Stable

A USDT Powered Layer 1 Blockchain for Stablecoins

Abstract

Stable is a Layer 1 blockchain that establishes stablecoins as native assets for transaction settlement. The network eliminates dependence on volatile gas tokens, enabling ultra-low fees and sub-second settlement for dollar-denominated transfers. Every element of the protocol is optimized for the unique transaction patterns of stablecoins, from consensus to execution. By embedding enterprise-grade features such as guaranteed blockspace, confidential transfers at the protocol layer, Stable establishes stablecoins as reliable digital money. The design targets three primary objectives: remove gas-token friction so that users interact solely in USDT, deliver predictable high-performance settlements at scale, and provide financial institutions with infrastructure that meets standards of cost certainty, operational efficiency, and regulatory alignment.

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1. Introduction

Stablecoins have become one of the most widely adopted categories of digital assets, with USDT emerging as the preferred digital dollar across: exchanges, trading platforms, and payment systems. While stablecoins have proven their utility in trading and liquidity provision, their broader potential in remittances, merchant payments, treasury operations, and global settlement remains largely unrealized.

The reason lies in infrastructure. General-purpose blockchains were not designed for monetary settlement. They introduce variable fees, inconsistent confirmation times, and multi-token complexity, creating friction that prevents stablecoins from functioning as seamless payment instruments.

Stable addresses these shortcomings by introducing StableChain, a Layer 1 blockchain dedicated to stablecoin transactions. Rather than adapting general-purpose networks, it aligns every layer of its design with the requirements of monetary settlement. The goal is to provide stablecoins with the same reliability as established payment systems while preserving the transparency, accessibility, and programmability of blockchain technology.

While StableChain uses USDT0 as the canonical USDT asset, this document refers to it as USDT, given the term's broader recognition and familiarity.

By removing gas-token friction, standardizing settlement around a single asset, and embedding enterprise-grade features into the base protocol, StableChain provides the foundational infrastructure required for stablecoins to scale from trading instruments to global payment rails.

1.1 Motivation

Stablecoins have reached a level of adoption that positions them to influence the structure of global payments. Their use has expanded into a broader role as digital dollars with the capacity to support settlement across markets and geographies. The combination of continuous availability, programmability, and global reach makes them a credible foundation for financial applications that require speed and certainty.

For this potential to translate into mainstream adoption, stablecoins require infrastructure that offers predictable performance, cost efficiency, and operational safeguards consistent with established payment systems. Stable is designed to provide this foundation. By aligning protocol design with the characteristics of monetary settlement, it enables stablecoins to support a wider spectrum of financial activity, from everyday transactions to institutional settlement and global finance.

1.2 The Challenge: Infrastructure Gap

The infrastructure supporting stablecoins today introduces structural barriers that limit their progression into mainstream financial systems. These constraints are not incidental but result from networks designed for broad computational flexibility rather than for monetary settlement.

- **Fee unpredictability.** Stablecoin transfers share blockspace with speculative trades and complex smart contracts. Fees therefore fluctuate with demand, at times exceeding the value of the transfer itself. This undermines the predictability required for payments and renders small-dollar transactions impractical.
- **Settlement delays.** Traditional payment systems achieve authorization in milliseconds, while most blockchains finalize transactions only after multiple confirmations across several blocks. This latency produces settlement times measured in tens of seconds or minutes, far slower than the standards of modern financial infrastructure.
- **Enterprise limitations.** Institutions require guarantees around throughput, costs, and reliability. Current blockchains do not provide these assurances natively. In their absence, institutions must either accept operational risk or rely on layered solutions that increase both cost and complexity.
- **Absence of monetary-specific features.** Stablecoins are deployed as generic tokens rather than as monetary instruments. They lack native support for requirements such as built-in compliance integration, transaction privacy, and treasury tools. These features are essential for institutional adoption but remain outside the scope of general-purpose blockchain design.
- **Scalability constraints.** Even high-performance blockchains encounter bottlenecks at payment-network volumes. Existing systems struggle to process the millions of transactions per day required for global retail and enterprise adoption while preserving decentralization and security.

These structural challenges illustrate why stablecoins have yet to reach their full potential as digital payment infrastructure. Addressing them requires a network designed with monetary use cases as its organizing principle. Stable embodies this approach by aligning protocol design with the operational and institutional requirements of stablecoin settlement.

1.3 The Solution: Stable Rebuilds the Payment Stack

Stable addresses these fundamental limitations by reimagining blockchain architecture specifically for stablecoin settlement. Rather than adapting general-purpose infrastructure, Stable rebuilds the entire payment stack from the ground up with monetary use cases as the primary design constraint.

- **USDT-native settlement.** USDT functions as both the base asset and fee token, unifying all activity under a single stable unit of account. Users transact directly in USDT without managing volatile gas tokens or navigating multi-asset fee structures. Fees are denominated in the same currency as transaction values, ensuring cost alignment for individuals and enterprises alike.
- **Performance specialization.** Every component of Stable's architecture is optimized for stablecoin settlement. Consensus achieves sub-second finality, meeting performance standards expected of payment systems. State management is optimized for frequent balance updates, while lightweight validation pathways handle high-frequency transfers efficiently. These optimizations deliver settlement performance tailored to digital dollars rather than generalized computation.
- **Enterprise-grade infrastructure.** Stable provides guarantees at the protocol layer: reserved blockspace for mission-critical transactions, confidential transfers for sensitive flows, and native batch processing for high-volume operations like payroll. Integrated reporting and audit capabilities further reduce compliance overhead. By embedding these capabilities directly, Stable removes the need for costly external workarounds.
- **Predictable economics.** The network is structured to deliver fee transparency and cost alignment. Smart contract interactions incur minimal fees denominated in USDT that remain stable even during periods of network congestion. For enterprises, volume-based pricing models simplify cost planning. Together, these features create a fee structure that is consistent, transparent, and aligned with stablecoin adoption.

1.4 Vision: Digital Dollars as Programmable Money

Stable envisions a future where digital dollars operate with the reliability, efficiency, and predictability of modern payment systems while maintaining the transparency, programmability, and global accessibility that make blockchain technology transformative. The network aims to establish stablecoins as the foundation for a new generation of financial infrastructure that combines the best aspects of traditional finance and decentralized systems.

Stable is designed to integrate with traditional financial workflows. It supports direct interoperability with banking infrastructure through compliance frameworks, regulatory reporting, and real-time settlement with financial partners. This creates a hybrid system where programmable dollars can be embedded into existing financial workflows without compromising institutional standards. Stable provides an always-on settlement infrastructure that reduces reliance on correspondent banking and traditional intermediaries. This enables faster and more efficient global payments, remittances, and trade settlement, expanding access to efficient financial services for emerging markets, small businesses, and individuals underserved by conventional systems.

By combining fee certainty, instant settlement, and full EVM compatibility, Stable enables new categories of financial applications that were previously uneconomical. Micro-payments, automated transfers, and programmatic treasury management become practical at scale. The result is a platform where stablecoins can support both mainstream commerce and the next generation of programmable financial products.

The network's success will be measured not only by technical performance metrics but by its ability to enable financial inclusion, reduce transaction costs globally, and provide the infrastructure foundation for the next generation of financial innovation.

2. Protocol Overview

Stable is designed as a high-performance Layer 1 blockchain where stablecoins are native to both settlement and network operations. Its architecture is defined by three objectives: eliminating gas-token friction, optimizing for stablecoin transaction patterns, and embedding enterprise-grade capabilities at the base layer.

2.1 Core Objectives

Stable has been designed with three fundamental objectives:

- **Eliminate gas token friction.** Stable uses USDT for all transaction fees, removing the need for users to maintain separate volatile gas assets. This streamlines the experience and reduces operational complexity.
- **Optimize for stablecoin operations.** Every layer of the protocol, from consensus to execution and settlement, is tuned specifically for stablecoin transaction patterns. The system prioritizes predictable costs, high throughput, and sub-second finality to support stablecoins as efficient payment instruments.
- **Provide enterprise-grade infrastructure.** Stable incorporates enterprise requirements directly into the base layer. These include guaranteed blockspace allocation, privacy preserving transfers, and compliance-friendly transaction batching. Together, these features create a network that is suitable for institutional scale operations.

2.2 Key Features and Differentiators

- **USDT as native gas.** All transaction fees are denominated in USDT, unifying balances and costs under a single stable asset and removing token management complexity. This simplifies the user and enterprise experience.
- **Institutional grade performance.** Stable finalizes blocks in under one second, enabling near-instant settlement. Reserved blockspace ensures that high-priority transactions are processed even during times of heavy demand. Confidential transfer mechanisms protect transaction data while preserving regulatory oversight.
- **Full EVM compatibility.** Stable is fully compatible with the Ethereum Virtual Machine. Developers can migrate existing smart contracts and applications without modification while using familiar tools such as MetaMask, Hardhat, and Etherscan. The system also offers precompiled contracts optimized for USDT operations.

2.3 Target Audience

- **Individual users.** Stable enables straightforward global payments and remittances. A single-token model provides an intuitive payment experience without the complexity of cryptocurrency management.
- **Enterprises and financial institutions.** The protocol offers predictable costs and settlement times. Confidential transactions support privacy for sensitive operations, and guaranteed blockspace supports the reliability required for high volume stablecoin processing.
- **Developers.** Stable provides a familiar EVM development environment along with SDKs and tools designed specifically for stablecoin applications. This allows developers to deploy and scale financial products quickly and efficiently.

2.4 Performance Specifications

Stable delivers settlement performance aligned with the requirements of global payments. The network sustains throughput in the thousands of transactions per second, with capacity for enterprise-scale batch operations. Transactions finalize within a single block, providing confirmation in under one second. Guaranteed blockspace ensures that priority transfers are processed predictably, even under heavy demand. Transfer aggregation increases efficiency for high-volume USDT flows, while confidential transfers are supported at the protocol level, combining privacy with compliance compatibility.

By unifying all network activity in USDT and embedding enterprise-grade assurances directly into the base layer, Stable provides predictable economics and operational reliability at scale.

3. Technical Architecture

Stable is designed as a multi-layered system where each component is optimized for the requirements of stablecoin settlement. The architecture is organized into four layers: consensus, execution, storage, and networking.

3.1 Consensus Layer: StableBFT

At the foundation of the network lies StableBFT, a customized Delegated Proof-of-Stake protocol. This consensus design achieves sub-second deterministic finality, allowing transactions to settle at speeds that match modern payment systems.

Key properties include:

- Fault tolerance of up to one-third validator failures.
- Delegated staking, enabling token holders to participate indirectly while professional validators provide operational infrastructure.

This arrangement balances decentralization, efficiency, and reliability, ensuring that the network can support high-frequency financial activity with consistent performance.

3.2 Execution Layer: Stable EVM

On top of the consensus protocol operates the Stable EVM, which provides complete compatibility with the Ethereum Virtual Machine. Developers can migrate existing applications without modification while benefiting from performance enhancements designed for stablecoin settlement.

Enhancements tailored for USDT include:

- **Custom precompiled contracts** to accelerate USDT transfers and reduce overhead.
- **Optimistic parallelization** to process multiple transactions simultaneously, rather than strictly in sequence.

Stable EVM maintains the programmability of Ethereum while delivering the performance required for monetary settlement.

3.3 Storage Layer: StableDB

Stable introduces **StableDB**, a storage engine purpose-built for monetary applications. It minimizes latency through **memory-mapped file I/O** and separates real-time state management from historical archiving:

- **MemDB** handles active balances and transfers for high responsiveness.
- **VersionDB** manages historical data, ensuring auditability and long-term compliance.

This separation of concerns enables Stable to process live transactions quickly while maintaining a complete, verifiable record of past activity. By decoupling state commitment from storage operations, StableDB achieves both efficiency and durability.

3.4 Network Layer: High-Performance RPC

The network layer is engineered to handle the communication demands of large-scale settlement. A split-path architecture assigns different communication channels to specific types of operations, reducing congestion and improving responsiveness.

Key capabilities include:

- **Function-specific lightweight nodes** for optimal routing and latency.
- A **native indexer** for fast access to on-chain data and analytics.
- **Publish-subscribe functionality** to support real-time services such as merchant payments and streaming applications.

These capabilities ensure that the Stable network can support both consumer-facing applications and enterprise-scale operations without requiring external middleware.

4. Tokenomics

The Stable economic model is structured around a clear separation between user-facing settlement in USDT and backend coordination secured by the STABLE token. This distinction allows users to transact exclusively in USDT, while STABLE provides the invisible economic foundation for governance and long-term network sustainability.

4.1 Token Overview

StableChain has a fixed total supply of 100 billion STABLE tokens. Its purpose is not to serve as a gas asset for user transactions but to provide security and governance. By removing STABLE tokens from the direct transaction path, the network ensures that users experience a single-token economy centered entirely on USDT. At the same time, the STABLE token remains critical for maintaining the incentives and coordination that underpin the system.

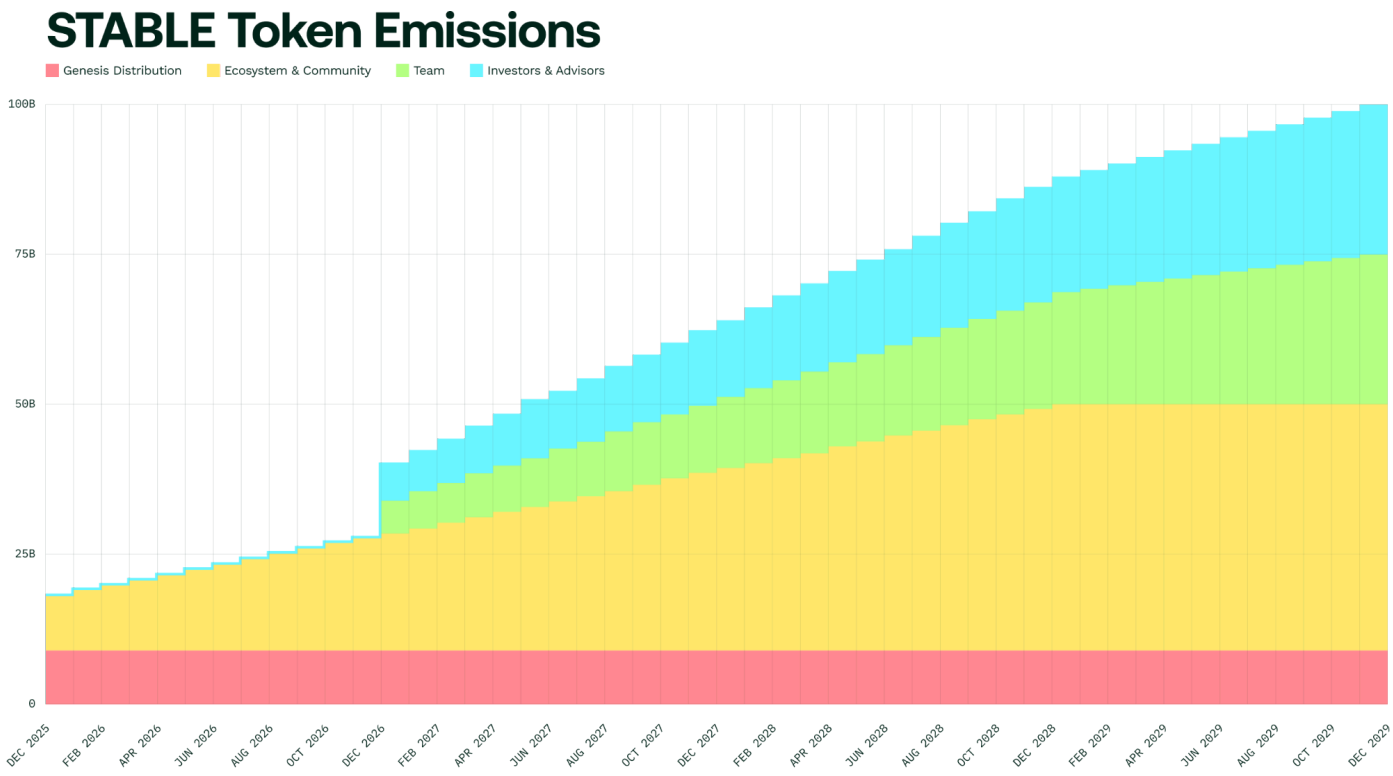
4.2 Allocation

Category	Allocation	Amount	Purpose
Genesis Distribution	10%	10,000,000,000 STABLE tokens	Designed to bootstrap usage, provide liquidity to market, conduct airdrop events, reward early supporters and campaigns with exchanges and ecosystem partners.
Ecosystem & Community	40%	40,000,000,000 STABLE tokens	Supports long-term ecosystem and community growth.
Team	25%	25,000,000,000 STABLE tokens	Allocated to founding team members, engineers, researchers, and contributors. Designed to ensure long-term alignment between the team and the Stable ecosystem.
Investors & Advisors	25%	25,000,000,000 STABLE tokens	Allocated for fundraising rounds and advisory support.

4.3 Vesting

To align incentives over time, both team and investor and advisor allocations follow a structured vesting schedule. Tokens are subject to a one-year cliff during which no releases occur. After this period, vesting continues linearly over the following 36-months, creating a total vesting period of 48-months from the token generation event. Tokens remain locked during this period.

4.4 Emission and Rewards



The emission model of the STABLE token is designed to reward productive activities while preserving a fixed token supply.

- **Ecosystem incentives.** Beyond validator rewards, the reserve also supports broader ecosystem growth. Allocations are directed toward developers, user adoption initiatives, and infrastructure providers that contribute to measurable network expansion.
- **Supply dynamics.** By sourcing incentives from a predefined reserve, the total supply of STABLE tokens remains constant. This approach avoids inflationary dilution while still tying reward distribution to network activity and long-term economic alignment.

4.5 Staking and Validators

Validators secure the network through a Delegated Proof of Stake (DPoS) model implemented via StableBFT. In this system, validators are responsible for proposing and validating blocks, while token holders can participate indirectly by delegating their stake.

- **Staking and delegation.** Validators must lock STABLE as collateral to take part in consensus. Token holders who do not wish to run infrastructure can delegate their STABLE to a validator of choice and earn a share of rewards from gas fees. This ensures broad participation in network security without requiring every holder to operate a node.
- **Slashing and accountability.** If a validator behaves dishonestly or fails to remain reliably online, a portion of their staked tokens is forfeited. Slashing for misbehavior such as double-signing or extended downtime creates financial consequences that discourage attacks and strengthen overall trust in the system.

This framework creates predictable incentives for honest participation, allows token holders to contribute without technical complexity, and ensures that security is backed by meaningful economic risk.

4.6 Token Utility

The STABLE token provides three essential functions within the protocol:

- **Network security.** Validators stake STABLE tokens to secure the network, and users can delegate their tokens to preferred validators. Misbehavior by validators is penalized through slashing, ensuring that economic security is backed by real financial risk.
- **Governance rights.** Stakers and delegators can participate in governance, including decisions regarding protocol parameters, upgrade approvals, and allocation of community treasury resources.
- **Economic alignment.** STABLE enables token holders to participate in the network's fee economy by delegating to validators who may share USDT-denominated gas fees. This creates a participation-driven mechanism in which validator performance, network activity, and community contribution policies influence the economic benefits available to stakers

4.7 Value Capture and Incentives

The economic design of Stable creates a network effect where USDT adoption drives transaction growth, while staking rewards in STABLE tokens secure and expand the network's infrastructure.

Incentives are outcome-based, with rewards distributed to partners and participants who achieve verifiable milestones such as user onboarding, corridor development, and transaction growth. Anti-speculation measures, including vesting schedules and declining emissions, ensure that value flows toward builders and active contributors rather than passive holders.

Through this model, USDT remains the frictionless medium for settlement, while STABLE underpins the network's security, governance, and incentive alignment. The result is an economic framework designed for long-term sustainability, reduced speculative volatility, and consistent value flow toward productive activity within the ecosystem.

4.8 Use Cases of the STABLE token

The STABLE token is an ERC-20 governance token on the stable mainnet. It can be used for:

- Electing validators
- Vote on protocol upgrades
- Handling governance proposals
- Serving as a credential to receive gas fee distributions from validators

On StableChain, all transactions use USDT as gas. These USDT gas fees are collected into a treasury managed by smart contracts. When token holders stake their STABLE tokens to validators, validators may choose to distribute gas fees from the treasury proportionally to stakers.

Demand and Value

As on-chain activity and real-world adoption of Stable grow, an increasing volume of USDT paid as transaction fees will flow into the protocol's fee vault.

Distributing rewards in USDT, a widely demanded stable asset, creates genuine demand for STABLE tokens: participants who wish to stake or run validators must acquire and lock STABLE tokens, while the rewards they earn are in a separate, highly demanded asset. This mechanism is expected to significantly strengthen demand for STABLE tokens, leading to higher staking participation and more robust network security in this Proof-of-Stake system.

5. Ecosystem and Use Cases

Stable's design enables practical applications across its core audience segments. By aligning network performance with the requirements of monetary settlement, the protocol supports both everyday use cases and institutional-scale operations.

5.1 Core Use Cases

For Individuals

- **Remittances.** Users can send USDT across borders instantly and at minimal cost. Unlike existing networks where fees fluctuate unpredictably, Stable provides cost certainty, making it viable for everyday remittance flows.
- **Micro-payments.** Stable's low, predictable fees make small-value transactions economically viable, enabling stablecoin use across digital services, content platforms, and e-commerce.
- **Everyday payments.** With a single-token model, users transact entirely in USDT without managing volatile gas assets. This simplicity allows stablecoins to function as a practical medium of exchange in daily transactions.

Enterprises and Financial Institutions

- **Payroll and supplier payments.** Stable supports high-volume recurring transfers with guaranteed settlement times and predictable costs. This enables businesses to manage payroll distribution and supplier settlements on-chain without operational risk from fee volatility.
- **Treasury management.** Programmatic transfers and automated liquidity management allow enterprises to streamline treasury operations, reducing manual overhead and improving capital efficiency.
- **Global settlement.** Stable provides direct USDT-denominated settlement rails, reducing reliance on correspondent banking and avoiding currency conversion costs. This improves efficiency in international trade and corporate finance.

Developers

- **Programmable money applications.** Stable enables developers to build services such as automated recurring transfers, subscription platforms, and programmatic treasury tools. These applications become viable at scale due to predictable costs and settlement guarantees.
- **Payment-centric financial products.** Developers can deploy lending platforms, yield protocols, and DeFi services centered on stablecoin liquidity. Stable's optimizations for USDT

make these applications more efficient and cost-effective than on general-purpose blockchains.

- **Enterprise integrations.** SDKs and tooling allow developers to embed Stable's settlement layer directly into corporate systems, enabling businesses to leverage blockchain settlement without modifying existing workflows.

5.2 Ecosystem Growth

Stable's long-term success depends on the strength of its ecosystem. Growth strategies focus on enabling developers, supporting enterprises, and establishing adoption pathways that align with stablecoin settlement use cases.

- **Developers.** Stable provides an EVM-compatible environment with SDKs, precompiled contracts, and developer tools optimized for stablecoin operations. Growth will be supported through grants, hackathons, and documentation resources that reduce barriers to entry and accelerate deployment of applications.
- **Enterprises.** Stable engages with financial institutions, payment providers, and corporates seeking predictable settlement infrastructure. Adoption is supported by protocol-level guarantees for cost, throughput, and compliance, as well as integration toolkits that enable connection to existing workflows without operational disruption.
- **Adoption pathways.** Initial focus areas include remittance corridors, digital commerce, and payroll automation, where stablecoins already demonstrate organic demand. These segments provide clear entry points for network usage and create momentum for broader institutional integration.

By combining developer enablement, enterprise partnerships, and targeted adoption channels, Stable establishes the conditions for a sustainable and expanding ecosystem.

6. Regulatory and Compliance

Stable is designed for adoption by enterprises and financial institutions operating in regulated environments. As a Layer 1 blockchain, it records all transactions on-chain, providing an **immutable settlement history** that supports reconciliation and oversight.

By making USDT the **native unit for both fees and settlement**, Stable ensures predictable economics, which is critical for enterprises integrating blockchain into payments, treasury operations, or global transfers.

Stable is designed to work alongside existing on/off-ramp providers and custodians, enabling enterprises to link blockchain-based settlement with traditional banking infrastructure. These features align the network with compliance requirements while preserving the openness of blockchain systems.

7. Interoperability and Connectivity

Stable is designed to operate as part of a broader financial ecosystem rather than as an isolated network. Its architecture incorporates interoperability features that enable both cross-chain liquidity and seamless integration with external systems.

- **Cross-chain interoperability.** Stable facilitates asset transfers and interaction between its network and other blockchains. This connectivity expands liquidity options, supports multi-chain application deployment, and ensures that assets on Stable can circulate freely across the broader digital asset ecosystem.
- **Developer integration**. SDKs and APIs expose standardized interfaces for applications to leverage Stable's cross-chain capabilities. This simplifies integration for developers building services that require interoperability across multiple networks.

By embedding cross-chain functionality and bridging into the protocol, Stable ensures that USDT settlement is not limited to a single network but can operate across the full spectrum of digital infrastructure. This connectivity strengthens liquidity, improves usability, and expands the scope of applications that can leverage Stable for monetary settlement.

8. Competitive Landscape

The stablecoin infrastructure market has evolved through several categories of solutions. Each addresses aspects of the settlement challenge but leaves structural gaps when measured against the requirements of monetary use cases.

8.1 Current Approaches

- **General-purpose L1s.** Base-layer blockchains designed for broad programmability host the majority of stablecoin activity today. Their versatility supports diverse applications but creates inefficiencies for payments. Stablecoin transfers must compete for blockspace with unrelated workloads, resulting in variable fees, delayed finality, and multi-token complexity for users managing both gas tokens and stablecoin balances.
- **Throughput-optimized L1s.** Some newer networks emphasize high transaction throughput and lower costs. While these designs achieve performance gains, they remain optimized for generalized computation rather than monetary settlement. Fee structures still fluctuate with overall demand, and features such as guaranteed throughput, compliance integration, and enterprise-grade privacy require external infrastructure.
- **L2 scaling solutions.** Networks built on top of existing L1s reduce costs and increase throughput by offloading computation and settlement. While this alleviates congestion, it introduces operational complexity through bridging, sequencing, and dependency on the base layer. They also inherit long finalization times from the underlying L1, especially for Ethereum L2s, which further impacts user experience and settlement guarantees. Fees remain indirectly tied to L1 congestion, and enterprise requirements are not addressed natively at the protocol level.
- **Traditional payment rails.** Systems like card networks and interbank settlement deliver sub-second authorization, predictable fees, and reliability at global scale. However, they operate within closed networks that limit openness, programmability, and accessibility. Emerging initiatives such as central bank digital currencies (CBDCs) improve digital payment efficiency but often trade decentralization and flexibility for central control.

8.2 Market Position and Strategic Differentiation

Stable departs from these models by rebuilding the payment stack from the ground up with monetary settlement as the primary design constraint. This approach creates both immediate technical advantages and sustainable competitive positioning.

- **Market opportunity scale.** USDT's dominance as the leading stablecoin with global adoption represents the foundation of a much larger opportunity. Current infrastructure serves primarily trading and liquidity use cases, leaving the vast majority of global settlement activity including global payments, corporate treasury operations, and emerging market financial services addressable by blockchain-native infrastructure that matches traditional payment system reliability.
- **Architecture-first specialization.** Every layer of Stable's protocol, from consensus to execution and networking, is specialized for stablecoin transaction patterns. Instant settlement matches payment system performance benchmarks. USDT as both settlement and gas asset eliminates multi-token complexity, creating a single-currency user experience. This specialization depth would require competitors to rebuild their entire technology stack, creating significant development overhead versus incremental improvements to existing systems.
- **Network effects.** Stable's design creates compounding advantages through reinforcing network effects. As USDT settlement consolidates on Stable, deeper liquidity reduces costs for all participants. Higher transaction volumes justify specialized infrastructure investment, creating performance improvements that further attract volume. Unlike general-purpose chains where developer attention is distributed, Stable concentrates on stablecoin-specific applications, producing superior financial tooling that compounds platform advantages over time.
- **Enterprise infrastructure lock-in.** Protocol-level guarantees such as reserved blockspace for mission-critical operations, confidential transfers compatible with regulatory oversight, and native batch processing are embedded directly into the base layer. Enterprise adoption requires extensive integration work, compliance validation, and operational testing. Once institutions build workflows around these capabilities, switching costs become prohibitive even if competitors offer similar features.
- **Economic model alignment.** By separating user-facing settlement (USDT) from backend coordination (STABLE), Stable avoids the economic contradictions that limit general-purpose chains. Users pay exclusively in USDT, ensuring cost predictability, while validators stake STABLE tokens to secure the network. Competitors attempting to retrofit similar models face migration complexity and economic disruption that Stable avoids through ground-up design.

  This combination of architectural specialization, network effects, and economic alignment positions Stable as the dedicated settlement layer for the global digital dollar economy, with competitive advantages that strengthen rather than erode as adoption scales.

9. Conclusion

Stable embeds USDT as a native asset at the foundation of blockchain infrastructure, providing a dedicated settlement layer for digital dollars. By eliminating gas-token friction, achieving instant finality, and embedding enterprise-grade features directly into the protocol, Stable delivers the predictability and reliability required for USDT to function as true digital money.

The network combines the strengths of blockchain such as transparency, programmability, and global accessibility with the performance and operational assurances of traditional payment systems. This foundation enables USDT to expand beyond trading and liquidity provision into everyday commerce, institutional settlement, and global finance.

As adoption grows, Stable's alignment with developer needs, enterprise requirements, and regulatory standards positions it to serve as the dedicated settlement layer for the global USDT economy. The result is infrastructure that advances financial inclusion, reduces transaction costs at scale, and supports the next generation of programmable monetary systems.

Glossary

StableChain: The Layer 1 blockchain purpose-built for stablecoin settlement. StableChain uses USDT for all user-facing activity, while the STABLE token powers staking, governance, and validator coordination.

STABLE Token: The governance and coordination token of StableChain. Used for staking, validator election, governance voting, and receiving USDT-based fee distributions.

USDT0: The canonical on-chain representation of USDT on StableChain. USDT0 is the asset users hold, transfer, and bridge, forming the basis of all settlement activity on the network.

StableBFT: StableChain's Delegated Proof-of-Stake (DPoS) consensus protocol, designed for sub-second deterministic finality and high-volume stablecoin settlement.

Stable EVM: StableChain's execution environment, fully compatible with the Ethereum Virtual Machine but optimized for USDT-centric operations through specialized precompiles and parallel execution.

Precompiled USDT Operations: Protocol-level optimizations that accelerate USDT transfers, batching, and settlement handling, enabling extremely low-latency stablecoin execution.

StableDB: StableChain's storage engine, consisting of 1) MemDB for real-time state and high-frequency balance updates and 2) VersionDB for long-term archival, auditability, and compliance-aligned history retention

Reserved Blockspace: Dedicated throughput within each block for priority or institutional transfers, ensuring predictable settlement even under peak network load.

Confidential Transfers: Protocol-level privacy features that allow sensitive transaction details to be shielded while maintaining compliance and audit compatibility.