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Two Eras of Digital Dollars: From Risky Assets to the Global Financial Framework - An American Banking Perspective

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Abstract. This paper chronicles the evolution of USD-denominated stablecoins through two distinct eras. It begins by deconstructing the fundamental mechanics of stablecoins, explaining their 1:1 reserve backing as a solution to the price volatility of early cryptocurrencies. The "First Era" (2017-2022) is detailed as a period of cautious engagement by the U.S. banking sector within a landscape of regulatory ambiguity. Subsequently, the paper analyzes the regulatory turning point that ushered in the "Second Era," providing a comprehensive overview of the proposed U.S. GENIUS Act and its strategic design. The core argument of this paper is that the U.S. is strategically leveraging this new regulatory clarity to cultivate the stablecoin ecosystem as a tool for reinforcing its global dollar hegemony. We support this thesis with evidence from capital markets, political economy, and the strategic design of the legal architecture. The conclusion posits that the rise of the regulated digital dollar marks the dawn of a new, strategically managed era in global finance.

Keywords: Stablecoins, Dollar Hegemony, Financial Regulation, Digital Dollar, Financial Technology (FinTech)

1. Introduction

1.1. The birth of Bitcoin and the core principles of blockchain

The 2008 global financial crisis has eroded public confidence in the established financial system and initiated questioning of centralized financial systems. When the public experienced tremendous amounts of bailouts, quantitative easing, continued bank failures, and defaults to repay debt obligations, confidence in a monetary system based on trusted institutions (banks and central banks) turned into skepticism of the very monetary system itself. It was during this moment of skepticism that Satoshi Nakamoto published the Bitcoin white paper entitled, "Bitcoin: A Peer-to-Peer Electronic Cash System," [1] which outlined a different form of the electronic payment system. It proposed a system that was completely decentralized, removing the bank (trusted third party), and instead put trust in each service provider via distributed and cryptographic means. The Bitcoin network was implored on January 3, 2009, when Satoshi Nakamoto mined the "Genesis Block,"

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making Bitcoin the world's first decentralized digital currency. The notable innovation of Bitcoin is not only a new form of money, but the new underlying system mechanism, based on blockchain technology, that uses a distributed ledger technology to achieve immutability and public verification of data [1].

Bitcoin's ability to operate securely without a central authority depends critically on the blockchain and the Proof of Work (PoW) mechanism. Blockchain is a distributed ledger collectively maintained by all nodes, recording transactions in a public and immutable manner. Each block is like a page in a ledger, recording a number of transactions. Blocks are linked in sequence, with the "summary" (hash value) of the previous block written into the beginning of the next block. This structure forms what is known as the "blockchain" — a chain of blocks connected through hash values. As The Bitcoin Backbone Protocol states "The protocol requires from miners to solve a "proof of work", which essentially amounts to brute-forcing a hash inequality based on SHA-256, in order to generate new blocks for the blockchain." The addition of new blocks requires validation by the majority of nodes, and miners obtain the right to record transactions by solving complex mathematical problems. This 'computational power competition' not only ensures system security but also increases the cost of altering history, rendering forgery virtually impossible [1].

Think of a classroom notebook that lies in the middle of the room. Any student can add a new page, but only after finishing a really tough Sudoku first. Whoever solves the puzzle wins a gold star (their reward) and writes the next page of notes. Because each new page also copies a unique code from the page before it, the notebook becomes a chain of linked pages. For over a decade, this mechanism has enabled Bitcoin to operate stably within a global network lacking trust mechanisms, establishing the prototype of a decentralized currency system and fostering a new paradigm in financial infrastructure. For example, Sara's wallet contains 4 Bitcoin. To pay Tom 3 Bitcoin, the wallet creates a short "payment message": use Sara's 4 Bitcoin, give 3 Bitcoin to Tom, leave 1 Bitcoin as a reward for miners (Transactions with high reward will be prioritized by miners). The app signs this message with Sara's private key and broadcasts it to thousands of Bitcoin computers. Each computer checks that the signature is genuine and that Sara's coin hasn't been spent before; once they agree, the payment waits in a public queue. Miners scoop up queued payments into a new page of the ledger and race their machines to solve a hard hash puzzle; the first miner to succeed publishes the page and pockets the 1 Bitcoin fee as part of the reward. Every other node takes seconds to verify the answer and glue that page onto the end of the shared ledger, permanently marking Sara's 4 Bitcoin coin as spent and crediting Tom with a fresh 3 Bitcoin he can now spend.

To illustrate how this system works in practice, consider a simple transaction:

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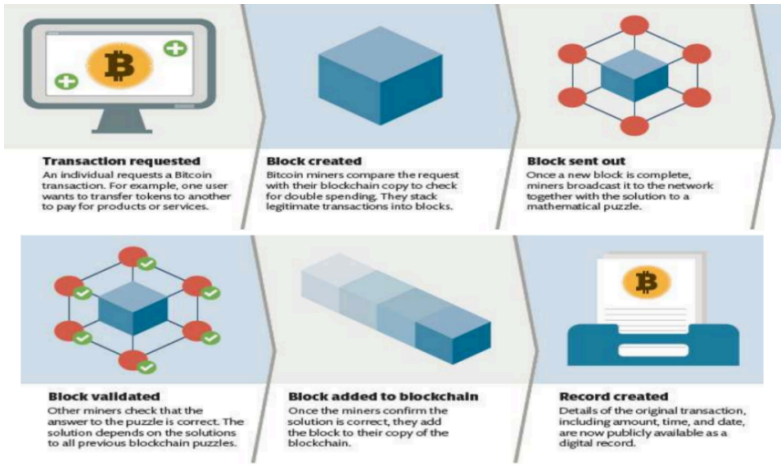

Figure 1. The process of a Bitcoin transaction

Notes: This diagram illustrates the six key steps of a peer-to-peer Bitcoin transaction, from the initial request to the final, immutable record on the public ledger. The process relies on a network of "miners" who validate the transaction and add it to the blockchain.

Source: Adapted from How Economics Works, DK.

As the example shows, the Bitcoin network facilitates value transfer without a central intermediary. A user initiates a transaction (Step 1), which is then bundled into a "block" by miners (Step 2). This block is broadcast to the network (Step 3), validated by other miners (Step 4), and finally added to the permanent blockchain (Step 5), creating an unchangeable public record (Step 6).

1.2. Ethereum and the smart contract ecosystem

The emergence of Bitcoin resolved the issue of value transfer; however, the limitations of its scripting language hindered support for complex financial operations. Following Bitcoin's establishment of decentralized value transfer, Ethereum, as the representative of second-generation blockchain, was officially launched in 2015, marking the transition of blockchain from a monetary system to a programmable financial platform [2]. The Ethereum platform provides a Turing-complete programming environment, enabling developers to deploy automatically executing programs with arbitrary logic on the blockchain—referred to as 'smart contracts.' Perhaps the best metaphor for a smart contract is a vending machine: with the right inputs, a certain output is guaranteed. As The Bitcoin Backbone Protocol notes, researchers now study 'tweaks' on the original Bitcoin backbone— 'GHOST,' for example, is the rule Ethereum adopts to support its smarter, faster chain.

A Smart Contract is self-executing code deployed on the Blockchain, where the program logic is embedded in the Blockchain and automatically executes relevant operations once predefined conditions are met, without requiring third-party intervention. This mechanism significantly expands the application scope of the Blockchain, enabling it to support complex financial logic, governance mechanisms, and interaction protocols. If you want to complete this transaction, you need to place the sell order on a exchange that supports Bitcoin trading. The trade will only be matched and executed when someone in the market is willing to buy at that price. The Bitcoin network does not actively carry out this trade or wait for the conditions to be met — it only records the transaction once it has been confirmed. So, Bitcoin itself does not respond to the "limit order"; it just records the fact that the transaction has already occurred. If you need automated execution based on conditions, you must rely on external systems, such as exchanges or platforms based on smart contracts. If

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Bitcoin addressed the question of 'how to transfer value,' Ethereum seeks to answer 'how to automatically execute financial logic on-chain.' The advent of Ethereum opened the door to 'programmable finance,' fostering the development of the decentralized finance (DeFi) ecosystem. Users can access on-chain services without intermediaries, and stable coins such as USDC and DAI have become important clearing media for smart contracts, enabling the highly volatile cryptocurrency ecosystem to establish a relatively stable and sustainable financial application foundation. Although smart contracts still face code vulnerabilities and governance disputes, their fundamental logic is regarded as an important complement to traditional financial architectures: not only enabling automated clearing but also providing technical support for institutional transparency [2].

However, it is crucial to recognize the limitations of smart contracts when interacting with real-world markets. A smart contract executes code based on predefined conditions, but it cannot create market liquidity where none exists. For example, a smart contract designed to sell 10,000 BTC at a price of $100,000 can only execute if there are sufficient buyers willing to pay that price on an exchange. If the sell order is too large for the market to absorb, it will result in significant price slippage, an issue the contract's code cannot solve. This highlights the ongoing challenge of bridging deterministic blockchain logic with the dynamic nature of financial markets (See Appendix A for a detailed discussion on smart contracts and market liquidity).

2. The cornerstone of the new era: a deep dive into stablecoins

In order to understand the current transformation into a new age of digital finance, it is necessary to examine its very fundamental building block: the stablecoin. This new financial instrument, born out of the volatile first generation of cryptocurrencies, represents a major change in how we think about and transact with value over the internet.

This chapter will present a complete and systematic analysis of this new asset class, from the ground up. We will break down why they were created, how a regulated stablecoin like USD Coin (USDC) actually works, the economically powerful model that creates its profitability, and the risks that shape its ecosystem.

2.1. The problem: the observed volatility of cryptocurrencies

The genesis of stablecoins is a direct response to a well-documented and persistent characteristic of first-generation cryptocurrencies like Bitcoin: their extreme price volatility [3]. Since its inception, Bitcoin's value has been characterized by dramatic bull and bear cycles, making it a powerful speculative asset but an unreliable instrument for commerce.

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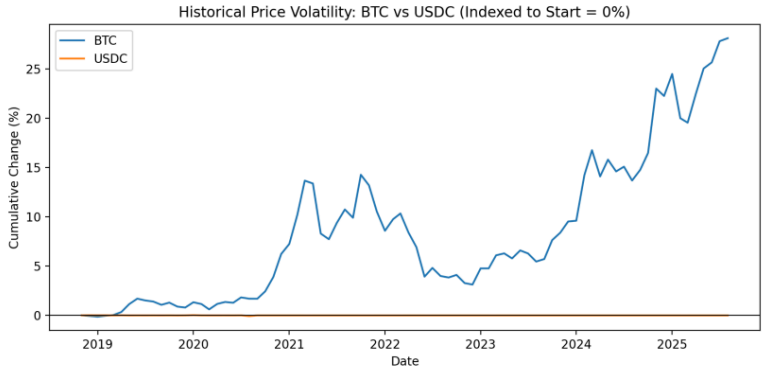

Figure 2. Historical price volatility, Bitcoin (BTC) vs. USD Coin (USDC), 2018-2025

Notes: This chart displays the cumulative percentage price change for BTC and USDC since the beginning of 2018. It visually demonstrates the long-term, structural volatility inherent in Bitcoin, which has experienced multiple cycles of appreciation and depreciation, compared to the consistent price stability of USDC, which remains pegged to its baseline value.

Source: CoinMarketCap (Jan 2018 - Jul 2025).

As illustrated in Figure 2, over a multi-year horizon, Bitcoin has exhibited exponential growth punctuated by severe drawdowns. This long-term price behavior, while attractive to long-term investors, makes it fundamentally unsuitable as a stable unit of account [3].

This volatility is not merely a feature of the past. Even in the most recent market cycle, the price instability of Bitcoin remains a significant barrier to its widespread adoption as a transactional currency. A closer look at the past year provides a clear illustration.

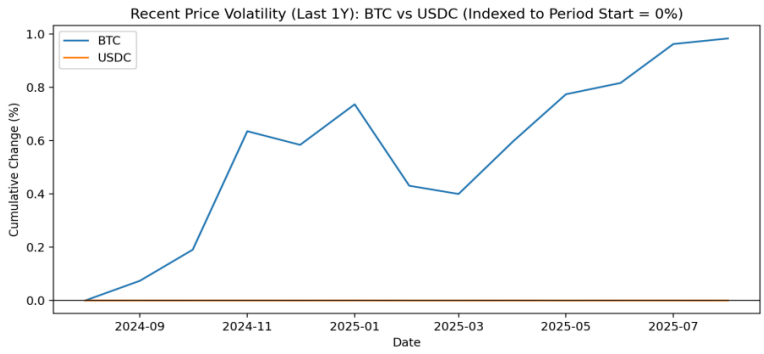

Figure 3. Recent price volatility, Bitcoin (BTC) vs. USD Coin (USDC), one-year period

Notes: This chart focuses on the percentage price change over the most recent 12-month period. It highlights that even during a more mature market phase, Bitcoin continues to experience significant short-term price fluctuations, whereas USDC maintains its unwavering peg to the U.S. dollar.

Source: CoinMarketCap (Jul 2024 - Jul 2025).

Figure 3 focuses on the past twelve months, demonstrating that even as the market matures, significant short-term volatility persists. As illustrated in both long-term and recent data, the price of Bitcoin has consistently exhibited a high degree of volatility. It is this empirical reality that created the market demand for a new type of digital asset capable of combining the technological efficiency of a cryptocurrency with the price stability of a traditional fiat currency.

Imagine attempting to run a business, price goods, or manage payroll with a currency that can fluctuate by over 50% in a matter of months. It is this fundamental challenge that stablecoins were

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created to solve. They were designed to offer the best of both worlds: the technological efficiency of a cryptocurrency combined with the price stability of a traditional fiat currency, a feature that holds true in both long-term and short-term analysis.

2.2. The solution: how a "digital dollar" is built and backed

At its essence, a stablecoin is built using blockchain technology for the purpose of transferring value that is pegged to a fiat currency. To clearly understand the functions it serves, we can break it down into its two key cornerstones: the blockchain as a transfer mechanism, and the reserve assets as the value anchor.

A blockchain, in its simplest way, is defined as a decentralized, public ledger. When someone sends a USDC to someone else, that transaction is sent to a globally shared ledger of record where a network of computers verifies the transfer and collectively record that a transfer has been made. This allows for the transaction to be immutable and secure and counter to the role of a traditional intermediary, or bank, as it is unchangeable.

The promise of maintaining a one-to-one peg with a fiat currency, however, is not based on the blockchain itself, but on a meticulously designed mechanism of full reserve backing. The life cycle of a USDC token, from its creation (minting) to its destruction (redemption), is best understood visually. The process involves several key institutional players and a clear, auditable flow of funds [4].

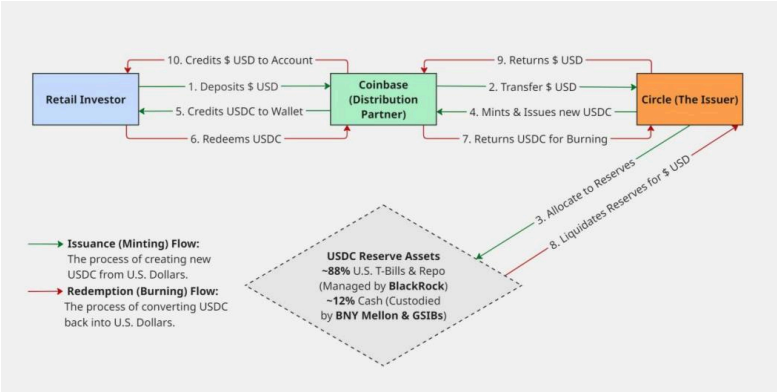

Figure 4. The life cycle of USDC: issuance & redemption flow

Notes: This flowchart illustrates the process for retail investors to acquire and redeem USDC through a distribution partner like Coinbase. The green arrows represent the issuance (minting) flow, where U.S. dollars are converted into new USDC. The red arrows represent the redemption (burning) flow, where USDC is converted back into U.S. dollars. The reserve assets are managed by third-party financial institutions.

As the flowchart shows, when a retail user deposits U.S. dollars with a partner like Coinbase, the funds are transferred to Circle. Circle then mints new USDC and simultaneously allocates the corresponding dollars to a segregated reserve pool. The composition of this reserve pool is the cornerstone of USDC's stability. As Circle officially states in its S-1 prospectus, these reserves consist predominantly of two components: a majority portion (~88%) invested in ultra-safe, short-term U.S. Treasury instruments via a fund managed by BlackRock, and a minority portion (~12%) held as cash in custody at Global Systemically Important Banks (GSIBs) like The Bank of New York Mellon. This conservative structure is fundamental to its trustworthiness [4].

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2.3. The economic engine: a zero-cost funding advantage

The brilliance of a regulated stablecoin's business model lies in its ability to generate significant revenue while assuming minimal financial risk, capitalizing on a powerful structural advantage over traditional banks [4].

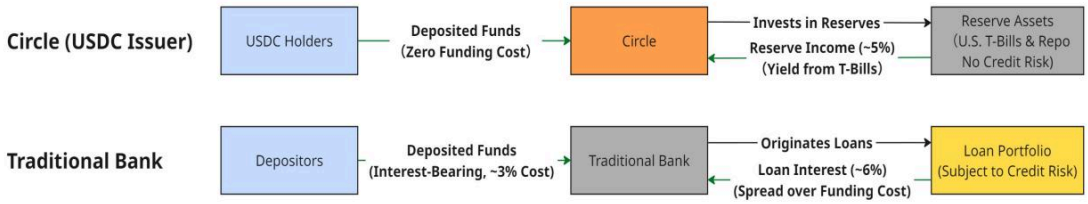

Figure 5. A comparative schematic of business models: stablecoin issuer vs. traditional bank

Notes: The diagram compares the core business models. Circle (USDC Issuer) benefits from zero-cost funding from its USDC holders and earns income from low-risk reserve assets. A Traditional Bank incurs interest expense on deposits and earns a spread by originating higher-risk loans.

Source: Circle's S-1 Prospectus and standard banking principles.

As illustrated, unlike traditional banks that must pay interest, stablecoin issuers operate with a near-zero cost of funding. It is important to note that this advantage may only be "for now," as future competition or regulation could alter this dynamic. However, under the current proposed legal frameworks, this zero-interest feature is structurally enforced. A law like the GENIUS Act, for instance, defines a compliant "payment stablecoin" as an instrument that is explicitly not a "security" [5]. This "definitional exclusion" is the key mechanism that allows compliant issuers to secure a vast pool of zero-cost liabilities.

With its funding cost at zero, Circle deploys these funds into high-quality, interest-bearing assets. The spread between the yield from these risk-free assets and the zero-cost funding constitutes a highly profitable revenue stream, accounting for over 98% of Circle's total revenue.

2.4. The risk spectrum: regulated (USDC) vs. unregulated (USDT)

Despite their name, not all stablecoins are created equal. The landscape is a spectrum of risk, largely defined by an issuer's regulatory standing and the quality of its reserve assets. The contrast between the two market leaders, USDC and USDT, provides a clear illustration [6,7].

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Table 1. A comparative risk profile of major stablecoins: USDC vs. USDT

Dimensione	USDC(Circle)	USDT (Tether)
Regulatory Status	Onshore,U.S. Regulated (Licensed,Audited)	Offshore,Largely Unregulated (Based in British Virgin Islands)
Reserve Asset Quality	Highest Quality (Cash &Short-Term U.S. Treasuries)	Mixed Quality(Includes Corporate Bonds,Precious Metals, other Cryptocurrencies,Secured Loans)
Transparency	High (Publicly filed S-1, monthly attestations by a Big Four firm)	Low (Self-reported on website,limited independent auditing)
Primary Risk Profile	Operational &Counterparty Risk (e.g.,risk of a custodian bank failure)	Fundamental Solvency &Credit Risk (e.g.,risk of reserve asset default or illiquidity)

Notes: This table provides a high-level comparison based on publicly available information. "Regulatory Status" refers to the issuer's primary jurisdiction and oversight. "Reserve Asset Quality" refers to the composition of assets backing the stablecoin. "Transparency" refers to the level of public disclosure and independent auditing. "Primary Risk Profile" refers to the main type of risk faced by the holders of each stablecoin.

Source: Circle's S-1 Prospectus [4]and Tether's public reserve reports [8].

As the comparison shows, the business model directly influences the risk profile.

Regulated players like USDC adhere strictly to a conservative model, holding only the safest assets to maintain their regulatory status and user trust. Their primary risk is operational and counterparty risk (e.g., the risk of a custodian bank failure, as seen with SVB).

Unregulated players like USDT, operating outside this legal framework, are not bound by the same constraints. As shown in their self-reported reserve breakdown, they can and do invest in riskier assets (corporate bonds, other cryptocurrencies, secured loans) in pursuit of higher yields. This introduces significant credit and market risk, creating a fundamentally different and more fragile risk profile for their holders.

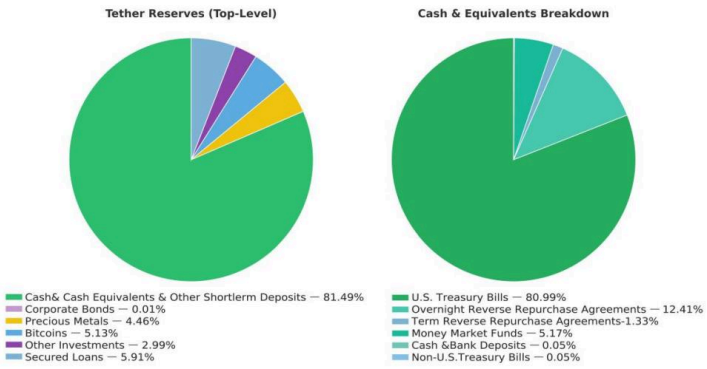

Figure 6. A visual breakdown of tether (USDT) reserve assets (Q1 2025)

Notes: This figure shows a self-reported breakdown of assets backing USDT. A significant portion is held in U.S. Treasury Bills, but it also includes other, potentially riskier asset classes such as Corporate Bonds, Precious Metals, and Secured Loans.

Source: Tether's Q1 2025 Reserves Report.

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This comparison reveals the critical role of regulation and transparency in mitigating risk. Understanding this spectrum is crucial for assessing the long-term viability and role of stablecoins in the future financial system.

3. The bank's initial exploration: cryptocurrency as a risk asset (2017-2022)

3.1. Opportunities and motivations: riding the wave of cryptocurrency dividends

Since 2017, the prices of crypto assets have experienced significant volatility, and the industry's popularity has surged sharply, attracting numerous technology startups, cryptocurrency trading platforms, and funds into the market. These institutions have demonstrated a strong demand for financial infrastructure such as bank accounts, clearing channels, and fiat custody; however, due to their unclear compliance status, they have long been regarded as 'high-risk clients' by the mainstream banking system, making it difficult to open accounts or obtain traditional services [9].

Against this backdrop, some technology-oriented small and medium-sized banks have recognized the potential for deposit growth and proactively opened limited service windows to the cryptocurrency industry. Representative banks such as Silvergate Bank and Signature Bank have chosen to provide 'borderline services' to cryptocurrency enterprises, including US dollar clearing, account management, and fiat currency on/off ramps, aiming to attract substantial capital inflows from this emerging industry. For example, Silvergate's Silvergate Exchange Network (SEN) enables trusted cryptocurrency exchange clients to settle US dollars 24 hours a day within its internal network, thereby circumventing the limitations of the traditional interbank system. Through this mechanism, Silvergate successfully attracted leading clients such as Coinbase and Gemini, with cryptocurrency-related deposits at one point accounting for over 60% of the bank's total deposits in 2021, becoming its primary growth driver [9].

However, it is noteworthy that these banks generally maintain a highly cautious stance towards holding crypto assets themselves. Silvergate has never included tokens such as Bitcoin and Ethereum on its balance sheet, nor has it allocated any crypto assets within its proprietary accounts. This strategy reflects a fundamental orientation: banks do not wish to engage in cryptocurrency price speculation but instead seek to attract highly sticky deposits from the cryptocurrency industry by providing low-risk financial interface services. There are two primary motivations behind these banks adopting a 'border access' model. The first is the compliance uncertainty arising from regulatory ambiguity. Due to the lack of consensus among institutions such as the SEC and OCC regarding the legal classification of crypto assets, most banks are concerned that directly holding tokens may trigger regulatory accountability or financial disclosure risks. Mainstream banks place great importance on their reputation among investors, rating agencies, and the public; once directly linked to highly volatile and controversial assets, they are very likely to face a loss of trust during crises.

Therefore, between 2017 and 2021, a model of 'functional cooperation' emerged within the U.S. banking system: banks were willing to provide basic services such as accounts, clearing, and compliance consulting to the cryptocurrency industry, but strictly delineated boundaries to avoid direct financial association with the tokens themselves. They regard cryptocurrency as a 'serviceable but non-absorbable' industry, providing merely a 'financial conduit' rather than 'asset recognition.'This mode of participation fully reveals the structural contradictions within the banking system: on one hand, driven by commercial motives, it seeks to capture deposit dividends; on the other hand, due to prudential compliance considerations, it cannot genuinely assume the underlying

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risks of the cryptocurrency industry. This mentality is neither simple acceptance nor outright rejection, but rather a strategic engagement that cautiously navigates regulatory gray areas.

3.2. Regulatory climate: ambiguity and evasion strategies

With the Biden Administration assuming office in 2021, the overall regulatory stance of the United States towards crypto assets entered a more cautious and structured phase. Although comprehensive federal legislation to combat or prohibit cryptocurrency was not immediately enacted, major regulatory agencies have expressed a high degree of vigilance towards the cryptocurrency industry through public statements, enforcement actions, and policy documents, creating a regulatory environment characterized by 'low intensity but high density' [10].

During this period, the three key financial regulatory agencies: the U.S. Securities and Exchange Commission (SEC), the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC) have not yet fully harmonized their regulatory approaches but have conveyed a shared stance: that crypto assets, as an emerging financial phenomenon, must be prudently managed within the existing regulatory framework. SEC Chairman Gary Gensler emphasized: “The vast majority of crypto tokens may constitute securities.” Because once crypto tokens are classified as "securities," they fall under the regulatory scope of U.S. securities law, which has profound implications for the operational models, compliance obligations, and legal risks across the entire crypto industry. The regulatory constraints on market participants' behavior will also be significantly strengthened. Although this position has not been codified into law, it conveys a clear deterrent effect in the market and, combined with a series of enforcement actions, has constrained the operational space of crypto projects. Meanwhile, the OCC has issued multiple interpretative letters regarding banks providing crypto asset-related services, such as Letter 1179 which stipulates: If banks offer crypto asset custody, stablecoin clearing, or other related services, they must “obtain prior approval and demonstrate risk control capability.”This mechanism does not directly prohibit such activities but substantially raises the entry threshold for banks. The FDIC has repeatedly warned that banks should carefully assess the impact of crypto-related deposits on their liquidity and systemic risk, especially following the 2022 Luna and Celsius incidents, during which the agency further emphasized the “high opacity and liquidity mismatch issues” inherent in crypto activities [9].

In an environment characterized by a “legislative vacuum plus frequent interventions,” banks face not only regulatory costs but also policy uncertainty. Consequently, most institutions have adopted a “limited exposure” strategy —that is, an approach of “maintaining distance without complete withdrawal”: engaging only in low-risk activities such as fiat clearing and custody, while avoiding holding tokens or assuming substantial exposure on their balance sheets. This form of evasive innovation is primarily reflected in adjustments to product structure, compliance processes, and information disclosure.

Overall, the regulatory logic during this period was to 'set limits before determination': regulatory authorities established deterrence through administrative signals, compelling industry self-regulation, forcing banks to continuously navigate between 'innovation' and 'compliance', and prompting banks to adopt a more conservative stance between risk and opportunity. The banks' response strategies exemplify the flexibility, risk awareness, and strategic patience of financial institutions operating within an uncertain institutional environment.

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3.3. Risk warning: early indicators of systemic risk

With the reversal of market cycles and the frequent occurrence of risk events, the apparent prosperity of the cryptocurrency market has been disrupted. Because once crypto tokens are classified as "securities," they fall under the regulatory scope of U.S. securities law, which has profound implications for the operational models, compliance obligations, and legal risks across the entire crypto industry. The regulatory constraints on market participants' behavior will also be significantly strengthened. The fourth quarter of 2021, driven by expectations of Federal Reserve interest rate hikes and macro liquidity tightening, the prices of mainstream assets such as Bitcoin and Ethereum have continuously declined, followed by the rapid emergence of structural risks within the cryptocurrency ecosystem. In 2022, the consecutive collapses of Terra/LUNA and FTX became focal points of systemic risk in the “first era” of the cryptocurrency industry, fundamentally undermining the traditional financial sector’s confidence in the underlying logic and risk control capability of this emerging domain [7,9].

In the Terra incident, the algorithmic stablecoin UST, originally pegged to the US dollar, rapidly lost market confidence and swiftly depegged to nearly zero. The LUNA token supporting its operation also subsequently collapsed, resulting in the vaporization of billions of dollars in assets, causing multiple DeFi protocol asset pools to be liquidated, triggering a series of leveraged liquidation cascades. This incident exposed the structural fragility of stablecoins due to the absence of collateral mechanisms and market-linked early warning systems.

Even more impactful was the dramatic collapse of the FTX exchange in November of the same year. As the then second-largest centralized platform globally, FTX was revealed within a short period to have severe governance deficiencies, including asset misappropriation, financial fraud, and lack of auditing. Although its collapse did not directly occur within the banking system, Silvergate Bank, having provided clearing services for FTX, experienced a sharp decline in stock price, loss of customers, and ultimately entered liquidation proceedings following the incident. (See Appendix)

These events sent a clear signal to the banking system: the problems within the cryptocurrency industry extend beyond price volatility or regulatory ambiguity; fundamentally, they arise from highly complex, opaque, and unpredictable 'endogenous risks'—whether in algorithmic structures, liquidity pool configurations, or corporate governance—all of which far exceed the risk paradigms familiar to traditional financial institutions. In this context, banking institutions have developed heightened vigilance regarding the risk transmission chain between themselves and the cryptocurrency industry. Even without holding any tokens, merely acting as a provider of payment, clearing, or account services may expose one to reputational damage, capital outflows, and regulatory accountability during market panic.

Therefore, the LUNA and FTX incidents represent not only an industry crisis but also a critical turning point in banks' risk perception, further consolidating their defensive stance of 'operating only at the periphery and avoiding deep entanglement,' and marking a turbulent and distrustful conclusion to the 'first era' [9] (A detailed analysis of the FTX collapse is provided in Appendix B).

4. The regulatory hegemon: how U.S. law is shaping the digital dollar era

The turbulent conclusion to the 'First Era' raised a critical question for the U.S. banking and regulatory landscape: what comes next? Would the risks exposed by the crypto market's implosions lead to a complete withdrawal by traditional finance, or would they catalyze a more structured and strategic form of engagement? This chapter argues for the latter. We begin by analyzing the political catalysts that reshaped policy expectations (4.1). We then examine the institutional awakening on

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Wall Street, presenting case studies of how major banks began to implement new, infrastructure-focused strategies (4.2). Finally, we provide a deep dive into the legal foundations, analyzing how frameworks like the GENIUS Act provided the certainty for this new era and serve a profound geopolitical purpose (4.3). We will demonstrate how these forces converged to transform the U.S. approach from reactive risk containment to a proactive strategy aimed at shaping the future of the digital dollar.

4.1. Political catalyst: policy expectations reshape strategic direction

Since 2020, U.S. regulatory thinking on digital assets has shifted from a singular focus on “risk containment” toward “guiding innovation.” In the late Trump administration, relatively lenient signals were released, including appointing regulators favorable toward digital assets and promoting the OCC’s recognition that banks could offer crypto custody services. This broke the entrenched notion that “digital currency = illegal speculation.” While the Biden administration tightened oversight, it also introduced systematic policy design: in March 2022, Executive Order 14067 required the Treasury Department, Federal Reserve, Department of Justice, and others to coordinate in studying the systemic impact of digital assets and to explore a U.S. version of a CBDC. Soon after, the Treasury’s Report on the Future of Payment and Monetary Systems proposed incorporating stable coins into the national payment strategy under controllable conditions and recognized U.S. dollar stable coins issued by regulated entities as legitimate clearing instruments. This policy shift moved stable coins from objects of inherent suspicion to payment tools integrated into mainstream finance. Against the backdrop of challenges to the U.S. dollar’s global position and shifts in the international monetary order, the U.S. government has positioned digital financial infrastructure as a key arena for sustaining dollar influence, creating both policy and strategic openings for banks to enter the Bitcoin and stable coin sectors [10].

4.2. The institutional awakening: wall street's shift from bystanders to builders

As examined in the previous chapter, the newfound regulatory clarity was not simply a risk-reducing event, but a force majeure that opened the floodgates of Wall Street's strategic execution of initiatives. This chapter will consider this second era of institutional adoption. To start, we will examine the monumental shift in the way the banking industry is thinking strategically, moving from passive observers to active builders of a new financial infrastructure. We will then provide real examples of how major banks, including J.P. Morgan and BNY Mellon, are implementing these new initiatives. Finally, we will examine the ultimate geopolitical implication for the adoption of crypto overall and this new financial infrastructure - that is, hegemony of the U.S. dollar in the digital age.

The issue of warming policy trends was the external condition; the real driving force of the banks' paradigm shift was the internal reconceptualization of the "crypto value center." Over the past couple of years, a critical mass of major banks has shifted their attention away from speculative token price and towards the underlying infrastructure and have made the incremental shift from passive observers to active builders.

This strategic reassessment is a direct response to the new policy environment and the international competitive landscape. Banks are no longer content with being "outsourced providers of crypto services." Instead, they are actively striving for leadership in constructing infrastructure standards, clearing interfaces, and regulatory connection layers. They recognize that in cutting-edge fields such as digital currency and tokenized clearing, proactively building the financial infrastructure provides greater long-term value, policy security, and structural stability than

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passively holding volatile assets. This marks a fundamental transition from a mindset of 'making quick profits' to one of 'building infrastructure.'

This strategic shift is not theoretical; it is being actively implemented by Wall Street's most powerful players, who are building the foundational infrastructure for this second era. Two leading examples are particularly illustrative:

• JPMorgan Chase's JPM Coin: The bank is deepening its deployment of the "Onyx" blockchain platform, where JPM Coin facilitates instant, inter-enterprise USD settlement within a permissioned, or closed-loop, network. This marks a significant move by a major bank to embed a stablecoin-like instrument into its core clearing processes. The operational logic of JPM Coin emphasizes compliance, control, and governance, reflecting a clear strategic choice to reshape the B2B payment infrastructure rather than engage in speculative trading.

• Digital Asset Custody at BNY Mellon: As one of the world's largest custodian banks, BNY Mellon has formally integrated a digital asset custody system into its core business framework. This platform supports mainstream assets like Bitcoin and Ethereum and was developed in collaboration with compliance firms such as Chainalysis to ensure on-chain monitoring. The bank's official statements underscore its commitment to providing institutional clients with a "trusted and auditable digital asset custody mechanism." This represents a formal endorsement of the legitimacy and security of digital assets by a leader in traditional finance, paving the way for wider institutional investment.

These cases, along with the rise of collaborative networks like the Canton Network (joined by Citi, HSBC, and Wells Fargo), demonstrate that banks are no longer on the sidelines. They are actively building the systems and standards for the future of digital finance.

4.3. Legal foundations and geopolitical implications: the GENIUS Act

Historically, U.S. oversight of crypto assets relied heavily on case-by-case enforcement, with no unified legal framework—leaving banks facing ongoing compliance risks due to unclear rules. In early 2023, the proposed GENIUS Act sent a critical signal: regulatory strategy was moving from “one-size-fits-all” containment toward “integration within the system.” The Act seeks to classify crypto assets by their use and structure and to establish clear licensing boundaries, enabling banks to know which services are permissible, how to conduct them compliantly, and how far they can expand. Under this framework, stable coins and other compliant digital assets gained legal clarity for the first time. This development reflects a broader regulatory shift from defensive enforcement to forward-looking legislation, providing banks with a secure legal foundation to expand digital payments, stable coin clearing, and related asset services [5].

4.3.1. The "carrot": nurturing domestic champions through definitional exclusion

The first mechanism is a powerful incentive, or a "carrot," designed to ensure the continued growth and financial health of compliant, U.S.-based issuers like Circle. For example, the Act uses a "definitional exclusion" in Section 2(14)(B) to classify payment stablecoins as non-securities. By classifying payment stablecoins as non-securities, the Act addresses the single greatest source of legal uncertainty that had previously stifled institutional adoption.

The strategic importance of this classification cannot be overstated. It is the legal foundation that provides the institutional certainty for the entire financial system to engage with this new technology (See Appendix C for a detailed analysis of the "security" vs. "non-security" distinction and its

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economic consequences). This clarity is arguably more significant for financial institutions than any other single provision in the Act.

The economic reasoning behind this legal maneuver is profound. By legally shielding these instruments from being classified as securities, the Act protects their highly profitable zero-cost funding model. This ensures that domestic champions can continue to attract U.S. dollars globally and convert them into reserve assets, primarily U.S. Treasury debt, without being burdened by the costly and complex regulations of securities law [11,12]. This is not just a technicality; it is the legal foundation that guarantees their capacity to function as the new, private-sector engine for U.S. debt demand. It ensures the "American team" is well-fed and strong.

4.3.2. The "stick": extending U.S. jurisdiction via reserve requirements

The second mechanism is a disciplinary tool, or a "stick," designed to extend U.S. influence over global competitors. One of the key provisions in the proposed legislation is that any stablecoin issuer that invests in U.S. Treasuries to back its tokens could fall under the purview of U.S. regulators.

The strategic brilliance of this clause lies in its inevitability. As established, holding U.S. T-bills is the only credible way for any large-scale, USD-pegged stablecoin to prove its stability and solvency to the global market.

Therefore, this clause effectively gives U.S. authorities leverage over nearly every major stablecoin issuer in the world, including offshore giants like Tether. This provides a powerful tool to mitigate systemic risks, enforce U.S.-led compliance standards (such as Anti-Money Laundering and Counter-Financing of Terrorism, AML/CFT), and ultimately ensure the entire global digital dollar ecosystem operates according to rules set in Washington. It transforms a market standard into a tool of jurisdictional control.

4.3.3. The synthesis: how the GENIUS Act forges a new hegemonic cycle

Table 2. The strategic impact of the proposed GENIUS Act on the stablecoin ecosystem

Aspect	Before GENIUS Act (Pre-2025)	After GENIUS Act (Post-2025)
Regulatory Framework	Stablecoins operated in a "legislative vacuum," with fragmented oversight and no unified framework.	Establishes a clear licensing regime,non-security classification,and encourages innovation through clear guidelines.
Risk Perception and Stability	Viewed as high-risk assets due to volatility,collapses (e.g.,Terra/LUNA,FTX),and regulatory uncertainty.	Introduces mandatory disclosures,certifications,and rules to reduce volatility and protect financial stability.
Issuer Landscape	Dominated by offshore,unregulated issuers with riskier reserve strategies,facing compliance challenges.	Favors U.S.-based issuers with clearer,standardized regulations,promoting trust and stability in the market.
Broader Impact	Innovation was hindered by enforcement actions,regulatory uncertainty,and lack of clear policy support.	Reinforces U.S. dollar dominance through stablecoin reserves and regulatory clarity,while fostering innovation.

Notes: This table synthesizes the strategic shifts catalyzed by the GENIUS Act. It moves beyond a simple regulatory description to analyze the Act's impact on the competitive landscape and its role in reinforcing U.S. dollar hegemony.

Source: GENIUS Act of 2025.8.1.

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In conclusion, the legislative framework, the flow of capital, and the political-economic alliances all point to the coherent and sophisticated strategy. The GENIUS Act, as summarized in Table 5.1, is the linchpin of this strategy. It transforms the stablecoin landscape from a chaotic, high-risk "legislative vacuum" to a structured, U.S.-led ecosystem. By creating a favorable domestic regulatory environment (the carrot) while extending its jurisdictional reach globally (the stick), the U.S. is not merely reacting to the rise of stablecoins; it is actively cultivating them as a strategic asset. In doing so, it is forging a new and powerful instrument to project and preserve its dollar hegemony in a rapidly tokenizing world [5,11,13,14].

5. Conclusion - the dawn of a new financial era

This paper has documented the rapid and significant evolution of stablecoins, from a niche technology to a geopolitically-relevant asset class. We have divided that transition into two eras.

The First Era featured a traditional bank's uneasiness about increasing involvement in cryptocurrency as a sector that could simultaneously be both high-risk and high-reward. It was characterized by a period of experimentation, associated with extraordinary profits for early adopters but a series of spectacular failures that highlighted the systemic risks associated with unregulated innovation intersecting with existing financial systems.

We are entering a new "Second Era" that is distinct in both scope and ambition. In this context, stablecoins have evolved from being just a bridge to crypto, to being integrated into the fundamental architecture of the global financial infrastructure. Our research has determined that this is not a passive market phenomenon, but rather a coordinated, multi-faceted strategy, especially on the part of the US.

From a technological and business standpoint, stablecoins challenge the legacy financial systems by creating a structural change that allows near-instantaneous, low-cost cross-border payments at all hours, every day. More importantly, from a geopolitical standpoint, our central idea is that USD-denominated stablecoins have become a form of strategic instrument for reinforcing US dollar hegemony. This has been demonstrated by multiple lines of evidence: creating another channel for global demand for US sovereign debt; strong political-economy alliances that have nurtured the US domestic ecosystem; and a robust legal architecture that can project US regulatory power globally.

The journey ahead is still fraught with uncertainty. The global regulatory landscape remains fragmented, and as institutions like the Bank for International Settlements (BIS) have noted, a fundamental tension exists between the innovative potential of tokenization and the established principles of monetary stability [13]. The key question is no longer if digital assets will be part of our financial system, but how they will be integrated and by whom their rules will be written. The rise of the regulated digital dollar, as we have argued, represents the United States' decisive answer to that question—marking not just the maturation of a technology, but the dawn of a new, strategically managed era in the competition for global financial leadership.

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Appendix A: smart contracts and market liquidity - a practical limitation

Smart contracts, as introduced in Chapter 1.2, represent a paradigm shift in financial automation. Their core promise is "code is law"—the deterministic, unstoppable execution of predefined instructions on a blockchain. However, a critical distinction must be made: a smart contract can automate the logic of a transaction, but it cannot create the liquidity necessary for that transaction to occur in the real world without adverse effects. This limitation can be explored through the scenario of executing a large-scale sell order.

A naive implementation would be a smart contract that, upon receiving a price feed showing BTC ≥ $100,000, attempts to execute a single, massive "market sell" order for 10,000 BTC. The outcome would likely be catastrophic for the seller due to insufficient liquidity. The large order would consume all buy orders at the top price and then move down the order book, an effect known as price slippage, resulting in a final average price far below the initial target. The smart contract, in its blind execution, is incapable of reacting to this dynamic market feedback.

A more sophisticated approach would involve a "limit sell" order, programmed to sell only at $100,000 or higher. This solves the problem of getting a bad price but introduces execution uncertainty; if market liquidity is insufficient, the order may only be partially filled, or not at all. The practical limit on a smart contract's trade size is therefore not imposed by the code itself, but by the liquidity of the underlying market—the same constraint faced by any human trader. While advanced contracts can mitigate this by breaking large orders into smaller pieces over time (a "TWAP" strategy), this adds significant complexity and cost.

In conclusion, the smart contract is a powerful tool for automating financial logic, but it is not a panacea for the fundamental challenges of market dynamics. It operates on top of markets, not outside of them. Its effectiveness is ultimately constrained by the depth and liquidity of the underlying trading venues. This realization is crucial: smart contracts are an important complement to traditional financial architectures, but they do not eliminate the need for the sophisticated risk management and liquidity provision that remain the domain of traditional financial institutions.

Appendix B: analysis of the causes of FTX's bankruptcy

First, there were issues of internal related-party transactions:

FTX and the hedge fund Alameda Research, although nominally two independent companies, were in fact both controlled by founder Sam Bankman-Fried, with a high degree of overlap in management and blurred business boundaries. As a cryptocurrency exchange, FTX held a large

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amount of customer assets, but without informing users, secretly transferred part of those funds to Alameda for its high-risk trading and speculative activities. This practice not only violated the asset segregation and fiduciary duties that an exchange is obliged to perform, but also directly exposed customer funds to highly volatile markets and potential losses. Once Alameda's trades suffered significant losses, the impact would quickly transmit to FTX, creating a risk of a complete liquidity collapse.

Second, the company's financial management was chaotic, with deficiencies in auditing and risk control:

FTX lacked a sound system and standardized accounting procedures, resulting in disorganized accounts where the true state of assets and liabilities could not be accurately reflected in regular financial statements. In terms of external auditing, FTX engaged a relatively small audit firm with limited qualifications, whose auditing processes and quality were insufficient, failing to detect potential funding gaps and liquidity risks in a timely manner. The risk management framework also had significant shortcomings, such as the lack of effective monitoring and stress testing of leverage ratios, liquidity conditions, and collateral values, which meant that when market volatility intensified, the company was unable to take timely measures to prevent risks from escalating.

Third, choosing a Lax Regulatory Jurisdiction to Evade Oversight:

FTX established its headquarters in the Bahamas, a jurisdiction with relatively loose regulation in the cryptocurrency sector and lacking the stringent compliance requirements imposed by major financial regulators such as those in the United States. Leveraging this geographic and legal arrangement, FTX was able to bypass U.S. mandates on customer asset protection, fund segregation, and information disclosure, thereby operating in an environment with limited transparency and minimal external checks and balances.

Appendix C: the "security" vs. "non-security" distinction and its strategic importance

The Legal Foundation: What Defines a "Security" in the U.S.?

This appendix addresses the critical question raised during our review: why the classification of a stablecoin as a "non-security" is of paramount importance. The answer lies in the vast and complex body of U.S. securities law, primarily established by the Securities Act of 1933 and the Securities Exchange Act of 1934, and enforced by the Securities and Exchange Commission (SEC). The legal standard for what constitutes a security is famously broad, largely determined by the Howey Test. This test, originating from a 1946 Supreme Court case, defines a security as an "investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others."

The Operational Consequences of a "Security" Classification

When a financial instrument is classified as a security, a completely different and far more complicated set of regulations will apply, not simply in terms of cost but also in how the instrument can be issued, traded, and custodied. For instance, a security has to be issued using registered broker-dealers rather than through some simple mint-and-redeem mechanism like a payment tool. These instruments will have to be handled by a regulated national securities exchange that is authorized to issue securities, and custodians are well regulated as they work to comply with SEC rules around asset segregation (e.g., Rule 15c3-3), which are much more complicated than typical banking custody. All communications to the public related to the financial instrument is also intensely regulated to protect investors.

The Core Problem: A Mismatch of Purpose and Regulation

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The central problem is a mismatch of categories: securities law has developed to regulate investment vehicles, where the objective is raising capital and providing returns for investors. The rules are designed to protect investors from fraud and information asymmetry in that context. A payment stablecoin, on the other hand, is designed to be a payment instrument. The object is to be a stable medium of exchange and a settlement asset. To force a payment tool to comply with all the complicated rules that securities law created for an investment vehicle would cause immense operational friction and legal uncertainty, making the payment tool unusable for its intended purpose of fast, low-cost payments.

The Strategic Importance of the "Non-Security" Classification

Therefore, the "definitional exclusion" mechanism within the GENIUS Act is the single most important legal provision for the future of the U.S.-based stablecoin industry, primarily because it provides institutional certainty for the entire financial system. By creating a clear legal "safe harbor," it explicitly signals to the market—banks, payment companies, and exchanges—that this is a tool for payments, not a speculative investment. This legal clarity is the absolute prerequisite for major, conservative institutions like J.P. Morgan and BNY Mellon to build services around stablecoins without exposing themselves to the unacceptable legal and compliance risks of inadvertently handling an unregistered security. This certainty, in turn, enables the ecosystem to grow to a scale where its broader economic and geopolitical impacts, as discussed in Chapter 4, can materialize. In conclusion, the debate over this classification is not about a minor legal technicality; it is about creating the foundational legal clarity necessary for a new financial instrument to be safely integrated into the mainstream financial system.