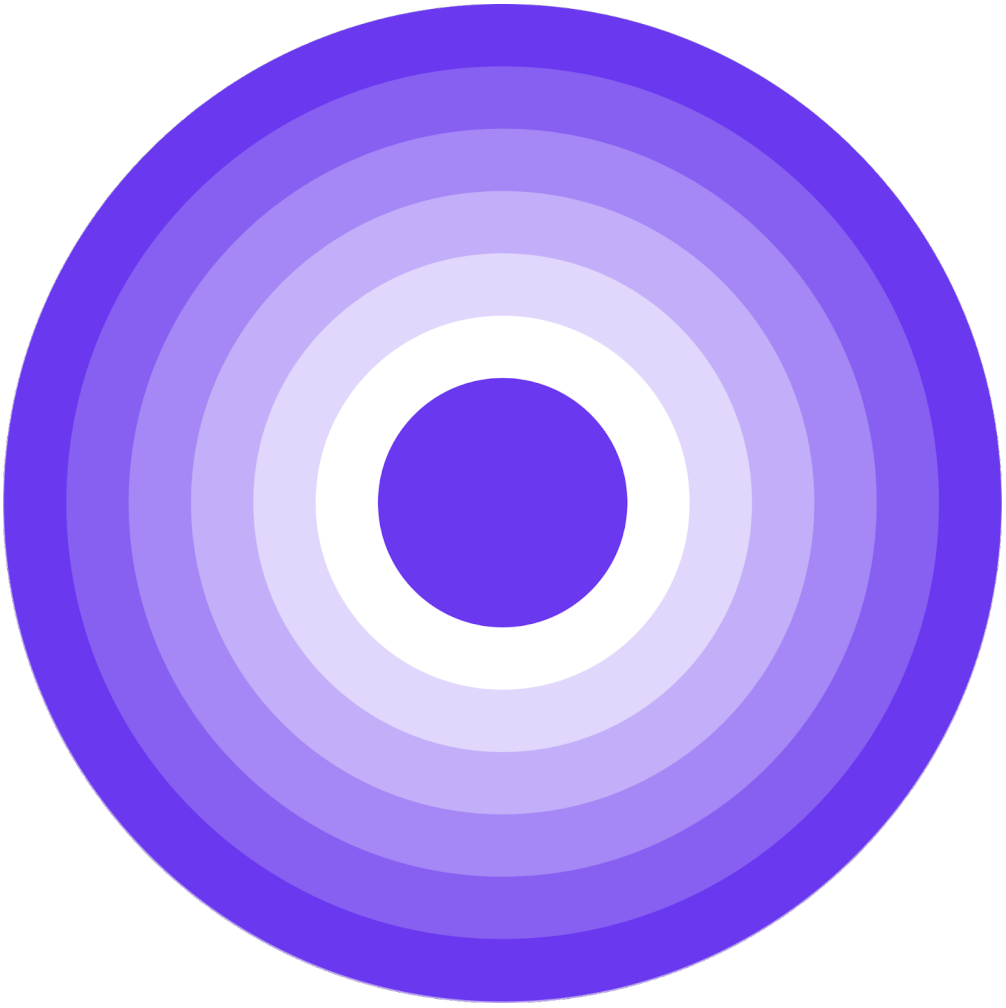

Stable Coin (SBC)

White Paper

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Abstract

Stablecoins are a critical element to bring the strength of central finance issued fiat currency into decentralized protocols and ecosystems. A well designed stablecoin that merges centralized fiat currency strengths (stability, portability) with the strength of DeFi protocols (24/7, machine enabled) can create additional network effects which benefit all participants. Solutions for regulated institutions to extend assets held within their traditional technology systems can operate in ways akin to extending traditional core systems via FinTech products. The next wave of stablecoins extend these assets further into new protocols allowing accelerated growth without expanding or redefining settlement risk.

In this paper, Brale introduces SBC, a digital dollar stablecoin designed to extend traditional finance best practices into cutting edge protocols.

Introduction

Existing stablecoins[1] solve a wide range of issues. In this paper, we will focus on optimizations to improve highly liquid, redeemable, and transferrable fiat-backed stablecoins.

The full reserve stablecoin model has already been proven, but different market participants have different needs. Most CeFi capital is not leveraging DeFi protocols yet due to concerns with either the technology, issuance model or treasury management of existing solutions.[2] Giving the market the right stablecoin products will reduce friction and drive stablecoin adoption.

There is a need to build stablecoins in a unique way to onboard the majority of capital and regulated institutions into DeFi technologies, where the application of those technologies may be different than the way we think about DeFi today. For example, DeFi is commonly commingled with a mental model of public chains (I.e. Ethereum) where all transactions and participants are public. We feel there is a convergence occurring that will blend public and private permissioned chains where all participants are validated by the issuer.

We believe creating infrastructure that gives DeFi users choices, while following CeFi best practices, will add value to the ecosystem.

A key element of trust in any stablecoin workflow is the ability to convert to fiat currency without the risk of redemption. Managing redemption risk at scale is possible without introducing unnecessary risk by ensuring responsible and transparent treasury management practices.

We believe technology and a regulated financial services infrastructure will drastically reduce the barrier of entry for third parties to deploy their off-chain assets on-chain. In this white paper, we set out to identify four major challenges as background, followed by solutions embodied in SBC.

Background

For a fiat-backed stablecoin to become further adopted at scale by the financial ecosystem, it must have a few shared traits:

1. **Cross-chain**
   Usable across blockchains and financial networks that an entity has already adopted.
2. **Legal**
   Usable within the existing regulatory framework that entities operates within.
3. **Open**
   Enable multi-issuer solutions that are inline with an entity's beliefs and business model.
4. **Liquid**
   Support conversion to cash whenever required at speeds equal to existing settlement solutions.

Supporting these four goals requires the merging of existing CeFI technology, including fiat currency and various DeFi technologies explained throughout this paper.

1. Cross-Chain

Many blockchains support vibrant DeFi ecosystems, and new specialized chains continue to emerge with complementary benefits. Different blockchains pose different opportunities in scalability, security, transaction fees, and other factors, making them suitable for different use cases.

For example, EVM-based blockchains such as Ethereum are highly programmable[3] and support widespread exchange, lending, and structured products. At the same time, non-EVM chains such as Stellar excel in cross-border payments due to their low fee structure.[4] As usage accrues to several ecosystems, support is growing for a multi-chain future where assets and protocols must be interoperable with various EVM and non-EVM chains to flourish.

For a stablecoin to be widely adopted, it must be compatible with DeFi ecosystems and with centralized systems that entities rely on today.

Businesses and financial institutions have spent decades refining their current systems and are unlikely to shift wholesale onto public chains due to compliance, privacy, and other differences from their traditional workflows.[5] Traditional finance prefers private transactions outside the public view[6], empowering the account holder to share balance information.

Similarly, for a stablecoin to be usable in CeFi, it must be interoperable with traditional database infrastructures (or private permissioned blockchains) broadly used today.

2. Legal

For a fiat-backed stablecoin to be adoptable by regulated entities, it must operate within the laws that entities operate under today. Appropriate controls, reporting, accounting, and mapping to law enforcement activities must be implemented and proven. The cost of changing regulations is a high barrier to adoption when technology solutions can be adapted to operate legally within today's rules.

Building solutions within the framework of existing laws across multiple jurisdictions requires significant time, attention, and expertise.

3. Open

Most stablecoins utilize a closed issuer model, where a single or small fixed set of issuers control governance and benefits. This closed design makes it difficult for some CeFi organizations to participate, as it requires significant investment to build liquidity, merchant acceptance, and broader ecosystem support.

4. Liquid

The ability of issuers to meet their obligations to convert assets to fiat, is a crucial risk for any stablecoin. Various factors drive liquidity risk, including daily trading volume, liquidity depth, wallet concentration, peg stability, underlying financial relationships, and redemption mechanics.

The quality of reserve assets and reserve transparency is also a major factor. For example, the market prefers conservative reserves (cash, cash equivalents, and treasuries[5]), with attestation periods more frequent than a month.

Solution

SBC is built to be the first example of Brale technologies that will assist in setting best practices for fiat-backed stablecoin issuance in the United States.

1. Cross-Chain

SBC is deployed through audited smart contracts supporting chain swaps by Brale as a centralized counterparty to maintain *natural supply* - meaning that a unit of value can only be represented once on any chain. Cross chain accounting is done without using wrapped or locked coins. As a result, total circulation across the deployed chains is matched directly to the underlying treasury, ensuring the supply reflected is always redeemable regardless of whether SBC is deployed on public or private blockchains.

The technology powering SBC is use case and chain agnostic. The design allows stablecoins to move in natural supply across private permissioned networks and public chains. This also includes interoperability with web2 permissioned balances in traditional FinTech applications, allowing SBC balances to reliably move between internet connected devices and applications.

2. Legal

SBC is issued by Brale, a US-based technology company, licensed as a Money Transmitter and registered as a Money Services Business. Brale is headquartered in Des Moines, IA and operates inside of today's regulatory frameworks, selling its services in the jurisdictions it is authorized to do business.

Brale partners with existing regulated financial institutions in the United States to custody the treasury backing SBC.

3. Open

SBC is built on reusable, open technology. Authorized third parties can leverage SBC in whatever blockchain ecosystem it has been deployed on. Once distributed, SBC is designed to be usable by millions of people around the world.

Brale's design for SBC is to partner with existing custodial, exchange, and market-making solutions, enabling it to be used by all participants in a given ecosystem.

SBC is designed to support multiple issuers in an open governance model. Organizations with appropriate regulatory approval will carry the same benefits and the same obligations as Brale. This open issuance allows institutions to benefit from SBC's existing liquidity, network partners, and best practices and enables more diverse, resilient governance, along with other ecosystem integrations as SBC grows.

4. Liquid

Brale takes special care in its Treasury design to optimize for regulatory compliance and redemption capability. The company does not lend, borrow against, or leverage the assets backing SBC. This non-provocative approach to Treasury oversight maximizes stability for the SBC ecosystem.

Treasury is managed across multiple accounts with various redemption timelines. Through this design, Brale can enable anytime redemption for SBC issued in small or large quantities.

Assets backing SBC are held in a segregated account with high-quality treasury management to maintain ample liquidity for redemptions and keep backing assets safe. Attestations of SBC's reserves will be published regularly by a third party accounting firm to provide transparency to the quality of reserves fully backing SBC.

Conclusions

Brale has designed SBC to solve various challenges in the marketplace. Our approach creates an open and transparent way to take advantage of fiat-backed stablecoins which bring the benefits of CeFi into DeFi protocols without consolidating the benefits to one party.

SBC is designed to act as a catalyst for broader fiat-backed stablecoin usage and adoption. Stable Coin is currently in Alpha while Brale seeks feedback for further development.

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