#### Global Stablecoin Regulations, Monetary Implications and Industry Disruption

#### Introduction

Stablecoins are digital tokens whose value is intended to remain stable relative to a reference asset. Unlike traditional cryptocurrencies such as bitcoin, which can experience wild price swings, stablecoins are designed to track the value of a fiat currency or other low-risk asset. Most widely used stablecoins today are fiat-backed: each token represents a claim on a reserve of cash or short-term government securities held by the issuer. A business or individual can purchase a stablecoin, send it to someone else via the internet and redeem it later for dollars, euros or yen. Because stablecoins use public blockchains, transactions settle near-instantaneously, across borders and outside normal banking hours, often at a fraction of the cost of card payments or wire transfersforvismazars.us. As a result, stablecoins have seen explosive growth. Research from Grayscale estimates that more than US\$250 billion worth of stablecoins are outstanding, and they collectively process over 100 million transactions every monthresearch.grayscale.com. Stablecoins' promise of fast, cheap and transparent payments has attracted interest from businesses, consumers, banks, regulators and central banks worldwide.

Stablecoins first emerged as a tool for cryptocurrency traders who wanted to move quickly between volatile digital assets without returning to traditional bank accounts. Over time, stablecoins have evolved into a broader fintech phenomenon. They enable payment of salaries, purchases of goods and services, settlement of trades, cross-border remittances and programmatic payments between machines. For businesses operating across borders, stablecoins remove many of the friction points in today's payment system – high fees, long settlement delays, currency conversion spreads and opaque intermediaries. Research from accounting firm Forvis Mazars notes that stablecoin transactions can be completed anywhere in the world with only an internet connection and a wallet, bypassing cross-border delays and the need for correspondent banksforvismazars.us. The firm highlights that stablecoins often cost a fraction of credit card or wire transfer fees and settle in secondsforvismazars.us. Real-world examples show these promises are not theoretical: Latin American e-commerce giant Mercado Libre has used USDC stablecoins to pay suppliers in multiple countries, cutting costs and improving operational efficiencyforvismazars.us. U.S. coffee chain Compass Coffee accepts USDC for mobile orders to avoid merchant discount fees and to receive payment instantly for vismazars.us. Stablecoins are also being used to pay contractors around the world, reducing foreign exchange losses and

enabling workers to get paid immediately <u>forvismazars.us</u>. These cases illustrate that stablecoins are not only a speculative asset but a practical means of moving value.

However, the rise of private stablecoins has also sparked intense regulatory debates. Governments are concerned about consumer protection, financial stability, anti-money-laundering compliance and the implications for monetary sovereignty. Unlike commercial bank deposits, most stablecoins are not covered by deposit insurance, and their reserves are not subject to the same prudential oversight as bank reserves. Moreover, stablecoin issuers often hold large amounts of short-term government securities such as U.S. Treasury bills, meaning their actions can influence financial marketsreuters.com. Central banks worry that if stablecoins become widely used for domestic payments, they could reduce the effectiveness of monetary policy and create new sources of systemic risk. As a result, many jurisdictions have introduced or are preparing regulatory frameworks to govern the issuance and use of stablecoins. This report provides a comparative overview of these frameworks, analyzes their potential economic impacts and explores how different industries could be transformed by stablecoins.

### **Global Stablecoin Market and Adoption Trends**

# **Growth of the Stablecoin Ecosystem**

The stablecoin ecosystem has grown rapidly over the past five years. According to Grayscale, the total supply of stablecoins reached about US\$250 billion by early 2025research.grayscale.com. The market is dominated by a handful of dollar-pegged tokens, including Tether (USDT) and USD Coin (USDC), which together account for roughly 90 % of supplyforvismazars.us. These tokens are widely used in crypto trading, DeFi (decentralized finance) applications and cross-border payments. Stablecoins are especially popular in emerging markets, where access to U.S. dollars can be limited and local currencies face high inflation or capital controls. The Bank for International Settlements (BIS) notes that stablecoins give users in countries with unstable currencies a way to gain exposure to foreign currency, particularly the U.S. dollar, and circumvent local restrictions. This global demand has turned stablecoins into a significant force in international finance.

# **Adoption Beyond Crypto Trading**

Stablecoins are increasingly used for everyday payments and corporate treasury management. As the adoption of stablecoins expands beyond crypto enthusiasts, businesses are discovering the benefits of near-instant settlement, programmable transactions and lower fees. Forvis Mazars describes how stablecoins allow global

vendors to receive payments directly, removing intermediaries and the associated delaysforvismazars.us. The firm also highlights the cost efficiency of stablecoins: transactions typically cost a fraction of credit card fees or wire transfers and settle within secondsforvismazars.us. This combination of speed and cost makes stablecoins attractive for e-commerce, supply chain financing, payroll and global remittances. Case studies show that a growing number of companies have integrated stablecoins into their payment flows. Mercado Libre's use of USDC to pay thousands of merchants and suppliers demonstrates how stablecoins can improve cash flow management and reduce settlement timesforvismazars.us. Compass Coffee's adoption of USDC reduces payment processing fees and allows customers to pre-pay for coffee with minimal frictionforvismazars.us. For contractors, stablecoins provide a way to receive payment in their preferred currency instantly, avoiding the delays and currency conversion costs associated with traditional international payroll systemsforvismazars.us. In supply chains, stablecoins enable quick settlement and improved transparency, allowing suppliers to be paid as soon as goods are delivered and reducing financing costsforvismazars.us.

#### **Consumer Adoption and Emerging Use Cases**

Consumer adoption of stablecoins is growing, particularly in regions with limited access to banking services. Stablecoins can be stored on smartphones and transferred without a bank account, making them attractive for unbanked populations. In the travel and hospitality sector, coins like USDC are becoming accepted by airlines, boutique hotels and travel agencies, reducing payment processing fees by up to 75 % according to a 2024 report by CoinsPaidreuters.com. The travel booking platform Travala.com processed US\$103 million in bookings in 2024, with 80 % settled in cryptocurrencies; crypto users spent 2.5 times more than fiat usersreuters.com. In gaming, stablecoins facilitate microtransactions and cross-platform asset portability. A 2025 article notes that in-game purchases exceeded US\$100 billion, and stablecoins enable frictionless microtransactions without the high fees associated with credit cardscoingeek.com. Outside of consumer payments, stablecoins are being integrated into decentralized finance (DeFi) protocols, where they serve as collateral for loans, liquidity for decentralized exchanges and yield-bearing instruments. Emerging uses include machine-to-machine transactions, where artificial intelligence agents or Internet of Things devices make automated payments for services such as cloud computing or data usageresearch.grayscale.com. As these use cases mature, stablecoins could become integral to digital economies.

#### **Market Concentration and Systemic Risks**

While stablecoins offer many benefits, their concentration among a few issuers raises systemic risks. The largest issuers hold tens of billions of dollars in reserves, primarily in short-term U.S. Treasury bills<u>reuters.com</u>. This concentration makes stablecoin issuers important participants in the money markets. A Reuters investigation highlights that a new U.S. bill would require issuers to back their tokens with high-quality liquid assets like cash and Treasury bills, potentially increasing demand for these securities<u>reuters.com</u>. Standard Chartered estimates that if robust regulation is passed, the stablecoin market could grow to US\$2 trillion by 2028, making these tokens among the largest buyers of short-term government debt<u>reuters.com</u>. Such a situation could create new channels of financial contagion. If investors lose confidence in a stablecoin issuer and redeem en masse, the issuer might have to liquidate large volumes of Treasury bills quickly, possibly causing volatility in government bond markets<u>reuters.com</u>. Regulators therefore emphasize high-quality reserves, segregation of client assets and limitations on the composition of collateral to mitigate these risks.wilmerhale.com

#### **Regulatory Frameworks Across Major Jurisdictions**

Stablecoins have prompted different regulatory responses worldwide. Some jurisdictions seek to integrate stablecoins into the financial system under strict oversight, while others restrict or ban their use. This section reviews regulatory regimes in the United States, European Union, Hong Kong, Japan and China and compares their approaches to licensing, reserves, permissible tokens and consumer protection.

#### **United States – GENIUS Act**

Until recently, the United States lacked comprehensive federal legislation for payment stablecoins. The U.S. House of Representatives addressed this gap with the July 2025 "Global Financial Innovation and U.S. Prosperity" (GENIUS) Act. The GENIUS Act creates a new category of "payment stablecoin" issuers and imposes stringent requirements on them. Only "permitted payment stablecoin issuers" – banks chartered by federal or state regulators or non-bank entities licensed under the Act – are allowed to issue stablecoinswilmerhale.com. Foreign issuers can operate in the U.S. only if they meet U.S. anti-money-laundering (AML) and sanctions requirementswilmerhale.com. Issuers must maintain high-quality liquid reserves equal to the value of outstanding stablecoins and segregate those reserves from other assetswilmerhale.com. They must disclose their reserves monthly, publish redemption policies and honour redemption requests at par. The Act specifies that investors have direct claims on the reserve assets and that in case of issuer bankruptcy, customers' claims are senior to other unsecured creditorswilmerhale.com. After a three-year grace period, unlicensed stablecoins will no longer be allowed, effectively forcing the market into regulated

channels<u>wilmerhale.com</u>. Supporters argue that the Act provides legal clarity, protects consumers and could attract stablecoin activity to the U.S., while critics worry it may stifle competition or cement the dominance of existing issuers<u>wilmerhale.com</u>.

#### **European Union – Markets in Crypto-Assets Regulation (MiCA)**

The European Union adopted the Markets in Crypto-Assets Regulation (MiCA) in 2023, with implementation phases between 2024 and 2025. MiCA is the world's first comprehensive crypto-asset framework spanning all 27 EU member states. It introduces a single licence for crypto-asset service providers (CASPs), enabling firms authorised in one member state to operate across the bloc without seeking multiple licenceslegalnodes.com. Under MiCA, issuers of asset-referenced tokens (ARTs) and e-money tokens (EMTs) must be incorporated in the EU, obtain authorization from the relevant national authority and publish a whitepaper that discloses riskslegalnodes.com. MiCA bans algorithmic stablecoins and requires issuers to hold liquid reserves equal to the value of tokens, with strict segregation of client funds. CASPs must implement AML controls, continuity of services plans, data security measures and governance frameworkslegalnodes.com. MiCA aims to protect consumers, ensure market integrity and prevent regulatory arbitrage across EU states. By harmonizing rules, the EU hopes to foster innovation while safeguarding financial stability. Critics argue that MiCA's prudential requirements could raise compliance costs, but proponents believe unified rules will provide certainty and encourage responsible growth.

### **Hong Kong – Stablecoins Ordinance**

In May 2025, Hong Kong's Legislative Council passed the "Stablecoins Ordinance," establishing a licensing regime for fiat-referenced stablecoins (FRS)davispolk.com. The ordinance defines a stablecoin as a digital representation of value used as a medium of exchange and transferred electronically on a distributed ledgerdavispolk.com. Only stablecoins pegged to fiat currency are permitted, while algorithmic tokens and unbacked crypto-assets remain prohibited. Issuers of FRS must obtain a licence from the Hong Kong Monetary Authority (HKMA) and can operate only if they are incorporated in Hong Kong or are authorized institutions such as banksdavispolk.com. Licensees must maintain high-quality liquid reserves equal to the par value of issued stablecoins, segregate those reserves in trust, and honour redemption requests at par value without paying interestdavispolk.com. The ordinance also prohibits the payment of interest on stablecoin holdings and bans algorithmic or arbitrarily collateralised stablecoinsdavispolk.com. The regime goes into effect on 1 August 2025davispolk.com. Hong Kong's goal is to become a regulated hub for stablecoin issuers and providers serving Asian and global markets while maintaining strong consumer protection.

### Japan – Payment Services Act and Subsequent Amendments

Japan implemented one of the first comprehensive stablecoin laws when amendments to the Payment Services Act came into effect in June 2023. The law defines stablecoins as digital money linked to the ven or another legal tender, guaranteeing redemption at face value. Only licensed banks, money transfer agents and trust companies can issue stablecoinsblockworks.co. The law requires issuers to hold reserves equal to the amount of tokens issued and restricts stablecoins to being legal tender-linked (no algorithmic designs). In March 2025, the Japanese Diet amended the law to make the regime more flexible. Under the amendment, trust-type stablecoin issuers are allowed to hold up to 50 % of reserves in low-risk assets such as Japanese or U.S. government bonds or time deposits, while the remaining 50 % must be held in demand depositslaw.asia. The amendments also create a new category of "electronic payment instrument/crypto-asset service intermediaries," allowing brokers to facilitate transactions between users and issuers without holding customer assets; these brokers are exempt from capital requirementslaw.asia. Regulators may issue "domestic asset holding orders" requiring providers to hold assets within Japan to prevent cross-border outflows in times of stresslaw.asia. The law underscores Japan's cautious approach: stablecoins must be fully backed and only regulated financial institutions can issue them.blockworks.colaw.asia

### China – Ban on Private Stablecoins and Focus on Digital Yuan

China has adopted the most restrictive approach to privately issued stablecoins. A 2021 circular issued by the People's Bank of China (PBOC) and other authorities declared that cryptocurrencies, including stablecoins, do not have legal status in China, cannot be used as currency and that all cryptocurrency transactions are illegalloc.gov. Financial institutions are prohibited from offering services related to crypto transactions, and foreign exchanges are barred from serving Chinese residents loc.gov. This effectively bans the issuance and use of private stablecoins domestically. However, Chinese tech giants have reportedly lobbied the PBOC to authorize yuan-pegged stablecoins issued in Hong Kong to promote international use of the renminbireuters.com. Although such proposals were still under consideration as of mid-2025, they indicate potential future developments in cross-border stablecoin initiatives. Meanwhile, China has been at the forefront of central bank digital currency (CBDC) development with the digital yuan (e-CNY), which has processed more than 7 trillion yuan in pilot transactions and is gradually being rolled out for retail and wholesale useatlanticcouncil.org. The digital yuan is designed to protect monetary sovereignty and provide an alternative to dollar-linked stablecoins.

#### **Comparative Analysis of Regulatory Approaches**

Although the jurisdictions reviewed above share some common objectives – consumer protection, financial stability and preventing illicit finance – their regulatory models differ significantly. Table 1 summarises key features across regions.

Region	Licensing & Scope	Reserve Requirements	Restrictions & Features	Effective Date
United States (GENIU S)	Only "permitted payment stablecoin issuers" may issue; includes banks and licensed non-banks; foreign issuers must meet U.S. AML and sanctions rules wilmerhale.com.	Stablecoins must be fully backed by high-quality liquid assets; monthly reserve disclosures; segregated custodial accountswilmerh ale.com.	Unauthorized stablecoins phased out after three years; cross-border parity; fosters demand for U.S. Treasurieswilmerhal e.com.	Bill under considerat ion in 2025.
Europe an Union (MiCA)	Single authorisation across all 27 member states; issuers must be EU-incorporatedlegal nodes.com.	1:1 backing with liquid reserves; issuers must publish whitepapers; no algorithmic tokens <u>legalnode</u> s.com.	CASPs must implement AML controls, data security, continuity planning and fair marketinglegalnode s.com.	Staggered implement ation 2024–25.
Hong Kong	Licence required from HKMA; only Hong Kong–incorporated or authorized institutions can issuedavispolk.com.	Reserves must equal par value of tokens; assets segregated in trust; redemption at pardavispolk.com.	Only fiat-referenced tokens allowed; algorithmic tokens banned; no interest paid on stablecoin holdingsdavispolk.com.	1 Aug 2025.

Japan	Issuers limited to banks, money transfer businesses and trust companies blockworks .co.	Full reserve backing in demand deposits; amendments allow up to 50 % of reserves in bonds or term deposits law.asia.	Stablecoins must be linked to yen or other legal tender; foreign issuers must set aside reserves in Japancryptoforinnov ation.org.	Original law effective 2023; amendme nts 2025.
China	No licensing regime; cryptocurrencies and stablecoins are illegal <u>loc.gov</u> .	N/A (private stablecoins prohibited).	Total ban on issuance and transactions; focus on CBDC e-CNYloc.gov.	Ban since 2021; e-CNY trials ongoing.

From the comparison above, several patterns emerge. The United States and European Union aim to integrate stablecoins into their financial systems under strict prudential supervision. Both regimes require full reserve backing with high-quality liquid assets and impose disclosure obligations. However, the U.S. allows non-bank issuers subject to federal oversight, while the EU restricts issuance to EU-incorporated entities. Hong Kong adopts a similar licensing model but focuses on fiat-referenced tokens and disallows interest payments. Japan restricts issuance to regulated financial institutions and emphasises conservative reserve management, though it recently relaxed reserve composition rules to increase efficiency<u>law.asia</u>. China, conversely, bans private stablecoins and channels innovation through its CBDC. These differences will have far-reaching implications for monetary policy and industry adoption.

#### **Monetary Policy and Fiscal Implications**

# **Monetary Sovereignty and Currency Substitution**

One of the most significant concerns for policymakers is that widespread adoption of private stablecoins could undermine monetary sovereignty. Stablecoins enable users to hold and transact in foreign currency by merely downloading a digital wallet. The BIS warns that in countries with high inflation or capital controls, individuals might adopt dollar-pegged stablecoins en masse, reducing demand for the local currency and eroding the central bank's ability to implement monetary policy. For example,

stablecoins could become a preferred medium of exchange in Argentina or Turkey, where local currency values are volatile. This digital dollarization could lead to currency substitution, diminishing seigniorage revenue and complicating the transmission of monetary policy. Christine Lagarde, President of the European Central Bank, has argued that private stablecoins pose risks to monetary policy and financial stability because they could interfere with the central bank's control over the money supply atlantic council.org. Such fears underpin the push for CBDCs and strict regulation of privately issued stablecoins.

To mitigate currency substitution, central banks are accelerating digital currency projects. The European Central Bank views a digital euro as essential to maintain the legal tender status of the euro and to reduce reliance on U.S. card networks atlantic council.org. China's digital yuan aims to enhance domestic payment efficiency and internationalize the renminbi while keeping control over the financial system atlantic council.org. Countries like India, Brazil and Nigeria are also developing digital currencies to provide a safe and convenient alternative to private stablecoins. These projects illustrate how stablecoins have spurred innovation in central banking.

#### **Financial Stability and Market Impact**

Stablecoins can influence financial markets through their reserve management and potential redemption runs. Most stablecoins are backed by short-term government debt. As of 2025, major stablecoin issuers collectively hold more than US\$160 billion in U.S. Treasuriesreuters.com. If the stablecoin market grows as some forecast – to US\$2 trillion by 2028reuters.com – their demand for Treasuries could shape yields and liquidity. The GENIUS Act's requirement that reserves consist of "high-quality liquid assets" will likely increase stablecoin holdings of T-bills, further tightening the link between stablecoins and the Treasury marketwilmerhale.com. Some analysts argue that this could strengthen the U.S. dollar by creating structural demand for Treasuries and encouraging the Treasury Department to issue more short-term debtreuters.com. Others warn that large-scale redemptions during market stress could force issuers to sell government securities quickly, causing price swings and impacting money market fundsreuters.com. The risk of a "stablecoin run" therefore requires robust liquidity management and oversight.

The BIS notes that stablecoins also fail to guarantee the "singleness of money" – the principle that one dollar is always worth one dollar. Stablecoins issued by different firms may trade at different values depending on the perceived creditworthiness of the issuer and the quality of reserves. During stress events, one stablecoin could depeg while others remain stable. This fragmentation can create confusion and undermine trust in digital money. Additionally, stablecoin supply cannot easily expand to accommodate

sudden spikes in demand for payment instruments, limiting their elasticity. Unlike central bank reserves, which can be created elastically to maintain payment system stability, stablecoins are constrained by the reserves they hold. These issues could amplify financial cycles if stablecoins become widely used for large-value payments.

Another dimension of financial stability concerns is the integrity of stablecoin transactions. Because stablecoins can be held in self-hosted wallets and transferred peer-to-peer, they can circumvent financial intermediaries and regulatory oversight. The BIS points out that this creates vulnerabilities for money-laundering, terrorist financing and sanctions evasion. Mixing services and peer-to-peer transfers make it difficult for authorities to trace flows. Regulators therefore require stablecoin issuers and service providers to implement AML and know-your-customer (KYC) measures. The GENIUS Act mandates that foreign issuers comply with U.S. sanctions rules when issuing to U.S. residents wilmerhale.com, and MiCA imposes stringent AML obligations on CASPslegalnodes.com. These measures aim to preserve law enforcement capabilities in a world of programmable money.

#### **Central Bank Responses and Digital Currencies**

In response to the rise of stablecoins, central banks worldwide are exploring or deploying their own digital currencies. The People's Bank of China has piloted the e-CNY extensively, processing more than ¥7 trillion (US\$1 trillion) in transactionsatlanticcouncil.org. The European Central Bank is preparing legislative proposals for a digital euro and expects to launch a pilot after 2025. The U.S. Federal Reserve is studying a digital dollar but has not committed to issuance. Many other central banks, including those of Brazil, India, Nigeria and the Bahamas, have launched or are testing CBDCs. The Atlantic Council notes that central banks see CBDCs as a way to ensure the "singleness of money," maintain control over monetary policy and provide a public alternative to private stablecoinsatlanticcouncil.orgatlanticcouncil.org. They also offer an opportunity to modernize payment systems, reduce costs and increase financial inclusion.

Beyond CBDCs, some jurisdictions are considering hybrid models. For example, the BIS envisions tokenised deposit systems or public–private platforms that combine central bank reserves with tokenised commercial bank liabilities. These models could preserve the benefits of stablecoins (instant settlement, programmability) while ensuring the backing and liquidity of central bank money. How such systems will coexist with private stablecoins remains an open question.

#### **Industry Disruption Across Eight Sectors**

Stablecoins have the potential to disrupt multiple industries by enabling new business models, reducing transaction costs and introducing programmability. This section examines eight major sectors likely to be transformed by stablecoins: cross-border payments, e-commerce and retail, supply chain and trade finance, payroll and gig economy, travel and hospitality, gaming and entertainment, financial services and DeFi, and digital services and AI.

### 1. Cross-Border Payments and Remittances

The global remittance market exceeds US\$600 billion annually, with fees averaging 6.3 % according to the World Bank. Stablecoins offer a compelling alternative. Because they are blockchain-based, stablecoin transfers across borders are instantaneous and low cost; users only need an internet connection and a walletforvismazars.us. Traditional cross-border payments rely on correspondent banks, which add intermediary fees and require days to settle. Stablecoins remove these intermediaries, reducing costs to fractions of a percent and enabling real-time settlementforvismazars.us. In emerging markets where financial infrastructure is underdeveloped, stablecoins can provide a lifeline for remittance recipients. Unlike wire transfers that may not reach rural areas, stablecoins can be stored and spent via mobile phones.

Corporate cross-border payments are also ripe for disruption. Large multinational corporations often incur high foreign exchange and banking fees when moving money between subsidiaries or paying suppliers. Stablecoins allow treasurers to move value globally at low cost. Mercado Libre's use of USDC to pay suppliers across Latin America demonstrates how stablecoins reduce settlement times and increase transparency in trade transactions for vismazars.us. Businesses like these can maintain working capital in stablecoins, convert only when needed and avoid the volatility and spreads associated with multiple currency conversions. For cross-border payroll, stablecoins enable companies to pay contractors or employees in different countries within seconds, eliminating the waiting period and FX losses typical in international payroll systems for vismazars.us.

However, adoption of stablecoins for remittances faces challenges. Users must trust that the stablecoin will maintain its value and that they can redeem it for local currency. Regulatory clarity is necessary to ensure consumer protection and AML compliance. Service providers also need to build user-friendly interfaces, integrate local payment rails for on- and off-ramping and educate users. In jurisdictions where crypto is banned or restricted (e.g., India or China), remittance providers cannot legally offer stablecoin services. Therefore, the disruptive potential of stablecoins in cross-border payments depends on regulatory acceptance and infrastructure development.

### 2. E-Commerce and Retail Payments

E-commerce platforms and brick-and-mortar retailers stand to benefit from stablecoin payments. Today, merchants pay credit card networks merchant discount rates (MDR) of around 2–3 % plus interchange fees. Stablecoins can reduce these costs dramatically. Because stablecoin transactions settle directly between buyer and seller on a blockchain, there are no interchange fees or chargebacks. Forvis notes that stablecoins cost a fraction of credit card processing fees and provide immediate settlement, improving merchants' cash flowforvismazars.us. For small businesses with thin margins, saving 2 % can be significant. Additionally, stablecoins support 24/7 settlement – a seller can be paid on weekends or holidays, unlike with traditional card networks.

Consumer adoption of stablecoins in retail is growing slowly but steadily. Compass Coffee, a local chain in Washington, D.C., began accepting USDC for mobile orders to avoid credit card fees and receive funds instantly for vismazars.us. Some merchants offer discounts to customers who pay in stablecoins, passing part of the fee savings onto shoppers. Payment processors and card networks are exploring stablecoin integration; Visa's Tokenized Asset Platform allows clients to mint and burn stablecoins and issue stablecoin-linked cards corporate.visa.com. Visa encourages banks and fintechs to integrate stablecoins into digital wallets to enable cross-border and domestic payments corporate.visa.comcorporate.visa.com. As mainstream payment platforms integrate stablecoins, consumer adoption is likely to accelerate.

Nevertheless, there are challenges. Merchants still need to convert stablecoin receipts into fiat to pay employees and suppliers or to meet regulatory reporting requirements. Off-ramping can involve fees or delays, eroding some of the savingsdigfingroup.com. Fraud protection and chargeback mechanisms provided by card networks are not yet available for stablecoin transactions, although "smart" escrow contracts and decentralized insurance solutions may eventually offer alternatives. Regulators may require consumer protection and dispute resolution frameworks for stablecoin-based retail payments. Integration with existing point-of-sale systems and consumer education are also necessary.

# 3. Supply Chain and Trade Finance

Stablecoins can improve supply chain efficiency by enabling immediate payment upon delivery of goods and providing transparent, real-time records of transactions. In global supply chains, goods may travel across multiple jurisdictions and involve several currencies. Payments to suppliers can take days or weeks to clear, leaving small and medium-sized enterprises (SMEs) in cash-flow limbo. Forvis notes that stablecoins

allow businesses to pay suppliers instantly and provide transparency for both parties in global supply chainsforvismazars.us. Smart contracts can automatically release payments when delivery conditions are met, reducing the need for manual reconciliation and dispute resolution. Stablecoins also enable programmable financing: invoices can be tokenised and discounted in real time, providing suppliers with cheaper liquidity.

Trade finance is another area ripe for innovation. Letters of credit and documentary collections involve multiple intermediaries and a tangle of paper documents. Stablecoin-powered platforms can digitise these processes, reduce fraud risk and shorten settlement cycles. For example, a buyer can lock stablecoins in an escrow contract, releasing funds when the shipping documents are verified. The immutable blockchain record can facilitate compliance and auditing. While these benefits are clear, adoption is still nascent due to regulatory uncertainties around tokenised assets, the need for integration with existing enterprise resource planning (ERP) systems and the complexities of cross-border on- and off-ramping.

#### 4. Payroll and the Gig Economy

In the gig economy, workers often face delays and high fees when receiving cross-border payments through banks or money transfer services. Stablecoins enable companies to pay workers instantly and in a preferred currency. Forvis highlights that stablecoin salaries allow workers to avoid foreign exchange losses and receive funds immediately for vismazars.us. Gig platforms, such as freelancing marketplaces, can integrate stablecoin payouts as a default option. This reduces operational costs, attracts global talent and improves worker satisfaction. Employees can decide when to convert their stablecoin pay into local currency, potentially taking advantage of better exchange rates.

Stablecoins also open possibilities for programmable payroll. Smart contracts can automatically divide earnings between wages, taxes, benefits and savings, improving financial planning. Employers can set conditions for bonuses or milestones, releasing funds when conditions are met. However, the regulatory treatment of wages in stablecoins varies by jurisdiction. In countries like China, paying salaries in crypto or stablecoins is prohibited; in others, taxes and reporting may be complex. HR departments must ensure compliance with labour laws and financial regulations before adopting stablecoin payroll.

#### 5. Travel and Hospitality

The travel industry is characterised by international transactions, varied currencies and high payment processing costs. Stablecoins offer a way to standardise payments and reduce fees. According to a 2024 report by payment processor CoinsPaid, airlines,

travel agencies and luxury service providers adopting stablecoins saw payment processing fees fall by up to 75 %reuters.com. The report notes that crypto-friendly travellers tend to spend more – customers paying with cryptocurrencies spent 2.5 times more than fiat users on Travala.comreuters.com. Stablecoins also enable "on-the-go" payments; travellers can pay for hotels, flights and experiences directly from their wallets without incurring foreign exchange fees.

Additionally, stablecoins can streamline loyalty programs. Hotels and airlines can issue loyalty points as stablecoin tokens, allowing customers to redeem them across multiple partners or even trade them on secondary markets. This provides more flexibility than closed-loop proprietary points systems. However, travel companies must navigate regulatory requirements around digital assets, ensure customer data protection and manage volatility risk if they hold reserves in stablecoins. They may also need partnerships with on-ramp/off-ramp providers to convert stablecoin revenues into fiat to pay suppliers and staff.

#### 6. Gaming and Entertainment

The gaming industry has become a digital marketplace worth more than US\$100 billion annually, with revenue largely driven by in-game purchases<u>coingeek.com</u>. Gamers frequently buy virtual items, skins and currency, often in increments of a few dollars. Credit card fees and micro-transaction costs can erode profit margins. Stablecoins are well suited for this environment: they enable low-cost, instant micro-payments and can be used across different games and platforms. A 2025 Coingeek article notes that stablecoins facilitate frictionless microtransactions and allow gamers to transfer value between games or trade digital assets<u>coingeek.com</u>. Developers can also use programmable money to create dynamic in-game economies, pay royalties to creators automatically and share revenue with players.

Beyond gaming, stablecoins are being explored in the broader entertainment sector for tipping artists, funding content and distributing royalties. Musicians and content creators can receive micro-payments from fans around the world without high intermediary fees. Streaming services could integrate stablecoin micropayments to allow users to pay per song or scene rather than subscribe to monthly plans. However, regulatory compliance, user education and volatility concerns remain hurdles. Platforms must also ensure that stablecoin transactions comply with copyright laws and tax obligations in various jurisdictions.

### 7. Financial Services and Decentralized Finance (DeFi)

Stablecoins are the lifeblood of the DeFi ecosystem. They are used as collateral for loans, liquidity for decentralized exchanges and instruments for yield farming. Because

stablecoins are designed to be stable, they allow DeFi participants to avoid exposure to volatile cryptocurrencies when lending or borrowing. On decentralized lending platforms, users deposit stablecoins to earn interest or borrow them against crypto collateral. Stablecoins thus enable permissionless credit markets that operate around the clock without intermediaries. In addition to DeFi, stablecoins are being integrated into traditional financial services. Banks can facilitate client access to stablecoins through digital wallets and tokenised asset platforms, as Visa's services illustrate <a href="mailto:corporate.visa.comcorporate.visa.com">corporate.visa.comcorporate.visa.com</a>. Financial institutions may also use stablecoins for interbank settlement, reducing reliance on slow correspondent banking networks.

Nevertheless, the intersection of stablecoins and financial services is complex. DeFi protocols can be vulnerable to smart contract bugs, hacks and market manipulation. Stablecoins used as collateral can depeg during market stress, causing cascades of liquidations. Regulators are keen to subject DeFi platforms to AML and investor protection rules, but enforcement is challenging in decentralized environments. Institutional adoption requires robust custody solutions, compliance frameworks and risk management policies. As regulation evolves, the integration of stablecoins with traditional finance will likely increase, leading to hybrid systems that combine open networks with regulated entities.

# 8. Digital Services and Artificial Intelligence

The rise of artificial intelligence (AI) and Internet of Things (IoT) devices is creating new markets for machine-to-machine payments. Stablecoins enable these micro-transactions to occur autonomously. Grayscale predicts that one of the biggest growth areas for stablecoins will be payments between AI agentsresearch.grayscale.com. For example, self-driving cars could pay tolls, charging stations and parking fees automatically; IoT devices might pay for data usage or bandwidth in real time. Stablecoins provide a digital bearer instrument that machines can store and transfer without human intervention. They also allow for programmable conditions: an AI agent can pay a service only when a certain outcome is achieved or when quality thresholds are met. In combination with smart contracts, stablecoins could facilitate complex economic interactions between machines.

There are challenges to realize this vision. All agents need secure storage of private keys and mechanisms to prevent unauthorized transactions. Regulatory frameworks must determine whether machine accounts need to undergo KYC and how to handle liability for autonomous payments. Interoperability between different blockchains and stablecoins is also necessary. As the All economy grows, stablecoins could become the monetary infrastructure that underpins new digital services.

### Transition from Traditional Payment Networks to Stablecoin Rails

#### **Anatomy of the Legacy Payment System**

Today's payment networks rely on layers of intermediaries. A typical credit card transaction involves the cardholder's bank, the card network (Visa/Mastercard), the merchant's acquiring bank and often multiple payment processors. Each intermediary charges fees and introduces delays. For merchants, the merchant discount rate (MDR) of roughly 3 % pays for fraud protection, customer rewards and network maintenance digfingroup.com. Funds may not settle for days, creating cash-flow friction. Cross-border card payments also involve currency conversion spreads and additional fees. Wire transfers through the SWIFT network can take several days and incur high costs, particularly for small transactions.

### **How Stablecoin Payments Differ**

Stablecoin payments remove many intermediaries. A buyer sends a stablecoin directly from their wallet to the merchant's wallet over a blockchain network. The transaction is settled almost instantly and recorded on an immutable ledger. Payment service providers may still facilitate the user interface, but the payment itself is peer-to-peer. As a result, fees are significantly lower. Forvis notes that stablecoins cost a fraction of traditional payment methods and settle in seconds<u>forvismazars.us</u>. Visa's corporate blog acknowledges that cross-border payments using stablecoins can be faster and more cost-effective than traditional methods and encourages banks and fintechs to integrate stablecoins into their services<u>corporate.visa.com</u>. Stablecoins also enable programmability: payments can be conditional on the receipt of goods or the performance of a contract, enabling escrow and automated disbursements. Additionally, stablecoins operate 24/7, making them suited for global e-commerce and digital services that run around the clock.

#### **Challenges and Limitations**

Despite their advantages, stablecoin payment rails face several challenges. Off-ramping stablecoins into fiat remains an issue. Merchants often need to convert stablecoins into local currency to pay suppliers or employees, and this conversion can involve fees and delaysdigfingroup.com. In G10 currency corridors, where card and wire fees are already low, the benefits of stablecoins may be less pronounced because off-ramping costs can offset the fee savingsdigfingroup.com. Furthermore, existing card networks provide fraud protection and dispute resolution services; replicating these protections on a decentralized network requires additional technology or insurance solutions.

Another concern is macroeconomic: if stablecoins become dominant in payments, deposits may migrate from banks to stablecoin issuers. Banks fund loans with deposits; if funds move out of banks and into stablecoins, credit creation could slow and central banks might lose tools for controlling money supply<u>digfingroup.com</u>. Off-ramp costs and macro-stability concerns mean that stablecoin rails may initially gain traction in cross-border corridors and emerging markets, where the benefits outweigh the risks. Over time, improved interoperability between stablecoins and banking systems, better consumer protections and regulatory clarity could enable broader adoption.

#### The Role of Payment Networks and Card Schemes

Major payment networks are not ignoring the stablecoin trend. Visa sees stablecoins as a strategic opportunity to enhance cross-border payments. The company has partnered with stablecoin issuers to test settlement in USDC and offers stablecoin-linked cards that let users spend stablecoins at merchants who accept Visa<u>corporate.visa.com</u>. Mastercard has also announced pilots to integrate stablecoin settlement. These initiatives suggest that established card networks may incorporate stablecoins into their infrastructure rather than being displaced. As such, the future payment landscape may feature a hybrid model where traditional networks handle fiat transactions and stablecoin transactions are settled on blockchain rails.

# **Regional Capital Strategies for Enterprises**

Businesses planning to issue or use stablecoins must align their capital strategies with local regulations. The following recommendations are tailored to each jurisdiction reviewed earlier:

#### **United States**

- Obtain a permit under the GENIUS Act. Companies that wish to issue stablecoins should seek licensure as "permitted payment stablecoin issuers" once the Act is enacted. Banks can convert existing charters into this licence, whereas non-banks will need approval. Firms should prepare to undergo supervision by the Federal Reserve or state regulators and to comply with AML and sanctions screeningwilmerhale.com.
- Maintain high-quality liquid reserves. Issuers must back tokens 1:1 with cash, deposits at Federal Reserve banks or short-term Treasuries and disclose reserve composition monthlywilmerhale.com. Treasury management strategies should prioritise T-bill liquidity while balancing yield and risk.
- 3. **Plan for consumer protection and redemption.** Issuers must publish redemption policies and be prepared to redeem stablecoins at par on demand.

- Legal structures should ensure holders' claims on reserves are senior in case of bankruptcywilmerhale.com.
- 4. **Evaluate cross-border issuance.** Companies wanting to issue stablecoins globally must ensure that foreign operations comply with U.S. sanctions and AML rules<u>wilmerhale.com</u>. Partnerships with foreign banks or payment firms may be needed to meet local requirements.

## **European Union**

- Apply for MiCA authorisation. Issuers must be incorporated in the EU and obtain approval from national authorities before launching stablecoins or asset-referenced tokens<u>legalnodes.com</u>. Preparation includes drafting a comprehensive whitepaper, risk disclosures and governance documentation<u>legalnodes.com</u>.
- Implement robust compliance. CASPs must have AML/KYC controls, continuity plans, cybersecurity measures and conflict of interest policies<u>legalnodes.com</u>. Enterprises should allocate resources to compliance teams and invest in compliance technology.
- Maintain 1:1 reserves and avoid algorithmic designs. MiCA bans algorithmic stablecoins; reserves must be held in highly liquid assets. Issuers should establish relationships with custodians and auditors to ensure transparency and segregation of fundslegalnodes.com.
- 4. **Prepare for cross-border operations.** Once authorised in one member state, CASPs can operate across the EU. Companies should plan for passporting their services and engaging with regulators in multiple jurisdictions.

## **Hong Kong**

- Secure an HKMA licence. Companies wishing to issue or distribute fiat-referenced stablecoins must incorporate in Hong Kong or obtain approval as authorised institutions<u>davispolk.com</u>. Firms should prepare to meet fit-and-proper requirements for directors and risk management frameworks.
- Design reserve and redemption structures. Issuers must maintain reserves
  equal to the par value of tokens, segregate them into trust accounts and redeem
  at par on request<u>davispolk.com</u>. Interest payments on stablecoin holdings are
  prohibited. Treasury strategies should focus on liquidity and compliance rather
  than yield.
- 3. **Innovate within fiat-referenced tokens.** Hong Kong prohibits algorithmic tokens. Companies may explore multi-currency stablecoins pegged to baskets of fiat currencies or to specific major currencies but must avoid algorithmic features.

4. Consider integration with mainland China. Although private stablecoins are banned in mainland China, Hong Kong could become a testing ground for RMB-pegged stablecoins that promote the renminbi internationally<u>reuters.com</u>. Firms interested in RMB stablecoins should monitor policy developments and engage with regulators to ensure compliance.

#### Japan

- Issue through licensed institutions. Only banks, trust companies and money transfer businesses may issue stablecoins<u>blockworks.co</u>. Enterprises without such licences should partner with licensed institutions or restructure to comply with the Payment Services Act.
- Comply with reserve rules. Issuers must back tokens with reserves in demand deposits and, following the 2025 amendment, may hold up to 50 % of reserves in government bonds or term deposits <a href="mailto:law.asia">law.asia</a>. Treasury strategies should balance liquidity requirements with yield by investing in short-dated Japanese or U.S. government bonds.
- Leverage new intermediary category. Brokers can connect users with issuers without holding customer funds, offering distribution opportunities law.asia.
   Enterprises can partner with these intermediaries to reach retail users while focusing on issuance and reserve management.
- 4. **Keep assets onshore and maintain reporting.** The FSA may require assets to be held domestically to prevent cross-border outflowslaw.asia. Companies must maintain accurate reporting and prepare for audits to ensure compliance with domestic asset holding orders.

#### China

- 1. **Do not issue or distribute private stablecoins domestically.** Crypto and stablecoin transactions are illegal in Chinaloc.gov. Enterprises should not attempt to market or use private stablecoins within mainland China.
- Leverage the digital yuan for domestic payments. Companies can integrate
  the e-CNY into their payment flows to benefit from instant settlement and state
  support. The digital yuan is designed to be programmable and to coexist with
  commercial bank deposits.
- Monitor offshore RMB stablecoin developments. Companies interested in RMB-pegged stablecoins can explore pilot programmes in Hong Kong, where proposals to issue an offshore yuan stablecoin have been under discussion<u>reuters.com</u>. Until a regulatory framework emerges, such initiatives should be treated as experimental.

4. Consider partnerships with Hong Kong entities. Mainland firms can collaborate with licensed Hong Kong issuers to offer services to overseas customers while complying with the mainland's ban on crypto. Careful legal structuring and regulatory engagement are necessary.

#### **Conclusion and Outlook**

Stablecoins represent a paradigm shift in how value is stored and transferred. From cross-border remittances and retail payments to supply chain finance and emerging AI economies, stablecoins offer programmable, borderless and near-instant money that can reduce costs and unlock new business models. Their growth has spurred regulatory innovation: the United States' GENIUS Act, the European Union's MiCA, Hong Kong's Stablecoins Ordinance, Japan's Payment Services Act and China's digital yuan project each illustrate different approaches to balancing innovation with financial stability. While the United States and EU seek to integrate stablecoins into the regulated financial system, Japan and Hong Kong adopt cautious but permissive frameworks, and China prohibits private stablecoins in favour of a sovereign digital currency.

Monetary policy and fiscal planning will be heavily influenced by the trajectory of stablecoins. If stablecoins continue to gain traction, they could increase demand for short-term government securities and strengthen the currencies they reference, particularly the U.S. dollar<u>reuters.com</u>. At the same time, they pose risks of currency substitution, especially in countries with unstable economies. Central banks are responding by developing CBDCs, exploring hybrid tokenised deposit systems and tightening prudential regulation.<u>atlanticcouncil.orgatlanticcouncil.org</u>

Industries across the global economy are beginning to feel the impact of stablecoins. Payments, e-commerce, supply chains, payroll, travel, gaming, finance and digital services all stand to benefit from lower costs, faster settlement and programmable money. Yet adoption will vary by sector and region, depending on regulatory acceptance, infrastructure maturity and user trust. Legacy payment networks are adapting by integrating stablecoin rails, suggesting that the future payment landscape will be hybrid rather than a wholesale replacement of existing systems.corporate.visa.com

For enterprises, the path forward requires careful navigation of local regulations and proactive engagement with policymakers. Companies should obtain appropriate licences, design reserve strategies that prioritise liquidity and transparency, implement rigorous compliance and consider cross-border implications when issuing or using stablecoins. By aligning their capital operations with the regulatory landscape,

businesses can harness the transformative potential of stablecoins while mitigating risks.

#### **Future Research and Considerations**

This report offers a snapshot of stablecoin regulation and industry implications as of July 2025. The landscape is evolving quickly. Future research should monitor developments such as: (1) the rollout of CBDCs and their interoperability with private stablecoins; (2) the emergence of new regulatory frameworks in countries not covered here, including the UK, Canada, Australia and India; (3) innovations in off-ramp and on-ramp infrastructure that reduce friction; (4) the role of stablecoins in environmental, social and governance (ESG) reporting and sustainable finance; and (5) the potential convergence of stablecoins with other digital assets such as tokenised securities and non-fungible tokens (NFTs). Policymakers, businesses and researchers should collaborate to ensure that stablecoin innovation advances financial inclusion and efficiency without undermining stability or undermining regulatory objectives.

#### **Visual Illustrations**

To provide a visual summary of the topics discussed, the report includes two illustrative images. The first, shown below, is an abstract depiction of a global digital network representing how stablecoins connect different regions and markets:



The second illustration portrays a central bank building and a network of coins and arrows, symbolising the interplay between stablecoins, monetary policy and central bank responses:

