

21 Keys to China e-CNY and CBDC

Master the essentials of China e-CNY and CBDC.

CNY



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AML/CFT

Anti-Money Laundering and Countering the Financing of Terrorism regulations for financial integrity.

AML/CFT requires entities to verify identities, report suspicious activities, and comply with FATF standards, with digital assets facing heightened scrutiny via rules like the Travel Rule. In 2025, U.S. proposals mandate record-keeping for crypto transactions over \$3,000.

For digital assets, they prohibit mixers and enforce KYC, as in EU's MiCA framework. Treasury promotes tech for detection, with settlements like Binance's \$4.3 billion fine.

CBDC

A central bank-issued digital currency designed to function as legal tender.

A Central Bank Digital Currency (CBDC) is a digital asset issued and backed by a central bank, functioning as a digital form of a country's fiat currency (e.g., digital USD or EUR). Unlike decentralized stablecoins, CBDCs are fully controlled by central authorities, ensuring stability and regulatory oversight. They aim to enhance payment efficiency, financial inclusion, and monetary policy implementation. Examples include China's e-CNY, with over 180 million wallets by mid-2024, and pilot projects in countries like the Bahamas and Nigeria.

Cross-border Payments

Payments using digital assets to facilitate fast, low-cost international transactions.

Cross-border payments involve using digital assets, particularly stablecoins like USDT and USDC, to transfer value across international borders, bypassing traditional banking systems. Stablecoins enable faster and cheaper transactions compared to legacy systems, which often incur high fees and delays. Widely used for remittances and trade finance, cross-border payments with stablecoins are especially valuable in regions with limited banking infrastructure, offering businesses and individuals a transparent and efficient solution for global commerce.

Currency Sovereignty

A nation's control over its monetary policy and issuance in the digital era.

Currency sovereignty ensures central banks maintain authority amid private digital assets, with CBDCs like digital euro safeguarding against stablecoin dominance. China's e-CNY counters U.S. dollar hegemony, promoting multipolar systems.

In CBDCs, it involves trackable issuance to prevent interference, reducing foreign dependency. Legal frameworks affirm sovereign control over digital money.

Digital Payments

Electronic transfers of value using digital channels, replacing cash.

Digital payments include mobile wallets, cards, and apps, with global volumes projected at \$114 billion in Southeast Asia by 2025. Trends feature AI for fraud detection and blockchain for security, with 86% penetration in China.

In digital assets, they leverage stablecoins and CBDCs for instant cross-border transfers, reducing costs by 40%. Statistics show 38.3% global adoption, driven by e-commerce.

Dual-Offline Payment

A feature allowing transactions without internet for both parties, using NFC or similar tech.

In e-CNY, dual-offline payments enable secure transfers via hardware wallets or apps in no-network areas, syncing later to prevent double-spending. By 2025, this supports remote regions and disasters, mimicking cash resilience with NFC "touch-and-go" for amounts up to RMB 500.

For digital assets, it enhances CBDC usability in inclusion-focused pilots, like China's trials in over 23 cities, reducing digital divide. Transactions remain traceable for AML while providing privacy.

e-CNY

China's digital yuan, a CBDC issued by the People's Bank of China.

The e-CNY, or digital yuan, is a Central Bank Digital Currency (CBDC) issued by the People's Bank of China (PBOC), launched in pilot phases since 2020. Fully backed by the PBOC, it functions as legal tender in digital form, used for retail payments, cross-border transactions, and government services. By mid-2024, e-CNY had over 180 million personal wallets and facilitated billions in transactions, aiming to enhance financial inclusion and reduce reliance on private digital payment systems like Alipay.

Electronic Payment

A digital method for transferring funds without physical cash or checks, using electronic networks.

Electronic payments encompass methods like credit/debit cards, ACH transfers, and mobile wallets, allowing instant fund transfers between parties via platforms such as PayPal or Venmo. In 2025, global electronic payment volumes exceed \$10 trillion annually, driven by e-commerce growth and reduced cash usage, with key components including payment gateways, processors, and security protocols like encryption.

In digital asset ecosystems, electronic payments integrate with blockchain for cryptocurrency transactions, enabling peer-to-peer transfers without intermediaries, as seen in stablecoin remittances. Examples include wire transfers for large sums and eChecks for business invoices, with benefits like lower costs (averaging 1-2% fees) and faster settlement times compared to traditional banking.

Financial Inclusion

Access to affordable financial services for underserved populations via digital means.

Financial inclusion reaches 1.7 billion unbanked globally through tools like mobile banking and CBDCs, with examples including India's UPI serving 300 million users. CBDCs like e-CNY enable wallet openings without bank accounts, targeting elderly and rural users with offline features.

In digital assets, it fosters DeFi access, reducing costs by 20-30% for remittances, as seen in Bahamas' Sand Dollar for unbanked islands. Over 100 countries explore CBDCs for this, closing gender gaps in account ownership.

Genius Act

Genius Act 2025, an U.S. legislation to regulate stablecoins, focusing on reserves and compliance.

The Genius Act is a proposed U.S. legislative framework aimed at regulating stablecoins, introduced to establish clear rules for issuers regarding reserve management, transparency, and compliance with anti-money laundering (AML) standards. While not yet enacted as of September 2025, it seeks to address regulatory uncertainty in the U.S. stablecoin market, ensuring consumer protection and financial stability. The act targets stablecoins like USDT and USDC, aiming to foster innovation while mitigating risks associated with their widespread adoption.

Hong Kong Stablecoin Bill

Hong Kong Stablecoin Bill, an ordinance passed on May 21, 2025, establishing a licensing regime for issuers of fiat-referenced stablecoins in Hong Kong, which became the Stablecoins Ordinance effective August 1, 2025.

The Hong Kong Stablecoin Bill was passed by the Legislative Council of Hong Kong SAR, China on May 21, 2025, to regulate the issuance of fiat-referenced stablecoins (FRS), a type of digital asset designed to maintain a stable value pegged to fiat currencies like the Hong Kong dollar. Under this regime, administered by the Hong Kong Monetary Authority (HKMA), any entity issuing FRS in Hong Kong or claiming stability referenced to the Hong Kong dollar must obtain a license, with requirements including full backing by high-quality reserve assets, segregation of client funds, robust stabilization mechanisms, and redemption at par value within reasonable timelines. Licensees must also adhere to anti-money laundering (AML) and counter-terrorist financing (CFT) standards, risk management protocols, regular auditing, and fitness and propriety assessments for key personnel.

The ordinance prohibits unlicensed FRS offerings to retail investors and restricts advertisements to only those from licensed issuers, including during a six-month transitional non-contravention period starting August 1, 2025. Pre-existing issuers had until October 31, 2025, to apply for licenses, with the HKMA confirming 36 applications received by the end of September 2025, and initial approvals anticipated in early 2026. This framework aligns with the "same activity, same risks, same regulation" principle, enhancing investor protection and



supporting Hong Kong's digital asset ecosystem while preventing fraud and maintaining financial stability.

As part of broader digital asset regulations, the ordinance complements existing rules for trading platforms and sets the stage for further consultations on over-the-counter trading, custodian services, and a second policy statement on digital assets, fostering sustainable industry growth in Hong Kong.

Legal Tender

Currency mandated by law for debt settlement, including digital forms.

Legal tender like e-CNY holds equivalent value to physical RMB, mandatory for acceptance in China since pilots began. By 2025, e-CNY transactions reach RMB 7 trillion, backed by sovereign credit.

In digital assets, it positions CBDCs as alternatives to cash, with e-CNY's M0 status ensuring zero fees and interoperability. This status drives merchant adoption in 23 pilot cities.

Managed Anonymity

A privacy framework in CBDCs balancing user anonymity with regulatory traceability.

Managed anonymity in e-CNY allows small-value transactions (under RMB 2,000) to be anonymous while enabling authorities to trace high-value ones for AML/CFT. It uses tiered wallets where basic ones require only phone numbers, protecting privacy under China's Personal Information Protection Law.

In digital currencies, this optimizes social welfare by reducing tax evasion, with models showing 10-15% efficiency gains. Similar to EU's digital euro, it employs anonymization tech without full central visibility.

mBridge

A multi-CBDC platform for cross-border payments using blockchain.

mBridge, involving BIS and central banks like PBC, enables real-time settlements, reaching MVP in 2024 with costs halved and times reduced to seconds. By 2025, China's phase includes non-state banks, processing over \$50 million in pilots.

It uses Lego Bricks modular design for FX, AML, and compliance, avoiding currency substitution. In digital assets, it tests wholesale CBDCs for efficient global trade, with 13 similar projects worldwide.

Mobile Payment

Payments made via mobile devices, often using apps or QR codes.

Mobile payments in China, led by Alipay and WeChat Pay, reach 943 million users in 2025, controlling 90% market share with \$40 trillion processed. Features include contactless NFC and P2P transfers.

In digital assets, they support e-CNY integration, enabling CBDC use in daily transactions. Asia-Pacific dominance sees 86% wallet adoption, with AI and regulation shaping growth.

Payment Service Providers (PSPs)

Intermediaries facilitating electronic transactions between merchants and customers.

PSPs like Stripe or Adyen handle payment processing, fraud detection, and compliance, supporting multiple methods including cards and wallets, with global revenues exceeding \$150 billion in 2025. They provide APIs for integration, reducing merchant setup costs by 30-50%.

In FinTech and digital assets, PSPs enable cryptocurrency payments and CBDC integrations, as 75% shift to blockchain solutions amid banking restrictions. They ensure AML/CFT adherence, bridging traditional finance with DeFi.

People's Bank of China (PBC)

China's central bank responsible for monetary policy and issuing the digital yuan.

The PBC, established in 1948, oversees China's financial system, managing currency issuance, interest rates, and reserves, with a key role in piloting the e-CNY since 2014. By 2025, it has expanded e-CNY pilots to over 23 cities, processing transactions worth over RMB 7 trillion, emphasizing two-tier distribution to avoid disintermediation.

In digital assets, the PBC promotes e-CNY as a sovereign CBDC to counter private cryptocurrencies, integrating features like managed anonymity and cross-border trials via mBridge. It established a Shanghai operations center in 2025 to advance e-CNY's global use, supporting multipolar currency systems.

Retail Payment System

Infrastructure for consumer-to-business transactions, handling everyday payments.

Retail payment systems process high-volume, low-value transactions like card swipes or mobile transfers, with components including networks, processors, and POS terminals. In 2025, they include debit/credit cards, ACH, and digital wallets, facilitating \$43 trillion in China alone.

In digital assets, they integrate CBDCs like e-CNY for seamless backups, enhancing resilience against disruptions. Systems like New Zealand's include multiple networks for interoperability.

Settlement Upon Payment

Immediate finalization of transactions upon initiation in digital systems.

Settlement upon payment occurs when funds are transferred and cleared instantly, as in blockchain-based stablecoin transactions like USDC on Visa's platform. In CBDCs like e-CNY, this feature ensures real-time value transfer without intermediaries, reducing counterparty risks.

For digital assets, it enables efficient cross-border settlements, cutting times from days to seconds and costs by up to 50%, as demonstrated in projects like mBridge. This contrasts with traditional systems where settlement lags payment, potentially leading to disputes or liquidity issues.

Stablecoin

Stablecoin is designed to maintain stable value by pegging to fiat currencies, commodities, or algorithms to minimize volatility.

A stablecoin is designed to maintain a stable value by pegging to assets like fiat currency (e.g., USD) or commodities (e.g., gold), to minimize volatility for payments, decentralized finance (DeFi), and cross-border transfers. Stablecoin types include fiat-backed (e.g., USDT and USDC, supported by reserves), crypto-backed (over-collateralized), and algorithmic.

In 2025, in the U.S., the GENIUS Act (Guiding Effective Non-Fiat Innovation and Utility for Stablecoins) was passed to establish a tailored regulatory framework for stablecoins. It emphasizes consumer protection, reserve transparency, and financial stability to foster innovation while mitigating risks like de-pegging.

Tokenization

The process of converting real-world assets into digital tokens on blockchain, enabling fractional ownership and enhanced liquidity.

Tokenization refers to the process of converting real-world assets (RWAs) into tokens on a blockchain, enabling fractional ownership, enhanced liquidity, and global accessibility. For example, ETF tokenization converts exchange-traded fund shares into tokens, offering real-time trading and integration with decentralized finance (DeFi) protocols for yield generation or lending.

A prominent example is BlackRock's BUIDL (BlackRock USD Institutional Digital Liquidity Fund), the first tokenized fund issued on the Ethereum network in 2024, providing qualified investors with U.S. dollar yields through tokenized shares managed by Securitize, with a TVL exceeding \$2.2 billion across multiple chains in 2025.

The tokenized RWA market exceeds \$230 billion, driven by platforms like Centrifuge and Ondo Finance, with oracles ensuring off-chain data integration.

