

Stablecoin Safety Assessment

Coin	USD Coin (USDC)
Date	04-06-2023
Overall Grade	B+

Factor Scores:

S. No	Factor	Score	Assessment
1	Stability	0.83	Stable
2	Management	0.84	Very low risk
3	Implementation	N/A	Not assessed
4	Decentralization	0.10	High risk (Not relevant to the grade)
5	Governance	0.71	Very low risk
6	Externals	N/A	Not assessed

Summary

- USDC is considered one of the safest stablecoins. It is issued by Circle and jointly promoted by Coinbase.
- USDC's reserves comprise short dated US Treasuries and cash deposits in fully segregated accounts. However, Circle's claims of USDC reserves being bankruptcy-remote are yet to be proven, making it less safe than its NYDFS-approved peers.
- USDC is one of the most versatile stablecoins that is suitable for the general public, institutions and crypto traders due to its deep liquidity and wide market coverage on centralized and decentralized exchanges, multiple on/off ramp partnerships and conservative approach to regulatory compliance and reserves management.

Evaluation

1. Stability [Score 0.83]

1.1. Reserves [Score 0.83]

1.1.1. Collateralization % and Type of Collateral [Score 0.99]

As of May 31, 2023, USDC is fully backed by US Treasury Bills (79%), and cash deposits (18%) in fully segregated accounts.

1.1.2. Storage of Assets [Score 1.00]

For off-chain collateral, we rank storage methods as follows (highest to lowest)

- With regulated custodians in reputable jurisdictions
- With regulated custodians not in reputable jurisdictions (e.g, BVI, Bahamas)
- Others / Undisclosed

USDC's reserves are held by BNY Mellon in the USA.

1.1.3. Asset Segregation [Score 0.50]

All customer assets in USDC's reserves are fully segregated from Circle's corporate treasury. However, Circle's claim of USDC being bankruptcy-remote is yet to be proven.

1.2. Market Feedback [Score 0.55]

1.2.1. Frequency of Deviation Below Peg [Score 0.50]

Number of Days where VWAP < Peg by 0.5% or more during the past 180 days = 10

1.2.2. Max Deviation Below Peg [Score 0.00]

Biggest daily VWAP deviation below peg: 1.76%

1.2.3. Volatility (% per day) [Score 0.75]

Daily volatility (%) over the past 180-day period: 0.66%

1.2.4. Downside Volatility in a Market Downturn [Score 1.00]

Average deviation below peg during the 5 worst-performing days for BTC (DoD price change) in a 180-day period: 0.096%

1.2.5. Liquidity Pool Imbalance [Score 0.50]

3Pool (USDC/USDT/DAI)

- USDC Share of Pool - 38%
- Pool Type - 3 Token
- Optimal Share of USDC - 33%
- Deviation from Optimal Share - 13%
- Non-USDC TVL in the pool - \$250,420,089
- Pool Score - 0.5

1.3. Stability Mechanism

[Score 1.00]

1.3.1. Core Mechanism

[Score 1.00]

USDC relies on market participants to arbitrage differences between the market price of USDC and the net asset value of USDC (typically, \$1 if USDC is fully-collateralized). We believe this is the most effective price stability mechanism.

When USDC trades away from its peg, any user who has a KYC'd account with Circle can mint or redeem USDC for US Dollars and make an instant profit. This risk-less profit opportunity attracts more participants and eventually pushes the market price of USDC towards its peg.

1.3.2. Primary Liquidity Access

[Score 1.00]

Users who possess a KYC'd account with Circle can redeem USDC for US Dollars or swap USDC for USD on Coinbase.

2. Management

[Score 0.84]

2.1. Restrictions

[Score 0.84]

2.1.1. Known Core Teams

[Score 1.00]

Circle was founded and continues to be led by Jeremy Allaire (Chairman and CEO). The company's management team includes several other senior executives across finance, tech, product, strategy, legal, compliance and risk.

2.1.2. Jurisdiction Score

[Score 0.68]

Our jurisdiction scores are derived from the World Justice Project's Rule of Law (RoL) Index – which ranks countries. We specifically consider the index's factors 'Regulatory Enforcement' and 'Civil Justice'.

Circle is headquartered in Boston, USA.

2.2. Track Record

2.2.1. Team's Background

[Score N/A]

Not scored

3. Decentralization

[Score 0.10]

3.1. Regulatory Oversight

[Score 0.00]

Regulatory oversight increases the risk of censoring endpoints of the stablecoin's network (such as the issuer, banks and custodians) as well as users. A score of 0 indicates a high degree of government censorship risk.

USDC's issuer, Circle, is regulated in 47 US states as a holder of money transmission licenses and is also required to comply with KYC/AML requirements and provide periodic reports to FinCen.

Note: Censorship resistance is not a key objective common to all stablecoins. Consequently, a low score may not be a relevant source of concern to most stablecoin users. Furthermore, regulatory oversight can also be beneficial to some users as it entails more robust consumer protection mechanisms and increased transparency.

3.2. Custodian Risk

[Score 0.50]

When evaluating custodian risk (i.e, credit risk of entities holding assets), we consider the distribution of assets between entities that hold the assets, such as the issuer, their banks and custodians.

US Treasury Bills are held through the Circle Reserve Fund, a money market fund managed by BlackRock that exclusively invests in US Treasury obligations. These assets are held in custody by BNY Mellon. Over 90% of cash deposits as of the reporting date are held at BNY Mellon.

3.3. Type of Collateral

[Score 0.00]

When evaluating decentralization, it is important to consider the extent to which the stablecoin's value is tied to a central authority or external fiat currency. Monetary policies / decisions taken by such authorities / central banks can have an impact on the purchasing power of the collateral.

USDC is fully backed by USD-denominated real-world assets which are subject to the monetary policies of the United States.

(Fiat currencies earn a score of 0 and decentralized cryptocurrencies earn a score of 1)

Note: Independence from a nation's monetary policies is not a key objective common to all stablecoins. Consequently, a low score may not be a relevant source of concern to most stablecoin users.

3.4. Decision Making & Voting Power

[Score 0.00]

Fiat-backed stablecoins such as USDC are run by private corporations. As such, the absence of decentralized decision making and voting power is a feature, not a bug.

3.5. User Blacklisting

[Score 0.00]

Circle can blacklist specific user wallets.

Note: Censorship through blacklisting helps prevent legitimate users from transacting with criminals. This is particularly relevant to institutional users who are obligated to report their transactions and activities.

4. Governance

[Score 0.71]

4.1. Holder Protection

[Score 0.75]

USDC's issuer, Circle, holds money transmitter licenses (MTL) in all the 49 US states that require one. MTLs regulate USDC as a stored value instrument, like pre-paid cards issued by PayPal. Each state that issues an MTL has its own set of compliance requirements but all commonly require the licensee to hold customer funds only in certain types of assets and make available all records and information to the regulator for periodic examination.

That said, stablecoin issuers who are specifically regulated and licensed as an issuer of stablecoin are held to a higher standard of customer protection than money transmitters are.

4.2. Periodic Reserves Attestations

[Score 1.00]

Our rating considers the type & frequency of reserves attestations.

Type [Score 1.00]

Attestations can be broadly classified into 2 categories based on the nature of the auditor's report. – 'Assurance Engagements' and 'Agreed Upon Procedures'.

Assurance Engagements are similar to audits in that the auditor determines the nature and extent of work required to express an independent opinion (provide assurance) on a particular matter. The auditor is free to conduct as deep an examination as they may deem appropriate to arrive at a reasonable conclusion. Assurance Engagements require the auditor to stake their reputation, and therefore carry more weight. Assurance Engagements provide either a 'reasonable level of assurance' (also called examinations) or a 'limited level of assurance' (also called reviews). The former is better and offers the same level of

assurance that is provided in a full-fledged financial audit but with a comparatively smaller scope and subject matter.

Agreed Upon Procedures are engagements wherein the auditor is engaged by the issuer to perform specific tasks and report on factual findings. The auditor's scope of work is limited by the issuer and does not involve expressing an opinion. Instead, the auditor provides factual statements in his or her report and the users of such reports are expected to form their own opinions on the matter. In such cases, the auditor does not stake their reputation and provide an assurance of any sort. AUPs, while useful, are inferior to Assurance Engagements.

Frequency [Score 1.00]

Reserves attestations can be monthly, quarterly, half-yearly or annually.

Since review procedures are performed on reserves data as of a particular day (typically, last day of the quarter), they do not consider transactions and events which occur in between reporting dates. Consequently, periodic reserves attestations provide a lower degree of assurance compared to a full scope financial audit.

Circle has engaged Deloitte, a Big 4 accounting firm, to provide monthly assurance opinions on its reserves.

4.3. Financial Audits

[Score 1.00]

Periodic reserves attestations alone are inadequate to ascertain the existence and adequacy of reserves, they must be complemented by full scope annual financial audits.

As an entity regulated by the NYDFS, Paxos is required to furnish financial statements audited by an independent CPA.

4.4. Redemption Policy

[Score 0.00]

Our scoring reflects whether stablecoin issuers have reasonable and transparent timelines for processing redemptions.

Circle's Terms of Service do not mention turnaround times for redemption of USDC. However, the following excerpt highlights Circle's power to suspend or delay redemptions:

"We reserve the right to decline to process any issuance or redemption without prior notice and may limit or suspend your use of one or more USDC Services at any time, in our sole discretion. Our rights under this paragraph are subject to our obligations under applicable law and licenses, including but not limited to our reasonable suspicion of inappropriate or illegal conduct. Suspension of your use of any of the USDC Services

will not affect your rights and obligations pursuant to these Terms. We may, in our sole discretion, delay issuances or redemptions if we reasonably believe the transaction is suspicious, may involve fraud or misconduct, violates applicable laws, or violates the terms of these Terms.”

In the absence of any firm or ‘best-effort’ commitments to clear and reasonable withdrawal timelines, Circle falls behind its peers regulated by the NYDFS.