

A Deep Dive into the Blockchain Stablecoin Value Chain: Participants, Flows, Economics, and Power Dynamics

Mapping the Stablecoin Value Chain: Key Participants and Their Interdependencies

The blockchain stablecoin ecosystem is a complex, multi-layered value chain composed of numerous interconnected participants, each playing a distinct role in the creation, circulation, and redemption of digital assets pegged to stable values⁶⁵. These participants range from centralized corporations issuing the tokens to decentralized protocols and the underlying blockchain infrastructure itself. Understanding their interdependencies is fundamental to analyzing the entire system's dynamics, vulnerabilities, and opportunities. The chain can be conceptually divided into several layers, starting with the foundational technology and moving up to the end-user applications^{94 95}.

At the base of the ecosystem are the Blockchain Infrastructure Providers, which serve as the settlement rails for all transactions⁹⁸. This layer includes Layer 1 blockchains like Ethereum, Solana, and Tron, which provide the foundational security, consensus mechanisms, and smart contract capabilities upon which stablecoins are built⁹⁵. Each blockchain presents a unique set of trade-offs; for example, Ethereum is favored for its robust DeFi ecosystem and tooling, while Tron has gained dominance for high-volume USDT transactions due to its low fees and high throughput^{57 95}. Supporting these networks are the infrastructure providers who offer secure storage and management solutions for institutional-grade digital assets, such as Fireblocks, GK8, and Utila, which abstract the complexity of interacting with blockchains using technologies like Multi-Party Computation (MPC) wallets^{78 95}.

Directly above the infrastructure layer are the Stablecoin Issuers, the entities responsible for minting and redeeming the stablecoins themselves⁶⁵. This group includes major players like Circle (issuer of USDC), Tether (USDT), Paxos (PYUSD), and newer entrants like Ripple (Ripple USD)^{62 95}. Their core function is to maintain the 1:1 peg to an underlying asset by managing reserves and honoring redemption requests⁶⁵. Under the U.S. GENIUS Act, these issuers are classified as "financial institutions," subject to stringent oversight and licensing requirements⁵⁵. Their business model is unique and highly profitable, centered on earning a net interest margin from investing the vast pool of reserve assets—held primarily in short-term U.S. Treasuries—while paying zero interest to holders, effectively creating a massive, scalable money market fund without taking on deposit liabilities^{49 104}.

The integrity of the issuer's promise hinges on the Reserve Custodians & Asset Managers. Since stablecoin issuers cannot hold FDIC-insured deposits, they rely on trusted financial institutions like BNY Mellon and BlackRock to custody their reserves and manage investments^{65 103}. This creates a critical link between the burgeoning stablecoin market and the sovereign debt markets of the United States, making major issuers significant buyers of U.S. Treasury bills^{57 62}. This reliance introduces a key dependency and a potential point of systemic vulnerability, as demonstrated when Circle's exposure to Silicon Valley Bank caused a temporary de-pegging of USDC in March 2023^{57 65}.

The next layer consists of the Liquidity Providers & Market Makers, which are essential for price stability and efficient trading. This diverse group includes centralized exchanges (CEXs) like Coinbase and Kraken, over-the-counter (OTC) desks such as FalconX, and professional arbitrageurs who exploit price discrepancies across different venues^{95 99}. They provide the deep liquidity pools necessary for converting stablecoins into other cryptocurrencies or fiat currency, acting as the crucial bridge between the stablecoin world and the broader volatile crypto market⁹⁵. Their activities ensure tight spreads and help maintain the peg by buying when the price falls below \$1 and selling when it rises above \$1²⁰.

To connect the stablecoin world with the legacy financial system, the Access & Orchestration Layer provides the vital on/off-ramps and aggregation services. On/off-ramp providers like Stripe/Bridge, Moonpay, and Ramp Network allow users to convert fiat currency into stablecoins and vice-versa, serving as the primary entry and exit points for the ecosystem^{57 94}. The acquisition of Bridge by Stripe underscores the strategic importance of controlling these access points⁵⁷. Above this, emerging orchestration platforms like Xweave and Aquanow are beginning to solve the fragmentation issue by aggregating liquidity and managing complex, multi-chain settlements, aiming to become the new intermediaries that abstract away the technical complexity for end-users and businesses^{94 95}.

Finally, at the top of the chain are the End-Users & Application Developers. This category is broad and includes retail users in emerging markets like Turkey, Nigeria, and Argentina, where stablecoins serve as a hedge against hyperinflation and a means to bypass restrictive banking systems^{65 71}. It also encompasses corporate treasurers who increasingly use stablecoins for cost-effective, real-time cross-border B2B payments and payroll^{60 67}. At the highest level of abstraction are developers and decentralized finance (DeFi) protocols, which utilize stablecoins as the primary unit of account for lending, borrowing, and liquidity provision, accounting for over 70% of the total value locked (TVL) in DeFi protocols^{64 81}. This diverse set of participants, from miners securing the network to arbitrageurs providing liquidity, forms a tightly coupled ecosystem where the actions of one directly impact the others.

Participant Category	Key Examples	Primary Function	Economic Model
Issuers	Circle (USDC), Tether (USDT), Paxos (PYUSD)	Mint/redeem stablecoins, manage reserves to maintain peg ^{62 65}	Net Interest Margin on reserve assets ^{49 104}

Participant Category	Key Examples	Primary Function	Economic Model
Custodians & Asset Managers	BNY Mellon, BlackRock, Cantor Fitzgerald ^{62 65}	Securely hold and invest reserve assets ⁶⁵	Custody fees, float income, NIM on held balances ⁹⁵
Infrastructure Providers	Fireblocks, GK8, Utila ⁹⁵	Provide secure digital asset storage and management for institutions ⁹⁵	Platform/account fees, API-based SaaS pricing ⁹⁵
Liquidity Providers	Coinbase, Kraken, FalconX, Wintermute ⁹⁵	Provide deep liquidity for price discovery and trading ⁹⁹	Trading spreads, arbitrage profit capture ⁹⁵
On/Off-Ramp Services	Stripe/Bridge, Moonpay, Conduit ^{94 95}	Facilitate conversion between fiat and stablecoins ⁹⁴	Transaction fees, FX spreads, subscription/platform fees ⁹⁵
Orchestration Platforms	Xweave, Aquanow ^{94 95}	Aggregate liquidity and manage multi-chain settlements ⁹⁴	Execution spreads, routing/coordination fees ⁹⁵
End-Users	Retail (Emerging Markets), Corporations, DeFi Protocols ^{65 67}	Use stablecoins for payments, savings, and as a unit of account ^{67 81}	Direct benefits (cost savings, speed) or indirect via application usage ⁶⁷

Analyzing the Core Flows: Information, Product/Service, and Capital Dynamics

The stablecoin value chain operates through three distinct but deeply intertwined flows: information, product/service, and capital. The efficiency, transparency, and security of these flows determine the health and functionality of the entire ecosystem. While blockchain technology promises unprecedented transparency, the reality is a complex interplay of public ledger data and opaque off-chain processes, creating unique challenges and friction points.

The Information Flow is characterized by a stark dichotomy. On-chain, every transaction is recorded on a public, immutable ledger, providing a transparent view of all transfers and wallet balances ⁷⁰. However, the most critical piece of information—the composition of the issuer's reserve assets—is managed off-chain and historically has been opaque ²⁴. Recent regulations like the GENIUS Act mandate monthly attestation reports, increasing transparency, but the actual valuation and quality of reserves remain a key area of uncertainty and risk ^{17 55}. Several critical information streams support the ecosystem's operation. Price feeds from oracles are essential for maintaining the peg and are used by DeFi protocols to calculate collateralization ratios ⁸¹. Blockchain analytics firms like Chainalysis and

Elliptic monitor on-chain activity to detect illicit financial flows and support Anti-Money Laundering (AML) compliance for issuers and regulators^{17 61}. Furthermore, advanced supervisory technology (suptech) tools like the BIS's Project Pyxtrial are being developed to integrate on-chain liability data with off-chain asset data, enabling near real-time monitoring of whether backing assets exceed liabilities at all times⁹⁰. Despite this progress, a significant friction exists in accurately attributing geographic location to self-custodial wallets, a major challenge for global regulators trying to estimate international capital flows⁷².

The Product/Service Flow describes the lifecycle of a stablecoin from issuance to redemption. It begins when a user deposits fiat currency with an issuer through an on/off-ramp service⁶⁵. Upon confirmation, the issuer mints a corresponding number of stablecoins and transfers them to the user's digital wallet⁶⁵. The service then continues as the user spends, trades, or lends the stablecoin. In the DeFi ecosystem, this often involves depositing the stablecoin into a liquidity pool or using it as collateral for a loan, where smart contracts automatically execute the terms of the agreement⁸¹. The reverse process, redemption, occurs when a user sends their stablecoins back to the issuer to receive an equivalent amount of fiat currency⁶⁵. This entire flow is underpinned by smart contracts, which automate the rules governing the stablecoin's behavior but introduce significant technical risks if they contain vulnerabilities⁸¹. A major bottleneck in this flow is the final step of converting stablecoins back to fiat. This process remains slow, costly, and often requires users to navigate multiple intermediaries, undermining the seamless experience promised by blockchain technology^{63 105}. For non-technical users, the requirement to hold native gas tokens for transaction fees on certain blockchains represents another significant point of friction¹⁰⁵.

The Capital Flow is the most substantial and economically significant aspect of the stablecoin ecosystem. With a combined market capitalization exceeding \$250 billion and annual transaction volumes surpassing those of Visa and Mastercard combined, trillions of dollars move through this channel annually^{48 49}. The flow starts with investors or depositors putting up capital, either in the form of fiat currency or other cryptocurrencies, and ends with the redemption of that capital⁶⁵. This flow is dominated by a few large actors; Tether and Circle alone account for approximately 90% of the total market supply⁶³. This concentration of capital gives dominant issuers immense economic power. The capital flow is also becoming deeply integrated with sovereign debt markets, as major issuers' reserve holdings make them significant purchasers of U.S. Treasuries, influencing interest rates and market liquidity^{15 57}. A critical constraint on this flow is the reliance on centralized custody. Because issuers' reserves are held in commercial bank accounts, any systemic risk or failure at a major custodian can trigger a run on the stablecoin, causing a temporary de-peg and eroding trust in the entire system⁶⁵. Furthermore, the proliferation of cross-chain bridges, while enabling interoperability, has introduced a new source of systemic risk, having been exploited in over \$2 billion worth of hacks, leading to significant capital losses and constraining the free movement of funds across the ecosystem¹¹⁸.

Economic Analysis: Value Pools, Bottlenecks, and Network Effects

The economic structure of the stablecoin value chain is defined by a unique revenue model that generates enormous profits for a select few, significant bottlenecks that constrain growth and innovation, and powerful network effects that create formidable barriers to entry. An analysis of these elements reveals a highly concentrated and dynamic ecosystem where value accrues disproportionately at the top of the chain.

The Value Pool of the stablecoin ecosystem is substantial, with a total market capitalization exceeding \$250 billion as of mid-2025 and annual transaction volumes reaching over \$27 trillion, dwarfing the combined volumes of traditional payment giants like Visa and Mastercard^{48 49}. The distribution of this value is profoundly unequal. The largest portion of profit is captured by the Stablecoin Issuers themselves. Through their unique business model of earning a net interest margin on invested reserves while paying zero interest to holders, companies like Tether and Circle have generated staggering returns. In 2024, Tether reported a net profit of \$13.7 billion with fewer than 200 employees, while Circle generated \$1.676 billion in revenue, 99% of which was derived from interest income on its USDC reserves⁴⁹. This creates a powerful economic incentive to maximize issuance scale and market share.

However, a critical insight from the value chain analysis is the phenomenon of Channel Capture. Despite bearing the brunt of regulatory and operational burdens, issuers often find that a larger share of the economic value is captured by downstream channels. Circle, for instance, pays out 58% of its income to channel partners like Coinbase, highlighting that the ability to control user traffic and provide a seamless interface is more valuable than the stablecoin itself¹⁰⁴. This dynamic creates a power imbalance where the entity with the best on/off-ramps and user-facing applications captures the lion's share of the value. Another significant economic shift is the threat posed to traditional Banking Sector models. By offering higher yields than standard checking accounts and facilitating direct peer-to-peer transfers, stablecoins compete for the same customer deposits that banks traditionally use for fractional-reserve lending^{9 13}. In response, many banks are now exploring the issuance of their own stablecoins to retain customer deposits and avoid being disintermediated¹³.

Despite its rapid growth, the stablecoin ecosystem faces several critical Bottlenecks and Constraints. The single greatest bottleneck is Regulatory Compliance. The complex and evolving global patchwork of regulations requires significant investment in legal, compliance, and AML/KYC infrastructure, creating a high barrier to entry for new players and favoring established incumbents with the resources to navigate these complexities^{66 78}. A second major bottleneck is the On/Off-Ramp Friction. The process of converting stablecoins to fiat currency remains slow, expensive, and often manual, representing a major pain point for users and undermining the efficiency gains offered by blockchain technology^{63 105}. A third, systemic bottleneck is the Centralized Custody Risk. The ecosystem's heavy reliance on a small number of large custodians for reserve management creates a single point of failure; a crisis at one of these institutions, as seen with Silicon Valley Bank, can trigger widespread panic and temporarily break the stablecoin's peg⁶⁵. Finally, Interoperability remains a significant constraint. While cross-chain bridges are essential for connecting different

blockchains, they have proven to be a major source of security breaches, with exploits totaling over \$2 billion, thereby limiting the seamless, atomic transfer of capital across the entire ecosystem ¹¹⁸.

Power in the stablecoin ecosystem is amplified by powerful Network Effects. The largest stablecoins, particularly USDT and USDC, benefit from a strong positive feedback loop: a larger user base attracts more merchants, exchanges, and liquidity providers, which in turn makes the stablecoin more useful and attractive to even more users ⁴. This creates a powerful moat that makes it incredibly difficult for new, competing stablecoins to gain traction. This dynamic is further reinforced by the fact that 99% of all stablecoins are USD-denominated, cementing the U.S. dollar's role as the default medium of exchange in the digital economy and reinforcing American monetary hegemony globally ^{49 104}. This concentration of power is not limited to the stablecoin layer. Incumbent financial platforms like Visa and Mastercard, once viewed as disruptors, are now integrating stablecoins into their networks, positioning themselves as tollkeepers on the new financial rails ^{16 49}. This demonstrates a classic case of incumbents adapting to survive, leveraging their existing infrastructure and brand recognition to co-opt the new technology. Ultimately, the combination of a highly concentrated value pool, significant operational bottlenecks, and powerful network effects shapes a stablecoin ecosystem where a handful of key players hold disproportionate economic and political power.

Regulatory Inflection Point: The Genesis Act and Its System-Wide Impact

The global stablecoin landscape underwent a seismic shift in mid-2025 with the passage of landmark legislation, most notably the U.S. GENIUS Act, alongside similar frameworks in Hong Kong and the European Union. These regulations represent a decisive move by governments to bring this nascent asset class under a formal, bank-like supervisory regime, fundamentally altering the value chain's architecture, participant responsibilities, and economic incentives. This regulatory inflection point has moved stablecoins from the speculative periphery to the regulated center of the financial system, imposing prudential standards that aim to mitigate systemic risk while fostering innovation ^{13 14}.

The GENIUS Act (Guiding and Establishing National Innovation for US Stablecoins), signed into law on July 18, 2025, establishes the first comprehensive federal framework for payment stablecoins in the United States ^{32 45}. It defines a payment stablecoin as a digital asset designed for use as a means of payment, backed 1:1 with specified assets like cash or short-term Treasuries, and not considered a security or commodity ^{45 55}. The Act creates three tracks for issuance: a Federal Track for subsidiaries of insured depository institutions, a State Track for smaller issuers operating under certified state regimes, and a Foreign Track for compliant international issuers ^{45 55}. Crucially, the Act mandates full reserve backing, prohibits issuers from paying interest on holdings to prevent them from functioning as bank deposit substitutes, and grants stablecoin holders priority claims on reserves in the event of insolvency ^{17 55}. This last provision, in particular, transforms stablecoins from unsecured creditor claims into a form of quasi-money with enhanced consumer protection, a significant departure from their previous status ³¹.

This U.S. framework is mirrored by parallel developments globally, signaling a trend toward regulatory convergence on core principles. The European Union's Markets in Crypto-Assets (MiCA) regulation, effective since December 2024, categorizes single-currency stablecoins as e-money tokens, requiring issuers to be regulated electronic money institutions and mandating strict reserve requirements and redemption rights^{30 35}. Similarly, Hong Kong's Stablecoin Ordinance, enacted in August 2025, created a standalone licensing regime for fiat-backed stablecoin issuers, requiring a minimum paid-in capital of HKD 25 million, 1:1 reserve backing in high-quality liquid assets, and legally enforceable redemption guarantees within one business day⁵³. These jurisdictions, along with Singapore and Japan, are establishing clear rules for licensing, reserve management, AML/CFT compliance, and consumer protection, raising the bar for participation in the market^{30 51}.

The impact of this regulatory wave is profound and multifaceted. For Stablecoin Issuers, the primary effect is the imposition of a heavy compliance burden. They must now operate as quasi-financial institutions, subject to rigorous capital, liquidity, and risk management standards^{14 55}. This increases operational costs but also enhances legitimacy and trust, potentially attracting more institutional clients⁵¹. For Reserve Custodians and Banks, the regulations clarify their role as integral parts of the financial system. They are now explicitly required to hold reserves for regulated entities, and their solvency directly impacts the stability of the stablecoins pegged to them⁵⁵. This has led to a pro-innovation policy shift at bodies like the OCC, which has reversed prior risk-elimination approaches to encourage engagement with crypto firms⁷⁴. For Financial Institutions and Payment Networks, the new laws open up new revenue streams. FIs are now actively developing on/off-ramp services and digital wallets to facilitate stablecoin transactions, while giants like Visa and Mastercard are building infrastructure to settle transactions on-chain, positioning themselves as key enablers of the new ecosystem^{49 73}.

Perhaps the most significant long-term impact is the resolution of the Systemic Risk Question. Regulators were concerned that privately issued stablecoins could pose threats to financial stability by creating instability in reserve asset markets or triggering bank runs^{75 100}. The GENIUS Act and similar frameworks address these concerns by mandating full, transparent backing and creating clear pathways for orderly resolution in case of failure⁵⁵. However, the debate over systemic risk is far from over. Experts warn that the sheer size of stablecoin reserves—holding over \$120 billion in U.S. Treasuries—makes them susceptible to fire sales during a crisis, potentially spiking interest rates and destabilizing bond markets^{15 63}. Furthermore, the GENIUS Act has raised concerns about regulatory arbitrage, where jurisdictions with laxer rules could become hubs for illicit activity, undermining the efforts of stricter regimes^{49 75}. Ultimately, the regulatory inflection point has provided much-needed clarity and stability, but it has also ushered in a new era of complex compliance and ongoing scrutiny, setting the stage for a more mature but still evolving stablecoin ecosystem.

Technological Disruption and Strategic Shifts Reshaping the Ecosystem

Beyond the transformative impact of regulation, the stablecoin value chain is being actively reshaped by powerful technological innovations and strategic shifts that are redefining its core functions,

competitive dynamics, and future trajectory. These forces are driving a transition from a niche, speculation-driven asset class to a utility-focused, institutional-grade financial infrastructure, blurring the lines between decentralized and traditional finance.

One of the most significant technological disruptions is the emergence of Yield-Bearing Stablecoins. The prohibition on interest payments in regulations like the GENIUS Act has spurred innovation around tokenized money market funds, such as BlackRock's BUIDL and Franklin Templeton's BENJI³⁹. Structured as securities, these instruments legally distribute the yield generated from their underlying portfolio of short-term U.S. Treasuries to holders, offering a yield-bearing alternative that complies with regulations banning interest-paying stablecoins^{49 61}. This development directly competes with traditional savings accounts and challenges the very premise of fiat-backed stablecoins, forcing a re-evaluation of their economic model and value proposition. A more radical innovation comes from hybrid models like Ethena's USDe, which uses a delta-neutral hedging strategy involving perpetual futures contracts to generate yield without holding any fiat reserves, further decoupling stablecoin design from traditional banking^{57 115}.

Another paradigm shift is occurring at the protocol layer with the rise of Intent-Based Execution. Traditional blockchain interactions require users to specify a precise sequence of steps to achieve a desired outcome. Intent-based protocols, supported by frameworks like the Open Intents Framework (OIF), allow users to simply declare their goal (e.g., "swap ETH for BUSD") and let a network of competitive solvers find the optimal execution path¹¹⁶. This approach offers superior user experience by abstracting away gas tokens and wallet management, provides better protection against miner extractable value (MEV) attacks, and enables truly atomic cross-chain transactions¹¹⁶. Protocols like Across Protocol and Eco Protocol are pioneering this space, promising to eliminate the friction and security risks associated with traditional bridging mechanisms and become the new standard for composability in DeFi^{116 117}.

These technological advancements are fueling broader Strategic Shifts within the ecosystem. The narrative is decisively moving from stablecoins as a speculative instrument to a practical utility. Real-world use cases are becoming the primary driver of adoption, with enterprises increasingly utilizing stablecoins for cross-border B2B payments, treasury management, and payroll to bypass inefficient legacy systems like SWIFT^{63 67}. This marks a pivotal moment where stablecoins transition from being an "on-ramp" to DeFi to a core component of enterprise finance. This convergence is accelerated by the increasing integration of stablecoins into traditional financial infrastructure. Major banks are now launching their own stablecoins, and payment networks are building dedicated rails for them, signaling a deepening of the symbiotic relationship between TradFi and DeFi^{13 16}.

Finally, a novel strategic development is the concept of Programmable Sovereignty, championed by nations like China. In contrast to the Western focus on decentralized trust, China is exploring yuan-backed stablecoins that embed spending limits, geofencing, and expiration dates directly into the code³⁴. This transforms money from a neutral medium of exchange into an active tool for social and economic governance, allowing the state to exert unprecedented control over capital flows and financial behavior. This represents a fundamentally different vision for the future of digital currency, pitting a model of state-controlled programmability against the Western ethos of decentralized autonomy³⁴. As the ecosystem matures, the most valuable layer may no longer be the settlement rails

or the issuers themselves, but rather the Orchestration Layer—platforms that can seamlessly route capital across chains, manage liquidity, and handle complex compliance requirements. These orchestrators, analogous to how Visa became the intermediary for traditional payments, are poised to emerge as the new gatekeepers of the digital economy, capturing significant value by solving the ecosystem's inherent complexity^{94 95}.

Future Trajectories: Synthesizing Power, Risk, and Geopolitical Forces

In conclusion, the future trajectory of the stablecoin value chain will be determined by the interplay of three overarching forces: the persistent tension between competing visions of power and control, the unresolved nature of systemic risk, and the escalating geopolitical rivalry over monetary sovereignty. While the ecosystem is rapidly maturing through technological innovation and regulatory clarification, these fundamental forces will continue to shape its evolution, creating both immense opportunity and significant peril.

The central theme of power in the stablecoin ecosystem is a recurring conflict between Decentralization and Control. On one hand, the original ethos of stablecoins, particularly those like MakerDAO's DAI, is rooted in a decentralized, trust-minimized model governed by smart contracts and community-held governance tokens³⁶⁵. This model prioritizes censorship resistance and user sovereignty. On the other hand, the dominant USD-backed stablecoins like USDC and USDT rely on a centralized, trust-based model where issuers and their custodians hold ultimate authority over reserves and user funds^{38 65}. This creates a critical trade-off: decentralization offers resilience against single points of failure but struggles with stability and scalability, while centralization provides robustness and institutional trust but introduces counterparty risk. The future will likely see a spectrum of models emerge, from fully decentralized, algorithmic designs to hybrid systems that blend algorithmic controls with carefully managed reserves, reflecting a pragmatic compromise between ideological purity and functional necessity.

The question of Systemic Risk remains the most significant uncertainty hanging over the ecosystem. The GENIUS Act and similar regulations have mitigated some risks by mandating transparent reserves and clear resolution plans, but they have not eliminated the possibility of a severe crisis^{55 75}. The core vulnerability lies in the system's dependence on a few large custodians and the lack of a lender of last resort for stablecoins, unlike traditional banks^{15 65}. A coordinated attack on a major custodian, a sudden loss of confidence leading to a massive redemption run, or a severe shock to the U.S. Treasury market could trigger a cascading failure, with fire sales of reserves threatening to destabilize not just the stablecoin peg but the broader financial system^{63 75}. The success of the stablecoin ecosystem will ultimately depend on its ability to build resilient mechanisms that can withstand such shocks, a challenge that regulatory frameworks alone cannot fully solve.

Finally, the stablecoin value chain is becoming a key battleground in the global struggle for Geopolitical Influence. The overwhelming dominance of dollar-denominated stablecoins reinforces the U.S. dollar's position as the world's primary reserve currency, extending its reach beyond traditional borders and challenging the monetary sovereignty of other nations^{15 49}. This has prompted

a strategic response from countries like China, which is pivoting from outright prohibition to exploring yuan-backed stablecoins in Hong Kong as a tool for programmable sovereignty and an alternative to the U.S.-led financial system^{33 34}. Europe is simultaneously advancing its digital euro project to preserve its monetary independence²⁸. This geopolitical dimension adds a layer of complexity that transcends purely technical or economic considerations. The future of the stablecoin ecosystem will be shaped not only by market forces but also by the strategic calculations of nation-states seeking to leverage this powerful new technology to advance their own interests. To sum up, the stablecoin value chain stands at a critical juncture, poised to become a foundational pillar of the global financial system. Its ultimate form will be forged in the crucible of these competing pressures, determining whether it becomes a decentralized, resilient utility or a centralized, state-controllable instrument of power.

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