

2019 STATE OF STABLECOINS



FORWARD

We are pleased to present the 2019 State of Stablecoins report, which builds on our first empirical stablecoin study published in September 2018.

Stablecoins, as the name suggests, are cryptocurrencies that are designed to minimize price volatility. This minimization of exchange rate volatility (most commonly against the US dollar) places stablecoins in stark contrast with more volatile cryptoassets like bitcoin, which lack any inbuilt price stability mechanism. Significant volatility is often cited as one of the main reasons why many institutions and individuals have remained on the cryptocurrency sidelines to date, and stablecoins have been developed to address this issue.

Today, stablecoins like Tether are most commonly used by cryptoasset traders to address market volatility. However, they also open up a number of other use cases where a volatile cryptocurrency may be less desirable (e.g., smart insurance). Stablecoins can serve as alternative stores of value or unit of accounts — use cases that globally amount to tens of trillions of dollars in value.

The report findings are based on the analysis of a data set comprised of 54 individual stablecoins. The total number of active projects makes stablecoins one of the largest cryptoasset categories, and as we show in the report stablecoins are also one of the top ranked cryptoasset categories across a number of other key metrics (e.g., cryptoasset market value share, venture funding).

The level of interest and resources devoted to stablecoins is striking and indicates that stablecoins are viewed as a very important part of the digital assets ecosystem. Indeed, stablecoins are often thought of as a foundational or infrastructure layer, one that could significantly expand the cryptoasset userbase from our current estimate of approximately 20-30 million individuals. In other words, stablecoins could help create a tipping point for much broader cryptoasset adoption.

What's new in the 2019 report?

This report significantly expands on our earlier research study with new data and analysis to highlight the rapidly growing world of stablecoins. Changes from the 2018 report include:

- Approximately double the data, refreshed to reflect big changes in the space in the last six months
- New research primers on three leading stablecoins: Paxos Standard, Stasis and Reserve
- A new section comparing three leading stablecoins: Paxos Standard, USD Coin and Gemini Dollar
- Expanded data profiles on 34 stablecoins, including many new stablecoins
- Overview of how to gain investment exposure to stablecoins

This report represents the next major publicly available research output from the Blockchain research team. You can freely download our other research from our website: https://www.blockchain.com/research.

We are looking forward to continuing and expanding our research into other digital assets and decentralized technologies, and we welcome your feedback on both this report and future research topics. Please contact us by email at research@blockchain.com.

The Blockchain Team

REPORT DATA & METHODOLOGY

This study utilizes both public and previously non-public empirical data to present new insights on an innovative and rapidly evolving sector of the cryptoassets ecosystem. Data was collected on a total of 54 stablecoins across a broad range of data categories, including:

- Format: asset-backed vs. algorithmic, backing collateral type, etc.
- Adoption: market value, trading volume, Tier-I exchange support, etc.
- Technology: platform (e.g., Ethereum), degree of stablecoin system automation, open source, etc.
- Legal structure: jurisdiction registration, software licenses, etc.
- Investors and partners: funding, strategic/business development partners, etc.
- Team: team size, headquarters location, recruiting priorities, etc.

In total, we collected over 2,000 individual data points across 62 unique categories, which is up from 1,600+ data point and 44 categories in last year's report. Our analysis of this data is highlighted in the body of this report and 17 'primers' on some of the leading live and pre-launch stablecoins. We have also presented a substantial portion of the raw data we collected in the Data Profiles included at the end of the report.

A number of sources and methods were utilized for data collection and analysis, including:

- Surveying stablecoin project teams
- Publicly available data from stablecoin websites and other project resources
- Other public and private data sources

Where appropriate, data sources are noted next to charts and diagrams presenting key findings.

Stablecoin ratings methodology

In Table 1 and the individual stablecoin primers and data profiles we have provided comparative ratings across the following stablecoin characteristics:

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
High	High		Yes

- Automation: a score of 'High' is given for fully automated systems (e.g., coin supply mechanistically determined by smart contracts) and a score of 'Low' for stablecoins requiring manual processes by issuers. Fiat-backed stablecoins generally score lower on this category.
- Complexity (Stability Mechanism): this rating primarily focuses on how complex the stability mechanism is, but it also factors in complexity from other elements of a stablecoin system (e.g., governance). A score of 'Low' is generally given for USD and other fiat backed stablecoins, and 'High' for less tested stability mechanisms (e.g., seigniorage shares)
- Transparency: a score of 'High' is generally given for stablecoins which utilize only cryptoassets and which operate fully 'on-chain', a score of 'Medium' for fiat-backed stablecoins that provide regular attestations or reserve audits, and 'Low' for more opaque stablecoin systems.
- Decentralization: a somewhat ambiguous and difficult to precisely define measure, the decentralization rating aims primarily at capturing the degree of trust-minimization in a a

- given stablecoin system. Stablecoins generally score higher in this category if they utilize more decentralized governance structures (e.g., through the use of decentralized autonomous organizations (DAOs), avoid the use of off-chain assets/backing-collateral that rely on trusted third parties, etc.
- Upside Participation: (Yes/No) simply means whether a stablecoin system features some type of
 incentive scheme or instrument that is widely available that can help drive adoption and network
 effects, such as a governance token or another instrument that accompanies the stablecoin (e.g.,
 seigniorage shares), the redistribution of stablecoin transaction fees, or some other incentive
 mechanism.

ACKNOWLEDGMENTS

A number of people and organizations contributed to this report, with thanks in particular owed to the over 50 stablecoin project teams included in this report that contributed data and feedback.

At Blockchain, contributions to the report were made by Dr. Garrick Hileman (lead author), Andy Kim, Nicolas Hourcard, Xen Baynham-Herd, Marco Santori, Mats Jerratsch, and Sydney St. Clare (lead designer).

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SUMMARY

EMPIRICAL DATA

Overview

- Size: the total of market value of all stablecoins has more than doubled in the last twleve months, up from \$1.4 billion at the start of 2018 to \$3 billion today
- Market share: the total stablecoin market value share has grown to 2.7% of all cryptoassets, up from 1.5% in Sept. 2018
- Activity: a total of 54 live and pre-launch stablecoins were identified for this research study sample, down slightly from th 57 identified in Sept. 2018 due to the shuttering of some projects like Basis
- Maturity: just under half of stablecoins are now live (48%, or 26), up from 23 (40% of total) in Sept. 2018; the remaining 28 stablecoins (52%) in the pre-launch phase are mostly expecting to launch in 2019
- Timing: while a number of stablecoin projects that committed to launching in 2018 achieved this goal, a number of high-profile planned 2018 launches failed to materialize (e.g., Saga, Terra, Sweetbridge, etc.)
- Stability: live stablecoins have mostly succeeded to date in achieving price stability, with asset-backed coins (e.g., Tether) generally delivering on their stability promise and outperforming algorithmic coins (e.g., NuBits)

Format

- Stablecoins can be broadly divided into two main stability mechanism categories: algorithmic and asset-backed, with 81% of our total sample asset-backed (up slightly from 77% in 2018)
- Of the asset-backed stablecoins, a higher percentage (62%, up from 54% in 2018) utilize on-chain collateral (i.e., cryptoassets like ether (ETH)) versus off-chain collateral (38%) (i.e., US dollars held in escrow)
- The US dollar is the most common stability benchmark or 'peg' and is utilized by 65% of stablecoins; other benchmarks include other fiat currencies (e.g., euro, yen), commodities (e.g., gold), and inflation (e.g., G10 average country inflation)
- Over half of all stablecoins offer some type of 'upside participation' (60%, up from 51% in 2018) in the form of holding another token with some rights over the stablecoin system (e.g., governance token), or a 'dividend' or incentive mechanism built into the design of the stablecoin system (e.g., 'seigniorage shares', sharing transaction fees, etc.)

Adoption

- Stablecoins are already an important part of the digital assets ecosystem: Tether (USDT) is the second most actively traded cryptocurrency at \sim 75% of BTC daily trading volume in 2019 (up from 57% in 2018)
- In 2019 Tether entered for the first time the top-5 cryptoasset rankings by market value
- Stablecoins are listed on over 60 different exchanges at present, with Tether featuring the greatest number of total individual exchange listings (at least 65, up 41% from 46 listings in Sept. 2018)
- Stablecoins have continued gaining listings on major exchanges, with 15 stablecoins featuring on one or more Tier-1 exchanges (almost double from eight in Sept. 2018); 58% of live coins now have at least one Tier-1 exchange listing (up from 42% in 2018)
- Use of stabelcoins outside of exchange trading and store of value have failed to materiale in any material fashion to date
- Emerging markets are being targeted by many stablecoin projects for additional use cases, such as remittances and merchant payments

Competition

- Stablecoin competition heated up for the first time in Q4 2018 with Tether's market value share dropping from 93% in Sept. 2018 to 69% today
- Tether has recoved some from its rocky Q4, with its market value today up 23% from its early Nov. 2018 low of \$1.7b
- Since Sept. 2018, both USD Coin and Paxos Standard have enjoyed outsize success, wich the former knocking TrueUSD from the #2 position in terms of market value, and Paxos Standard leaping to #2 in daily trading volume
- Even with the success of the so-called 'better Tethers' at gaining market value share and listings on major exchanges, Tether continues to dominate stablecoin trading volume with approximately 96% of total stablecoin daily trading volume, down only slightly from Sept. 2018 (98%)

Technology and Licensing

- None of the Tier-I wallets have made any extra effort to support stablecoins to date, creating incentives for stablecoins to run on Ethereum and piggyback on broadening ERC20 token support
- While Ethereum is by far the most widely used technology platform for stablecoins, only 50% of all stablecoins are building exclusively on top of Ethereum (down from 60% in 2018)
- Other technology platforms chosen for use by at least two stablecoins include Bitcoin and Stellar
- Over two-thirds of project teams (67%) have made their stablecoin code (e.g., smart contract) open-source for audit inspection
- Little clarity exists around code licensing, with very few projects disclosing or having made final decisions about how their code can be used or licensed by third-parties
- A growing number of fiat-backed stablecoins feature a centralized 'freeze function' in their smart contracts that enable the issuer or law enforcement to freeze or zero out individual stablecoin balances

Funding, Legal, and Team

- \$250m in venture funding has been raised by all stablecoin project teams to date, down substantially due to the shuttering of Basis from \$350m in 2018
- Algorithmic stablecoins have now raised substantially less funding at \$41m or 16% of the total (down from \$174m, or 50% in 2018) than traditional asset-backed stablecoins (\$177m, 71%); crypto-collateralized stablecoins continue to bring up the rear with \$32m or 13% of total funding raised, up from 9% in 2018
- Stablecoins are legally domiciled in a wide variety of legal jurisdictions, with the US (8) and Switzerland (6) leading
- While the vast majority of stablecoins (73%) are structured as for-profit, the number operating not-for-profit structures has increased significantly from 15% in 2018 to 27% today.
- The leading home for stablecoin teams is the US (17), with Europe (13) the second most popular location

VIEWPOINT SUMMARY

Short-Medium Term

- While there is a great deal of excitement surrounding stablecoins, the technology and platforms on which they operate are still nascent; it is unlikely the perfect stablecoin design exists today, and further experimentation/innovation is expected
- As we correctly forecasted in our last report, some of the enthusiasm for algorithmic stablecoins has at least temporarily dampened due to the exit of Basis and growing concerns over whether some stablecoins can successfully navigate legal uncertainty, securities laws, and technical and liquidity challenges
- Due to the aforementioned design uncertainty as well as regional factors (e.g., local regulations), we continue to believe that space exists for approximately 5-8 significant stablecoins in the short to medium-term; our view here received some validation in Q4 2018 with the reduced dominance of Tether and the rising use of Paxos Standard, USD Coin, and other top-100 market value stablecoins
- Stablecoins continue to be more complementary than competitive with other cryptocurrencies like bitcoin or ether, with many stablecoins relying on the security, compatibility and infrastructure provided by such cryptocurrencies
- Stablecoins will continue to see an increase in listings on more cryptoasset exchanges, and these listings will be motivated for reasons beyond simply offering traders options to reduce exposure to market volatility e.g., algorithmic stablecoins may prove popular to list as they could attract 'Sorosattack' trading (and significant trading volume) aimed at breaking the automated stability peg
- Key near-term regulatory issues include whether stablecoins (or aspects of stablecoin systems) are in compliance with securities and money service laws in some jurisdictions

Longer Term

- Overall, stablecoins are best viewed as a form of infrastructure or foundational layer for cryptoassets that will generate immense value for the digital assets ecosystem
- A stablecoin could help create a tipping point for much broader cryptoasset adoption by successfully addressing volatility, which is often cited as a key reason why many institutions and individuals have remained on the digital assets sidelines to date
- Many asset-backed stablecoins will attempt to transition to a more algorithmic design.
- Due to competition and other factors, it is unclear how much direct, long-term financial profits stablecoins will generate for the entrpreneurs and investors behimd them; greater long-term value may be derived from stablecoin-powered products and services (e.g., smart insurance)
- Some stablecoins may be viewed as posing greater direct competition to fiat currencies than more volatile cryptoassets like bitcoin; if a stablecoin were to become widely used as a means of payment it may spark a competitive response or regulatory backlash from central banks, which in many jurisdictions have largely remained on the sidelines of cryptocurrency regulation to date
- Rising use of stablecoins may weigh on the prices for some cryptocurrencies, such as bitcoin, that
 will face greater competition for certain medium of exchange (MoE) and store of value (SoV) use
 cases

INVESTMENT SUMMARY

Gaining investment exposure to growing stablecoin use and adoption

We expect the range of options for gaining direct investment exposure to growing stablecoin use will increase as more algorithmic and cryptoasset-backed stablecoin systems go live in the coming months. However, today the number of options for gaining direct investment exposure to stablecoins, particularly for the largest live stablecoins, are extremely limited.

Amongst the largest live stablecoins, the Dai stablecoin system is currently the only one that by design has a second token, the MakerDAO (MKR) governance token, which may appreciate in value in response to growing use of its associated stablecoin, Dai (DAI). Please see our Dai primer later in this report for more details.

A significant number pre-launch stablecoins, as we show in the Funding section of this report, have received investments from venture and crypto-focused funds. However, these funds are generally only accessible by high net worth individual (qualified investors). Some pre-launch stablecoin systems also conducted initial coin offerings (ICOs), and some of these did provide broader access to early stage stablecoin projects. While secondary markets for ICO tokens do exist, considerable legal and regulatory uncertainty continues hang over some ICOs in many jurisdictions.

Indirect investment exposure

The lack of 'pure play' stablecoin investments has led to a search for indirect means to gain investment exposure, and some assets and platforms that may materially benefit from rising use of stablecoins include:

- exchanges on which growing stablecoin trading volumes could drive increased token appreciation or more revenue (e.g., decentralized exchanges (DEXs), centralized exchanges)growing use of dApps that will integrate stablecoins
- publicly traded companies that have issued or announced an intention to issue stablecoins (e.g., JP Morgan Chase, perhaps Utility Settlement Coin members)
- technology platforms on which stablecoins run and function
- total market value of cryptoassets

Some follow-up points on two indirect investment areas:

Technology platforms on which stablecoins run and function

50% of stablecoins currently run on Ethereum (ETH) and growing use of Ethereum-based stablecoins should increase demand and use of ETH. Indeed, nearly 2% of all ETH in existence is currently 'locked-up' as Dai stablecoin backing collateral, thereby reducing the available supply of ETH for other use

However, it is important to note that we have observed in the last five months a material decline in the percentage of stablecoin projects running exclusively on Ethereum. This decline is likely driven in part by concerns over Ethereum's relatively high transaction fees and scalability concerns (limited capacity). Other competing 'Ethereum killer' smart contract platforms have also attracted significant funding and are deploying some of this capital to attract leading applications to build on their platform. While the barriers to transitioning a stablecoin from a technology platform like Ethereum to a competing smart-contract platform are not insignificant, they are by no means insurmountable.

Total market value of cryptoassets

There are a growing number of general cryptoasset investment index products, such as the Bitwise 10 Crypto Index (BIT10), which offers exposure to approximately 80% of the total market value of all cryptoassets. In addition, Bitcoin (BTC) has historically responded positively to overall growing cryptoasset use and adoption given its status as the leading cryptoasset across a number of key metrics, including exchange trading volume (liquidity), market value, and number of cryptoasset trading pairs. In other words, what's been good for the cryptoasset ecosystem as a whole has generally proven good for the price of BTC.

Bitcoin, as the leading decentralized store of value cryptoasset, is likely well positioned to benefit from rising stablecoin use in the short-to-medium term. However, over the longer-term stablecoins could compete more directly with bitcoin on some of its current use cases, like payments.

OVERVIEW OF STABLECOINS

Overview

Digital assets are notoriously volatile. The volatility of bitcoin (BTC) has been trending downwards as compared to earlier periods in the cryptocurrency's now 10-years in existence (Figure 1). However, for the foreseeable future bitcoin is likely to remain more volatile than well-managed national currencies, as well as physical commodities like the one that with which it is most frequently compared, gold.

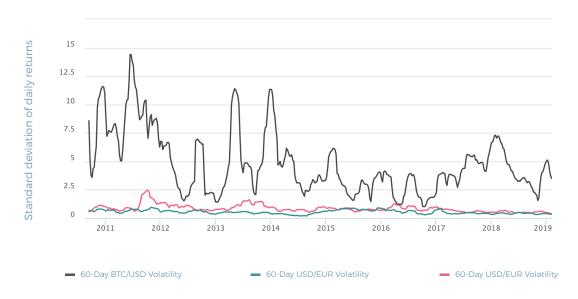


Figure 1: Volatility - Bitcoin vs Gold vs Fiat

To be clear, bitcoin's volatility from the perspective of many market participants is viewed as a positive characteristic. Indeed, contrary to the view expressed by Nobel Prize-winning economist Friedrich Hayek in *The Denationalization of Money*, bitcoin has demonstrated that millions of people would prefer to hold a currency that has the potential for price appreciation over one that is relatively stable. In short, bitcoin's volatility has proven to be "a feature, not a bug".

However, this feature is also preventing cryptocurrencies from realizing their full potential as an alternative means of payment and unit of account in the broader economy, and many feel the gap will be filled by stablecoins.

What is a stablecoin?

As the name suggests, a stablecoin is a cryptocurrency that has been designed with the aim of minimizing price volatility.

Most stablecoins have been designed to be equal to the US dollar, the world's leading reserve currency. For example, a single currency unit of the largest stablecoin, Tether (USDT), is intended to be equal to one US dollar, and for the roughly three years that Tether has been actively traded in public cryptocurrency markets its exchange rate has proven to be generally reliable in delivering on this design objective (Figure 2).

\$3,000M \$120

\$2,500M \$1.50

\$1,500M \$

Figure 2: Tether (USDT) - Exchange Rate and Market Value, 2017-Present

Other stability benchmarks besides the US dollar are also being employed by stablecoins, including other fiat currencies (e.g., Euro), baskets of various fiat currencies (e.g., IMF Special Drawing Rights), commodities or other tangible assets (e.g., gold, real estate), or economic measures (e.g., indexed inflation).

Stablecoins stand in stark contrast with bitcoin, and most other cryptocurrencies, which have no inbuilt mechanism to minimize exchange rate volatility. While a number of novel valuation methodologies have been developed for cryptoassets, the debate over what a bitcoin should be worth carries on as strongly (and probably more

This debate over bitcoin's price reflects genuine and legitimate uncertainty over what a bitcoin is worth

strongly) today as it did in 2010 when bitcoin exchange markets first materialized. The marketplace for bitcoin, and its often volatile supply and demand forces, are what determine bitcoin's price. In contrast, stablecoins are designed to be anti-volatile, matching or closely mimicking the performance of so-called 'hard' currencies like the US dollar, euro, yen, and Swiss franc.

Why use a stablecoin?

A highly volatile cryptocurrency such as bitcoin may be inappropriate or even unusable in certain circumstances, and for a number of products and services. For example, if someone is living paycheck-

Stablecoins can provide a critical infrastructure layer for the digital assets ecosystem to-paycheck and needs to make a regular rental housing payment each month, that person would be ill-advised to hold the funds needed for this payment in a currency as volatile as bitcoin.

At the same time, if you are bullish on bitcoin's 'digital gold' investment thesis, and you believe it will continue to appreciate and successfully store value over time, then using bitcoin for everyday purchases may be psychologically unappealing. In both of these examples, a stablecoin, serving respectively as a store of value and medium of exchange, could be preferable for use.

Another important point to emphasize is that stablecoins are simply price-stabilized cryptocurrencies, meaning they incorporate many of bitcoin or ether's most compelling features: programmability

(e.g., smart contract integration), efficiency (e.g., low-to-zero transaction fees, fast settlement times), fungibility, open (i.e., permissionless) access, and so on.

The emerging area of 'smart travel insurance', which insurance giants like Axa have begun exploring, is a compelling example of how smart contracts and stablecoin technology can be paired together (see inset). We document and discuss further stablecoin use cases later in this report.

Smart Insurance: Why Stablecoins, Not Ether (ETH), Will Serve as the Numeraire

In the UK, annually approximately 600,000 passengers do not file eligible insurance claims for delayed/canceled UK flights. A delayed/canceled flight is a public record that can be queried by a 'smart flight insurance' blockchain application; if the flight is delayed or canceled then the smart contract automatically pays the claimant, eliminating the painful claims process. Insurance premiums can also be escrowed 'on-chain' to eliminate counterparty risk.

In travel and many other smart insurance use cases, it would be preferable to denominate the smart contract with a stablecoin rather than a more volatile cryptocurrency, such as ether (ETH). Generally, people take out insurance to reduce risk and would therefore want smart contract insurance underpinned by a stable currency.

There are other motivations for the development of stablecoins. Although significant capital gains can be quickly made in the cryptoasset markets, there is growing demand from investors to periodically reduce risk exposure by rotating into a less volatile cryptoasset. Market makers and traders may also welcome the steadier nature of stablecoins as they carry out their daily operations.



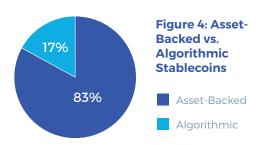
Volatility is one factor that has also stunted the development of debt and credit markets within the cryptoassets ecosystem. In certain jurisdictions, exchanging cryptocurrencies back into national currencies may also trigger a taxable event, an event some may prefer to postpone.

For these and other reasons, the emergence of stablecoins is a natural development in the cryptocurrency ecosystem. Tether, the largest stablecoin in terms of its market value of approximately \$2 billion USD, illustrates the underlying demand for a stablecoin. Tether recently moved up in the rankings into the Top-5 largest cryptocurrencies, and for some time now it has had the second highest daily trading volume after bitcoin.

TAXONOMY

The Search for the Perfect Stablecoin

Stablecoins are one of the categories that best illustrate the tremendous creativity and innovation underway in the digital assets economy. While a wide variety of different stablecoin designs have been developed and released to date, all stablecoins can be broadly characterized as either a) 'asset-backed' or b) 'algorithmic'.



An asset-backed stablecoin design is one where some asset or set of different assets, often US dollars but increasingly cryptoassets like ether (ETH), are held in reserve with the aim of supporting the stablecoin's exchange rate. Tether is the most well-known live example of such a fiat-based design, and Maker Dai is the largest cryptoasset-backed stablecoin.

In contrast with asset-backed designs, algorithmic stablecoins employ a set of rules, expressed in software code, that aim to maintain exchange rate stability by dynamically matching the supply of the stablecoin with demand. An important point to note here is that of the 26 live stablecoins only 19% are algorithmic, making algorithmic designs less tested. Further, some algorithmic stablecoins as part of their rollout strategy also incorporate asset-backing.

Of these two types of stablecoins, asset-backed ones have been more popular to date, representing 83% of all stablecoins. Generally, asset-backed stablecoins are easier to bring to market and simpler in their design, particularly when they are 'traditional asset-backed' (eg USD, gold). More complex designs include MakerDAO's Dai stablecoin, which is 'crypto-asset backed' with ether (ETH) and soon other cryptoassets.

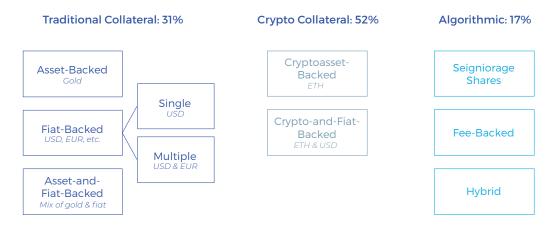


Figure 5: Taxonomy of Main Stablecoin Design Types

The perfect stablecoin design, the so-called "Holy Grail of crypto", probably does not exist at present, and it may never exist. As we describe in more detail in the individual stablecoin primers later in the report, significant trade-offs have featured in every stablecoin design presented to date, and insufficient empirical data exists to understand which are the 'least bad' trade-offs. Further, it is unlikely than a single design is optimal for all use cases or users. In other words, which stablecoin is 'best' depends upon a

wide variety of sometimes competing factors, including:

- Intended use (e.g., short-term trading store of value)
- Degree of desired trust minimization and decentralization
- Regulatory/jurisdictional compliance
- Scalability/capacity to grow
- Desired upside participation by users in the success of a given stablecoin system

We now review some of the pros and cons, and key hurdles, of several of the main stablecoin design types.

Type 1a: Traditional-Collateral ('Off-Chain') Backed

Pros

- Demonstrated market demand and use: Tether's market value of \$2 billion has been achieved in spite of significant concerns around regulatory compliance, transparency and brand reputation
- Enforceable price floor: hard assets can be used to counter price instability and 'death spirals', which are a particular concern for some algorithmic stablecoins
- Trust: traditional asset-backed stablecoins may help facilitate traditional trust-enforcement measures (e.g., legal action); may be easier for some people to conceptualize and feel comfortable using
- Funding: asset-backed stablecoins have demonstrated strong fundraising appeal
- Simplicity: no complex inbuilt incentive structure required as value exists in the collateral; no need for smart contract issuance / on-chain collateralization, meaning less engineering talent needed to implement
- Collateral flexibility: reserve can consist of one or many of the same type of asset (e.g., USD and EUR), or different assets (e.g., commodities, fixed income)
- Regulatory compliance: have been approved by regulators (e.g., NYDFS); banks can manage licensing, which is especially useful in the US given the fragmented nature of e-money regulations

Cons

- Centralized: requires trust in the issuer or escrow agents
- Inefficient: lacks automated monetary supply mechanism; may require manual redemptions processing
- Banking: requires partnership with a bank or escrow agent that holds licenses for deposits / reserves
- Limited peg options (e.g., fiat that the banks can easily manage)
- Compliance: possible risks from underlying fiat (KYC / AML, security rather than utility token)
- Taxes: uncertain tax status, may generate taxable income
- Scalability: requires more backing assets to scale

Type 1b: E-Money

A variation on the traditional off-chain asset backed model that carries some (but not all) of the same pros/cons is becoming an EU electronic money (E-money) institution, which some stablecoins like Monerium are pursuing. The process for becoming an E-money issuer includes:

Applying to become an Electronic Money Institution (EMI), which can be a short process (<90 days)

- Creating a company in the state of application (typical options include Lithuania and Ireland) with an initial capital requirement of €350,000
- Partnering with a reputable auditor and redemption parent (e-money is always redeemable).

Pros

Several additional advantages over traditional asset-backed designs include:

- EU compliance: solution across SEPA payment system
- Financial integration: opens up other financial activity like money transfers, payments and issuing payment cards
- Reduced need for banking support: less reliant on finding a risk-averse banking partner.

Cons

As well as possessing many of the same cons as asset-backed models, additional cons for E-money include:

- Reporting: KYC / AML requirements from EMI status unless small balances (< €250) and small annual transactions (< €2,500)
- Regional limitation: E-money likely does not port to the US and other jurisdictions
- Resources: likely more legal work than setting up EMI and reporting

Type 2: Crypto-Collateral ('On-Chain') Backed

On-chain collateral-backed stablecoin designs, while 'natively digital', are similar to the above traditional asset-backed design in some ways. Some stablecoins are employing a hybrid on-chain/off-chain strategy to gain advantages from both designs.

Pros

Several additional advantages over traditional asset-backed designs include:

- Decentralized: auditable and open; greater degree of trust-minimization than an off-chain design
- Asset flexibility: collateral can span crypto, fiat, commodities and other assets; can choose to tie-up some collateral in smart contracts to create some trust-minimized asset backing
- Reduced banking requirements: less concern about actual trading liquidity / holding complications
- Network effects: adoption incentives through an additional system token (e.g., the MKR token in the case of Dai) that allow for speculation and appreciation.

Cons

- Stability: harder for the market to trust the maintenance of the peg, may be prone to gaming or other attacks; reputation may be damaged if peg is broken
- Complexity: may require additional tokens (e.g., governance tokens like Maker (MKR))
- Volatility of underlying assets: problematic if they concentrate around digital commodities or cryptoassets
- Resource-intensive: more complex than fiat asset-backed to create and can require substantial engineering resources
- Security: rely on smart contracts, which offer attackers additional threat surfaces and vectors; may require the use of trusted 'oracles' for price determination
- Market manipulation: natural targets for gaming/shorting, which may compromise decentralization

- Global competition: in contrast with stablecoins sheltered by local regulations, a digital native stablecoin may be more open to global competition
- Use cases: in contrast with asset-backed stablecoins like Tether, digital stablecoins have less well defined and established uses cases; less market demand for a decentralized stablecoin
- Scalability: requires more backing assets to scale; also unclear whether a decentralized stablecoin can reliably offer the same transaction capacity as a more centralized system

Type 3: Algorithmic

Given the prioritization of creating trust in the stability mechanism over decentralization, many stable-coin designs have started with an asset-backed token. Asset-backed tokens are arguably less complex and easier to bring to market (assuming a banking partner can be found). However, many believe the long-term stablecoin winner(s) will likely be a digital-native, fully-algorithmic stablecoin, and we expect over time that many asset-backed stablecoins will attempt to transition to a more algorithmic design.

Algorithmic designs share many of the same pros and cons of on-chain collateral-backed stablecoins, with arguably the key difference being the greater complexity of a non-asset backed stability mechanism.

Potential advantages possessed by algorithmic stablecoins could include greater scalability (due to obviating the need for an ever-growing quantity of additional assets to back further stablecoin issuance) and stronger network effects / adoption incentives through different upside participation schemes.

Stablecoin upside participation

One of the more interesting area of stablecoin design is the potential opportunity to realize upside on the creation and growing use of stablecoins. 60% of stablecoins offer some type of 'dividend' or incentive mechanism built into the design of the stablecoin system (e.g., 'seigniorage shares', transaction fee dividends). Later in the report primers we highlight which stablecoins offer upside participation.

USE CASES

Stablecoins can be employed for many of the same use cases as other cryptocurrencies like bitcoin, with the added benefit of price-stability. Whether or not price stability is desirable or a worthwhile trade-off will depend on the individual context and circumstances, but the crucial point to understand about stablecoin use cases is that many of them are multi-trillion dollar opportunities. In other words, stablecoins have the potential to grow into one of the largest, if not the largest, digital asset categories.

Stablecoins are a multi-trillion dollar opportunity and have the potential to grow into one of the largest digital asset categories

Medium of Exchange

At present, any business would take a significant risk accepting cryptocurrencies for payments due to the significant volatility of this asset class. Stablecoins hold the potential to help unlock the use of cryptocurrencies for day-to-day payments for businesses and commerce as price stability is a key missing element for the adoption of cryptocurrencies by merchants and retailers all over the world.

Companies need a degree of certainty about their short-term cash reserves and revenues. Transacting in ether or bitcoin would make the role of a financial officer a difficult task as the business's runway (how long the company can survive if expenses exceed income) could adversely shift in an instant due to unfavorable cryptoasset market swings.

Unit of Account

The unit of account is the measure by which goods and services are priced and a necessary feature for a given asset to become "money". In the US, retailers price goods in USD, employees are paid in USD by their employers, profits/losses and assets/liabilities are denominated in USD. There is currently no agreement regarding the intrinsic value (and future value) of a given cryptocurrency, meaning accepting bitcoin as a "unit" is therefore problematic.

Stablecoins can be pegged to established units of accounts in their respective countries and can thus become a digital representation of the unit of account (so long as the peg is maintained). Given their emphasis on price stability and the ability to peg stablecoins to inflation, stablecoins also arguably have a greater chance of becoming an independent unit of account in the longer-term.

dApps

In the web 3.0 stack, decentralized applications ("dApps") are being built on top of infrastructure protocol layers. Many of those applications will likely rely on price stable cryptocurrencies to distribute value. For example, Augur, a decentralized predicion market, is planning to integrate the Dai stablecoin. Stablecoins should accelerate the shift from token speculation to usage in dApps as users won't be incentivised to hold (or sell) the token in anticipation of future price appreciation(or depreciation). This should in turn increase the token velocity, helping to fulfill the potential of decentralised networks.

ERC20 stablecoins can be held and transferred by anyone who already has an Ethereum wallet, and approximately half of all stablecoin projects are running on Ethereum. Provided that Ethereum is a successful underlying infrastructure protocol for dApps, ERC20 stablecoins should be adopted faster and benefit from the Ethereum vibrant ecosystem.

Store of Value

A store of value is a commodity, asset, or money that retains its purchasing power or value into the future. Some view cryptoassets including bitcoin as too volatile to be commonly accepted as a store of value.

Some companies need to hedge themselves over the long-term. For example, miners are currently highly exposed to the price of the cryptoasset they receive in return for computing resources. A stable reserve of liquid assets is needed to cover one-off additional fixed costs (such as purchasing hardware) and on-going variable costs (such as electricity).

In the current crypto ecosystem, volatility risk is currently being highlighted in fundraising via Initial Coin Offerings ("ICOs"). Projects generally raise a given amount of ether to allocate resources in order to deliver on their committments. Some founding teams have held most of their funds in ether. In a bear market associated with falling prices like the present one, management would have to meet investor expectations while suddenly having less capital at their disposal. Stablecoins could thus help founding teams of ICO projects manage their funding more safely over the long-term.

Performance Measurement

If we consider a hypothetical project that grows over some reference period (e.g., three years), the same project priced in a stablecoin better demonstrates the growth in intrinsic value than when a volatile cryptocurrency like bitcoin is used as the reference currency, as bitcoin has dramatically appreciated over the past few years. In other words, tracking performance in terms of stablecoins should lead to a better representation of historical performance measurement. Stablecoins pegged to inflation would also obviate the need for making inflation adjustments to historical data.

Derivatives/Lending

Derivatives can be an effective way to hedge a position in an underlying asset. For example, commercial airline companies need to hedge their fuel costs, which is denominated in USD per barrel. An exposure denominated in USD is essential in this context. As an example, owning three bitcoins while shorting three bitcoin futures (currently possible via cash settled futures) results in a neutral USD exposure.

Derivatives are mostly cash settled, and stablecoins would enable this transfer of value at expiry in the digital world. As of now, CME and CBOE leverage the current underlying banking infrastructure, relying on costly intermediaries such as clearing houses and settle each contract in fiat. In order to shift these complex interactions onto blockchains via smart contracts, USD denominated assets will be needed. One can imagine any derivative being settled on-chain via stablecoins in the future. This should minimize frictions and remove the need for centralized entities, which provide trust amongst participants in the current financial markets framework. Similarly, stablecoins could unlock decentralized lending.

Remittance

Stablecoins reduce price volatility risk as crypto payments are being processed. To stay relevant in this context, transactions would have to be confirmed rapidly (ideally in a matter of seconds) to provide a good user experience and a noteworthy improvement compared to transfers relying on the current underlying banking infrastructure (international banking transfers can currently take as long as three days or more).

ADOPTION

Stablecoins are nothing new and have been actively used for the past four years. They also already form an important part of the digital assets ecosystem. The total market value of all stablecoins is approximately \$3 billion, or 2.7% of the total market value of all cryptoassets (Figure 6).

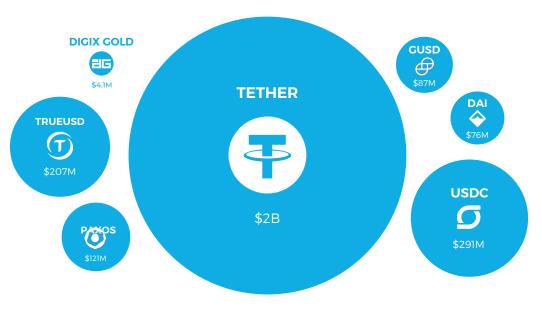


Figure 6: Market Value of Live Stablecoins

Source: CoinMarketCap

Stablecoins are listed on over 60 different exchanges at present, with Tether featuring the greatest number of total individual exchange listings (at least 65) (Figure 7).

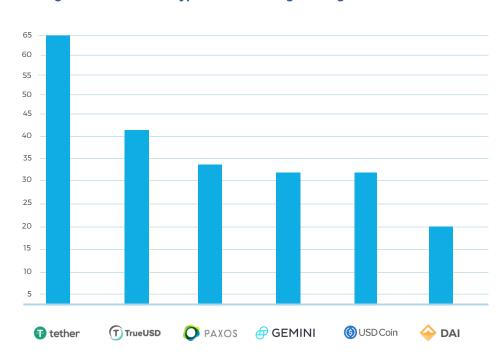


Figure 7: Number of Cryptoasset Exchange Listings for Live Stablecoins

Source: CoinMarketCap

A number of stablecoins have also had success gaining listings on major exchanges, with ten stablecoins (43% of live coins) featuring on one or more Tier-I exchange listings: Tether (7), TrueUSD (6), Paxos (5), USD Coin (5), Gemini (4), SteemDollar (4), Dai (2), Stably (2), NuBits (2), BitBay (2), STASIS (1), HelloGold (1).

Figure 8: Stablecoins Listed on Major Cryptoasset Exchanges

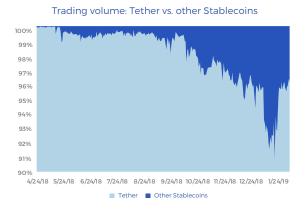


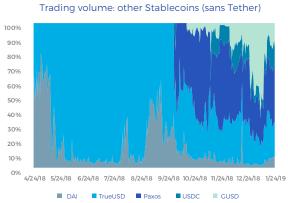
Source: CoinMarketCap

However, the story of stablecoin use and adoption to date is primarily a story about Tether (USDT). Tether is the second most actively traded cryptocurrency, equal to approximately 75% of BTC daily trading volume in 2019 (up from 57% in 2018). Earlier this year Tether entered the top-5 cryptoasset rankings by market value and it currently comprises 69% of the total market value of all stablecoins.

Even with the success of new 'better Tether' entrants like Paxos, USD Coin, Gemini Dollar and TrueUSD in gaining listings on major exchanges and in attracting market value share, Tether continues to dominate stablecoin trading volume, commanding approximately 96% market share. (Figure 9).

Figure 9: Stablecoin Exchange Trading Volumes - April 2018-Jan 2019





Source: CoinMarketCap

A similar picture emerges when we look at the currency trading pairs for stablecoins, with Tether in the clear lead with at least 396 different cryptocurrencies trading against Tether, up from 159 in Sept. 2018 (Figure 10). The next closest stablecoins, TrueUSD and USD Coin, have 140 and 109 crypto pairs, respectively. There are also relatively few fiat-stablecoin trading pairs, which reflects the fact that stablecoins at present are primarily used by cryptoasset traders to address market volatility.

Table 1: Number of Cryptocurrency and Fiat Trading Pairs for Stablecoins

	Tether	TrueUSD	USD Coin	Paxos	Gemini	Dai	BitUsd	Stasis	Digix Gold Token	AAA Reserve
Number of fiat pairs	4	5	2	1	3	3	0	2	1	3
Number of crypto pairs	396	140	109	76	58	67	24	13	3	0

Source: CoinMarketCap

REGULATORY LANDSCAPE

While certain countries and regions are home to more stablecoin activity than others, stablecoins are a global phenomenon. Project teams are based in North America, Europe, Asia, the Middle East, and Oceania (Figure 11). The leading home for stablecoin project teams is the US (17), with Europe (14) the second most popular location. Within Europe Switzerland (5) leads, followed by the UK (3). Interestingly, one of the leading cryptocurrency trading locations, Japan, does not have a stablecoin project team based inside the country.



Figure 10: Primary Physical Location of Stablecoin Project Teams

Source: Mosaic.io

Key near-term regulatory issues include whether stablecoins (or aspects of stablecoin systems) are in compliance with securities and money service laws in some jurisdictions. Because someone buying a stablecoin pegged to a fiat currency often does not expect profit, then an argument can be made that these types of stablecoins do not in fact meet the definition of a security in some jurisdictions. However, if someone is buying a related asset, like say a bond in an algorithmic seigniorage shares-style system, they might be expecting a profit, and so this asset might be a security. Stablecoins backed by commodities like gold may also be deemed an investment and therefore qualify as a security.

Standard money transmission laws may also apply to stablecoins, which in the US would entail abidance with anti-money laundering (AML) laws at the Federal level and licensing at the state level. Various consumer protection laws may also be relevant. Stablecoin projects would be well advised to familiarize themselves with the Liberty Reserve case.

Canada Russia **United Kingdom** (5) Stably parity Belgium Jersey Korea Serbia MILE Malta Japan Cayman Islands A DAI **(%)** Hong Kong Switzerland Barbados **United States** TrueUSD Reserve Sweetbridge ∩dau SAGA ⊕ GEMINI Ampleforth SwissReal CARBON (token Malaysia d Phi ¥ HelloGold @ GLOBCOIN Australia OnRamp **British Virgin Islands** Singapore e tether 85

Figure 11: Legal Domicile of Stablecoin Projects

Source: Mosaic.io

We also gathered data on where stablecoins are legally domiciled, and again the sample data shows that stablecoins are spread globally in terms of their legal personality (Figure 12). The leading legal domicile for stablecoins is again the US (10), followed by Switzerland (7). Australia, Cayman and Jersey are the legal homes for more than one project.

For the above and other reasons, we anticipate that legal and compliance expenses will continue to be significant for many stablecoin projects.

"Stop trying to create money"

In July of this year the Mr. Agustín Carstens, General Manager of the Bank of International Settlements (BIS) (sometimes referred to as the central bank for other central banks), published a statement saying "My message to young people: stop trying to create money". Mr. Carstens' statement was generally directed at the cryptocurrency community, although it is not clear whether his comments were directed specifically at volatile cryptocurrencies like bitcoin or stablecoins. What is clear is that many economists and central bankers for some time now have been highly critical of cryptocurrencies like bitcoin, in large part due to its volatility, with some going so far as to jettison the term 'cryptocurrency' from official speeches in favour of the term 'cryptoasset'.

The growing regulator preference given to the term cryptoasset may be a reflection of bitcoin's greater use today for investment purposes (store of value) over its use in everyday transactions and payments (medium of exchange). However, the use of the term cryptoasset may also reflect the more seemingly open embrace by regulators of new digital assets, commodities or securities over new currencies.

Rightly or wrongly, volatile cryptocurrencies like bitcoin are not viewed by many central bankers as a serious competitive threat to their own national currencies. However, a stablecoin of sufficient size and use may be deemed to pose greater direct competition to fiat currencies than bitcoin and may therefore spark a competitive response or regulatory backlash from central banks, which in many jurisdictions have largely remained on the sidelines of cryptocurrency regulation to date. What is less clear here for cryptocurrencies is "how big is too big?" Central bankers have been reluctant to provide specific quantitative levels that would trigger concerns (e.g., what percentage of payments made with a cryptocurrency would be deemed to pose a threat to a central bank's ability to conduct monetary policy?).

FUNDING & BUSINESS MODELS

Stablecoin projects have raised significant funding, \$250m to date, highlighting their importance within the crypto landscape. However, total stablecoin venture funding is down almost one-third from 2018 with the surprise December announcement from Basis, which had raised \$133m, that it was shuttering and returning capital to investors. With the exit of Basis the funding landscape is much less lopsided: a number of projects have raised around \$20-\$30m (Figure 13). The project with the most publicly announced funding at present is Terra at \$32m.

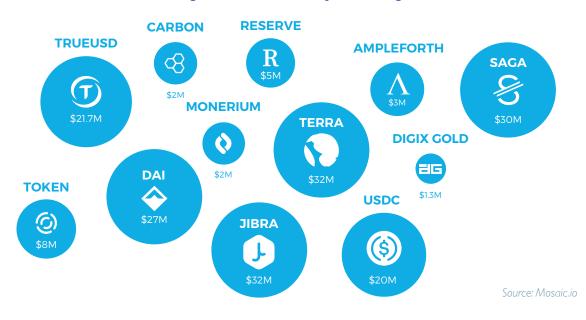


Figure 12: Stablecoin Project Funding

The most active investors in stablecoin projects are divided into two broad categories: traditional venture capitalists and funds solely focused on cryptoassets. The former include Andreessen Horowitz (investments in TrustToken, Dai/Maker and Celo), Lightspeed (SAGA), Octopus (Token) and True Ventures (Ampleforth). The latter include the usual suspects such as Polychain Capital (Dai/Maker and Celo), Blocktower (Synthetix and TrueUSD), Digital Currency Group (Carbon and Token), and Pantera Capital (Ampleforth).

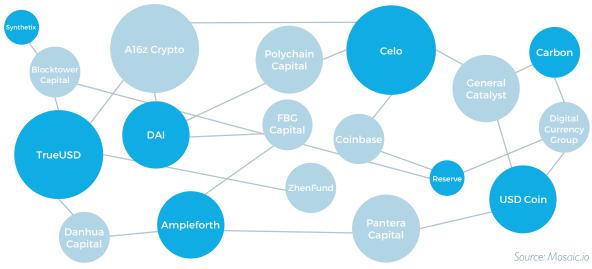
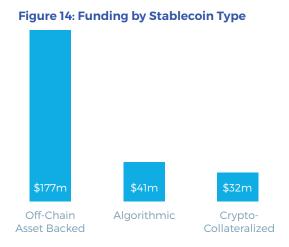


Figure 13: Many Investment Funds have Backed Multiple Stablecoins

Investors have been allocating funds across a variety of different stability mechanism designs, highlighting the diversity of views on different stablecoin designs. The off-chain asset-backed collateralized stablecoin projects, which include TrueUSD, CENTRE (which designed USDC), SAGA, Digix, Token and Monerium, raised a combined \$177m. Non-collateralized tokens (also sometimes referred to as "algorithmic central banks"), such as Terra and Carbon, have raised a combined \$41m. Crypto-collaterlized tokens, such as Maker Dai and Reserve, have raised the least total funds at \$32m.



Busines models

In the case of algorithmic central banks (non-collateralized stablecoins), token holders benefit from the growth of the network, expecting future purchases from new participants. As the adoption of stablecoins grows, an increase in supply should follow to maintain the peg, resulting in dividend-like payments to stablecoin system token or share holders. Other algorithmic designs incorporate some type of transaction fee sharing with holders of stablecoin system assets.

Today, interest income on Tether's bank deposits alone should yield more than \$20m annually

In contrast, the revenue model for fiat-backed cryptocurrencies such as Tether is to charge a fee once USD is converted into the stablecoin (and vice versa). However, increased competition between such centralized companies should bring downward pressure on fees, which could converge to zero in the long run. Indeed, we have already seen some evidence of this with TrueUSD recently cutting fees to zero.

The elimination of issuance/redemption fees would leave the following two main sources of revenue for off-chain asset backed stablecoin issuers: a) stablecoin exchange trading fee income (for exchanges like Bitfinex that also issue stablecoins) and b) earning interest on fiat assets held in reserve. Interest income alone could be quite sizable source of revenue. For example, assuming a 1% interest bearing deposit rate, interest income on Tether's bank deposits should yield more than \$20m annually.

Finding a way to pass some of this interest revenue on to stablecoin holders may be a way to counterbalance the network effect advantage that algorithmic and some cryptoasset-backed stablecoins (e.g., Dai with its MKR token) have over fiat-backed stablecoins, which largely today do not offer upside participation.

STABLECOINS COMPARISON: PAX VS USDC VS GUSD

In late-2018 the dominance of Tether was shaken as several major new stablecoins came into existence and quickly rose in size and use: Paxos Standard (PAX), USD Coin (USDC), and Gemini Dollar (GUSD) In this section of the report we share our comparative analysis of these three coins and their issuers across a number of dimensions, beginning with a high-level overview presented in Table 2.

Table 2: Overview of Paxos Standard, USD Coin and Gemini Dollar

MEASURE	PAXOS	USD CENTER	GEMINI DOLLAR
MEASURE	PAXUS	USD CENTER	GEMINI DOLLAR
Outstanding supply	\$124m	\$302m	\$89m
Avg daily volume \$73m (60d)		\$22m	\$53m
Price daily standard deviation (60d)			2%
Most actively traded exchanges (% vol.) ZB (33%), Binance (21%) and Okex (14%)		Binance (22%), Coinbase (16%) and Coinbase pro (12%)	Fragmented (Gemini volume not disclosed)
Issuers	Paxos Trust	Circle and Coinbase	Gemini Trust
Regulated under NYDFS		MSB under FinCEN & BitLicense	NYDFS
Explicit fund freeze Only if law enforcement		Yes	Only if law enforcement & requires fork
Fees / min size redemptions	None / \$100	None / \$100	None/\$0
Key differentiator	Strong relationships in Asia to grow more quickly	Onboarding, multiple issuers, inclusive approach	Wire processing, issuance and redemption

Structure and issuance process

At a high level, these three stablecoins are more similar than they are different, with each maintaining stability by holding fiat (US dollars) in reserve at a trusted third-party custodian, with the reserves subject to periodic, independent verification (Figure 15).

Figure 15: Issuance Process for Paxos Standard, USD Coin and Gemini Dollar



However, there are a number of notable differences. For example, as of today USDC has multiple issuers (Circle and Coinbase), while both PAX and GUSD are the first stablecoins whose issuance received prior approval by a major regulatory agency. Our analysis identified a number of differences across the three as summarized in Table 3.

Table 3: Rating Paxos Standard vs USD Coin vs Gemini Dollar

	O PAXOS	(§) USD Coin	GEMINI dollar
BRAND	Strong	Strong	Strong
GENERAL INDUSTRY ADOPTION	Medium	Medium	Low
HISTORICAL STABILITY	Average		Average
CREDIBILITY OF BANKS	Average		High
TIME IN USE - LINDY EFFECT	Recent	Recent	Recent
REGULATED	Pre-issuance approval by NYDFS	Registered	Pre-issuance approval by NYDFS
TEAM	Very Credible	Very Credible	Very Credible
OPERATIONAL "PLUMBING"	Average	Average	Good
FEES	Zero	Zero	Zero
COMMITMENT TO LOW FEES	Yes	Yes	Yes
LONG-TERM COMMITMENT	Medium	High	Medium
BANKING BACK-UP/ REDUNDANCY	Medium	High (multi issuer)	High (2 more tiers in Q1/2)
PLAN FOR MULTI CURRENCY?	Yes	Yes	Yes

User Experience Testing

Setting up accounts to use the three different stablecoins was a somewhat mixed experience (Table 4). Those who already have Circle or Coinbase accounts will have an easier time accessing USD Coin, and the process for Paxos was relatively straightforward. However, one of our testers ran into trouble setting a Gemini Dollar account due to several restrictions, including the requirement that a traditional phone number be entered (e.g., Google Voice numbers, which can offer greater security due to featuring two-factor authentication for account access, are not supported by Gemini).

Table 4: Account Setup and Know Your Customer (KYC) Process

	Paxos Standard	USD Coin	Gemini Dollar
Account Setup & Login	Typical requirements. Overall quick. 2FA required every time, no option to trust device	Existing Circle and Coinbase accounts can be used	After confirming email address requires entering a phone number to setup 2FA. Does not accept Google Voice phone numbers, forcing user to enter a regular carrier phone number. Also forces the use of a country code for the country of residence. Had to contact customer support to get help. Was directed by customer service to make phone number change via Authy, which has a multi-day process.
KYC Requirements	Relatively straightforward for PAX. Enabling 2FA required to proceed. Uploaded US drivers license (or passport or ID card). No live photo required. Process was less smooth during onboarding to the itBit exchange.	Additional KYC beyond existing Circle account required to gain access to USDC, including confirming: country of birth, country of residence, SS#, address. No delay after this information was added.	Passport and proof of address
KYC Speed	1-day approval process	Instantaneous	1-day approval process

After establishing an account, the next step in the process of creating a fiat-backed stablecoin is to send funds (e.g., US dollars) to the stablecoin issuer. Silvergate was the receiving bank for both Circle and Paxos. Our comparison of this process is detailed in Table 5.

Table 5: Funds Deposit and Banking Process

	Paxos Standard	USD Coin	Gemini Dollar
Bank Wire - Deposit	Wire information was presented in a clear way. \$0 fee from Paxos.	After entering my US bank information was sent an email to confirm the addition of the bank account. However, the bank account did not appear after completing this step. I repeated and the bank account was added the second time. To wire funds a unique reference number needs to be included in the wire instructions.	Only same-day wire transfer is allowed. Was required to send funds to Silvergate with reference code.
Wire Speed	Wire received less than 24 hours after being sent, although not sure exactly when it arrived as no email confirmation was provided; under the transaction 'Date' heading it states "Invalid date".	Received email confirming that wire was converted to USDC 2.5 hours after sending the wire.	Yet to to be received after 24 hrs and no emails from Gemini
Bank Wire - Withdrawal	\$0 fee from Paxos. \$100 minimum withdrawal amount.	A redemption fee of 0.1% (with a minimum of \$50) is charged by Circle. \$100 minimum withdrawal amount	N/A

We saw the slowest deposit time with Gemini, and the Circle process was both the quickest and most user friendly (e.g., email notification when deposit received). Where USD Coin/Circle scored low was on fees.

With regards to actually using and transferring the coins, the experience was broadly similar with a couple of key differences (Table 6).

Table 6: Coin Minting, Transactions, and Redemptions

	Paxos Standard - Paxos	Paxos Standard - Binance	USD Coin - Circle	USD Coin - Coinbase
Stablecoin minting	Requires the user to already have an Ethereum address to mint new PAX into existence. \$100 minimum minting requirement.		Minted directly to the Circle web wallet. In contrast with PAX, no other wallet or address is required to mint USDC into existence.	
Stablecoin Transfers - Outbound User Experience	Took over three hours to be received by Binance. Newly minted PAX transfered to Binance. Paxos provides an Etherscan link to the transaction after it is confirmed.		Circle requires that you first approve by email the ETH address where USDC will be sent.	
Fees - Transfer Out	O fee from Paxos	Binance charged a \$0.80 withdrawl fee (\$0.025 reported as standard gas fee on https://ethgasstation. info)		In contrast with Circle, a lower gas fee that what was shown on Etherscan was charged by Coinbase (\$99.90 - \$99.87 = \$0.03 vs Circle's \$0.10; Etherscan showed the gase fee at \$0.04)
Stablecoin Transfer - Inbound for Redemption	itBit does not support PAX (they say because they offer USD). Was not as intuitive how to transfer PAX back to Paxos Standard account (which is separate from itBit; had to call itBit support). Process is confusingly called "Redeem PAX" but did not look at this menu item because assumed would first have to transfer PAX in before they could be "redeemed" for USD.		Within about 5 minues received email from Coinbase that USDC had been sent back to Circle. Different syncronization: funds showing as received in Circle within approximately 10 minutes, but still showing "Pending" on Coinbase. Email from Circle confirming receipt arrived within approximately 15-20 minutes of transaction.	Within 1-2 minutes of transfer from Circle, received email from Coinbase that USDC had been received. Received status also reflected on Coinbase web wallet.

Overall, the user experience for both Paxos and USD Coin was generally positive, particularly by cryptocurrency use standards. Unfortunately, we were not able to fully test Gemini Dollar due to setup issues. In terms of which offers the best overall experience, from an ease of use perspective Paxos is not quite as polished (particularly for less savvy/experienced users) as Circle. However, the lower fees, speed and redemption flexibility Paxos are compelling compared to USD Coin.

Table 7: Overall User Experience - Rating Paxos Standard vs USD Coin vs Gemini Dollar

	Paxos Standard	USD Coin	Gemini Dollar
Account Setup & Login	Overall, good UX for crypto, but not quite as polished (particularly for less savvy/experienced users) as Circle.	Overall, good UX for crypto. Some slight issues on getting the bank registered and some questions about gas fees, as noted above. Main UX concern is the \$50 min fee Circle charges to redeem USDC for USD.	

LOOKING AHEAD

Competitive landscape

New stablecoins continue to be announced, although the pace announcements has certainly slowed from 2018 and we have started to see some projects close down (most notably Basis). Still, the total number and stablecoin projects raises questions around competition and how many stablecoins the cryptoassets ecosystem can support.

One way to examine how projects are competing with each other is by analysing recruitment. In addition to the emphasis placed on hiring engineering and product talent that is seen across most cryptoasset projects, hiring areas of focus for stablecoin projects include business development (e.g., exchange listings), community management, and legal/compliance. Beyond developing the software and core product, obtaining a sufficient number of exchange listings and liquidity are seen as the two most important success factors by many stablecoin projects.

As we have reviewed in this report, there are many different ways that stablecoins can differentiate, including stability mechanism design, technology platform, reference pegs, jurisdictional/regional focus, fundraising, and so on.

In terms of the core stablecoin design, different choices create trade-offs across a number of dimensions, such as the degree of transparency and automation (trust-minimization) offered by a stablecoin, as well as the complexity of the price stability mechanism. Utilizing the empirical data collected, we have compared the various stablecoin projects across these three metrics in Table 8.

Today, the more decentralized the stablecoin design, the less confidence exists in its price stability

Table 8: Comparative Overview of Stablecoin Design Features by Platform

Platform	Stablecoin	Transparency	Automation	Complexity
Ethereum	AAA Reserve	Low-Medium	Low	Low
	Ampleforth	High	High-Medium	High
	Augmint	Medium-High	Medium-High	Medium
	Bridgecoin	Low-Medium	Medium	
	Carbon	High	High-Medium	High
	Coin Payment Processor	Low-Medium	High	Medium
	Dai	High	Medium-High	High
	Digix Gold	Medium-High		Low
	Gemini Dollar	Medium	Low	Low
	HelloGold	Medium	Medium	Medium
	HKDT	N/A	Low-Medium	Low
	Jibrel	Medium	Medium	Medium
	Kowala	High	Medium-High	High
	Synthetix	High	Medium-High	High
	Paxos	Medium	Low	Low
	Reserve	High	Medium	High
	SAGA	Medium		High
	Stably	Medium-High	Low-Medium	Low
	Stasis	Medium		Low
	TrueUSD	Medium	Low-Medium	Low
	Token	Medium	Low-Medium	Low
	USDC	Medium	Low	Low
	x8c	Low-Medium	Low-Medium	Medium
Omni Protocol	Tether	Low-Medium	Low	Low
Nano	NOS		Low	Medium
Dfinity	Phi	Medium-High		
Proprietary	Celo	High	TBD	TBD
Unknown	Stableunit	High	High	High
	Terra	High	Medium-High	High
Elliptic Enterprises	Peg	Medium-High	Medium-Low	Medium
Stellar	White Standard			

Today, it would appear that prioritization of automation/transparency generally carries with it the trade-off of greater complexity of the stability mechanism (i.e., risk that the peg will be broken). In other words, the more decentralized the stablecoin design, the less likely it is to remain price stable against a peg like the US dollar.

The success to date of centralized stablecoins like Tether and newer entrants like Paxos Standard, USD Coin, and TrueUSD over other more-decentralized stablecoin designs offers at least some evidence that so far the market has prioritized the simplicity of the stability mechanism over decentralization (i.e., transparency and automation). Our view is that market participants are likely to continue to place a premium on stability over decentralization for the near-term. Anyone who heavily prioritizes

decentralization already has the option to own arguably the most decentralized cryptoasset, bitcoin. Indeed, the current preference for price stability is recognized by many of the algorithmic stablecoins, some of which are in the process of developing hybrid algorithmic/asset-backed launch designs.

Longer-term we expect stablecoins to become increasingly decentralized as projects continue to experiment with various designs, and additional data is gathered on 'what works'. For now, design uncertainty, as well as other factors such as regional/local regulations, lead us to believe that space may exist for approximately 5-8 significant stablecoins in the short to medium-term.

Impact

A successful, well-designed stablecoin could help create a tipping point for much broader cryptoasset adoption by successfully addressing concerns around volatility, which are often cited as a key reason

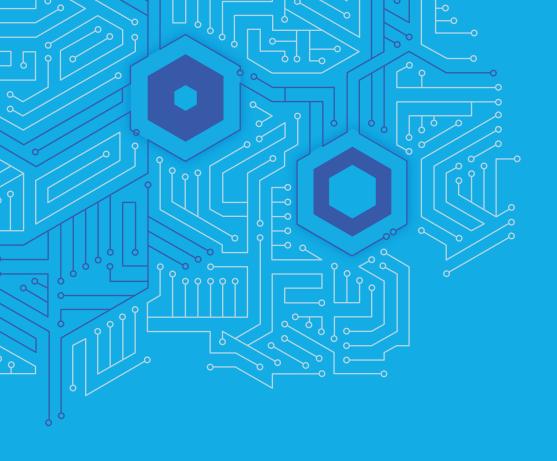
why many institutions and individuals have remained on the digital assets sidelines to date.

The rise of stablecoins may also affect the prices for some cryptocurrencies, such as bitcoin, that will face greater competition for certain medium of exchange and store of value use cases. However, in Today, stablecoins are more complementary than competitive with other major cryptocurrencies like bitcoin or ether

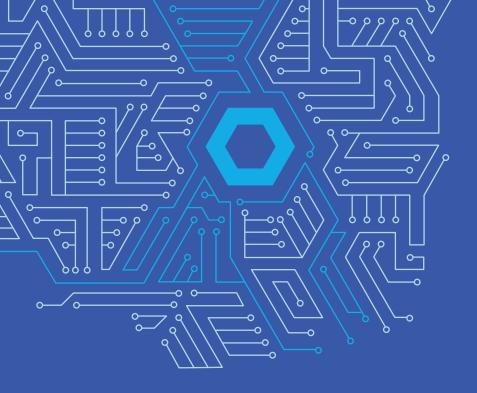
our view stablecoins are more complementary than competitive with other major cryptocurrencies like bitcoin or ether. Indeed, many stablecoins rely on the security, compatibility and infrastructure provided by cryptocurrencies like bitcoin and ether. Overall, stablecoins are best viewed as a form of 'infrastructure' or foundational layer for cryptoassets that will generate immense value for the overall digital assets ecosystem.

The advantage of reduced volatility that stablecoins offer over other cryptocurrencies makes them attractive in certain settings and use cases, such as reducing exposure to market volatility. But does the broader world beyond the digital assets ecosystem really need (or want) stablecoins?

Stablecoins do not exist in a vacuum, and in addition to competing with other more volatile cryptoassets like bitcoin, they are also competing against national legal tender currencies (fiat). How successful or unsuccessful central banks are at managing national currencies will certainly influence the fate of stablecoins and cryptocurrencies as a whole. But stablecoins do not simply offer great competition in the marketplace for currencies and money. Like bitcoin, stablecoins are helping to usher in a new era of monetary innovation and encouraging established institutions like central banks to re-examine the nature and possibilities around one of our oldest institutions, money, and its role in the financial system.



STABLECOIN PRIMERS



STABLECOINS



- Continued rise into the Top-5 cryptocurrency rankings demonstrates Tether's importance, as well as the overall market demand for stablecoins
- More centralized and opaque than other stablecoins, but making efforts of late towards greater transparency
- Despite entrance of new competitors, continues to dominate the stablecoin market
- Most similar to: TrueUSD, USD Coin, Paxos Standard, Gemini Dollar and Stably

OVERVIEW

Formerly known as RealCoin, Tether (USDT) was established in 2014, making it one of the oldest stablecoins. It is a cryptoasset that leverages distributed ledger technology to allow individuals and organizations "to store, send, and receive digital tokens pegged to dollars, euros, and yen person-toperson, globally, instantly, and securely for a fraction of the cost of any alternative".

A 'tether' (the currency unit) is issued and redeemed using the Omni Layer protocol (previously known as Mastercoin), which is an 'overlay network' that runs on top of the Bitcoin blockchain. Backed by off-chain collateral, Tether is designed to protect its stakeholders from cryptocurrency volatility by maintaining a one-to-one reserve ratio between the cryptocurrency token (tether) and its associated real-world asset (fiat currency). This configuration is supported by a 'Proof of Reserves' process and 'Tether Limited', the business entity responsible for custody of fiat reserves and conversion of value across the network.

Once a tether has been issued it can be transferred, stored, spent, etc. just like a bitcoin or any other cryptocurrency. The fiat currency held in reserve is thereby effectively transformed, gaining the general properties of a cryptocurrency while also having its price "tethered" (stabilized) to the price of the fiat currency held in reserve.

Tether tokens have no transaction fees and can be traded for other tokens at exchanges or withdrawn and held in any bitcoin wallet where the user controls their private keys. Tether Limited generates revenue from imposing a small fee on the issuance of new tokens.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Low	Low	Low-Medium	No

STRENGTHS

Longevity and Familiarity

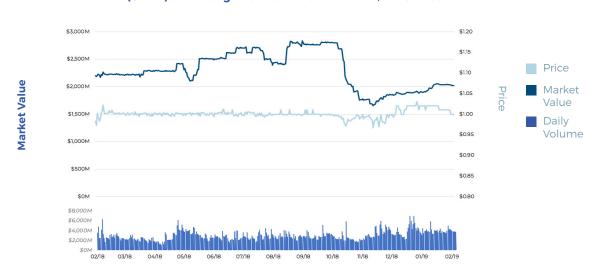
Tether is one of the oldest stablecoins and therefore benefits from the so-called 'Lindy effect', which posits that the life expectancy of a technology is enhanced by its age. Of today's large stablecoins, Tether also has a significantly longer stability and redemptions track record, and thereby earned the trust of many traders.

Liquidity

While its market value share significantly declined in Q4 2018, Tether dominates the current stablecoin trading volume landscape with 93% market share.

Tier-1 Exchange Support

Tether has proven particularly attractive to major exchanges that do not offer US dollar customer accounts. For example, in 2017 Tether experienced a rapid increase in volume on Poloniex, arguably playing a key role in it becoming the market leading exchange by volume in mid-2017. Tether's market cap has grown from ~\$7million in 2017 to \$2.7 billion today. The upsurge in market capitalization has mainly come from adoption by active cryptocurrency traders who use Tether as a risk management and hedging tool. Crypto traders can move funds into USDT to de-risk from general crypto volatility while simultaneously avoiding leaving the cryptocurrency market by converting back to fiat currency. As shown in the below chart, Tether's continued growth demonstrates the significant demand for fiat-backed cryptocurrencies in the market.



Tether (USDT) - Exchange Rate and Market Value, 2018-Present

ISSUES/TRADEOFFS

Negative Publicity

Since 2015, many cryptocurrency exchanges and trading platforms have integrated and partnered with Tether to support deposits and withdrawals. However, Tether has been accused of running a 'fractional reserve.' Tether's reputation and image has been impacted by challenges associated with public transparency regarding its backing, though it has maintained that USD reserves have always been sufficient. The recent FSS report was a first step in showcasing such proof, but more will be needed to improve public transparency going forward.

Counterparty Risk & Reliance on Traditional Banking System

Tether's vulnerability to counterparty risk is significant and inherent to its current design. The company relies on legacy banking institutions in Taiwan and perhaps Puerto Rico to custody its fiat reserves. Tethers are therefore subject to the same credit and counterparty risk inherent with any standard bank deposit.

Lack of Legal Rights for Tether Holders

Concerns have arisen over what exactly Tether promises and its legal obligations regarding redemptions.

Tether Limited issued a legal clarification, which in essence states that holding tethers provides no legally enforceable rights for the holder.

Opaqueness / Single Point of Failure

Tether more broadly represents two main problems with fiat backed stablecoins: (1) lower transparency than on-chain collateralized systems, and (2) a centralized, single point of failure. Many believe Tether has not gone far enough to minimize the degree of trust and dependence on Tether Limited, which is relied upon to circulate funds by creating and destroying asset-backed tokens.

OPPORTUNITIES FOR IMPROVING TETHER

Disclose Reputable Asset Custodian

Any asset-backed cryptocurrency is only as secure as the ultimate custodian of the underlying assets. Depositing the underlying funds/assets in a banking institution that is secure, reputable, and trusted would potentially represent a significant improvement to Tether. In short, the safer the bank, the better. An ideal candidate would be a true 'narrow bank' in which assets are as liquid as its liabilities, meaning that deposits are invested one-to-one in safe government bonds or held in cash with no fractional reserve banking. While Tether's Nov. announcement that it had secured a banking relationship with Deltec, based in The Bahamas was a step in the right direction, Deltec is not a Tier-I financial institution and lacks the balance sheet and reputation custodians used by some of Tether's competitors.

Enhance Trust in the Issuing Entity

Significant improvements could also be made with regards to the issuing entity as this is where the majority of the operational risk lies regarding the creation and destroying of asset-backed tokens. The greater the trust and transparency, the better. In fact, this entity could actually be a deposit-accepting bank itself.

Add Legal Enforceability

Another perhaps difficult area is determining the legal status of the token itself. Tethers have no associated legal enforceability. Any coin that gave the owners real legal rights (but also still facilitated peer-to-peer exchange) would represent a vast improvement over the current offering. Whether such a coin would be legally deemed 'money', a security, or something else is unclear.

CONCLUSION

Despite its weaknesses, Tether continues to remain entrenched in the top-10 cryptocurrencies in terms of value and second only to bitcoin in terms of daily trading volume. Contrary to its reputation, Tether has also embraced some regulatory oversight (e.g., registering as a Money Service Business with the Financial Crimes Enforcement Network (FinCEN)). However, Tether has been shrouded in suspicion around its collateral reserves, and third-party verification of Tether's off-chain fiat reserves has not erased all doubts.

Bottom line: traders have not shied away from using Tether on crypto exchanges, and Tether has built up trust with leading cryptocurrency exchanges, which is a key factor in its continued dominance. However, Tether's shortcomings have created an opportunity for an alternative stablecoin to enter the market, and its market value share has dropped from over 90% to under 70%. Stablecoins that minimize trust and counterparty risk by storing collateral on-chain offer a particularly strong contrast with Tether's relatively centralized structure.

TETHER

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 4

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Binance, OKEx, Huobi, HitBTC, Poloniex, Kraken, Bittrex

USD, EUR (Yen pre-announced)

\$3.747.939.358

Legal/Compliance

OWNERSHIP

LEGAL ENTITY Hong Kong-Based Ltd (Tether

LEGAL JURISDICTION

REGULATORY STATUS

(COUNTRY)

Money Service Business with the Financial Crimes Enforcement Network of the US Dept. of Treasury

British Virgin Islands

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Hybrid (built on top of Omni

Unknown

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

Deltec Bank, The Bahamas

Although many have accused Tether of being a fraud, this seems less and less likely for various reasons (eg new compliance hire, continued to print USDT after CFTC subpoena in December 2017, hiring reputable PR firm, etc.)

WEBSITE

MILESTONES / **NOTABLE EVENTS** https://tether.to/

Cyber security experts find Cyber security experts find double-spending security flaw (29/06/18) | Chief Strategy Officer Resigns (22/06/18) | aw firm verifying their bank balance (Q2 2018) hiring a compliance head (Q3 2018)



- Off-chain collateral backed by fiat currency
- Well-funded stablecoin (has raised \$20m to date)
- Regulated company with U.S. and international compliance programs
- Most similar to:TrueUSD, Paxos Standard, Gemini Dollar, Tether

OVERVIEW

Circle and Coinbase, both leading cryptocurrency exchanges and platforms with major investors, launched a new stablecoin in Q4 called USD Coin (USDC). USDC is a US dollar-backed stablecoin running on the Ethereum blockchain. The design is based on the open source fiat stablecoin framework developed by CENTRE, an open source initiative established by Circle in late-2017. Initially, only U.S. dollars will be supported, but CENTRE plans on adding tokens for the euro and pound.

Other notable features:

- A separate web app has been created for customers to purchase and use USDC, with new tokens minted or burned based on submissions or redemptions
- Primary market and trading pairs for the coin are on Circle Poloniex, Coinbase, and several other partners' exchange platforms
- Strong support from banking partners, including a top-10 U.S. bank
- Revenue from this initiative will be generated through interest on deposits and trading spreads captured on exchange
- Working with banking partners, public auditors, and top-tier insurance underwriters
- Use cases include exchanges, smart contracts, settlement, remittance and lending (CENTRE has partners focused on each of these opportunities)
- CENTRE is highly transparent with both audit results and financials
- CENTRE governance will be distributed

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Medium	Low		No

STRENGTHS

Legally Compliant Stablecoin

Many financial institutions are only interested in and legally able to adopt compliant financial instruments, and it is with these institutions where USDC may have a significant advantage over other stablecoins. Both Circle and Coinbase are operating within the regulatory framework of U.S. and foreign money transmission laws and working with established banks and auditors. CENTRE will audit its members and also be audited itself by respected firms. Circle and Coinbase are reigstered with FinCEN as licensed money transmitters and actively seeking appropriate licenses from various state banking departments and international regulatory authorities. In the U.S., money transmitter licenses are handled on a state-by-state level, and Circle and Coinbase have already obtained licenses from all

the required states.

Open Source

The development of USDC is open source, meaning multiple developers can work on the project and audit the code. The framework is being developed by CENTRE, providing a degree of independence between USDC and Circle/Coinbase. Given the inherent centralization associated with fiat-backed stablecoins, open sourcing USDC helps to re-balance the initiative back towards the principles associated with blockchain technology. As an ERC20 token, USDC can easily be integrated into other major exchanges without being a member of CENTRE.

Strategic Partnerships

USD Coin has generated early support from a significant number of platforms in the cryptoassets ecosystem. Both Circle and Coinbase are large, well-established and trusted cryptoassets company with proven track records and a focus on mainstream adoption. USD Coin has shown that it can onboard new and reputable partners quickly, which will aid USDC adoption.

ISSUES/TRADEOFFS

Ecosystem Competition Concerns

Lack of adoption across other exchanges and wallets will reduce access to and the usefulness of USDC. As major exchanges, both Coinbase and Circle are actively competing with other cryptoasset exchanges, and it is unclear whether major competing exchanges will choose to adopt USDC (which may be viewed as aiding Circle and Coinbase). Mitigating this concern is historical precedent – Tether is also closely associated with another major exchange, Bitfinex.

Centralization

USDC is still heavily reliant on a single entity (Circle), and its focus on compliance means it is not fully censorship resistant as various parties can deny or limit its use.

Adverse Shift in Regulations

The success of USD Coin may be significantly linked to its ability to continue to leverage its compliant status. Should an adverse regulatory shift occur, or should Circle fail to gain the necessary approvals, this could severely limit the use of USDC.

CONCLUSION

As leading cryptocurrency exchanges, Circle and Coinbase are arguably one the best positioned partnerships to destabilize Tether's exchange dominance and drive widespread adoption of a competing stablecoin. Circle's view is that all fiat currency will become cryptocurrency, and USDC is one step forward in bringing mainstream financial services to the world of cryptocurrency and blockchain technology. With its other suite of offerings, including Circle Invest and OTC trading, USDC can speed up transactions made with dollars and provide a less volatile and compliant alternative to institutions and users interested in embracing cryptocurrency. Both Coinbase and Circle are also very familiar with the strict regulations applicable to the still-nascent cryptocurrency space and knowledgeable about navigating regulatory uncertainty. CENTRE is expected to be highly transparent with audits and financials. Overall, USDC appears well positioned to provide strong competition for Tether and other similar fiat-backed stablecoins.

USD COIN (USDC)

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

Multiple issuers (CENTRE framework), speed of delivery/onboarding **DIFFERENTIATOR(S)**

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION:

GOVERNANCE TOKEN, DIVIDEND / INCENTIVE **SCHEME (EG**

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$302,737,674

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$17,190,901

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 2

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS TIER-1 EXCHANGES

Poloniex, Coinbase, OKex, Binance, Huobi

Technology

LEGAL ENTITY

OWNERSHIP

Circle Inc, but not issued out of their broker dealer licens

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

Silvergate "send" partnership

PARTNERS (BIZ DEV/ ECOSYSTEM)

20+ partners in total. KYC/ AML: Chainalysis, Elliptic, ar Confirm. Crypto apps/

services:

services.
Coinbase, AxiomZen,
CryptoStrikers, MoneyToken,
Centrifuge, Esprezzo, Dharma,
Origin, and Melonport.
Wallets: ImToken, Trust Wallet,
Toshi, Status, MyCrypto*

GENERAL INTENDED

USE

Remittance, bank transfers

OTHER COMMENTS/ INTERESTING ASPECTS OF COIN

USDC is issued through the CENTRE open source framework and membership scheme. Multiple companies

can join as issuers on the protocol - as well as other flat stablecoins - and customers can access USDC through exchanges, digital wallets, and banks

WEBSITE https://www.centre.io/index.

MILESTONES / **NOTABLE EVENTS** Nov. 2018 - Coinbase joint founding member announcement



- Off-chain, fully collateralized USD-backed ERC20 stablecoin
- Currently the 3rd largest live stablecoin by market value
- Collateral stored in escrow accounts managed by third-party regulated financial institutions
- Early problems with price stability following Binance exchange listing
- Most similar to: USD Coin, Paxos Standard, Gemini Dollar, Tether

OVERVIEW

TrueUSD (TUSD) is an off-chain fiat-collateralized stablecoin that runs on Ethereum. Technically, TrueUSD does not hold any USD in its reserves. Instead, it has partnered with registered banks and institutions with fiduciary obligations to keep the funds in an escrow account. Together with this third-party trusted off-chain escrow account, users must pass a KYC/AML check, wire USD to one of the TrueUSD third-parties, and provide an Ethereum address to receive TUSD. The transaction, once validated, initiates the TrueUSD smart contract, which mints an equivalent amount of TUSD that is delivered to the user's Ethereum address. If the user wants to redeem the TUSD tokens for fiat, the user sends the tokens back to the smart contract, which burns the tokens and issues USD to the user from the escrow account. This burning process effectively secures an exact 1-to-1 match between USD in the escrow account and TrueUSD. Each time coins are minted or burned, 'TrustToken', the company behind TrueUSD, previously took a 0.1% fee (\$75 minimum), but this fee has been dropped to \$0.

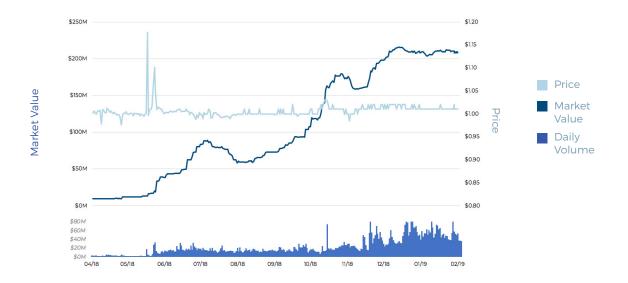
Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Low-Medium	Low	Medium	Yes

HOW IS IT USED?

TrueUSD uses smart contracts that are fully open source, meaning anyone can view and audit the code. As well as KYC/AML checks, traditional financial escrow accounts are utilized to enable regular attestations and traditional legal protections. By partnering with regulated financial institutions, TrueUSD enables direct banking, which introduces safeguards to prevent it from manipulating reserve holdings. This feature addresses one bone of contention for many with Tether's structure.

TrustToken, the entity behindTrueUSD, has received investments from many well-known and respected venture capitalists including a 16 crypto, BlockTower Capital, GGV Capital, Jump Capital, and Danhua Capital. For its KYC/AML services, TrueUSD uses A 10tix, ComplyAdvantage, and Thomson Reuters, a bank-grade compliance stack.





STRENGTHS

Escrow Protection and Fund Management

TrueUSD is openly taking a hybrid approach to tokenizing US Dollars. Unlike other fiat-backed stablecoins, the escrow account used by TrueUSD does offer legal protection to token holders. Many parties are generally familiar with third-party escrow accounts and are happy to rely on them for funds management and dispute resolution. Any individual or institution that passes a KYC/AML check has the ability to redeem TrueUSD for USD.

Legal Framework

TrueUSD has retained law firms WilmerHale and White & Case to develop its legal framework for collateralized cryptocurrencies. This framework exists alongside the team's network of other fiduciary, compliance, and banking partners. The team's legal counsel has provided a memorandum that TrueUSD tokens are not securities, likening the token to deposit and safekeeping receipts, which the SEC has previously issued a no enforcement action for their use. It is worth noting that the previous SEC no action letter does not directly apply to TrueUSD unless the SEC has specified that it applies. However, this attention to the legal framework and escrow accounts, as well as the transparent demonstration around its efforts around compliance, contrasts favorably in the eyes of many with the approach taken to date by Tether.

2nd Most Tier-1 Exchange Listings and Market Value

TrueUSD's listings on popular exchanges such as HitBTC, Binance, UpBit, and Bittrex (more Tier-I exchanges than any stablecoin except Tether) gives it a lead on competing stablecoins. TrueUSD and Tether are also listed on several of the same exchanges, enabling TrueUSD to substitute for (and take market share from) Tether.

Transparency

Given the speculation around Tether, transparency into a project's holding structure and operations is becoming increasingly valued among fiat-collateralized stablecoins. Unlike Tether, TrueUSD ownership structure has been publicly acknowledged, and the escrow accounts are reviewed (aka an attestation) by Cohen & Co (a top-50 accounting firm) and published publicly every month here: https://blog.trusttoken.com/trueusd-attestation-reports-86f693b90a4.

ISSUES/TRADEOFFS

Instability

The reliability of TrueUSD's stability mechanism has been called into question as TUSD rose to \$1.39 in May following the Binance exchange listing announcement.

Minimum Redemption Requests

Per the Terms of Use policy, the company may prohibit wire submissions of USD or redemption requests of TrueUSD if the total amount submitted or requested is less than \$1,000 USD. With such a high redemption minimum, TrueUSD seems to be targeted at institutions rather than the small user. However, the \$1,000 minimum could conceivably cut both ways; while prohibitive for many people, the amount was determined by the vetted participants of TrueUSD's fiduciary network and may create an opportunity for TrueUSD to differentiate itself.

Counterparty Risk & Reliance on Traditional Banking System

Also like Tether, True USD is vulnerable to counterparty risk due to its reliance on legacy banking institutions.

CONCLUSION

TrueUSD was one of the first of the 'better Tether' stablecoins to come to market and has had early success in growing its trading volume and listings on a number of major exchanges. Indeed, TrueUSD was able to pole vault into the #2 stablecoin market value position even though it launched well after Dai, although it has since been overtaken by USD Coin. Its off-chain collateral structure will be seen as an advantage by some (e.g., the use of regulated and compliant institutions), and in certain circumstances, a disadvantage by those that value decentralization. Whether the use of trusted escrow audits and traditional third parties hurt or help TrueUSD more will only be known over time.

TRUEUSD

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. ALGORITHMIC)

Asset-backed

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE Yes (eventually). TrustToken ICO, which is not yet officially

SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$208,967,745

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$52,261,460

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 5

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HO/PRIMARY TEAM

Technology

PLATFORM (EG

AUTOMATION

ETHEREUM)

DECENTRALIZATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

a16z crypto, Blocktower Capital

FUNDING RAISED TO

DATE

\$21,700,000

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

Blocktower Capital, Cooley, Stanford-StarX fund, Futurism

GENERAL INTENDED

USE

Stable cryptoasset + tokenization of off-chain assets in general

OTHER COMMENTS/ INTERESTING ASPECTS

Problems with price stability following exchange listing (~40% after Binance listing)

OF COIN WEBSITE

https://www.trusttoken.com/ trueusd/

MILESTONES / **NOTABLE EVENTS**



- Format: off-chain collateral backed by USD fiat currency
- Size & liquidity: second most actively traded stablecoin and 16th most actively traded cryptoasset
- Redemptions: relatively speedy, free, and no daily limits
- Compliant: regulated status with U.S. and international compliance programs
- Funding: well resourced; parent ItBit has raised \$93m to date
- Comparables: most similar to Gemini Dollar, USD Coin, TrueUSD, Tether

OVERVIEW

In late-2018, ItBit, a leading cryptocurrency exchange, launched a new regulated stablecoin called Paxos Standard (PAX). PAX was quick to attract support from a number of Tier-1 exchanges and has firmly established itself as the fourth largest stablecoin and a top-40 cryptocurrency in terms of total market value.

PAX is a US dollar-backed stablecoin running on the Ethereum blockchain and is similar in a number of ways to some of the other leading USD-backed stablecoins, particularly Gemini USD (GUSD), as well as USD Coin (USDC), TrueUSD (TUSD) and Tether (USDT).

Other notable features of PAX include:

- Other than one brief spike in Oct. up to \$1.10, PAX has remained relatively stable to its 1:1 USD peg
- PAX has generally traded at a slight premium to USD, with an average daily price of \$1.01 since launch
- The lowest observed prices for PAX were approximately \$0.98, a level last observed in early Nov.
- Paxos, the issuer of PAX, is a trust company and regulated by the New York State Department of Financial Services
- PAX operates as a base currency trading pair on Binance
- Paxos/ItBit will generate revenue from PAX through interest earned on USD deposits

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Low	Low		Yes

STRENGTHS

Liquidity and size

According to self-reported trading volume from exchanges, PAX is the second most actively traded stablecoin (after Tether) and ranks amongst the top-20 most traded cryptoassets (currently number 16). This level of trading activity is in spite of the fact that PAX is only the fourth largest stablecoin by market value. Overall, PAX ranks among the top-40 cryptocurrencies in terms of total market value.

Regulated and Legally Compliant Stablecoin

Many financial institutions are only interested in and legally able to adopt compliant financial instruments, and it is with these institutions where PAX may have a significant advantage over other non-compliant stablecoins. PAX is regulated by the New York State Department of Financial Services, which is generally regarded as one of the most stringent regulators. Paxos parent, ItBit, was also one of the first exchanges to obtain a New York BitLicense. PAX also operates within the regulatory framework of U.S. and foreign money transmission laws, working with established banks and auditors.

Zero Fees and No Minimum Purchases/Redemption Sizes

Relatively unique amongst USD-backed stablecoins, Paxos does not charge any fees, including currency conversion, transaction, or redemption fees (e.g., bank wire fees). There are also no minimums for purchases or redemptions. PAX can be redeemed 24/7 to USD within one business day.

Customer Service and Convenience

The Paxos global team provides customer service 24/7, including telephone support. Dedicated account managers are available for those able to make minimum purchases of \$100K.

Audited

The entire supply of PAX is collateralized by USD in dedicated omnibus cash accounts at FDIC-insured U.S. banks. Auditing firm Withum performs attestations (using standards established by the AICPA) on these accounts and the PAX tokens on a month-end basis to ensure they are consistent.

ISSUES/TRADEOFFS

Ecosystem Competition Concerns

Like Circle, Gemini, and other exchanges that have launched stablecoins, ItBit is actively competing with other cryptoasset exchanges and it is unclear whether all major competing exchanges will choose to adopt PAX (the more revenue generated by PAX, the more competitive firepower possessed by the ItBit exchange). Mitigating this concern is historical precedent – Tether, the most widely exchange-supported stablecoin, is also closely associated with another major exchange, Bitfinex – along with the success to date that PAX (as well as USDC and GUSD) have had gaining listings on major exchanges.

Centralization

PAX is still heavily reliant on a single entity (Paxos/ItBit) and its focus on compliance means it is not fully censorship resistant. Paxos/ItBit as an administrator can deny or limit the use of PAX. Further, the PAX smart contract contains a "lawEnforcementRole", which according to Paxos was "required by our regulators". This law enforcement role can "freeze and unfreeze the PAX balance of any address on chain" and "wipe the balance of an address after it is frozen to allow the appropriate authorities to seize the backing assets". I

Adverse Shift in Regulations

Like other regulated and compliant stablecoins, the success of PAX is linked to it remaining in compliance with prevailing laws and regulations. Should an adverse regulatory shift occur, or should Paxos fail to maintain or gain necessary approvals, this could severely limit the use of PAX.

CONCLUSION

The fact that PAX (as well as a number of other stablecoins) has tended to trade at a slight premium to its peg value is evidence of the convenience and utility offered by stablecoins to crypto traders and other users. While the regulated/compliant USD backed stablecoin space has become much more

crowded in recent months, PAX has distinguished itself by taking a clear lead over Gemini USD, which it launched alongside. Even though TrueUSD and USD Coin were launched and announced, respectively, well in advance of PAX and have higher market values, PAX has leapt past both in daily trading volume. Overall, PAX is well positioned to provide strong competition for Tether and other similar fiat-backed stablecoins. However, PAX like the other "better Tethers" has yet to dethrone USDT from atop the market value and liquidity leader board.

https://github.com/paxosglobal/pax-contracts

PAXOS

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

• • • • • •

.

Fast and free with no-limits **DIFFERENTIATOR(S)**

on daily redemptions. Similar to Gemini dollar and USDC. PAX is regulated under NYDFS and insured under the FDIC.

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$124,376,011

RANK - MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

LEGAL ENTITY Paxos Trust Company LLC

LEGAL JURISDICTION

(COUNTRY)

Regulated by New York Department of Financial Services (DFS) **REGULATORY STATUS**

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDING RAISED TO

DATE

BANKING RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM) **GENERAL INTENDED**

USF

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

"Paxos Smart Contract Audit: https://medium.com/ nomic-labs-blog/paxos-standard-pax-audit-report-ca743c9575dc"

https://www.paxos.com/ standard/ **WEBSITE**

MILESTONES / **NOTABLE EVENTS** https://www.dfs.ny.gov/about/ press/pr1809101.htm

Liberty City Ventures, RRE Ventures, Canaa Partners

itBit raised \$93m, but unclear how much is dedicated to

Silvergate, Bank of Montreal, Signature, Metropolitan, Collateral will be held at a bank located in the United States and eligible for FDIC "pass-through" deposit

Withum will perform monthly

Trading and fiat settlement. EUR and other currencies will be supported. Crypto



- Decentralized, on-chain collateral backed by the ether (ETH) cryptocurrency (and other ERC-20 tokens in the near future)
- As one of the early Ethereum projects, Dai has developed over several years a relatively strong community
- Currently listed on 20 exchanges (+100% over 2018) with 65 different cryptocurrency pairings
- Most similar to: Reserve, BitShares, Synthetix, Augmint

OVERVIEW

Dai is an on-chain collateral backed stablecoin, backed by the ether (ETH) cryptocurrency. 'Maker' is the entity that created the decentralized technology that runs on top of the Ethereum blockchain that powers Dai. The Dai stablecoin system employs smart contracts on Ethereum that actively stabilize Dai's exchange rate through the use of Collateralized Debt Positions (CDPs) and autonomous feedback mechanisms. Appropriately incentivised external actors (e.g., market traders) also play a role in stabilizing Dai.

CDPs are collateralized smart contracts that allow users to generate Dai in proportion to the value of the deposited assets. A user deposits ETH into the CDP smart contract, where it is held until the debt (as well as interest) is fully paid.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Medium-High	High	High	Yes

HOW DOES IT WORK?

In order to combat the volatility of the underlying collateral, the Dai system can liquidate CDPs by auctioning off the underlying collateral held by the smart contract whenever the value of the collateral falls sufficiently.

The Dai system has a governance token called MakerDAO (MKR). Ownership of MKR gives these token holders governance rights over the Dai system's risk parameters and types of collateral that can be held in CDPs. When users close CDPs they must pay a stability/governance fee in the form of MKR which is then burned by the Dai system. This reduction in the supply of MKR is one of the direct financial incentives for holding MKR and supporting the Dai ecosystem.

Stability Protections

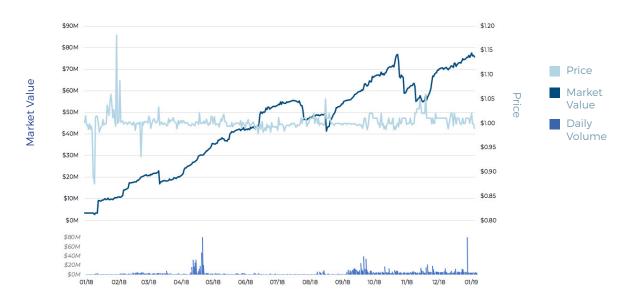
Dai's price is stabilized through the following autonomous feedback mechanisms:

- Target Price
- Target Rate Feedback Mechanism
- Sensitivity Parameter
- Global Settlement

The Target Price mechanism provides two functions: (I) it allows for the calculation of the collateral to debt ratios of CDPs and (2) it determines the value of assets deposited into CDPs in the case of global settlement. The Target Rate Feedback Mechanism (TRFM) is one of the most important mechanisms because, in the case of market instability, it helps maintains the Dai market price around the Target Price. This is done by changing the Target Rate and (consequently) the Target Price to balance supply and demand for Dai by adjusting users' incentives to generate or hold Dai.

The Sensitivity Parameter determines the magnitude of Target Rate change in response to deviations of the Dai market price away from the target price. This is one of the means by which Maker token holders exert their power over the Dai market, as Maker voters can set the Sensitivity Parameter to stabilize the coin, while TRFM and Target Price are determined by the market. However, the TRFM is not engaged by default and is only used during periods of market instability.

Another important mechanism, Global Settlement, is an emergency tool that is used to ensure Dai holders and CDP owners have a claim on the correct value of their holdings in the case of serious market instability. This is likely to be used in cases of long-term market irrationality, hacking or security breaches, and system upgrades. Furthermore, the voters are not necessarily people from the Maker core team, but MKR holders, making the network more decentralized.



Dai - Exchange Rate and Market Value, 2018-Present

STRENGTHS

First Mover Advantage in its Class

With the concerns surrounding Tether (some of which apply equally to other centralized, fiat-backed stablecoins), Dai is in an attractive position as the first decentralized, on-chain collateral backed stablecoin to successfully launch. The code has been open source and auditable for much longer than many other stablecoin projects.

Decentralized Governance

The Maker team intends for the Dai stablecoin system to be governed in its entirety by MKR token holders. Whilst most development and governance decision are currently driven by the core Maker team, the planned future decentralized governance will reduce the reliance on a centralized team. The Maker team is putting a concerted effort towards more transparency and promoting decentralized

governance through the Maker Foundation, which aims to promote greater decentralized governance of the Dai system through the MKR token. This degree of effort around decentralizing governance is not found in any other live stablecoin project.

Experienced Developer Team

Maker is generally viewed as having a strong team of highly-skilled smart contract developers and security specialists (DappHub). The project has the benefit of having been in development for three years and has, thus far, maintained a relatively stable price and smooth launch.

Framework for Multi-Collateral Dai

The Collateralized Debt Position model for maintaining Dai's stability means future upgrades could include other types of collateral, which would allow Dai to leverage and benefit from the stability and success of other cryptoassets (including other stablecoins).

Third-party Developer Community

The open-source nature of the Dai stablecoin system means that third-parties can build useful applications on top of the Dai backend. Already there have been third-party applications built which integrate the Dai system, such as EasyCDP and AutoCDP, which is a testament to the third-party Dai developer community.

ISSUES/TRADEOFFS

Only One Form of Collateral Available (ETH)

Currently only ETH (Pooled ETH) is available as a collateral type for backing Dai. Reliance on ETH means that all Dai are susceptible to large drops in a single cryptoasset's price, creating single point of failure risk. Moreover, the long-term success of the CDP model depends on the ability to find uncorrelated CDP types, and currently most cryptoassets are strongly correlated.

Similar to other crypto-backed stablecoins, Dai is exposed to the volatility seen in cryptoasset prices and potential 'black swan'-type events. Even though Dai has held up relatively well during the approximately 80% cryptoasset market price decline from the December 2017 high, it is unclear how the Dai system will maintain its stability during times of rapid increases and decreases.

Over-collateralization required

Under the current Dai structure, excess capital is required to produce \$1 of Dai (e.g., a minimum of \$1.50). While over-collateralization helps provide confidence during a downturn, some may view it as an inefficient deployment of capital.

Difficult to Understand

The Dai system is much more complex than many competing stablecoins. This can be a disadvantage as everyday users may be more reluctant to use a stablecoin whose operations and dynamics they cannot easily understand, especially compared to relatively simple fiat-backed stablecoins.

Supply constraint

The total supply of Dai has an upper bound, capped by the amount that collateral users are willing to put into CDPs. The exact collateral upper limit is unknown, but any such limit may diminish Dai's ability to scale as compared to its competitors.

Potential for Smart Contract Vulnerabilities

Dai's utilization of smart contracts, which are a nascent technology frequently afflicted by software bugs,

could leave it more vulnerable than its off-chain collateralized competitors. In addition, the Dai system has one of the most complex codebases of any current token project on Ethereum, and this greater attack surface potential opens Dai up to more attack vectors for hackers. The Maker team has carried out several smart contract audits (Trail of Bits, etc.) in an attempt to mitigate this risk.

CONCLUSION

Dai's structure, backed by ETH in a smart contract, is inherently decentralized. Users do not rely on a trusted-third party, as is the case with more centralized stablecoins such as Tether and Digix, where the stablecoins are essentially IOU coins. Dai is also not subject to the same counterparty risks or traditional banking risks as Tether. Since Dai's launch in December 2017, the token has managed to stay quite stable relative to its USD soft-peg. The forthcoming launch of multi-collateral CDPs will help expand the reach of the token and allow the circulating supply of Dai to increase further.

There will continue to be ongoing concerns over whether Dai's economic model is scalable and whether the collateral used for CDPs will be uncorrelated enough to protect Dai from the risk of large scale market price crashes. In short, only time will tell whether Dai's stability mechanism is robust enough for the topsy turvy world of cryptoassets. Should Dai continue to perform it is well positioned to see increased usage as a decentralized alternative to Tether and other fiat-backed stablecoins.

DAI

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S) that is being adopted in the

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

.

.

ETH (Future: Digix, Multi-CDP will allow any ERC20 approved by MKR token holders)

UPSIDE **PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND / INCENTIVE SCHEME (EG**

SEIGNIORAGE SHARES)

Yes. Stability fee paid (MKR burned) by CDP holder when CDP is closed, which reduces MKR supply (creating upward MKR price pressure)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$76,956,917

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$7,627,269

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF **EXCHANGE LISTINGS**

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

Non-For-Profit Foundation headquartered in Denmark **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDING RAISED TO DATE

\$27,000,000

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

Https://github.com/ makerdao/awesome-makerdao/blob/master/ README.md#partnerships

GENERAL INTENDED

Trading pairs on decentralized exchanges. Integration into Ethereum dApps (i.e. Augur)

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

announced a proposal for the Maker Foundation which aims to promote the decentralized governance of the Dai system through MKR.

https://makerdao.com **WEBSITE**

MILESTONES / **NOTABLE EVENTS**

in the next few months (Q3 2018).



- Weekly off-chain reserve verification by BDO International (BDO Malta)
- Fiat deposits and KYC outsourced to liquidity partner network
- Regulated under Maltese law
- Most similar to: Tether, USD Coin, TrueUSD, Paxos Standard, Monerium, Moneyfold

OVERVIEW

The EURS stablecoin is designed to digitally mirror the euro and is fully convertible to euros on a 1:1 basis. The fiat-to-EURS tokenization process is organized through third party liquidity providers that constitute the STASIS network of partners. Euros received by STASIS are allocated to a reserve fund to provide 100% backing for each EURS stablecoin. When liquidity providers sell EURS back to STASIS, the received EURS stablecoins are eliminated from circulation. The company's legal structure, regulatory compliance, and four capital admission streams (IBAN, SEPA, ISIN and ISDA) provide a gateway for large capital to enter and exit positions in the cryptocurrency market.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Medium	Low		No

STRENGTHS

Euro-based stablecoin

Having euros as collateral opens up a stablecoin market for those whose reporting currency is not the US dollar, the most common stablecoin peg. EURS meets the arguably under served stablecoin needs for Eurozone persons and institutions.

Weekly cash reserve verification and reserve ring-fencing

There are three different verification frequency streams available for EURS holders: daily (account providers), weekly (BDO Malta reserve verifications), and interim quarterly and annual audits (BDO). A legal ring-fencing mechanism separates off-chain funds from the issuer and secures the reserves for users.

Native wallet

STASIS has developed a native EURS wallet with exchange options between EURS and BTC, ETH, DAI. The aim is to make the wallet a marketplace for stablecoins in the future. One of the features offered in the wallet is a delegated transfer, which allows a user to transfer EURS on-chain without having to pay the Ethereum gas fee to the network.

Regulatory and legal status

STASIS's legal framework was assembled in consultation with KPMG, PWC, Ganado Advocates, and the Maltese government. As a result, EURS was granted VFA status, in contrast with competitor stablecoins that are seeking e-money or financial institutions licenses.

Liquidity provider partnerships

The STASIS model revolves around a system of liquidity provider partners. Partners engage in the primary sale of EURS tokens and distribute them to their clients in secondary sales, when needed. As a result, cost reductions and time savings are achieved with onboarding and KYC/AML procedures, which are basically managed by partners. STASIS uses four capital-admission streams: IBAN, SEPA, ISIN, and in some cases, ISDA.

ISSUES/TRADEOFFS

Centralized

Off-chain fiat-backed stablecoins are not fully decentralized; they rely on centralized teams.

Counterparty Risk & Reliance on Traditional Banking System

Also like Tether, Stasis is vulnerable to counterparty risk due to its reliance on legacy banking institutions.

CONCLUSION

Stasis by focusing on being a euro-oriented stablecoin is attempting to carve out a niche for itself in the stablecoin space. However, it will soon face significant competition from similar and already live stablecoins like USD Coin, Paxos Standard, TrueUSD, and others that have indicated they will soon offer a euro stablecoin. If Stasis can continue to differentiate itself, as it has done with its native web wallet and regulatory strategy, it may be able to continue to enhance its current position as one of the top-100 cryptoassets by market value.

STASIS

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Legal/Compliance

LEGAL JURISDICTION (COUNTRY)

Financial Asset Act

REGULATORY STATUS

according to VFAA (neither a security nor e-money)

COUNTRY LOCATION -

HO/PRIMARY TEAM

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC) SUB-CATEGORY

(EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$33,911,736

RANK - MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$633,105

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF CRYPTO

NUMBER OF FIAT PAIRS

PAIRS

. . . .

NUMBER OF

EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Technology

PLATFORM (EG ETHEREUM)

AUTOMATION

DECENTRALIZATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDING RAISED TO DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED

USF

Exante.eu, epayments.com

grade infrastructure for tokenization of any financial asset. The EURS stable coin is a cryptocurrency designed to maintain euro-level volatility, making it superior to regular cryptocurrencies in terms of payment reliability. EURS represents the safest and most transparent type of stable coin, namely, the fiat-backed stable coin. The

STASIS network creates two-way capital flow channels for institutional investors. STASIS ecosystem provides several ways to purchase EURS: Fiat, Crypto. Security, ISDA

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

leam comes from different backgrounds, including IT & blockchain, asset management & finance, legal and regulation, and government relations. All of us are bringing our expertise to develop an outstanding product and propel adoption of cryptocurrencies among institutional capital

WEBSITE

https://stasis.net/

MILESTONES / **NOTABLE EVENTS**

Institutional Client for EURS Stablecoin STASIS Wallet App Launches BTC/EURS Exchange

Legal/Compliance

OWNERSHIP

LEGAL ENTITY



- Off-chain, gold-collateralized ERC20 token
- Well funded: one of the early ETH crowdfunding campaigns
- Open source and high transparency
- Most similar to: HelloGold, x8c

OVERVIEW

Digix (DGX) belongs to a growing class of 'price-stabilized' cryptocurrencies backed by physical commodities. The DGX coin is described as 'digital gold on a blockchain.'

Each DGX token is an on-chain representation of I gram of physical gold in one of the gold cast bars from London Bullion Market Association-approved refiners. Digix uses the Safe House Singapore as its custodian vault and has a redemption policy.

Digix uses their proprietary Proof of Provenance (PoP) protocol to ensure the stored gold is maximally secure and its ownership/custodianship is tracked correctly on the Ethereum blockchain. DGX tokens are processed through three processes:

- 1. PoP Cards are uploaded onto the Digix network and the Digix Minter Smart Contract mints DGX tokens
- 2. Users can then redeem gold bars with their PoP cards
- 3. Developers can use their PoP cards and DGX tokens to develop front-end contracts
- 4. Reduce the circulating supply.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Medium	Low	Medium-High	Yes

DGX - Exchange Rate and Market Value, 2018-Present



STRENGTHS

New Form of Gold Trading and Ownership

DGX, through tokenization, offers a new way to trade and own gold. Gold has a strong, lengthy track record as a store of value. The token and protocol ensure full control of the digital representation of the underlying assets and offer a convenient way for some users to trade, transfer, and store tokenized gold.

Digix Resources and Track Record

Digix is one of the oldest projects based on Ethereum and its team is relatively experienced and well-known within the cryptoassets industry and Ethereum ecosystem. As one of the early ETH crowdfunding campaigns, the project currently holds significant ETH funds. Given the team's resources, experience, and success thus far, Digix is viewed as being in a strong position to provide a platform for a range of asset-backed tokens.

Industry Partnerships

Digix has secured a number of industry partnerships, including Consensys, Blockchain at Berkeley, Kyber Network, Maker, and Request Network.

ISSUES/TRADEOFFS

Single Point of Failure (Centralization)

DGX is relatively centralized as the token represents a claim on the gold backing the token. The user is forced to trust Digix as the issuing party as well as its custodian vault, the Safe House Singapore. This creates counterparty risk for token holders.

Gold Peg

Commodity-backed cryptocurrencies like DGX occupy something of a middle ground between USD-pegged stablecoins like Tether (which have proven less volatile than DGX) and cryptocurrencies such as bitcoin (which are more volatile than DGX). Volatility in the price of gold can significantly impact the value proposition of DGX. Unlike other stablecoins, which are pegged 1-to-1 with fiat currencies like USD, DGX's price is pegged to a historically more volatile precious metal. Many users are interested in stablecoins due to their parity with various fiat currencies, making them useful for purchasing goods and in trading. It is unclear if these same use cases will apply as widely for a token pegged to gold.

CONCLUSION

The DGX token, alongside the DigixDAO, presents a novel application of blockchain technology; firstly, by tokenizing off-chain assets, and secondly by implementing decentralized governance through DigixDAO. DGX bridges the gap between the physical world and the crypto world by enabling digital access to a time-tested store of value.

Digix is arguably more of a supply chain management tool for gold rather than a stablecoin. Today, investors use gold as a volatility hedge and portfolio asset, not as a means of payment. It is unclear why DGX would be adopted en masse as a means of payment if a more stable digital means of payment exists. This may leave DGX's best hope for wider adoption limited to its role as an alternative store of value to other cryptoassets, like bitcoin.

DIGIX

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. ALGORITHMIC)

Asset-backed

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG** Price of 1g of 99.99% LMBA Standard Gold

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1

EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDING RAISED TO

DATE

BANKING RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

Consensys. Blockchain at Berkeley, Kyber Network, Maker, Request Network

GENERAL INTENDED

USE

\$1300,000

OTHER COMMENTS/

INTERESTING ASPECTS OF COIN

Recently open-sourced code for DigixDAO 1.0: https://github.com/DigixGlobal/daocontracts

WEBSITE https://digix.global/

MILESTONES / **NOTABLE EVENTS** Launch of DGX 2.0 in March 2018.

SYNTHETIX

HIGHLIGHTS

- One of a handful of 'fee-backed' stablecoins
- Began trading in July 2018 on a top-50 exchange (Hong Kong-based Kucoin)
- Relatively decentralized (e.g., on-chain collateral-backed)
- Most similar to: Terra, Dai, Augmint, and BitShares

OVERVIEW

Synthetix (formerly called Havven) is an on-chain collateral-backed stablecoin system that employs two tokens: (1) Synthetix (sUSD), the stablecoin and (2) Synthetix Network Token (SNX), the collateral-backed sUSD. The Synthetix project is one of a handful of transaction fee-based stablecoin designs that have been developed to date.

sUSD users (spenders of the stablecoin) pay an approximate 0.2% transaction fee to SNX holders who collateralize the network. This fee compensates SNX collateral providers for supporting exchange rate stability.

Issuance of sUSD requires a greater value of SNX to be escrowed in the system's smart contract. This feature is intended to provide confidence that Synthetix can be redeemed at face value even if the price of SNX coins falls. The collateral ratio varies, but approximately 20% of the value of a SNX coin will be issued as Synthetix, and the remaining 80% will be staked as a buffer against price changes.

When a user decides to stake their SNX in a smart contract escrow, the sUSD will be generally issued in line with the ratio mentioned above and automatically put up for sale at a price of approximately \$1 USD, with the proceeds paid back to SNX holders. To release escrowed SNX, the Synthetix smart contract system buys the sUSD (also at a price of \$1 USD) and burns them from the system to reduce the circulating supply.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Medium-High	High	High	Yes

STRENGTHS

Direct Incentives

As long as demand exists for Synthetix there is a baked-in incentive to maintain a stable sUSD price. In other words, users who act to stabilize the sUSD price are rewarded for their efforts by being paid the transaction fees. Of course, being rewarded in transactions fees requires transactions (fundamental demand).

Direct incentives also motivate users to act quickly to stabilize the price because they will receive a larger fraction of the total fees generated. These direct incentives may help avoid the potentially circular incentive structure found in some project designs that have yet to be tested in the market (e.g., Basis).

Stability Tied to Economic Activity

Unlike some stablecoin projects, transaction fees offer the possibility of directly linking the stability mechanism with bona fide economic activity. This feature may help market participants have more confidence that growth in the use of the token is being driven by actual fundamental economic activity rather than speculative interests.

Over-Collateralization

Although over-collateralization is somewhat capital-inefficient, the conservative ratio may help create confidence amongst market participants in Synthetix's stability system.

ISSUES/TRADEOFFS

Stability

sUSD only commenced trading on a single cryptocurrency exchange in July 2018, but so far it has had some difficulty maintaining its \$1 USD peg. It is worthwhile to note that the trading volume thus far is still below \$200,000 per day and total sUSD in circulation is valued at a little bit more than \$1 m, meaning it may be premature to draw long-term conclusions about the stability and performance of sUSD in the market based on only a few weeks of data. However, average daily trading volume has been declining since launch.

Fee-Based Adoption Incentivization Model

Since the transaction fee percentage is low, one can argue that the fee-based model does not provide competitive returns to supporters when compared to other cryptocurrency projects. For example, even if annual transaction volume reaches \$15 billion, a 0.15% transaction fee would yield \$22.5 million in pre-tax fee revenue. In other words, given the current circulating supply of 64 million (or max. 100 million circulation cap), Synthetix may not generate sufficient returns for investors when compared to other projects seemingly offering more upside. One could argue that another advantage could be potential price appreciation of the SNX token.

Collateralization Ratio

Transaction fees are distributed in proportion with how effectively each issuer reacts to the changing collateralization ratio. The Synthetix system monitors the sUSD price and responds by adjusting its targeted global supply, and individual issuers (Synthetix stakers) are incentivised to adjust their collateral ratio.

For instance, if the value of sUSD drops below the desired peg, SNX holders in essence need to burn sUSD to create upward pressure on the sUSD price in return for an increased allocation of transaction fees. However, during any black swan event, it is unclear whether market participants will have sufficient confidence to burn their stablecoins/fiat to save the peg if both the value of SNX and sUSD are falling sharply in the secondary market. Furthermore, unless there is a convenient mechanism for investors to adjust the collateral ratio constantly a substantial number of SNX holders may not respond to changes in the target collateralization rate, and this would adversely impact the stability of sUSD.

Possible Reliance on Securing Large Partnerships

The success of the fee-based approach may rely heavily on actual adoption and use cases in the market, i.e., adding large e-commerce partners to the ecosystem who can create incentives for spending the stablecoin and driving adoption. Whether large e-commerce platforms will join the Synthetix network when they can create their own stablecoin – under their own control and brand – is an open question. Unlike the similar Terra stablecoin, Synthetix lacks strong ties to large e-commerce platforms, raising

questions over whether the Synthetix team can win enough partnerships fast enough to achieve the necessary dominance and network effect.

Over-Collateralization

Although over-collateralization helps to provide confidence during a downturn, it is an inefficient deployment of capital and may limit its ability to scale when compared to some competitors.

CONCLUSION

Synthetix's relatively-decentralized and revenue-generating design presents an intriguing stability mechanism. However, the launch is arguably off to a somewhat rocky start, and Synthetix's ultimate success may hinge less on its design than the project team's business development prowess (e.g., success in securing e-commerce relationships), where it appears to be at a disadvantage to other projects.

Like other crypto collateral-backed stablecoins, the sUSD stablecoin is subject to the volatility of its backing asset. As such, Synthetix must be over-collateralized to protect against any irregular volatility. However, such over-collateralization does not protect against black swan events that would cause the coin to become under-collateralized. No stablecoin design developed to date is without its tradeoffs. Only time will tell whether the tradeoffs chosen by the fee-based model employed by Synthetix are on balance the correct ones.

SYNTHETIX

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE **SCHEME (EG**

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

Asset-backed

Cryptoassets (SNX token)

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$2,719,000

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30

DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 0

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

Blocktower, Alphablock Investments, Blockasset Digital asset management, GBIC, AlphaCoin Fund

Dether, Market Protocol, Intimate.io, Groundhog, Elysian, ARAW

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/

INTERESTING ASPECTS

OF COIN

https://synthetix.io/ **WEBSITE**

MILESTONES / **NOTABLE EVENTS**



- Multi-currency and multi-asset (fixed income) off-chain collateral backed
- Only live stablecoin currently pegged to inflation
- Utilizes fixed income investments to generate a positive return to maintain peg
- Most similar to: Tether, TrueUSD, Saga, Monerium, USD Coin

OVERVIEW

AAA Reserve Currency (AAA) is an off-chain, fiat-collateralized stablecoin. AAA claims to be the most stable of all live stablecoins and three times less volatile than USD since its launch in January 2018. AAA is designed to hold multiple fiat currencies, such as the US dollar, sterling and yen, along with fixed income assets (e.g., British gilts or other AAA-rated credit investments) as collateral backing for the value of AAA coins. Proceeds raised from the sale of the AAA ERC20 token are invested back into these asset categories, with the diversified lending and fixed income investments expected to produce a positive investment return that offsets the loss of purchasing power of the fiat currencies held in the portfolio. This expected positive investment return is what will enable AAA to maintain its peg to inflation.

The issuing of AAA coins is overseen by Arc Fiduciary Ltd, a special purpose vehicle (SPV) registered in Jersey (the Bailiwick of Jersey) that operates as a not-for-profit.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Low	Low	Low-Medium	No

AAA Price



STRENGTHS

Superior Store of Value and Unit of Account

At present, AAA is the only live stablecoin that is pegged to inflation. This makes AAA arguably both a superior store of value and unit of account versus other stablecoins pegged to the US dollar, which loses approximately 2% of its purchasing power per year. With its fixed income portfolio, the SPV holding AAA's reserve collateral is expected to produce a positive investment return that offsets the loss of purchasing power of the fiat currencies in the portfolio, enabling AAA to maintain its peg to inflation (the average inflation for G-10 countries).

Diversified Stability Mechanism

The AAA model seeks stability from multiple fiat currencies as well as fixed income assets like UK gilts and other high-quality bonds. Given continuous fluctuations across different fiat currencies, a basket of diverse, real assets may provide additional layers of stability beyond other stablecoins that are backed by a single fiat currency.

Legally Compliant Stablecoin

Many financial institutions are only interested in and legally able to adopt compliant financial instruments like AAA, and it is with these institutions where AAA may have a significant advantage over other stablecoins. AAA is operating within the regulatory framework of Jersey and can take advantage of its financial passporting rights.

Proven Stability Mechanism

Like many other stablecoins, AAA Reserve uses an off-chain collateral model, which in some ways is much simpler than either on-chain collateral or algorithmic models. It is easy to understand how exchange rate stability for stablecoins like AAA is achieved.

Non-Profit Structure

The AAA SPV operates as a not-for-profit, which eliminates potential incentives to game/attack seigniorage share-style stablecoins.

ISSUES/TRADEOFFS

Counterparty Risk

Like Tether and other off-chain stablecoins, AAA is centralized through its reliance on AAA Fiduciary Ltd., making AAA subject to counterparty risk. For example, if AAA Fiduciary Ltd were to ever fail or experience fraud the value of the AAA stablecoin would likely drop.

Liquidity and Lack of Exchange Support

The AAA Reserve coin is much less popular than some live competitors, such as Dai, Tether, and TrueUSD. A central value proposition for stablecoins is their usage for trading and across blockchain-based applications, making the liquidity and the popularity of a given stablecoin a significant determinant in its success. AAA is lagging behind its live competitors in these areas.

Limited Income or Profit Upside for AAA holders

While the inflation peg allows AAA holders to potentially outperform holders of other fiat-backed stablecoins or non-or-low interest-bearing cash deposits, the upside for AAA holders appears lower than other seigniorage share-style or fee-backed stablecoins. The lack of upside for AAA holders on the growing use of AAA may reduce adoption interest amongst speculators and network effect dynamics.

CONCLUSION

The AAA model offers a potentially superior store of value and unit of account versus other stablecoins. No other stablecoin at present is pegged to inflation, and many designs would have difficulty making the transition to an inflation peg without making significant structural changes. AAA's structure may therefore give it an edge for certain use cases, such as low risk investments like savings retirement accounts, as well as for benchmarking and performance measurement over time. AAA's multi-currency purchase options could also make it an attractive on-off ramp from fiat to cryptocurrencies (and vice versa).

AAA's main challenge is rapidly growing stablecoin competition. While a separate commercialization vehicle was recently established to drive greater use, AAA will continue to suffer criticism (like Tether and other similar off-chain collateral models) for its relative lack of decentralization (counterparty risk) and trivial technical innovation.

AAA RESERVE

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

Pegged to inflation, diversified fiat and fixed income

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE** Multi-currency (USD, EUR, GBP, YEN), fixed income

UPSIDE PARTICIPATION:

GOVERNANCE TOKEN, DIVIDEND / INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$3,500

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

Collateral is owned by Arc Fiduciary Ltd. with AFL being controlled by a special purpose trust, which has no beneficiaries (so is bankruptcy remote) and solely exists to facilitate a stable priced

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

AUTOMATION

DECENTRALIZATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED

USF

WEBSITE

Providing loans, borrowing funds, save money and store value or as alternative method of payment

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

https://www.aaareserve.com/

MILESTONES / **NOTABLE EVENTS**



- Decentralized Seigniorage Shares model
- One of the first cryptocurrencies to build on Hedera Hashgraph
- Will launch as a hybrid (algorithmic/fiat-backed)
- Most similar to: Basis, Ampleforth, and Kowala

OVERVIEW

Carbon is a non-collateralized, seigniorage shares model stablecoin that utilizes two tokens: (1) Carbon stablecoin and (2) Carbon Credit token ("Carbon Credit").

When demand is falling for the Carbon stablecoin (i.e., trading below the 1 USD peg) Carbon Credits are auctioned off via a reverse Dutch auction smart contract to market participants who are willing to burn their stablecoins. The Carbon Credit holders are later rewarded during the expansion cycle when the stablecoin demand increases beyond the peg ratio. When the demand for the Carbon stablecoin increases (i.e., its price is higher than the \$1 peg) newly minted stablecoins are distributed to Carbon Credit holders on a pro-rata basis, creating downward pressure to push the price back to the peg.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Medium-High	High	High	Yes

STRENGTHS

Seigniorage Model

Similar to Basis, the seigniorage model is more decentralized and non-collateralized compared to other existing IOU/crypto-backed models. That is, Carbon doesn't need to hold flat in centralized banks or hold fluctuating cryptocurrencies as collaterals. Carbon slightly modifies the seigniorage shares model allowing users to freeze portions of their funds to manage contraction and growth cycles.

Attractive Cryptoeconomics (compared to Basis)

During a price downturn (e.g., stablecoin price declines to \$0.85), the upside for Basis bondholders is capped at 15% if the bonds can be redeemed at par without expiration. Any further upside (when trading above the peg) goes to Basis shareholders - who directly contributed towards arresting the peg break - instead of the bondholders.

In contrast, the Carbon system gives 100% of the upside to users who helped the system to contract through burning their tokens. If the Carbon stablecoin was trading at the same price (\$0.85), the Carbon Credit holders will receive uncapped upside to their investment (i.e., potentially receive unlimited newly minted coin on a pro-rata basis), and therefore Carbon theoretically yields significantly higher returns during the expansion cycle. Furthermore, there is a risk and uncertainty that the Basis bonds may not be redeemed and thus expire after five years. This uncertainty impacts the risk/reward profile for Basis bonds and could cause its secondary market to become relatively illiquid compared to the Carbon Credit market.

Scalability and First Mover Benefits from Utilizing Hashgraph

Carbon will use Hedera Hashgraph, which can in theory achieve a much faster throughput compared to a blockchain-based stablecoin (e.g., up to 50-100k+ transactions/second compared to, say, bitcoin's approximately 7 transactions/second). Development is taking place on Ethereum as Hedera Hashgraph will support the ETH virtual machine. Interoperability is central to Carbon's management strategy and should help Carbon move value amongst ecosystems. As one of the first cryptocurrencies to commit to utilizing Hashgraph, Carbon may be well positioned to serve as the preferred stablecoin on Hashgraph. However, it also leaves Carbon exposed to Hashgraph's launch roadmap (expected in Q1-Q2 2019) and the inherent limitations of Hashgraph protocol rules, as noted below.

ISSUES/TRADEOFFS

Funding and Reserve Ratio

When compared to other similar stablecoin projects such as Basis (which raised ~\$130 million), the Carbon team has only raised \$2M. The lack of funding may make it difficult for Carbon to challenge similar but more well-funded projects in areas where funding can play an important role (e.g., initial market adoption, interest, partnerships).

Although the white paper does not discuss the stability reserve, it appears in one of the online postings made by the Carbon team that they will have 30% of the market cap as its stability reserve. It is unclear whether 30% of the relatively small market cap will be sufficient to protect the peg in its early stages of network life.

Controversial Pricing Oracle Design

Every 24 hours, a Schelling point scheme is initiated where nodes submit bids for what they believe is the correct exchange rate for Carbon. Anyone who bids outside the 25th and 75th percentiles will have their balances deducted and given to the bidders whose bids fall within the 25-75th percentile. This confiscation of collateral may work against Carbon and ultimately deter broader participation. For example, even if a node reports a price that is a few basis points beyond the 25-75th percentile, the imposed penalties might be deemed as too severe.

Potential Post-Launch Manipulation

One of the general concerns with algorithmic stablecoins is the risk that actors may attempt to manipulate the system, particularly while the market cap is relatively small. Any break in a stablecoin's peg, regardless of the explanation, may cause a potential crisis in confidence and reduction in demand. During such a crisis for Carbon, market participants may be less likely to burn their dollars/stablecoins to save the network and obtain Carbon Credit tokens, which could become worthless should the entire system collapse.

Centralization (Hedera Hashgraph Protocol)

While the Hashgraph protocol offers potential advantages, particularly around capacity, Hashgraph is a 'permissioned' (more centralized) protocol run by a limited number of nodes (39 are currently planned). There are also concerns around the relationship between Hashgraph and the Carbon team, some of whom used to work on the Hashgraph team. More specifically, there is a concern that Hashgraph team members or close insiders may assume dominant Carbon node roles, which would allow them to acquire the majority of processing fees and hold significant influence over future decision making for both protocols.

CONCLUSION

Among the different stablecoin projects, Carbon stands out for its innovative approach. However, Carbon will be challenging to implement successfully in its own right, and the project is also relying on the new Hashgraph decentralized ledger that has yet to launch and prove its reliability. There are also concerns around whether Carbon can prevent successful gaming/attacks.

CARBON

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: **GOVERNANCE TOKEN,**

DIVIDEND / INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1

EXCHANGE LISTINGS

TIER-1 EXCHANGES

Technology

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

Ethereum initially, still interested in Hedera Hashgraph, interoperable

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

The Fund, FirstMark, General Catalyst, Digital Currency Group, Plug and Play

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

Raised \$2m seed round in April 2018.

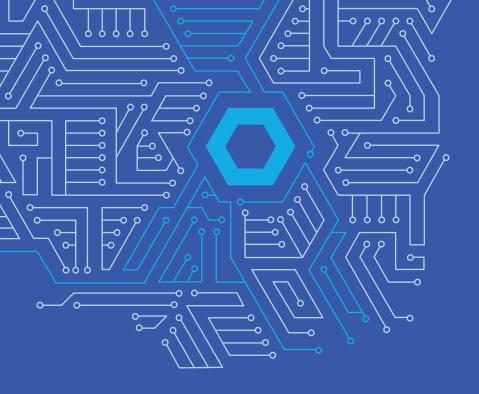
Hedera Hashgraph

\$2,000,000

WEBSITE

https://www.carbon.money/

MILESTONES / **NOTABLE EVENTS**



PRE-LAUNCH STABLECOINS



HIGHLIGHTS

- One of a handful of 'fee-backed' stablecoin designs
- Algorithmic and decentralized multi-currency model; maintains an on-chain stability reserve
- Amongst top-3 funded pre-launch stablecoins, \$30 million USD raised to date (tied with Terra)
- Support from major Asian (especially South Korean) e-commerce firms
- Most similar to: Synthetix, AAA Reserve, Monerium, Saga, and CircleUSDC

OVERVIEW

Terra, in the beginning, will mirror the composition of the IMF Special Drawing Rights (SDRs). The protocol relies on the 'Luna' asset for the price stability of Terra (the stablecoin). Luna's supply, which is fixed, is determined at genesis. Terra transaction fees are paid out to Luna holders, who deposit Luna to stake in the Stability Reserve.

When the reserve ratio against circulating supply falls below the minimum (1.2:1) target ratio, the algorithm triggers transaction fee percentages to increase accordingly. The expected increase in cash flow, via the increased transaction fee percentage is expected to increase the price of Luna and bring the stability reserve ratio back to the target.

Luna are essentially a non-dilutive share in future transaction fees accrued by the Terra network and governance token.

Automation		Complexity Stability Mechanism	Transparency Upside Partici	
	Medium-High High		High	Yes

STRENGTHS

e-Commerce Use Case Focus

Terra's adoption roadmap focuses on it being used as a currency at online checkout. Currently, the Terra project has six members of its Terra Alliance that will facilitate checkout with 'TerraPay', and the project is moving forward with on-boarding partners for real-world use cases to drive demand for Terra.

Team and Partners

The project is headed by a co-founder of TMON, the 2nd largest e-commerce provider in South Korea. One of the founding members of Kakao PLC (largest messenger app in South Korea) is part of the team. The team notes that Terra partners have \$25B in transaction volume, making it arguably one of the most feasible projects in the stablecoin arena.

Relatively Conservative Algorithmic Stability Mechanism

In theory, the system may hold-up relatively well in a black swan market sell-off scenario due to the non-speculative and revenue-generating nature of Luna.

ISSUES/TRADEOFFS

Transaction Fee Competition

The fundamental premise of the Terra model is that it can achieve broad adoption via e-commerce platforms and that its fee remains competitive. However, Terra may find it difficult to compete should other zero-fee stablecoins prove more popular, or if larger e-commerce platforms such as Amazon, WeChat and Facebook enter the stablecoin arena and are willing to offer lower stablecoin transaction fees (or zero transaction fees), or should payment companies such as Visa reduce their transaction fees.

Business Model Uncertainty and Capitalization

The initial supply of the coin is not yet known, making it difficult to develop a clear forecast. Further, it appears that the Terra team will not receive any money or profit after the initial ICO. Going forward, the team may not be sufficiently capitalized, have sufficient ongoing incentives or continued vested interest in the project's longer-run success.

Expansion through Fiscal Spending

When the exchange rate of Terra is greater than the price peg, the system mints new Terra and takes proposals/votes from Luna stakeholders to engage in decentralized fiscal spending for the betterment of the system. While the project team has stated that these funds will be used "to fuel discounts in our ecosystem of e-commerce companies", it is unclear how these grants will be monitored to avoid misuse of the funds.

CONCLUSION

The Terra stablecoin project is both pragmatic, with its inclusion of e-commerce platforms in the founding partner group, and ambitious. Over time Terra will include commodities (such as gold, corn, etc.) with the ultimate goal being to transition the Terra stablecoin to a completely fiat-independent instrument. Insofar as Terra is a valuable currency that people choose to transact with, Luna will retain its value by the transaction fees that Terra use generates.

Although the team has impressive backing and experience as well as growing international exposure, its strengths primarily rely on Asia and especially the South Korean market. At the same time, South Korea is one of the leading cryptocurrency markets at present. Should other e-commerce/social media platform providers across the globe with larger user bases enter the stablecoin field, Terra may no longer be as competitive, particularly outside Korea. For now, however, Terra's e-commerce adoption prospects compare favorably to other pre-launch stablecoin projects.

TERRA

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

Algorithmic (with initial fiat backing)

Luna token, with initial fiat backing

"ST: SDR (+ commodity) LT: fiat independent

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE **SCHEME (EG SEIGNIORAGE SHARES)**

STABILITY BENCHMARK /

REFERENCE PEG

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Technology

OWNERSHIP

Terraform Labs: privately held company; based in Seoul **LEGAL ENTITY**

LEGAL JURISDICTION (COUNTRY)

COUNTRY LOCATION -HQ/PRIMARY TEAM

REGULATORY STATUS

Technology

PLATFORM (EG ETHEREUM)

TBD (Most likely: own

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

TMON (South Korea). Carousell, Pomelo, Tiki.vn (Vietnam), other e-commerce players in Singapore and

GENERAL INTENDED

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

e-commerce adoption. Could struggle if other competitors with lower fee + larger userbase enter the market, or Visa etc. cut fees.

WEBSITE https://terra.money/

MILESTONES / **NOTABLE EVENTS**



HIGHLIGHTS

- Multi-currency, off-chain collateral backed
- Leaves room for price appreciation (balancing stability and growth)
- Top-3 funded pre-launch stablecoins, \$30 million USD raised to date (tied with Terra)
- Team and advisors include a former central bank governor and the chairman of JPM international, as well as a Nobel prize winning economist. The project's Chief Economist is a former central banker.
- Most similar to: AAA Reserve, Monerium, and CircleUSDC

OVERVIEW

Saga (SGA) is an Ethereum-based "stabilized currency", meaning it is not a single peg currency. It is backed by a reserve that utilizes the International Monetary Fund's (IMF) special drawing rights (SDRs) as its unit of account. The reserve is held in a regulated financial institution where it accrues interest, which will be paid out to the benefit of SGA token holders. The reserve backing model is variable, starting with 100% backing in SDR and decreasing gradually as its economy grows and market trust is demonstrated. The reduced backing is manifested in price appreciation.

Saga's early investors hold a different token called Saga Genesis (SGN) which is a voucher token convertible to SGA. The amount of SGA received per SGN token (the conversion ratio) depends on the strength (demand) of SGA, but it is capped at no more than 15 SGA per SGN.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation	
Medium High			Yes	

STRENGTHS

Price Appreciation Mechanism

The variable reserve backing allows the currency to develop its intrinsic value while taming volatility.

Full Regulatory Compliance

Saga is working under the authority of FINMA and complies with KYC and AML regulations. Holders of the currency must identify online.

Interest Payments to SGA Token Holders

The Saga reserve is held in major banks where it accrues interests that will benefit SGA token holders. It is a competitive advantage compared to other digital currencies which pay no interest rates.

Funding and Investors

Saga has raised \$30 million from reputable investors, making it one of the top-3 funded pre-launch stablecoins.

Team and Advisors

The team includes Barry Topf, a former senior economist of the Bank of Israel and a monetary committee member. The board of advisors includes three noteworthy individuals: Prof. Myron Scholes (father of Black & Scholes pricing model), Dr. Jacob Frenkel (Chairman of JPM International, previously the governor of the Bank of Israel), and Prof. Dan Galai, co-inventor of Vix (the Volatility Index).

ISSUES/TRADEOFFS

Reserve Ratio

It is unclear how best to manage the reserve ratio. The team defines three successive stages (Small / Fragile Economy, Growing Economy, Standalone Economy) and suggests a gradual decrease (modeled mathematically) of the reserve ratio as confidence increases in the Saga economy. The reserve ratio starts at 1:1, when the economy is weak.

The reserve ratio is a function of the number of outstanding SGA tokens, and the price of the SGA token is a function of the number of outstanding tokens. Order requests from the market cause the smart contract to issue or liquidate tokens and these supply adjustments will impact the price.

Adoption Friction

Saga requires that all people interested in purchasing SGA be first approved through a Know Your Customer (KYC) process, which causes additional onboarding friction and may deter some users. However, the KYC process will also attract users seeking a compliant cryptocurrency.

Counterparty Risk & Reliance on Traditional Banking System

Like Tether, Saga is vulnerable to counterparty risk due to its reliance on legacy banking institutions.

Centralization

In the short-run, the Saga foundation plays a governing role over some aspects of the smart contract. In the long-term, however, the Saga Foundation does not have any decision-making authority, even though it will exist in perpetuity.

CONCLUSION

The Saga team is comprised of several experts in different areas of study, including economics, mathematics, and other social sciences, illustrating the view that developing an innovative, new monetary system requires an interdisciplinary approach. Saga's diverse team and funding ensure it will be a player in the stablecoin space. Saga does not consider itself a stablecoin though, but rather a currency with volatility-taming mechanisms — this is due to it being a model built to depart gradually from fiat reserves towards intrinsic, un-pegged value.

Saga states that it is more of a monetary startup than a technology one, in the sense that the core focus is creating a global monetary model independent of the considerations of any single nation state. As a currency-first project Saga risks compromising decentralization and trust minimization for other priorities. However, Saga's utilization of decentralized technology aligns with its expressed wish to submit control over the money supply algorithm to a broader consensus mechanism.

SAGA

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

*Taming Volatility - Saga's model is inspired by monetary instruments **DIFFERENTIATOR(S)**

monetary instruments used by central banks to build the currencies we all use today; "Acceptability within the traditional financial system - Working under the Swiss regulatory framework, Saga performs a friendly, online onboarding process, which complies with Swiss AML act policies and practices; "Governed by its Participants - Saga will implement a governance model that allows both direct representation and efficient decision making by delegation according to the various use cases.

Fiat, decreasing reserve ratio

Format

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TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY

Adoption

(FUNCTIONAL)

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30

DAILY VOLUME) RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

Adoption

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

headquartered in Switzerland

LEGAL ENTITY

headquartered in Switzerland

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

Supervised by ESA and member of VQF, an SRO supervised by FINMA for all AML related issues.

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -STABILITY MECHANISM

OPEN SOURCE (YES = FULL/PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

Lightspeed, Mangrove Capital Partners, Vertex Ventures, Lool Ventures, Disruptive, Singulariteam, iCapital, Juno, Initial Capital, Spice Venture Capital, MizMaa Ventures

FUNDING RAISED TO DATE

\$30,000,000

BANKING

RELATIONSHIPS

be revealed before launch. Banks will supply daily attestation of the reserve they

FIS (Treasury management); Reuters; Deloitte

PARTNERS (BIZ DEV/ ECOSYSTEM)

USF

New money - MoE, UoA, SoV and reserve currency **GENERAL INTENDED**

OTHER COMMENTS/ **INTERESTING ASPECTS OF COIN**

WEBSITE

https://www.saga.org/

MILESTONES / **NOTABLE EVENTS** 03/18 - Announcement; Q1 2019 - Publish Govenenca policy + Currency launch

Ampleforth

HIGHLIGHTS

- Decentralized, Seigniorage Shares / algorithmic model
- Untested monetary policy
- Most similar to: Basis, Kowala, and Carbon

OVERVIEW

According to its website at press time, Ampleforth proposes a seigniorage shares-based stablecoin that utilizes three different assets: reserves, bonds, and USD Ampleforth. Similar to how some stablecoins have been referred to as a "Better Tether", Ampleforth has been referred to by some as a "Better Basis". However, it should be noted that Ampleforth reports that they will soon be releasing a whitepaper for their protocol detailing a new approach to stability that will vary significantly from current projects and the version of their protocol examined here.

The algorithmic Ampleforth protocol enables both long-term and short-term use cases (e.g., store of value and medium of exchange) based on the protocol's ability to automatically expand and contract its currency supply as needed. For short-term use, Ampleforth is pegged at \$1 USD. Ampleforth plans to move from the USD reference peg in the future to a CPI-based basket, the constituents of which will likely be voted on by token holders.

The protocol, which is built on the Ethereum blockchain, operates on a concept called rebasing, which is a way of expanding and contracting supply based on demand. When the platform needs to grow supply, it mints and distributes coins and when the platform needs to decrease supply, it motivates participants to remove supply by issuing bonds.

Token holders act as market makers, buying Ampleforth in times of price drops below the \$1 peg and selling Ampleforth when the price rises above the \$1 threshold. The algorithm activates when market makers are not able to maintain this equilibrium in price. During times of inflation, Ampleforth holders receive newly minted Ampleforth, which they can then sell. Conversely, in times of deflation holders are rewarded for burning Ampleforth into bonds to decrease supply and push the price back up to \$1.

Autonomy is an important characteristic in the Ampleforth design, with the aim of enabling quick adaptability and action in the system.

Automation Complexity Stability Mechanism		Transparency	Upside Participation	
High-Medium High		High	Yes	

STRENGTHS

Addressing Concerns with Basis

The potential strength of Ampleforth can be examined vis-à-vis Basis, a similar stablecoin design. The decentralized Basis protocol is designed to self-stabilize. However, if there is a crisis of confidence in the Basis ecosystem, Basis holders might want to exit their positions instead of swapping their coins

for bonds, which are options on the coins. In other words, the Basis protocol may need a buyer of last resort.

In the opposite direction, if there is very positive news, nothing forces the Basis holders to sell the additional coins that they are receiving. Thus, they might want to keep their coins and accrue even more coins because they anticipate more positive news. For these and other reasons, there is some reasonable skepticism over whether Basis will trade at its peg.

The Ampleforth design attempts to address this issue by introducing a capital reserve buffer which will act as something akin to a 'moral authority'. In this instance, programmatic bidding will remove bonds from supply when needed and when supply increases.

ISSUES/TRADEOFFS

Untested and Complex Monetary Policy

The monetary policy behind Ampleforth is untested, and the Fragment asset classes (USD Ampleforth, USD Fragment Bonds, and Reserve Collateral Assets) and structure are complicated. Similar to other seigniorage share models, how the coin will perform under severe downward price pressure remains to be seen. Accordingly, the project does not call itself a stablecoin, but rather, a "low volatility cryptocurrency."

CONCLUSION

Ampleforth is one of a growing number of algorithmically adjusted stablecoins. Like Basis, the project offers a new, untested design. At this stage there are more questions than answers about how these stability mechanisms will perform over time in the marketplace.

Another open question is who represents the target market for Ampleforth? Previous stablecoins largely target traders and exchanges, while Ampleforth seems to target everyone. Given the current proliferation of stablecoins, the Ampleforth community may want to focus on targeted use cases (e.g., use cases that require an algorithmic, trust-minimized solution) and organic growth.

AMPLEFORTH

NUMBER OF TIER-1

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Overview **Technology**

OWNERSHIP TICKER(S)

Privately held company, based in San Francisco **LAUNCH DATE LEGAL ENTITY**

HQ/PRIMARY TEAM

FUNDING RAISED TO

LIVE (YES/NO) **LEGAL JURISDICTION**

(COUNTRY) Algorithmic with a single-coin **REGULATORY STATUS DIFFERENTIATOR(S)**

COUNTRY LOCATION -

Format TOP-LEVEL CATEGORY

Technology (ASSET-BACKED VS. ALGORITHMIC) **PLATFORM (EG**

ETHEREUM) Algorithmic (single coin system) **SUB-CATEGORY** (EG OFF-CHAIN **DECENTRALIZATION**

COLLATERAL BACKED)

AUTOMATION COLLATERAL /

RESERVES TYPE COMPLEXITY -**STABILITY MECHANISM**

UPSIDE OPEN SOURCE (YES = PARTICIPATION:

FULL/PARTIAL) GOVERNANCE TOKEN, DIVIDEND / INCENTIVE

SCHEME (EG Investors, Team & Partners **SEIGNIORAGE SHARES)**

Joey Krug (Pantera Capital), Paul Veradittakit (Pantera Capital), Noah Jessop (Founder Collective), Michael **STABILITY INVESTORS (TIER 1 & BENCHMARK** / OTHERS) **REFERENCE PEG**

Karnjanaprakorn (Turing Capital), True Ventures, Slow Ventures, FBG Capital **TRANSPARENCY** (FUNCTIONAL)

DATE

Adoption **BANKING**

RELATIONSHIPS

MARKET VALUE PARTNERS (BIZ DEV/

ECOSYSTEM) RANK - OVERALL MARKET VALUE GENERAL INTENDED

Alternative unit of account that reduces volatility in fiat currency through shifting from unit price to unit count and functions as a store of value for both the near term and long term. **LIQUIDITY (AVG. 30 DAILY VOLUME)**

RANK - OVERALL MARKET LIQUIDITY

OTHER COMMENTS/ NUMBER OF FIAT PAIRS N/A **INTERESTING ASPECTS**

Ampleforth defers from being called a stablecoin and is referred to as a low volatility cryptocurrency instead. The Ampleforth protocol hasn't launched yet so there are still a number of unanswered questions surrounding the implementation of the protocol. **OF COIN NUMBER OF CRYPTO PAIRS**

NUMBER OF EXCHANGE LISTINGS

WEBSITE

EXCHANGE LISTINGS MILESTONES / Fragments to Ampleforth in Dec. 2018 **TIER-1 EXCHANGES NOTABLE EVENTS**

https://www.ampleforth.org



HIGHLIGHTS

- Multi-layer stability design: full on-chain collateralisation via "real" cryptoassets (e.g., tokenized gold and tokenized debt) with decentralized management of the stablecoin supply using smart contracts
- Large number of noteworthy backers such as Coinbase, Peter Thiel, Sam Altman and approximately 40 others
- Most similar to: Dai, Terra

OVERVIEW

Reserve is a stablecoin backed by on-chain collateral which utilizes three main components: (1) the Reserve stablecoin, (2) the Vault which holds tokenised real assets via smart contracts (3) the Reserve Share (RSH) which entitles holders to the revenue from Vault asset appreciation and seigniorage in exchange for financial support of the project.

When demand for the Reserve stablecoin increases, the smart contract mints and sells new stablecoins. All proceeds from the sale are put in the Vault, maintaining 100% collateralisation of each minted stablecoin. When demand decreases and the price falls below the \$1 peg, assets from the Vault are used to repurchase and burn the Reserve stablecoin, returning the price to the target price.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation
Medium High		High	Yes

STRENGTHS

Multi-layer Stability Design

In addition to full collateralisation, the team has added an extra buffer via the Reserve Share, the equity token. This allows the stabilization protocol to take loans from Share holders if the protocol needs short-run capital, providing additional stability and confidence.

Investors and Advisors

The team has received funding from top-tier investors including Peter Thiel, Sam Altman, Coinbase, and another 40 notables. Furthermore, the advisors include a former SEC Commissioner, early Paypal members and many more. The investor group represents a strong vote of confidence in the project's potential and suggests support will be available to the team going forward.

On-chain 100% Collateralisation

The Reserve protocol maintains at least 100% collateralisation of all minted stablecoins using a pool of on-chain assets, diversifying across financial correlation, jurisdiction, and issuing company. The team intends for this to be primarily built from tokenized real-world assets, as opposed to leveraging unstable crypto assets like Ether. Though perhaps at the expense of scalability, this approach provides robust transparency and stability. That Reserve is collateralised entirely on-chain renders it significantly different from most other collateralised stablecoins.

Thought Leadership

In a space as noisy as stablecoins, Reserve has successfully established itself as one of the important thought leaders in the space through their blog. Most notably, their analysis of the MakerDAO system is perhaps the best analysis publicly available. While Reserve is yet to publicly release their whitepaper, their team's rigorous thought process.

ISSUES/TRADEOFFS

Centralized Elements of Vault Portfolio

As noted by the team, the selection of assets held in the Vault will be centralized in the early stages. Although the goal is to decentralize asset selection in the future, it is not clear how this decentralisation will be implemented. It is also unclear whether centralized or decentralized selection will lead to effective portfolio asset selection, and relying on tokenized assets like debt and gold introduces counterparty risk to Reserve.

Asset Valuation Manipulation

Until tokenised trading platforms mature, price manipulation of Vault assets may occur with the aim or purchasing the Reserve stablecoin at an advantageous exchange rate. Nonetheless, the team is aware of this issue and is considering limiting the rate at which the protocol purchases and sells Reserves.

Scalability

Furthermore, there is a lack of liquidity for tokenised real assets at present, and therefore the project may struggle to scale until adequate liquidity is secured.

Centralized Oracles

Until a fully decentralized oracle solution reaches the mainstream, the team will use a centralized oracle which may result in price manipulations and protocol attacks.

CONCLUSION

Reserve has written extensive criticisms of other stablecoins but has still not published its own whitepaper, and a number of questions remain about the exact nature of its final design and implementation. Reserve's relatively decentralised design featuring tokenised real asset collateralisation distinguishes it from other stablecoins. However, we believe the actual implementation of Reserve's fully decentralised concept to be far more difficult in reality. Even with these questions we expect Reserve's project strengths and backers will help ensure it remains an important player in the stablecoin arena for the foreseeable future.

RESERVE

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO) Aug 2017

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG** USD (but can be pegged to

TRANSPARENCY

(FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

.

NUMBER OF

EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

LEGAL ENTITY

Legal/Compliance

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

Multi-platform, based on Ethereum

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

FULL / PARTIAL)

OPEN SOURCE (YES =

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

Peter Thiel, Coinbase, Sam Altman, GSR.io, Distributed Global, Blocktower Capital, Digital Currency Group, NEO Global Capital, Fenbushi, PreAngel, Velorum Capital, Rocket Fuel, CryptoLotus, Arrington XRP Capital, and about 40 others

\$5,000,000

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

Patomak Global Partners, a financial services consultancy led by former SEC

Commissioner SEC Commissioner Paul Atkins that includes former officials from the SEC, CFTC, Federal Reserve, OCC, and Treasury Department.

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

Recently announced. White paper not yet out.

WEBSITE https://www.reserve.org/

MILESTONES / **NOTABLE EVENTS**



HIGHLIGHTS

- Decentralized, Two-token, Algorithmic/Mint & Burn
- Incentivizes traders to help stabilize price
- Most similar to: Basis, Ampleforth, and Carbon

OVERVIEW

Kowala is a dual-token system that consists of a mining token (mUSD) and a stablecoin (kUSD). The value of I kUSD is targeted to equal I USD, and the supply of kUSD is automatically adjusted based on market demand. New kUSD are distributed to miners. The protocol is designed to maintain the value of the kUSD stablecoin on exchanges.

kUSD is a protocol coin with its own blockchain. This blockchain utilizes modified versions of both the Ethereum codebase and a unique PoS mechanism derived from Tendermint. This consensus mechanism was developed to deliver faster transaction times and drastically lower transaction fees. Kowala's blockchain automatically adjusts stablecoin money supply based on demand as measured by exchange prices. These prices are reported into the blockchain via a decentralized oracle. Rather than keeping a fiat reserve, Kowala uses three primary stability mechanisms to maintain kUSD value stability:

- 1. Minting (algorithm)
- 2. Stability Fee (algorithmic)
- 3. Trading Activity (market)

The minting algorithm pushes the price down in times of inflation by minting new kUSD, while a 'burn wallet' is used to decrease supply and manage the price back towards \$1 peg. The mechanism, Trading Activity, involves traders who engage in activities that help stabilize the price as well.

Automation	Complexity Stability Mechanism	Transparency	Upside Participation	
Medium-High High		High	Yes	

STRENGTHS

Active, Pioneering Development

The Kowala GitHub is regularly updated and the code has been on testnet with a mainnet launch slated for Q3 2018. Kowala is one of the early projects to utilize Tendermint, which should offer comparatively greater throughput than other systems.

Agent-based Modeling

Kowala uses agent-based software to model variations in order to test the stability mechanisms. As mentioned with other stablecoins, death spirals and black swan events are significant concerns. While models do not always capture real world scenarios, the team is actively refining its protocol in an effort to identify potentially destabilizing activity and uncover unforeseen vulnerabilities itself as the

ultimate legally liable and responsible entity. Some members of the team have experience working in supervisory institutions (e.g., central banking) and in the legal establishment.

ISSUES/TRADEOFFS

Community

The Kowala community is small and faces strong competition from similarly positioned projects like DAI. As the project evolves, kUSD stability will in part rely on the efforts of traders, who can be rather fickle.

Funding and Partnerships

While the team is composed of individuals with relatively strong professional pedigrees, primarily in software, Kowala has not had an ICO, nor has it raised any notable VC funding. This is in contrast with many of its competitors. Further, Kowala has yet to specify its existing partnerships, although it claims to have partnered with several investment entities.

CONCLUSION

Overall, Kowala is both one of the more ambitious stablecoin designs, but also one with corresponding higher-risk (in terms of the likely success of its stability mechanism). In the absence of reserves, its stability relies on various unproven assumptions that may be vulnerable following launch. The lack of disclosure of financial resources and partners makes it difficult to assess Kowala's prospects at present.

KOWALA

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

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TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)** Seigniorage Shares (Mint and burn)

Yes. Though mUSD does not technically allocate dividends, mUSD mining tokens can

be used to stake a node and earn block rewards, allowing

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: **GOVERNANCE TOKEN, DIVIDEND / INCENTIVE SCHEME (EG SEIGNIORAGE SHARES)**

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal/Compliance

OWNERSHIP

Legal/Compliance

LEGAL ENTITY Kowala SEZC

C/o Cayman Enterprise City P.O. Box 10315 Grand Cayman KY1-1003 CAYMAN ISLANDS

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

AUTOMATION

Ethereum. Separate blockchain, a fork of the Ethereum codebase with modified version of Tendermint POS consensus

DECENTRALIZATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

Self-funded by its founders and other private investors. No further information about the names of these investors and how they raised money. They apparently raised via an ICO but it does not appear on their website. Source

\$4,000,000

https://canya.io/

FUNDING RAISED TO DATE

BANKING RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED USE

OTHER COMMENTS/ **INTERESTING ASPECTS OF COIN**

and medium of exchange to replace the US dollar

Kowala has two distinctive tokens: 1) kUSD: stable coin used as store of value, medium of exchange and unit of account in the Kowala protocol 2) mTokens (such as mUSD, mEUR, mGDP, etc.): mUSD, mEUR, mGDP, etc.): mining token pegged to fiat. Anyone who holds this token and contribute to the network to find block hashes is eligible to participate in mining activities, the Kowala protocol uses a proof-of-control algorithm to reward the winning miner. Others: They plan on making the main Kcoin repository open source on Github

https://www.kowala.tech/ **WEBSITE**

MILESTONES / **NOTABLE EVENTS**



HIGHLIGHTS

- Multi-currency, off-chain collateral backed
- Licensed EU e-money institution subject to audits and regulatory supervision
- Most similar to: AAA Reserve, Tether, TrueUSD, USDC

OVERVIEW

Monerium is a multicurrency-backed stablecoin that utilizes USD, euros, and other currencies as collateral to achieve price stability. Each Monerium coin corresponds with one fiat currency unit (e.g., one US dollar). The fiat currency backing Monerium is held in reserve at a traditional regulated financial institution.

Based in the EU, Monerium is in the process of becoming an EU regulated e-money service provider and it will issue e-money tokens in major currencies. Monerium is a funded project and has secured certain undisclosed partnerships that may help the project achieve adoption by providing a bridge between the existing regulatory environment and blockchain ecosystems. Monerium will be an ERC20 token and will run on Ethereum.

Automation	Automation Complexity Stability Mechanism		Upside Participation	
Medium Low			No	

STRENGTHS

Multi-Fiat Backing Options

In contrast with some stablecoins that only offer pegging/backing to a single fiat currency (e.g., US dollars), Monerium is being built to be backed with any fiat currency.

Legally Compliant Stablecoin

Many financial institutions are only interested in and legally able to adopt compliant financial instruments and it is with these institutions where Monerium may have a significant advantage over other stablecoins. Monerium is operating within the regulatory framework of European Union and its money transmission laws.

Accountability and Team Experience

In contrast with the structure for other off-chain stablecoins (e.g., TrueUSD), Monerium has positioned itself as the ultimate legally liable and responsible entity. Some members of the team have experience working in supervisory institutions (e.g., central banking) and in the legal establishment.

Transparency

The Monerium codebase is partially viewable to the public. As the project is built on Ethereum it could benefit from Ethereum's vast developer community through contributions to the code and sharing the project's goals.

ISSUES/TRADEOFFS

Centralized

Off-chain fiat-backed stablecoins are not fully decentralized; they rely on banks or other traditional financial institutions, resulting in counterparty risk.

Lack of Buzz and Online Activity

The Monerium Twitter page has not had a post since its announcement of three new board members in October 2017. Searches on Etherscan and Amberdata.io for an Ethereum address did not result in any matches. On Monerium's public GitHub, the Monerium repository only has 22 commits.

Overall, Monerium's online presence is not as strong as other stablecoins. With so many stablecoin competitors, interacting with and updating the public may be essential to generating the necessary awareness and buzz to drive interest and adoption. However, the team may be somewhat limited in this area due to the ongoing e-money application before regulators, and the Monerium team could be working within a private repository until it is ready to emerge from stealth mode.

CONCLUSION

Monerium faces significant competition from similar and already live stablecoins like Tether, TrueUSD, AAA Reserve, and from others soon to launch, like Circle USDC. The lack of news and active community around Monerium is a concern. However, Monerium's focus on compliance may give it a regulatory edge once it does launch.

MONERIUM

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. ALGORITHMIC)

Asset-backed

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE** High quality, liquid fixed income assets as prescribed by EU e-money regulations

UPSIDE

PARTICIPATION: **GOVERNANCE TOKEN,** DIVIDEND / INCENTIVE **SCHEME (EG**

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / USD, EUR and other

REFERENCE PEG

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Technology

OWNERSHIP

Limited company, based in Reykjavik, Iceland **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

EU regulated e-money institution

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

AUTOMATION

DECENTRALIZATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

ConsenSys, Crowberry Capital, Hof Holdings

FUNDING RAISED TO

DATE

BANKING RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

Bridges existing regulatory frameworks with blockchain flat issuance

WEBSITE www.monerium.com

MILESTONES / **NOTABLE EVENTS** Blockchain report completed 2016; advised central bank and published smart contract 2017; e-money application filed 2018



HIGHLIGHTS

- Decentralized curation, unification, risk protection of stablecoins, protocol governance, and monetary policy
- Automated market maker to unify the liquidity of stablecoins and simplify their exchange
- Community-insured basket of stablecoins, protecting users from the risk of any particular stablecoin losing value
- Seeks to unify the stablecoin ecosystem and protect users from risk and ensure the stablecoin ecosystem remains both decentralized and reliable
- Most similar to: Messari, Bancor

OVERVIEW

CementDao was founded in 2018 in response to the proliferation of stablecoins creating market fragmentation and making it difficult for users to assess risks. CementDao creates a decentralized ecosystem of stablecoin rating agents. The community of ONE token holders vote to whitelist the best stablecoins, allowing them to be added to a diversified basket.

This basket of stablecoins serves three functions:

- 1. Pools liquidity and exchange between stablecoins
- 2. Diversifies risk across multiple stablecoins
- 3. Creates a market mechanism for protecting users against the risk of stablecoins losing value.

The ONE token is used for governance, whitelisting, and selection of collateral stablecoins through staking. In return, system fees are collected and distributed to ONE holders who participate in governance. Token holders can stake votes to elect the Rating Agents that decide which stablecoins to whitelist by staking their reputations. ONE must be staked to support the addition of stablecoins into the diversified basket. When users buy a CementDao meta-stablecoin, they are given the option between a Standard coin or a Risk coin.

The Standard coin is a "meta-stablecoin" that can be redeemed at any time. Its value is insured from risk by the holders of the Risk coin. Risk coins are redeemable, but redemption is not immediate as holders will take the first losses if one or more of the stablecoins in the basket fail. In return for holding this risk they are compensated over time by holders of Standard coin.

Standard coin and Risk coin may be redeemed for any and all of the underlying stablecoins in the basket. They can also be transferred, stored, etc. just like bitcoin or any other cryptocurrency.

Automation Complexity Stability Mechanism		Transparency	Upside Participation	
Medium	High	High	No	

STRENGTHS

Unified Ecosystem

Instead of creating a new stablecoin, CementDao seeks to build the tools needed to foster a strong stablecoin ecosystem to the benefit of stablecoin users and projects. This helps avoid a situation where liquidity and attention in the space becomes ever more fragmented.

Transparency

CementDao is a decentralized and cross-blockchain protocol, with the ONE token used for governance. Stablecoins included in CementDao baskets will benefit from community validation and efficient pricing.

Expert Insight

CementDao users may choose how to engage with the CementDao ecosystem. Industry experts may decide to evaluate individual stablecoins and nominate the best of stablecoins for inclusion in the CementDao baskets.

Risk Management

CementDao creates a marketplace for the risk associated with stablecoins. Users who want the lowest degree of risk can acquire protection from users who have an appetite for it. Members of the CementDao community may choose to take on risk in compensation for a premium, or reduce risk by paying a premium.

ISSUES/TRADEOFFS

Governance Risk

Rating Agents in the CementDao system are attempting to provide in-depth research and audit projects in a new and often opaque space. It may be difficult for them to make accurate assessments in a rapidly changing space where best practices have yet to be established. Deep-pocketed speculators or stablecoin projects might also attempt to sway the whitelisting process in their favor.

Bug/Hack Risk

By creating a decentralized basket of stablecoins, CementDao has the risk of bugs or hacks. In the event that a critical flaw with the contract is discovered, it could lead to funds becoming trapped or stolen.

Regulatory

A decentralized basket of currencies is not anticipated by existing regulation. It is not yet clear what regulations will govern users or how the meta-token will be treated.

Systemic or Correlated Failures

The CementDao system cannot mitigate against large-scale, systemic, or correlated failures across the stablecoin space. If failures of one token create contagion across multiple stablecoins, this could overwhelm the 'insurance buffer' built into CementDao.

CONCLUSION

CementDao is a decentralized organization that aims to assess and reduce risk in the stablecoin ecosystem. Holders of the 'Standard' coin gain insured and diversified access to an interoperable set of the top stablecoins. CementDao can promote the entire stablecoin ecosystem by curating the best projects and creating incentives for standardization.

CementDao can help the ecosystem avoid some of the pitfalls and problems that have plagued the wider cryptocurrency world. Stablecoins are designed to preserve wealth, rather than act as speculative assets. Therefore, losses from low-quality projects could adversely impact the reputation of the sector as a whole. CementDao will help avoid catastrophic failures that could reduce faith in the entire sector.

CEMENTDAO

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO) No

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE

UPSIDE

PARTICIPATION: **GOVERNANCE TOKEN,** DIVIDEND / INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG** USD, any fiat currency

Asset-backed

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - OVERALL MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Technology

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDING RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/

INTERESTING ASPECTS

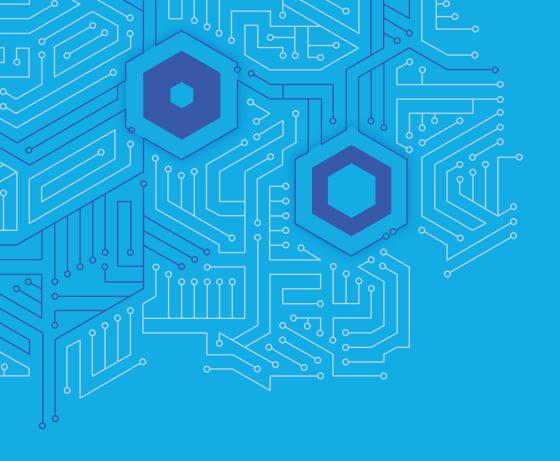
OF COIN

https://www.cementdao.com/ **WEBSITE**

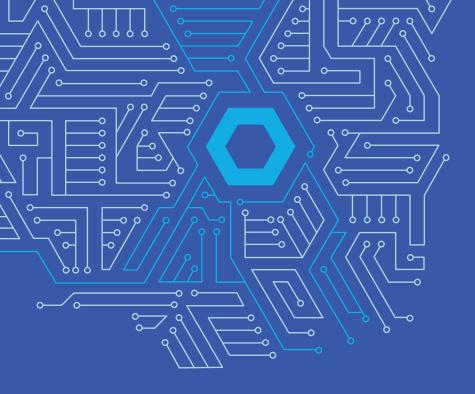
MILESTONES /

NOTABLE EVENTS

98



DATA PROFILES



STABLECOINS

GEMINI

GEMINI DOLLAR

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Regulated and no built-in freeze address function, ease of redemption compared to competitors, issued by trust company entity, and discloses banking partner (State Street)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY Off-Chain Collateral Backed

(EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

PARTICIPATION: **GOVERNANCE TOKEN,**

DIVIDEND / INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK/

REFERENCE PEG

TDANSDADENCY

(FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF

EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES Gemini, Hitbtc, Okex, Huobi

\$5,992,996

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

Regulated by New York Department of Financial Services (DFS)

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

DATE

FUNDS RAISED TO

BANKING

RELATIONSHIPS

State Street Bank holding deposits. Collateral "will be held at a bank located in the United States and eligible for FDIC "pass-through" deposit insurance

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

OTHER COMMENTS/

INTERESTING ASPECTS OF COIN

tech) online: https://gemini.com/dollar/#reports . https://gemini.com/dollar/trailofbits

WEBSITE https://gemini.com/dollar/

MILESTONES /

https://www.dfs.ny.gov/about/press/pr1809101.htm **NOTABLE EVENTS**



BRIDGECOIN (SWEETBRIDGE)

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TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE** Fiat, Crypto, Physical assets, Future cash flows, IPs etc.

UPSIDE PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK/ **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 0

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

.

NUMBER OF TIER-1 EXCHANGE LISTINGS N/A

TIED-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

Sweetbridge, Inc: Privately Sweetbridge. Inc: Privately held company, based in Phoenix, AZ - USA is developing protocols but is intended to wind down within 7 years, and a decentralized network of 'local operating units' will run licensed activities, several already exist (Sweetbridge has more than 10 global nonprofit entities), more can join by signing a common charter

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

Seeking licensed partners as LOUs in many jurisdictions for money transmission activities, and Sweetbridge entities are working towards licensed activities in Arizona and the UK/EEA in Q4 2018

COUNTRY LOCATION -HQ/PRIMARY TEAM

Two centers--UK and Arizona

Technology

PLATFORM (EG ETHEREUM)

AUTOMATION

DECENTRALIZATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS PAISED TO

DATE

\$17,000,000

BANKING RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

Sweetbridge Alliance includes Mattereum, and Sweetbridge is part of Accord

GENERAL INTENDED

USF

Commerce, Asset-Backed Lending, Retail Payments

OTHER COMMENTS/ INTERESTING ASPECTS OF COIN

Two coin model--BRC is coin for payments, SWC is a loyalty/rewards token

WEBSITE

https://sweetbridge.com/

MILESTONES / **NOTABLE EVENTS** Advised by Don Tapscott, Vinay Gupta, and a stable of



STEEMDOLLARS (STEEM.IT)

Overview

TICKER(S) **LAUNCH DATE**

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

Algorithmic

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/ **RESERVES TYPE**

UPSIDE

PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND / INCENTIVE

SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY

(FUNCTIONAL)

Adoption

MARKET VALUE \$8,896,703

RANK - MARKET VALUE 236

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$100,230

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 2

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

AUTOMATION

DECENTRALIZATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = **FULL / PARTIAL)**

Steem.it

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

PROJECT FUNDS

RAISED (ORIGINAL

VALUE)

FUNDING (PRESENT

VALUE)

FUNDING (PRESENT

VALUE)

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE

MILESTONES /

NOTABLE EVENTS



JIBREL

Overview

JUSD, JGBP, JEUR, JKRW, JJOD TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

Enterprise adoption (Al Hilal Bank) **DIFFERENTIATOR(S)**

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN

COLLATERAL BACKED)

On-chain: Jibrel Network Token (JNT), Off-chain: Fiat currencies COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE

SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

.

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 **EXCHANGE LISTINGS**

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

Licensed Financial Intermediary (FINMA -Switzerland, Germany, UK) Innovation Testing License Cohort (Dubai Financial Services Authority) Sandbox License (Central Bank of Jordan)

COUNTRY LOCATION -**HQ/PRIMARY TEAM**

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

Predominantly MENA and Crypto funds, e.g. Aurora Capital Partners, TaaS Fund, Kolaghassi Capital

FUNDS RAISED TO DATE

BANKING RELATIONSHIPS 6 Private Banking Relationships 4 Technical Pilot Banking

PARTNERS (BIZ DEV/

ECOSYSTEM)

Al Hilal Bank, Abu Dhabi Global Market, Central Bank of Jordan, Dubai Financial Services Authority, Dubai

GENERAL INTENDED USF

Government issued crypto-fiat

OTHER COMMENTS/

INTERESTING ASPECTS OF COIN

Proof of solvency mechanism implies the Jibrel DAO will hold Jibrel Network Token

(3NT) of the same value as the Jcash in circulation at that point in time. Ensuring that users can transparently check that the value backing the assets is held on-chain as well, for instant liquidity

WEBSITE

https://jibrel.network/

MILESTONES / **NOTABLE EVENTS**



BITUSD

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN COLLATERAL BACKED)

COLLATERAL/

BitShares core token (BTS). Every bitUSD is backed by at least \$2 worth of BTS **RESERVES TYPE**

Asset-backed

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE **SCHEME (EG**

SEIGNIORAGE SHARES) STABILITY

BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE 404

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$1.820

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 0

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

PROJECT FUNDS

RAISED (ORIGINAL

VALUE)

FUNDING (PRESENT

VALUE)

FUNDING (PRESENT VALUE)

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

https://bitshares.org/ **WEBSITE** technology/price-stable-cryptocurrencies/

MILESTONES /

NOTABLE EVENTS



Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN,

DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK /

REFERENCE PEG

TRANSPARENCY (FUNCTIONAL)

Adoption

\$2,681,060 **MARKET VALUE**

RANK - MARKET VALUE 496

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

MinexSystems: Privately held company based in Hong Kong, China **LEGAL ENTITY**

Hong Kong

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

COMPLEXITY -

DECENTRALIZATION

AUTOMATION

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/

OF COIN

MNX/BTC atomic swaps **INTERESTING ASPECTS**

https://minexcoin.com/ **WEBSITE**

MILESTONES /

NOTABLE EVENTS

StableUSD

STABLY - STABLEUSD

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

Real-time collateral view via live feed from Prime Trust's API **DIFFERENTIATOR(S)**

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/ **RESERVES TYPE**

UPSIDE PARTICIPATION:

GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK /

REFERENCE PEG

TRANSPARENCY

(FUNCTIONAL)

Adoption

\$1,500,000 **MARKET VALUE**

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Stably Blockchain Labs; Based in North Vancouver, Canada **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

Investors, Team & Partners

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

https://www.stably.io/ **WEBSITE**

MILESTONES / **NOTABLE EVENTS**

\$500,000

weekly attestations for our fiat

107



WHITE STANDARD

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

(between consumers and as **DIFFERENTIATOR(S)**

payments to merchants), 3 second tx time, 100% USD backed, FDIC insured and

monthly audited

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY Off-Chain Collateral Backed

(EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

PARTICIPATION:

GOVERNANCE TOKEN, DIVIDEND / INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK/

REFERENCE PEG

TRANSPARENCY

(FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$150,000

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF **EXCHANGE LISTINGS**

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

US persons, Elizabeth White majority owner

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

FINCEN registered Money Service Business

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

Apis Capital Management

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

Unlimited fiat on/off ramp and liquidity to Worldwide C2C micropayments and C2B payments for goods/services

Stellar Development Foundation, Interstellar, REM loyalty, Spl.yt, Debitum, REEL, Codex, Roger.ai

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

transparent \$50,000,000 current post money valuation

WEBSITE

https://thewhitecompanyus.com/white-paper/#white-

MILESTONES / **NOTABLE EVENTS** \$100 million USD in crypto

conversion by The White Company, Aug.1,2018 \$1.5 million in payments plus trades of WSD



GOLDMINT

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

Asset-backed

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY

(ASSET-BACKED VS. ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION:

GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK/ **REFERENCE PEG**

TRANSPARENCY

(FUNCTIONAL)

Adoption

\$524,988 **MARKET VALUE**

RANK - MARKET VALUE 849

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL/PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/

INTERESTING ASPECTS

OF COIN

WEBSITE https://www.goldmint.io/

MILESTONES /

NOTABLE EVENTS



HELLOGOLD

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES) STABILITY

BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$100

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

.

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

Equity fundraise (500 Startups, The Finlab) & Token Sale (Fenbushi Capital)

FUNDS RAISED TO

DATE

BANKING

\$7,700,000

RELATIONSHIPS PARTNERS (BIZ DEV/

ECOSYSTEM)

provider) AEON Credit Services Axiata Digital

GENERAL INTENDED USF

As a diversification or hedging option for investors in the cryptocurrency market

OTHER COMMENTS/ INTERESTING ASPECTS OF COIN

The gold backing GOLDX is held in a vault that is audited by Bureau Veritas and insured by XL Insurance. Token holders can receive physical delivery of the gold backing GOLDX with a minimum redemption size of 1 gram. GOLDX is charged a demurrage fee automatically by the smart contract once every 24 hours.

Each person trading GOLDX with HelloGold will need to KYC register beforehand

WEBSITE

https://www.goldx.io/

MILESTONES / **NOTABLE EVENTS** GOLDX being the first crypto token to be fully backed by gold and certified as shariah



NUBITS

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN COLLATERAL BACKED)

COLLATERAL/

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND / INCENTIVE

SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

Algorithmic

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$388,216

RANK - MARKET VALUE 895

LIQUIDITY (AVG. 30 DAILY VOLUME)

\$3,870

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBED OF TIED-1 **EXCHANGE LISTINGS**

TIER-1 EXCHANGES Bittrex, UpBit Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = **FULL / PARTIAL)**

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

PROJECT FUNDS

RAISED (ORIGINAL

VALUE)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

Peg has broken twice: first in 2016 and then again in 2018, leaving some to argue it is now a zombie/ dead https://medium.com/ reserve-currency/the-end-of-a-stablecoin-the-case-of-nubits-dd1f0fb427a9

WEBSITE https://nubits.com/



COIN PAYMENT PROCESSOR

Overview

TICKER(S)

LAUNCH DATE 4 April 2018

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND / INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBED OF TIED-1 **EXCHANGE LISTINGS**

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

PROJECT FUNDS **RAISED (ORIGINAL**

VALUE)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED

Open Consortium Gold Partners x3 company, Bronze Partners x1 company.

USF

Fixed price tokens pegged to fiat currency exchange rate of ETH and ERC20

OTHER COMMENTS/

INTERESTING ASPECTS

OF COIN

https:// coinpaymentprocessor. org/widgets/?page_id=1207 https://medium.com/cp-

WEBSITE

https://www.coinpaymentprocessor.org/

MILESTONES /

NOTABLE EVENTS

Public distribution of Price Indexes, First cPRO token distribution



PEG

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE

PARTICIPATION: **GOVERNANCE TOKEN, DIVIDEND / INCENTIVE SCHEME (EG**

SEIGNIORAGE SHARES)

STABILITY BENCHMARK/ **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

Private company limited by shares

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

If a client is a resident of one of the following countries, there may be some form of restriction on using our services (i.e. Peg minting/redemption): Afghanistan, Bosnia & Herzegovina, Burma, Burundi, Central African Republic, Congo, Cote D'Ivoire, Cuba, Eritrea, Iran, Iraq, Lebanon, Liberia, Montenegro, Nigeria, North Korea, Republic of Guinea, Serbia, Somalia, South Sudan, Sudan, Syria, Tunisia, Yemen, Zimbabwe

Technology

PLATFORM (EG ETHEREUM)

Zimbabwe

DECENTRALIZATION

AUTOMATION

COMPLEXITY -STABILITY MECHANISM

OPEN SOURCE (YES = FULL/PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO DATE

BANKING

RELATIONSHIPS

Private

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

Unique position as GBPbacked and ERC-621. Different versions of Peg may be released, backed by other

WEBSITE https://lbxpeg.com/

MILESTONES / **NOTABLE EVENTS** First token minted 12 Nov 2018

M MILE UNITY **FOUNDATION**

MILE

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

MILE is an index of demand on XDR. XDR value is tied to SDR, IMF reserve currency **DIFFERENTIATOR(S)**

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

XDR is tied to SDR, IMF

COLLATERAL / **RESERVES TYPE**

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

UPSIDE

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY Mile Unity Korea

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

There are 100+ investors, all

There was no ICO and pre-ICO

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

Partnership agreements with several international organizations, including BRICS, G-Global, Global Silk

GENERAL INTENDED

USF

XDR is already used as money remittance tool, its daily turnover exeeds 40 million

OTHER COMMENTS/ INTERESTING ASPECTS OF COIN

Growth plan in next 6 month:
1. Increasing of cross-border
MILE trade transaction
2. Release of beta-version of
iOS App wallet for MILE &
XDR transactions
3. Incleases MILE (XDR)

ADR transactions
3. Implementing MILE/XDR
as a tool for global trading
and money remittance in real
economy

WEBSITE



MONEYFOLD

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK /

1-to-1 peg to fiat as required by regulation for GBP, EUR, JPY, HKD, BGN, CAD, RUB, PLN, SKK **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Fiat in segregated client

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP Owned by Oraclize Limited and Nikola Tchouparov

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HO/PRIMARY TEAM

United Kingdom

United Kingdom

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

banks & central banks in Europe", Undisclosed bank provides digitally signed statements to prove collateral - daily, hourly, on-demand

"A dozen POC's in the works"

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED

INTERESTING ASPECTS

OF COIN

Dapp payments, atomic

OTHER COMMENTS/

WEBSITE www.moneyfold.co.uk

MILESTONES / NOTABLE EVENTS FCA Sandbox, Bank of Englad RTGS Renewal Programme



Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/ **RESERVES TYPE** Hong Kong Dollar

UPSIDE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG** Hong Kong Dollar

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE \$127,388,535

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 2 (HKD. RMB)

NUMBER OF CRYPTO PAIRS

NUMBER OF

EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Anchor Financial Technology Development Limited **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

\$10,000,000

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

DATE

FUNDS RAISED TO

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

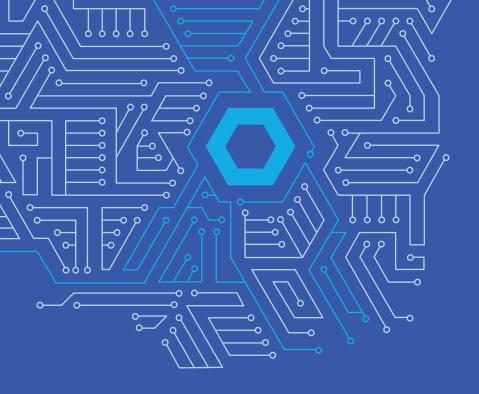
OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

Payments

HKDT may be converted to RMB on OTC desks by users' requests. Original HKDT wallet supports special Chinese features, such as red envelope (gift transactions), red envelope lottery (group of receivers can get a random amount of money)

www.hkdt.org **WEBSITE**



PRE-LAUNCH STABLECOINS



TOKEN

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/ **RESERVES TYPE** 1:1 backed by deposits in commercial banks

UPSIDE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Regulated financial institutions are the issuer **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

Regulated financial institutions are the issuer **REGULATORY STATUS**

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

Tier 1: Octopus Ventures, EQT Ventures, Op bank, Plug and Play Ventures, Digital Currency Group

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

Not disclosed

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

WEBSITE MILESTONES /

NOTABLE EVENTS

www.token.io



SUPER DOLLAR (CP PROCESSOR)

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE UPSIDE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

REGULATORY STATUS

(COUNTRY)

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL/PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

Gvisp1, PS Invest, GcapMark, Tokens Marketplace, Joksovic Stojanovic & partners (Attorneys at law)

Stable coin payment

GENERAL INTENDED USE

OTHER COMMENTS/

OF COIN

INTERESTING ASPECTS

Super Dollar will always maintain its 1:1 peg to US Dollar. It is a decentralized Stable Coin Aggregator (Stable Coin ETF) with only regulated fiat collateral stablecoins as underline

WEBSITE

https://www.coinpaymentprocessor.org/

MILESTONES / **NOTABLE EVENTS** Dapp launching in January 2019



CELO

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN

COLLATERAL BACKED)

COLLATERAL/ **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG** USD (potentially other fiat

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

OTHER COMMENTS/

OF COIN

INTERESTING ASPECTS

https://celo.org/

WEBSITE

MILESTONES / **NOTABLE EVENTS** Little information about Celo currently, white paper is not public

Cash transfer programs, social payments, paid participation schemes.

Polychain Capital, Andressen Horowitz, General Catalyst, Coinbase, Social Capital

Public announcement in June 2018



X8C

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN,

DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS O

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE https://x8currency.com/



STRONGHOLD USD

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY

(ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP Stronghold https://stronghold.co

Stronghold: Privately held company, based in San Francisco, CA, USA **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/

INTERESTING ASPECTS OF COIN

WEBSITE

https://medium.com/

strongholdxchg/stronghold-stellars-first-venture-backed-usd-anchor-30cf88fc3eb4

MILESTONES /

NOTABLE EVENTS

122



SWISSREALCOIN

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN

COLLATERAL BACKED)

COLLATERAL/ **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

WEBSITE

https://www.swissrealcoin.io/

MILESTONES /

NOTABLE EVENTS



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TICKER(S) **LAUNCH DATE** LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Public company based in London, UK **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL/PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/

INTERESTING ASPECTS

OF COIN

WEBSITE https://www.augmint.cc/

NOS

Overview

NOS token utilized to pay for cash-out & other fees at 50% at market rate (similar to BNB)

Planned (NEURO, NOLLAR, etc.) TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND / INCENTIVE

SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK/ **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

NOS Stablecoin Limited (C 87617) 78, Mill Street QRM3101 Qormi

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HO/PRIMARY TEAM

Malta, EU

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED USE

OTHER COMMENTS/

INTERESTING ASPECTS

OF COIN

Paymentworld, E&S, Youcal, Arweave, TNG, InsurLab, 10x Value Partner Remittance, cross-border

Top 30 global bank + several smaller banks

WEBSITE http://nos.cash/

MILESTONES / **NOTABLE EVENTS** EMI / Regulator backing. Friends&Family Beta live, First ICO investment via stablecoin



Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1

EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

DFINITY Stiftung: based in Zug, Canton of Zug - Switzerland.

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED USE

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

Seems to be in the ideation stage. Don't think many/if any of Dfinity's resources have been dedicated to this.

WERSITE

https://dfinity.org/pdf-viewer/pdfs/viewer?file=../library/phidfinity-extended-v2.pdf



STABLEUNIT

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/

RESERVES TYPE

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

USD value on Jan 2019 + 1%

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Distributed into several jurisdictions, TBD **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

Partly based on Ethereum source code

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/

INTERESTING ASPECTS

OF COIN

WEBSITE

https://stableunit.org/

AUR SRA

BOREAL (AURORA)

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL /

RESERVES TYPE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

UPSIDE

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Ethereum & Various Cryptocurrencies

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Aurora: Privately held company, based in San Francisco, Panama. **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE https://auroradao.com/

platform/boreal/



GLOBCOIN

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN

COLLATERAL BACKED)

COLLATERAL/

RESERVES TYPE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

UPSIDE

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

15 Fiat Pairs + Gold

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS 15 Fiat Pairs + Gold

None

NUMBER OF CRYPTO

PAIRS

NUMBER OF

EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Reserve Currency Solutions SA, AG based in Zug -Switzerland. **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

https://globcoin.io/ **WEBSITE**

XANK

XANK

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TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)** On-Chain self-funding Treasury Backed

COLLATERAL/ **RESERVES TYPE** Reserve (15% of circulating supply of Xank at all times)

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

to Voters (master nodes) and another 35% of block reward to Stakers (PoS)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

South Korea

Technology

PLATFORM (EG ETHEREUM)

AUTOMATION

DECENTRALIZATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

\$100,000

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

Regular commerce and

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

WEBSITE

https://xank.io/

CRYPTOPEG

CRYPTOPEG

TICKER(S)

ALGORITHMIC)

NUMBER OF

EXCHANGE LISTINGS NUMBER OF TIER-1 EXCHANGE LISTINGS TIER-1 EXCHANGES

Legal / Compliance Overview

LAUNCH DATE LEGAL ENTITY

OWNERSHIP

LEGAL JURISDICTION

Technology

Decentralized open-source project (like Bitcoin, no centralized entity behind it) LIVE (YES/NO)

(COUNTRY) **DIFFERENTIATOR(S) REGULATORY STATUS**

Format COUNTRY LOCATION -

HQ/PRIMARY TEAM TOP-LEVEL CATEGORY (ASSET-BACKED VS.

SUB-CATEGORY Bitcoin - Rootstock/RSK, possibly eth **PLATFORM (EG** (EG OFF-CHAIN ETHEREUM) **COLLATERAL BACKED)**

DECENTRALIZATION BTC (via rsk/SBTC), possibly ETH COLLATERAL / **AUTOMATION RESERVES TYPE**

UPSIDE COMPLEXITY -**PARTICIPATION: STABILITY MECHANISM GOVERNANCE TOKEN.**

OPEN SOURCE (YES = DIVIDEND/INCENTIVE FULL / PARTIAL) SCHEME (EG SEIGNIORAGE SHARES)

Investors, Team & Partners **STABILITY BENCHMARK** / **INVESTORS (TIER 1 & REFERENCE PEG**

TRANSPARENCY FUNDS RAISED TO (FUNCTIONAL) **DATE**

OTHERS)

BANKING Adoption **RELATIONSHIPS**

PARTNERS (BIZ DEV/ MARKET VALUE ECOSYSTEM)

RANK - MARKET VALUE N/A Stablecoin pegged to fiat, crypto-backed loans, bitcoin exposure extension **GENERAL INTENDED** USE

LIQUIDITY (AVG. 30 DAILY VOLUME) Truly decentralized, not even a DAO, purely open-source like Bitcoin OTHER COMMENTS/ **INTERESTING ASPECTS**

RANK - OVERALL OF COIN MARKET LIQUIDITY

WEBSITE http://www.cryptopeg.org/ NUMBER OF FIAT PAIRS N/A

MILESTONES / **NUMBER OF CRYPTO NOTABLE EVENTS PAIRS**



ONRAMP

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1

EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

HQ/PRIMARY TEAM

COUNTRY LOCATION -

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -

STABILITY MECHANISM

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE

https://onramp.tech/



PEBLIK

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN

COLLATERAL BACKED)

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1

EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG

ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE

https://peblik.com/



LIBRECASH

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN

COLLATERAL BACKED)

COLLATERAL/ **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG** USD; after 2020, rate calculation will be conducted based on the global purchasing power unit

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY LibreBank Foundation

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE

https://librebank.com/ litepaper.pdf

FREEDIUM

FREEDIUM

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN

COLLATERAL / **RESERVES TYPE**

COLLATERAL BACKED)

UPSIDE PARTICIPATION: GOVERNANCE TOKEN,

DIVIDEND/INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

Freedium: established company based in Dubai **LEGAL ENTITY**

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

GENERAL INTENDED USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE https://www.freedium.io/



NDAU

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

Endowment of Assets plus Algorithmic Stability (New Buoyant Category) **DIFFERENTIATOR(S)**

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE** Endowment of traditional plus some crypto assets

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE

SCHEME (EG

STABILITY BENCHMARK /

SEIGNIORAGE SHARES)

None. "Increasing Target Price Curve / High Water Mark"

TRANSPARENCY (FUNCTIONAL)

REFERENCE PEG

Adoption

\$17,000,000 **MARKET VALUE**

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL

MARKET LIQUIDITY

NUMBER OF FIAT PAIRS

NUMBER OF CRYPTO

PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP Decentralized Autonomous Governance: Blockchain Policy Council

US, Isle of Man, Malta, others

Many participating legal entities within ecosystem **LEGAL ENTITY**

LEGAL JURISDICTION

REGULATORY STATUS

(COUNTRY)

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

Ndau Native Blockchain, Proof of Stake consensus

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES =

FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/ ECOSYSTEM)

USE

GENERAL INTENDED

OTHER COMMENTS/ INTERESTING ASPECTS

OF COIN

WEBSITE

MILESTONES / **NOTABLE EVENTS** ndau.io

\$5,000,000

Long-term Store of Value / Collateral, Staking

parity.

PARCOIN

Overview

TICKER(S)

LAUNCH DATE

LIVE (YES/NO)

EU/UK regulated, and institutional standard **DIFFERENTIATOR(S)** governance and investment

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS.

ALGORITHMIC)

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

Sovereign risk fixed income

COLLATERAL / **RESERVES TYPE**

UPSIDE

PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND / INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES)

STABILITY

BENCHMARK/ **REFERENCE PEG**

TRANSPARENCY

(FUNCTIONAL)

Adoption

MARKET VALUE \$17,000,000

RANK - MARKET VALUE

LIQUIDITY (AVG. 30

DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS All major fiat currencies

NUMBER OF CRYPTO

PAIRS

NUMBER OF

EXCHANGE LISTINGS NUMBER OF TIER-1

EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION

(COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

Pre-seed stage - private investors

FUNDS RAISED TO DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

Technology: Applied Blockchain Legal: DLA Piper Crypto Industry: Crypto

GENERAL INTENDED

USE

OTHER COMMENTS/

INTERESTING ASPECTS

OF COIN

Medium of exchange, unit of account, and store of value

WEBSITE

https://www.parityfinancial.io/



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TICKER(S) **LAUNCH DATE** LIVE (YES/NO) **DIFFERENTIATOR(S)**

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL / **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN, DIVIDEND/INCENTIVE SCHEME (EG SEIGNIORAGE SHARES)

STABILITY BENCHMARK / **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF

EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = FULL / PARTIAL)

Investors, Team & Partners

INVESTORS (TIER 1 & OTHERS)

FUNDS RAISED TO

DATE

BANKING

RELATIONSHIPS

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

WEBSITE https://unum.one/#!/main



BITBAY

Overview

TICKER(S) **LAUNCH DATE** LIVE (YES/NO)

DIFFERENTIATOR(S)

Format

TOP-LEVEL CATEGORY (ASSET-BACKED VS. **ALGORITHMIC)**

SUB-CATEGORY (EG OFF-CHAIN **COLLATERAL BACKED)**

COLLATERAL/ **RESERVES TYPE**

UPSIDE PARTICIPATION: GOVERNANCE TOKEN. DIVIDEND / INCENTIVE SCHEME (EG

SEIGNIORAGE SHARES) STABILITY

BENCHMARK/ **REFERENCE PEG**

TRANSPARENCY (FUNCTIONAL)

Algorithmic

Adoption

MARKET VALUE

RANK - MARKET VALUE N/A

LIQUIDITY (AVG. 30 DAILY VOLUME)

RANK - OVERALL MARKET LIQUIDITY

NUMBER OF FIAT PAIRS N/A

NUMBER OF CRYPTO PAIRS

NUMBER OF EXCHANGE LISTINGS

NUMBER OF TIER-1 EXCHANGE LISTINGS

TIER-1 EXCHANGES

Legal / Compliance

OWNERSHIP

LEGAL ENTITY

LEGAL JURISDICTION (COUNTRY)

REGULATORY STATUS

COUNTRY LOCATION -

HQ/PRIMARY TEAM

Technology

PLATFORM (EG ETHEREUM)

DECENTRALIZATION

AUTOMATION

COMPLEXITY -**STABILITY MECHANISM**

OPEN SOURCE (YES = **FULL / PARTIAL)**

Investors, Team & Partners

INVESTORS (TIER 1 &

OTHERS)

PROJECT FUNDS

RAISED (ORIGINAL

VALUE)

FUNDING (PRESENT

VALUE)

FUNDING (PRESENT VALUE)

PARTNERS (BIZ DEV/

ECOSYSTEM)

GENERAL INTENDED

USE

OTHER COMMENTS/ **INTERESTING ASPECTS**

OF COIN

https://bitbay.market/ **WEBSITE**

MILESTONES /

NOTABLE EVENTS

