 24/7 settlement, which appears to be a technical advantage of stablecoins, is not a function that Asian policymakers must necessarily give up when choosing CBDCs and deposit tokens.

4.4.2 Atomic DvP



Smart contract execution environments process transactions as atomic units. All state changes are either fully reflected or fully rolled back; partial execution is impossible. If asset delivery and payment are bundled into a single transaction, failure on one side nullifies both. This structure enables DvP (Delivery versus Payment) without settlement risk.

The same principle can reduce time-zone risk in FX settlement. Conventionally, separate settlement infrastructure such as CLS (Continuous Linked Settlement) was needed to manage the timing difference between settlement of two currencies, but on a single ledger, the transfer of both currencies is confirmed simultaneously within a single transaction. Settlement risk is handled at the protocol level rather than by a separate intermediary.

Implementation differs by environment. EVM rolls back all state changes in a transaction to a pre-execution snapshot on revert. Canton has validators of involved parties each verify

separately before confirming through a Synchronizer layer; if verification fails, the transaction does not settle. Corda has a notary node verifying for double spending, atomically confirming UTXO state transitions, and failed transactions are not recorded.

DCJPY follows the same principle: the deposit token sub-ledger (Financial Zone) and the security token sub-ledger (Business Zone) are separated, but payment and asset delivery between the two zones are bundled into a single transaction, nullifying both sides if one fails. Atomic DvP is also a property arising from the transaction processing structure of distributed ledgers, implementable equally with CBDCs and deposit tokens on permissioned ledgers.

4.4.3 Conditional Payments

Smart contracts are programs that encode condition-execution pairs into ledger state and process them automatically. Logic such as "transfer if balance exceeds X" or "liquidate if oracle price falls below P" executes without external intermediaries. Financial logic such as escrow, automatic liquidation, conditional vouchers, and dividend distribution can be automated at the code level.

In conventional systems, conditional payments had to be implemented by combining internal bank systems with external triggers (trust companies, escrow agents, etc.), generating operational costs and counterparty risk in the process. Smart contracts integrate condition verification and payment execution within the same code.

Execution environments vary. Ethereum uses Solidity/EVM; Solana uses Rust/SVM; on permissioned ledgers, Quorum operates on EVM and Hyperledger Fabric on Go chaincode. Languages and environments differ, but the ability to encode conditional logic into ledger state is common. Korea's Project Hangang digital vouchers and Singapore MAS's Purpose Bound Money are both examples of conditional payment implementation on permissioned ledgers. Conditional payments are also not a stablecoin-exclusive function but one implementable with CBDCs and deposit tokens given a smart contract execution environment.

4.5
Summary: CBDCs and Deposit Tokens as Internal Settlement Networks, Stablecoins as External Liquidity Networks

The four factors examined in this chapter originate from different layers: geopolitics, payment infrastructure, institutions, and technology. All point in the same direction, however. When Asian monetary authorities design digital money, the default weights toward CBDCs and deposit tokens rather than stablecoins. The reasons in summary:

1. **Digital de-dollarization:** Dollar stablecoin expansion accelerates digital dollarization, in which domestic currency deposits are absorbed into US government bond liquidity. CBDCs and deposit tokens are the countermeasure: building settlement infrastructure in which the dollar has no role. Domestic-currency stablecoins are also possible, but restricting reserve assets to domestic government bonds and domestic-currency cash weakens the profitability of private issuers, making market formation difficult.

2. **Payment infrastructure:** In the US, the fragmented banking network and payment friction provided the backdrop for stablecoin expansion. Asia, by contrast, already operates integrated settlement through single clearing hubs and a small number of large banks. In this environment, stablecoin rails amount to the inefficiency of solving problems that are already solved.

3. **Institutions:** Stablecoins are alien money that arose organically outside the existing monetary system. Friction around deposit flight, interest payments, reserve assets, and redemption obligations is unavoidable. The US patched a grown market ex-post; Asia builds digital money within the banking system from the outset, bypassing these conflicts.

4. **Technology:** 24/7 settlement, atomic DvP, and conditional payments are not stablecoin-exclusive functions but general properties of distributed ledgers and smart contracts. If the same functions can be implemented, CBDCs and deposit tokens, which also maintain central bank liabilities and monetary policy continuity, are the more rational policy choice.

Asia's prioritization of CBDCs and deposit tokens is not purely the result of regulatory conservatism. If monetary sovereignty can be protected, conflicts with the existing banking system avoided, and the functional gap in implementation is small, the reason to place privately issued money on public chains at the center is limited. From a policymaker's perspective, CBDCs and deposit tokens are the safer, more familiar, and more controllable options.

One distinction must be made here, however. The above conclusion is rationality from the policymaker's perspective; it does not mean that stablecoins lack utility. Markets operate by different criteria. Digital money is simultaneously money and a network, and actual adoption is not determined solely by the stability of the issuer. Who can access it, where it circulates, and what assets it can combine with determine its use cases.

At this point, stablecoins remain difficult to replace. CBDCs and deposit tokens have advantages in safety and institutional alignment, but they mostly operate within permissioned networks. Participating institutions must be pre-authorized, and cross-border connections require agreement between central banks and regulators. This structure is strong in areas where trust and control are important, such as public finance execution, interbank settlement, and tokenized securities settlement. In areas where accessibility and composability matter, such as global liquidity, DeFi, and emerging market remittances, it becomes a critical constraint.

Stablecoins' advantages lie precisely on the other side. The moment of issuance on a public chain, wallets, exchanges, DeFi, and payment apps worldwide can simultaneously access it. This is a different path of adoption from CBDCs and deposit tokens, which must connect national permissioned networks one by one.

The coming structure therefore does not simplify to CBDCs and deposit tokens completely replacing stablecoins. Nor is the conclusion that the three currencies coexist side by side sufficient. What matters is which market each currency serves. The next chapter specifies the boundary between the institutional internal market that CBDCs and deposit tokens will absorb and the external network where stablecoins will remain.

5.
OUTLOOK: WHERE DO ASIAN STABLECOINS SURVIVE?

Paradoxically, the more Asian countries tilt their digital currency policies toward CBDCs and deposit tokens, the narrower the stablecoin market becomes, but also the sharper it gets. The coming structure is likely to form not in the direction of one digital currency replacing the entire market, but toward internal settlement networks and external liquidity networks each serving different markets.



Market Where CBDCs And Deposit Tokens Hold The Edge

Settlements Where KYC, FX Reporting, And Bank Reconciliation Cannot Be Separated From The Payment Flow

Market	Use Case	Role of CBDC / Deposit Tokens
Domestic retail payments	• Card, QR, Mobile wallet, Wallet-based payments	Tokenized settlement layer for existing payment networks
Domestic B2B payments	• Supplier payments, Invoice settlement, Recurring vendor payments, Franchise and distributor settlement	Default corporate payment layer
Public fiscal disbursement	• Subsidies, Tax refunds, Disaster relief payments, Government procurement payments	Policy execution tool with conditional payments and use-of-funds tracking
Institutional capital market settlement	• DvP settlement for securities, bonds, funds, and tokenized assets	Permissioned-ledger-based settlement asset
Interbank wholesale settlement	• Final settlement, clearing, and collateral movement between banks and payment institutions	Central bank money-based settlement layer
Regulated cross-border payments	• Trade payments, Import/export settlement, FX-reportable transactions	Settlement asset that satisfies FX and banking network requirements

Source Four Pillars

:: FOUR PILLARS

Given the preceding discussion, the markets that CBDCs and deposit tokens will absorb are relatively clear. These are areas where settlement finality must be recognized on a central bank or bank ledger: domestic retail payments, intercompany payments, public finance execution, interbank wholesale settlement, and tokenized securities settlement. In these markets, KYC/AML, FX reporting, depositor protection, accounting treatment, and bank reconciliation cannot be separated from payment flows.

What determines advantage in this domain is not public chain accessibility but credit position. Deposit tokens are a tokenized form of bank liabilities, so they inherit the existing deposit account, payment supervision, and bank reconciliation framework directly. Private stablecoins can technically provide the same functions, but reserve assets, redemption, custody, accounting, and regulatory reporting frameworks must be built separately.

This market is therefore better understood not as an area technically inaccessible to stablecoins, but as one where settling on bank and central bank liabilities is simply more economical. Stablecoin opportunities arise outside this internal market.



Markets Where Stablecoins Hold The Edge

Where Permissioned Networks Cannot Reach And Open Liquidity Access Matters More Than Credit Position

Market	Use Case	Role of Stablecoins
Global dollar-standard settlement	• Settlement between exchanges, OTC desks, Market makers, Payment providers	Onchain dollar-standard asset
Multi-country platform payouts	• Multi-country payouts to creators, freelancers, drivers, and sellers	Multi-country simultaneous payout instrument
Global digital service settlement	• E-commerce, app store, advertising, SaaS settlement	Global seller receivable asset
24/7 corporate treasury	• Fund reallocation between overseas subsidiaries, exchanges, custodians, and market makers	Off-hours liquidity transfer instrumentc
Dollar-based cross-border B2B	• Overseas supplier payments Dollar settlement legs in trade payments	Correspondent banking bypass settlement asset
Onchain capital markets	• DeFi collateral, onchain FX, repo, RWA settlement	Settlement-capable collateral asset
Agent payments	• AI agent payments, Usage-based billing, Automated micropayments	Settlement-capableWallet- and API-based micropayment assetcollateral asset
Dollar holdings in unstable -currency markets	• Digital dollar holdings to hedge against local currency depreciation	Digital dollar for bypassing capital controls

Source Four Pillars

:: FOUR PILLARS

Conversely, the areas where stablecoins remain are markets that CBDCs and deposit tokens structurally cannot reach. Permissioned networks have limited participants, and cross-border connections require agreement between central banks and regulators. CBDCs and deposit tokens, designed around national currencies and banking networks, cannot easily build distribution networks that simultaneously connect global wallets, exchanges, and platforms.

In these markets, stablecoins' strength is not the replacement of fiat but connectivity to liquidity networks. The moment of issuance on a public chain, wallets, exchanges, DeFi, and payment apps worldwide can simultaneously access it. Issuer credit risk and reserve asset management burdens remain, but in deployment speed and network effects, CBDCs and deposit tokens cannot keep pace.

Three markets remain for stablecoins:

1. **Dollar standard rails:** Global dollar payment and settlement rails where USDC and USDT have already established themselves as the business standard
2. **Multi-country fund movement:** Corporate payment rails that must simultaneously pass through the banking networks and currencies of multiple countries
3. **Onchain capital markets:** Onchain finance connecting tokenized assets as collateral, with payments and settlement linked through smart contracts

These areas are too broad to group under "cross-border" or "onchain" as a single term, however. They divide more precisely into three markets. The reason CBDCs and deposit tokens cannot reach each market differs, and the types of businesses capturing the opportunity also differ.

5.1 Dollar Standard Rail Access: Domestic-Currency Stablecoins Become Gateways to the Global Dollar Network

The first domain is the global business rail where USDC and USDT have already established themselves as the standard. Just as the dollar was the default currency of international payment networks, dollar stablecoins are functioning as the standard settlement unit in public chain-based payments and settlement.

CBDCs and deposit tokens cannot easily replace this domain. They are economical only within their domestic regulatory jurisdiction and banking network. Online finance, global fintech, crypto cards, overseas SaaS, and payment APIs are already aligning their base currencies around USDC and USDT.

Going forward, the default currency of global businesses using onchain infrastructure will be USDC and USDT, not local-currency stablecoins. At this point, domestic-currency stablecoins become gateways to the dollar stablecoin network.

5.1.1 Dollar Stablecoins: The Common Settlement Unit of Global Onchain Business

The structure in which dollar stablecoins are establishing themselves as the standard rail is currently forming in three ways:

1. **Default unit for corporate payments:** Onchain, the default unit for corporate payments is aligning around USDC. Coinbase Business enables companies to send USDC to onchain addresses or email addresses. Even recipients without wallets can onboard via email links and withdraw in local currency.

2. **Card network settlement segment:** Visa has launched USDC settlement in the US, allowing US issuers and acquirers to settle Visa network obligations in USDC. Consumer payments still go through the conventional card authorization network, but USDC enters the settlement segment between issuers and acquirers.

3. **Merchant payments:** PayPal launched "Pay with Crypto" in July 2025, enabling US merchants to receive over 100 crypto assets including BTC, ETH, USDT, and USDC as payment. Payments are automatically converted to PayPal's PYUSD stablecoin or fiat and credited to the merchant's account.

The common thread across the three segments is that dollar stablecoins are used as the settlement unit in the backend of corporate payments, card settlement, and merchant payments. Regardless of what currency the user pays in, the settlement layer of global payment infrastructure is aligning around USDC and USDT.

This does not mean Asian individual users, merchants, and businesses start out holding and paying USDC or USDT directly. The actual starting point remains each country's local currency.

5.1.2 The Role of Non-Dollar Stablecoins

As global settlement units converge on dollar stablecoins, the connection problem with local currencies becomes visible. Users see prices and pay in SGD, JPY, and KRW; merchants recognize revenue in local currency terms; businesses also start from KRW revenues, yen liquidity, and SGD accounts.

This gap is what creates the role for non-dollar stablecoins. Domestic-currency stablecoins function as conversion assets at segments where USDT/USDC-based global settlement is needed. Users pay in local currency, merchants settle in local currency terms, and the connection to dollar stablecoin rails is made only at segments requiring global settlement.

Actual non-dollar stablecoin cases are also moving in this direction:

- **StraitsX:** XSGD operates in a structure where it is directly swapped with USDC in the backend of Southeast Asian payment infrastructure. Users at Grab merchants and Alipay+ stores pay in SGD, but in the global settlement segment, XSGD is converted to USDC for processing. This is a case of a domestic-currency stablecoin positioning itself as an adapter between the SGD payment network and global dollar liquidity.

- **JPYC:** From launch, JPYC pursued Circle's CCTP (Cross-Chain Transfer Protocol) integration, establishing onchain FX routes connecting yen and USDC as a core business. Even if Japanese businesses and users enter in yen, global settlement connects to USDC. JPYC's position in this business domain is closer to a gateway connecting yen-zone liquidity to the USDC network than a globally standard stablecoin.

- **Coins.ph PHPC:** PHPC is a Philippine peso stablecoin that positioned itself from launch as a gateway asset connecting the peso zone to the USD network rather than as a domestic payment alternative. Targeting the approximately $41 billion annual Philippine remittance market, PHPC deployed USDC trading pairs on Solana, Ronin, Polygon, and the Arc testnet.

Of course, if the only goal is exchanging KRW for USDC, no such path is needed; a standard on-ramp suffices. In recurring payment structures, however, each conversion to dollar stablecoins accumulates FX costs, settlement delays, and accounting unit mismatches. Having onchain balances in local currency units allows merchant settlement and subsequent payments to be processed in the same currency unit.

This market ultimately divides into two layers. The global settlement layer goes to USDC and USDT; the user interface and local payment layer is handled by each country's currency stablecoins. The realistic opportunity for Asian domestic-currency stablecoins lies here: not becoming the standard global currency, but becoming gateways connecting local currency flows to the dollar stablecoin network.

5.2
Multi-Country Payments: Onchain FX Connecting Local Currencies to Global Settlement

The second domain is the multi-country corporate payment market. This differs from the previous case where the dollar is the endpoint in one direction. The core is bidirectional: connecting multiple local-currency zones and payment networks into a single flow.

A multinational company, for instance, receives revenue in KRW in Korea, must pay suppliers in Southeast Asia in local currency, and manages intermediate settlement in dollar terms. Revenue generated by a Japanese subsidiary must be settled on a US headquarters basis, and a portion may need to be paid to Filipino contractors. In this case, originating currency, intermediate settlement asset, destination currency, and local banking or payment network must all be combined within a single flow.

CBDCs and deposit tokens are effective when participants are within the same regulatory jurisdiction and banking network: domestic retail payments, intercompany settlement, public disbursement, and final interbank payments. However, the performance required in multi-country corporate payments is connectivity that actually completes payments across multiple currency zones.

Non-dollar stablecoins can become endpoints between each country's local currency and dollar stablecoins. Businesses manage intermediate settlement in dollar stablecoins and process local receipt and payment at both ends in KRW, yen, peso, and real stablecoins. Non-dollar stablecoins' competitive advantage in this market is not independent monetary standing but the ability to connect global dollar stablecoin rails with local payment networks.

5.2.1 Existing Structure: The Fiat-Stablecoin-Fiat Sandwich

The simplest current structure for stablecoin-based cross-border payments exchanges fiat and dollar stablecoins at both ends:

Originating fiat → USDC/USDT → Destination fiat

This structure is faster than traditional correspondent banking networks. USDC or USDT moves in the intermediate segment without being tied to weekends and business hours, and counterparties need not belong to the same banking network. Dependence on correspondent banking chains and pre-funded accounts also decreases.

However, this sandwich structure of placing dollar stablecoins between fiat currencies is a half-solution. The blockchain only solves the segment where the token is transferred in the

middle; the actual costs and risks arise at the on-ramps and off-ramps at both ends. Dollar-denominated currencies alone are insufficient: payments originate in domestic currency, and recipients need local currency they can actually use.

Payment does not therefore end when stablecoin transfer is complete. Converting stablecoins to local currency at the destination and depositing to the recipient through local payment networks is required for economic completion. Thin liquidity widens off-ramp spreads, extends payment times, and tightens pre-funding conditions. The bottleneck of this solution is not blockchain transfer speed but destination currency liquidity.

5.2.2 Onchain FX: When Local Currencies Also Come Onto the Ledger

The structure emerging to reduce this bottleneck is onchain FX. The key is placing local currencies themselves on the ledger in stablecoin form.

In existing paths, destination currencies remain within bank accounts and local payment networks, so even as stablecoins move onchain, the final local currency conversion depends on offchain liquidity providers. Spreads, payment times, pre-funding costs, and compliance costs arise in this segment. If domestic-currency stablecoins exist, the destination currency itself becomes an exchangeable asset on the ledger. In this case, the transfer path can extend as follows:

Originating fiat → Originating currency stablecoin → USDC/USDT (as needed) → Destination currency stablecoin → Destination fiat

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This may appear to add complexity, but placing destination currency liquidity onchain enables selection of better settlement paths for each country and currency combination. If direct liquidity is sufficient, the dollar stablecoin can be bypassed (KRW → JPYC); if insufficient, USDC or USDT can be used as intermediate routing assets. Moreover, since both assets are onchain, Payment versus Payment (PvP) transactions also become possible.

Real markets are also finding product-market fit in this direction:

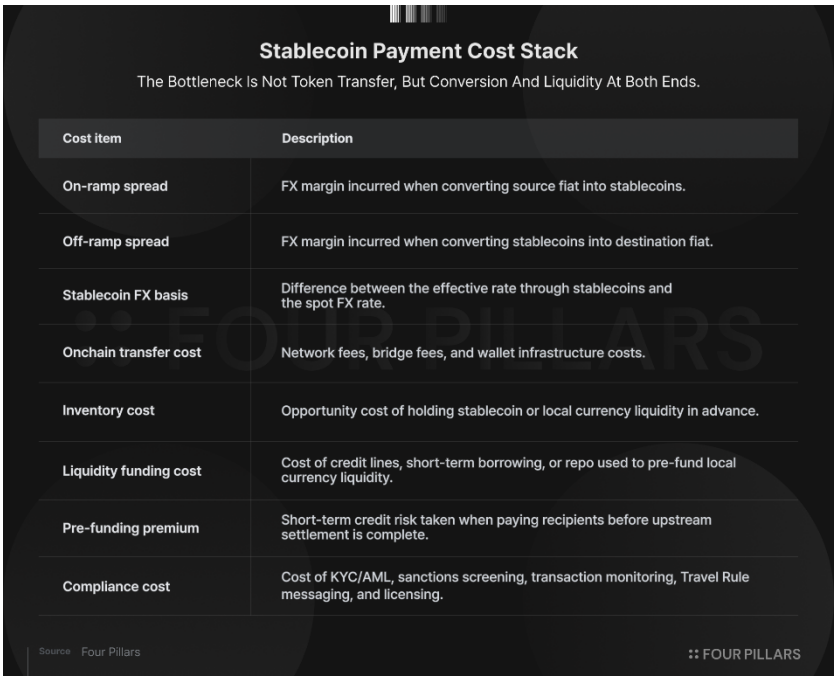
- **Bitso:** Bitso's subsidiary Juno has issued Mexican peso stablecoin MXNB and Brazilian real stablecoin BRL1, connecting the two assets via USDC (BRL → USDC → MXNB).
- **StableFX:** Circle is also servicizing multi-currency FX routing through StableFX. StableFX routes stablecoins across multiple currency zones (USDC, EURC, JPYC, KRW1, etc.) on a single FX engine. USDC sits at the center of global liquidity, and domestic-currency stablecoins handle the entry, conversion, and redemption layer for each region.

- **Ripple Payments:** Ripple Payments is a cross-border payment infrastructure enabling banks, fintechs, and businesses to send funds to multiple countries and pay in local currency. It routes RLUSD, USDC, USDT, EURC, and local-currency stablecoins across over 60 regional markets.

5.2.3 Market Opportunity: Costs Arising in Conversion Segments

Where does market opportunity arise in onchain FX? The core is not the issuance volume of domestic-currency stablecoins but the conversion segment. The process in which KRW deposits convert to KRW stablecoins, KRW stablecoins exchange with USDC or JPYC, and then flow down to a yen or peso payment network to be completed as actual payments is the relevant domain. Completing this flow as real payments requires inter-currency stablecoin liquidity, fiat redemption capability, and local payment network connections.

The cost structure must also be viewed from this perspective. The segments that can be priced include the costs of issuance, routing, redemption, inventory management, compliance, and pre-funding.



Stablecoin Payment Cost Stack

The Bottleneck Is Not Token Transfer, But Conversion And Liquidity At Both Ends.

Cost item	Description
On-ramp spread	FX margin incurred when converting source fiat into stablecoins.
Off-ramp spread	FX margin incurred when converting stablecoins into destination fiat.
Stablecoin FX basis	Difference between the effective rate through stablecoins and the spot FX rate.
Onchain transfer cost	Network fees, bridge fees, and wallet infrastructure costs.
Inventory cost	Opportunity cost of holding stablecoin or local currency liquidity in advance.
Liquidity funding cost	Cost of credit lines, short-term borrowing, or repo used to pre-fund local currency liquidity.
Pre-funding premium	Short-term credit risk taken when paying recipients before upstream settlement is complete.
Compliance cost	Cost of KYC/AML, sanctions screening, transaction monitoring, Travel Rule messaging, and licensing.

Source Four Pillars

:: FOUR PILLARS

Players filling this cost gap are also emerging in the market. They currently divide into two main types:

1. **Stablecoin FX and routing providers:** Providing quotes, APIs, and settlement workflows between fiat and stablecoins, enabling global businesses to convert multiple currencies and stablecoins from a single interface. OpenFX and XFX are

representative examples.

2. **Regional infrastructure and local liquidity providers:** Providing on-ramps, off-ramps, and local payments based on local bank accounts, instant payment networks, regulatory licenses, and local-currency liquidity. Bitso has strengths in LatAm; Yellow Card in over 20 African countries; Coins.ph in the Philippine payment network.

CBDCs and deposit tokens are efficient for payments and settlement within a single currency zone, but have limits in bundling multiple countries' currencies, banking networks, and payment infrastructure into a single flow. In this domain, non-dollar stablecoins function as bridge assets between global dollar rails and local payment networks, and the market opportunity in the conversion segment connecting each currency zone's liquidity, redemption, local payment, and compliance is worth noting.

5.3 Onchain Capital Markets: Domestic-Currency Capital as a Cash Leg Connecting to Onchain Credit Markets

The third domain is onchain capital markets. The issue here is not whether functions such as 24/7 settlement, atomic DvP, and conditional payments can be implemented. These functions can be implemented with CBDCs and deposit tokens too. The difference arises from which assets can directly meet onchain credit liquidity.

This difference originates not from technology but from legal character. Deposit tokens are bank liabilities, and holders and transferees must be within the bank's regulatory scope. Stablecoins, by contrast, are transferable onchain payment assets issued on the basis of reserve assets. Even on the same chain, some assets can enter liquidity pools and others cannot.

5.3.1 Two Markets in the Onchain Capital Market

Depending on the legal character and purpose of payment assets, the markets where tokenized assets circulate are currently dividing into two major streams.

- **Permissioned institutional settlement efficiency:** Singapore's Project Guardian is the representative case. This MAS-led program launched in 2022 with participation from over 40 institutions including DBS, JPMorgan, and Standard Chartered. The transactions executed here are closer to settlement efficiency improvements,

processing the FX, bond, repo, and fund transactions institutions already conducted faster and at lower cost, rather than a market seeking new demand. Transaction participants are all licensed institutions, transaction sizes are large, and settlement finality and regulatory alignment matter more than speed. In this domain, deposit tokens face no structural barrier to functioning as the cash leg; from a regulatory alignment perspective, they are actually more natural.

- **Onchain credit markets:** Markets such as Morpho (permissioned vaults) and Aave Horizon are closer to this category. The demand is different. Borrowers seek liquidity without selling ETH, wBTC, tokenized government bonds, or tokenized MMFs; suppliers seek higher yields than traditional finance by deploying stablecoins. JPYC's integration into Morpho's JPYC vault and Secured Finance's JPYC fixed-rate lending market also falls into this category. While not fully permissionless given the focus on qualified investors, the structure of depositing collateral assets and borrowing or supplying cash-like assets on the other side operates onchain. In this domain, transferable stablecoins rather than deposit tokens are better suited as the cash leg.

Non-dollar stablecoin opportunities arise in the second market. CBDCs and deposit tokens are suited for permissioned institutional settlement efficiency but face significant constraints in becoming the common cash leg for onchain credit markets.

5.3.2 The Limits of Deposit Tokens: Bank Liabilities Cannot Enter Liquidity Pools

Tokenized government bonds and tokenized MMFs are moving beyond held-to-maturity positions into onchain collateral assets. BUIDL, USYC, USDY, and OUSG are being connected to exchange margins, collateral lending, institutional management, and redemption flows. In this structure, tokenized assets are collateral. The cash leg is the payment asset that buys, sells, redeems, and moves these collateral assets to other positions.

The cash leg entering onchain capital markets must therefore be more than just a final settlement asset. It must be depositable into liquidity pools, usable as the borrowing asset in collateral loans, and instantly transferable at the time of liquidation and redemption. At this point, the difference between deposit tokens being difficult to incorporate into onchain credit markets and stablecoins being possible becomes apparent.

The reason lies in the legal character of deposit tokens:

1. **Counterparty constraints:** Deposit tokens are bank liabilities. Sending a token to someone is equivalent to the creditor of the bank's liability changing in the bank's ledger. Banks need to know who the creditor of their liabilities is. The moment a smart contract such as a Morpho vault or Aave pool holds a deposit token, the bank

cannot identify whether it can treat this smart contract as a customer, who the actual rights-holder is, or whether the transfer satisfies regulatory requirements.

2. **Balance sheet treatment:** If an institution deposits tokenized government bonds as collateral and borrows deposit tokens, these deposit tokens are a claim on the issuing bank. To recognize this claim as an asset in accounting, the legal relationship with the issuing bank must be clear. However, deposit tokens received indirectly through a DeFi protocol can blur the relationship between the holder and ultimate rights-holder.

3. **Redemption path severance:** The value of a deposit token derives from the issuing bank's promise to redeem at par 1:1 in cash. For this redemption to be possible, the holder must be identified as a customer of the issuing bank. If a DeFi pool holds deposit tokens, the bank must verify the identity and rights of the redemption requester. If this path is unclear, the par maintenance mechanism also weakens.

In practice, JPMorgan's deposit token JPMD has come to public chains where USDC, BUIDL, and USYC already circulate, but is not connected to Morpho or Aave liquidity pools. JPMorgan directly stated that "JPMD will not be appearing on Uniswap anytime soon," and JPMD transfers are restricted to whitelisted institutions. Being on a public chain does not automatically connect to onchain credit liquidity. The legal character of the asset determines the scope of liquidity that asset can reach.

Stablecoins, by contrast, enter onchain credit markets more naturally. Stablecoin issuance is a narrow banking structure in the strict sense: it operates as a token form that separately holds reserve assets of equal size to the outstanding issuance, so the token itself is not recorded as the issuer's liability but operates as a transferable onchain asset representing a claim on reserve assets.

This difference is why stablecoins can directly connect to liquidity pools, collateral lending, liquidation, redemption, and reinvestment flows. The reason JPYC enters Morpho's vault and Secured Finance's fixed-rate lending market, and EURC operates as collateral in Aave, is also here. Not simply because they are on a public chain, but because they are transferable onchain payment assets based on reserve assets rather than bank liabilities.

5.3.3 Non-Dollar Stablecoin Opportunity: The Entry Point for Domestic-Currency Capital into Onchain Markets

The opportunity for non-dollar stablecoins is not in becoming the global standard collateral. It is in becoming the entry point connecting domestic-currency zone capital to global onchain credit liquidity. Market opportunities divide into three streams.

1. **Domestic-currency onchain credit markets:** The JPYC-Morpho vault and

Secured Finance's JPYC fixed-rate lending market are early examples. Here JPYC goes beyond the role of payment asset to become both the supply asset and borrowing asset of a lending pool. Borrowers deposit ETH, wBTC, and tokenized assets as collateral to borrow JPYC; suppliers deposit JPYC to earn yen-denominated yields. If this structure develops, non-dollar stablecoins become the base asset of domestic-currency onchain interest rate markets.

2. **Local fintech onchain yield sourcing:** The model where Coinbase deposits user USDC into Morpho vaults to provide higher yields than traditional bank deposits, already operating with over $1.6 billion in collateral, has the easiest implementation path for Asian fintechs such as GCash, Toss, and GrabFinancial. The most straightforward path is actually converting domestic-currency deposits to USDC in the backend for deployment. However, in this case, onchain yields and dollar exchange rate movements are both reflected. Passing FX risk to users makes it a dollar-exposed investment product; the platform absorbing it incurs hedging costs. If domestic-currency stablecoins develop sufficient borrowing demand and liquidity, local fintechs can build onchain products denominated in KRW, peso, and SGD.

3. **Redemption adapter between local capital markets and dollar liquidity:** When local investors subscribe to or redeem global tokenized assets such as BUIDL or USYC, USDC is ultimately required. The domestic-currency stablecoin ↔ USDC path becomes the entry point. This is the gateway role in payment networks extended into the capital markets domain.

These onchain credit market opportunities clearly appear closer to retail finance than institutional settlement. For the settlement of pre-authorized tokenized securities, a separate CBDC and deposit token-based rail can be built as in current Asian country pilots. However, markets that access onchain credit liquidity or move flexibly between global quality assets and domestic-currency zones are different. These are markets that open only with the stablecoin attribute of being a transferable payment asset.

6.
CLOSING: POLICY INTENT AND MARKETS DO NOT ALWAYS MOVE IN THE SAME DIRECTION

Asia's digital currency strategy ultimately connects to the question of how to manage dollar dependence. This is a question that has recurred since the 1997 Asian financial crisis. Asian countries then maintaining dollar pegs received IMF bailouts as foreign exchange reserves were exhausted, and Japan's proposed Asian Monetary Fund was blocked by US opposition. The self-help measure Asia chose afterward was not escaping the dollar system but accumulating more foreign exchange reserves to endure dependence. The same question has returned with only the path changed. If the 1997 dollar peg pressured monetary sovereignty through the exchange rate system, dollar stablecoins in the 2020s create the same pressure.

Against this backdrop, Asia's policy direction is converging on CBDCs and deposit tokens. This is not purely the result of regulatory conservatism but a choice to bypass the digital dollarization driven by dollar stablecoin expansion, preserve the deposit base and monetary policy transmission channels, and layer tokenization functions onto existing payment networks. Rather than entrusting the next generation of financial infrastructure to privately issued money that is difficult to control, the direction is to absorb it within central bank settlement and the banking system.

Policy intent and markets do not always move in the same direction, however. Businesses, fintechs, exchanges, and asset managers still see opportunities in public chain-based global liquidity, multi-country payments, and onchain credit markets. CBDCs and deposit tokens structurally cannot reach these domains. As the policy center of gravity shifts toward CBDCs and deposit tokens, stablecoin markets narrow, but the positions where they are needed become more clearly defined.

Ultimately, in domestic retail payments, public disbursement, interbank settlement, and institutional capital market settlement, CBDCs and deposit tokens are likely to be more efficient. In Asia, where banking systems are concentrated and integrated payment networks are developed, policy intent is easily reflected in industrial infrastructure, and real markets are also more likely to move in that direction. The position of non-dollar stablecoins targeting this domain head-on will narrow progressively.

In the domains where external liquidity networks connect, however, opportunities remain. The domain of connecting domestic-currency liquidity to dollar stablecoin rails, passing through multiple countries' payment networks, and serving as the cash leg for onchain credit markets is narrow but clearly defined. Asia's digital money is now entering the next stage, where CBDCs, deposit tokens, and stablecoins each redefine their boundaries.

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