

Stablecoin Stability Assessment

Tether (USDT)

Dec. 3, 2024

Summary

S&P Global Ratings assesses the ability of Tether (USDT) to maintain its peg to the U.S. dollar at 4 (constrained). Issued in 2014, USDT is the longest-standing stablecoin with the largest volume in circulation. Its price has remained relatively stable in recent years and particularly over the past 12 months.

Our asset assessment of 4 (constrained) reflects a lack of information on the creditworthiness of USDT's reserve custodians, counterparties, or bank account providers. This is notwithstanding that a large share of USDT's reserves comprise short-term U.S. Treasury bills and other U.S. dollar cash equivalents. There is also significant exposure to higher-risk assets with limited disclosures. Such assets could be subject to credit, market, interest rate, or foreign currency risks.

Other weaknesses we have observed are in line with a stablecoin stability assessment of 4, the same level as our asset assessment. These weaknesses include limited transparency on reserve management and risk appetite, lack of a regulatory framework, no asset segregation to protect against the issuer's insolvency, and limitations to USDT's primary redeemability.

The stablecoin stability assessment could improve if there is increased disclosure and a shift to lower-risk assets. In particular, this relates to disclosure on the underlying assets and on the creditworthiness of the custodians, counterparties, and bank account providers. Regulation or supervision of USDT's issuance and management by an authoritative body could also support a stronger assessment. The stablecoin stability assessment could worsen if there is a shift to higher-risk assets, such as cryptocurrencies.

This report was not produced at the request of the stablecoin issuer or sponsor but with their input.

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Asset assessment

| |
|------------------------|
| 1 Very strong |
| 2 Strong |
| 3 Adequate |
| 4 Constrained |
| 5 Weak |

Adjustment

| |
|--------------------|
| Neutral (0) |
|--------------------|

Stablecoin stability assessment



Assessed on a scale of 1-5, where 1 is very strong and 5 is weak.

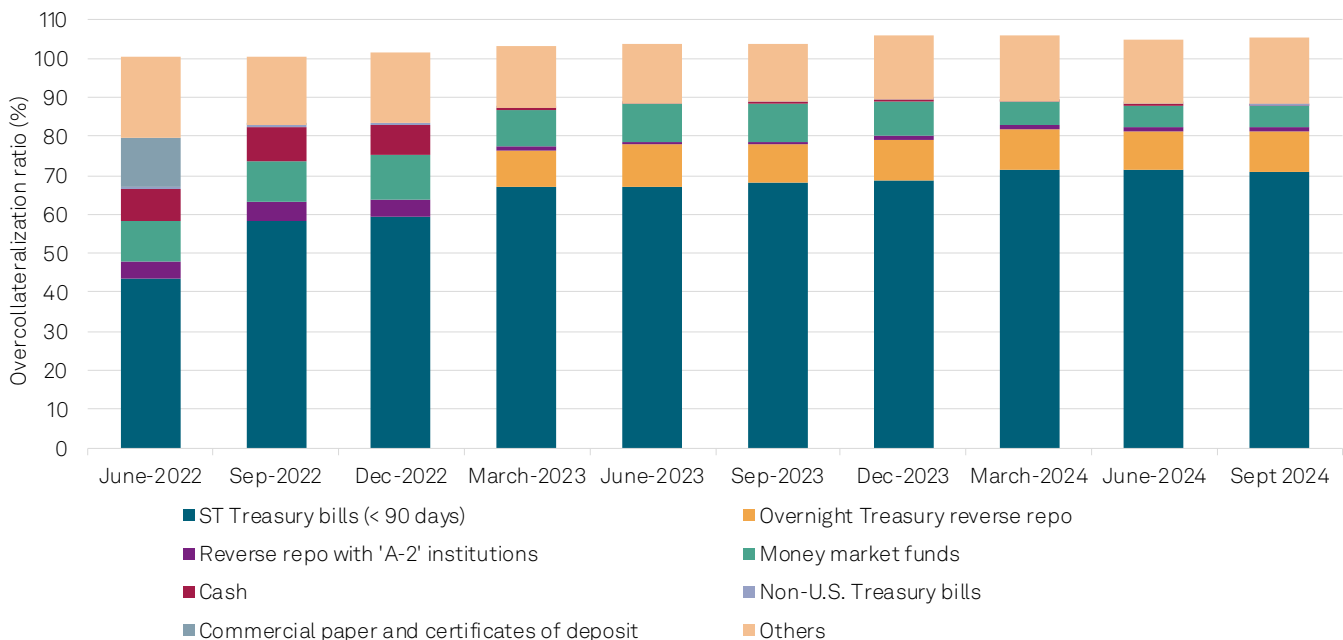
Asset assessment: 4 | Constrained



Issued in 2014, USDT is fully backed by reserves. It is issued by Tether International Ltd. and Tether Ltd., which are incorporated in the British Virgin Islands (BVI) and Hong Kong, respectively. Both are wholly owned by British Virgin Islands-registered Tether Holdings Ltd. The reserves for USDT consist of a combination of: (i) highly liquid and secure assets such as short-term U.S. Treasury bills and similar cash equivalents and (ii) riskier assets such as precious metals, secured loans, and other investments with limited transparency on their composition.

Tether publishes a quarterly reserve report. Based on the most recent report, attested by BDO Italia, as of Sept. 30, 2024, reserves of \$125.5 billion backed \$119.4 billion of USDT in circulation (see chart). The overall collateralization ratio stood at 105%, consisting of short-term U.S. Treasury bills with an average tenor of less than 90 days (71%), U.S. Treasury-bill-backed overnight reverse repurchase agreements (repos; 11%), other reverse repos and non-U.S. Treasury bills (1%), money market funds (5%), cash and bank deposits (less than 0.5%), and a combination of riskier assets (17%).

USDT's asset composition



Source: S&P Global Ratings.

In our view, the short-term U.S. Treasury bills and U.S. Treasury-bill-backed overnight reverse repos (81% of the collateralization ratio) represent low-risk assets. Notably, Tether's holdings in U.S. treasuries have reached more than \$97 billion, positioning it among the largest holders globally. That said, the reserve report does not disclose any information about the creditworthiness of the entities that act as custodians, counterparties, or bank account providers of the assets in the reserve. There is, however, reference in the public domain to a U.S. financial institution as custodian of the U.S. Treasury bills. Money market funds make up 5% of the underlying assets, but there is no publicly available information on those funds.

Assets can be subject to credit, market, interest rate, or foreign currency risks. The riskier assets making up 17% of the underlying assets comprise corporate bonds, precious metals, bitcoin, secured loans, and other investments. This includes an increased exposure to Bitcoin to \$4.8 billion (4%) compared with \$1.6 billion (2%) on Sept. 30, 2023. Given the type of assets and limited transparency on their composition, such as their denomination and the creditworthiness of the borrowers of the secured loans, there is potential exposure to credit, market, currency, and interest risks that cannot be quantified.

Limited transparency on counterparties and risky asset exposure informs our asset assessment. Due to a lack of information on the creditworthiness of the entities that act as custodians, counterparties, or bank account providers, limited transparency on the asset composition, and significant exposure to higher risk assets, we assess USDT's assets at 4 (constrained).

Adjustment: Neutral

Neutral

Negative

Overall adjustment

USDT is the largest and longest-standing stablecoin in circulation. It has maintained price stability in recent years and over the past 12 months. We make no adjustment to the asset assessment despite certain weaknesses such as limited transparency on reserve management and risk appetite, lack of a regulatory framework, absence of information on asset segregation, and limitations to primary redeemability. This is because we consider these weaknesses commensurate with a stablecoin stability assessment of 4 (constrained).

Governance: Opaque management

- There is no public disclosure about the type of assets eligible for inclusion in USDT's reserves or the action to be followed if the value of one of the underlying assets or asset classes were to drop significantly. We nevertheless observed an improvement in USDT's reserve management practices between 2022 and 2023 with a shift toward lower-risk assets, which has remained stable over the past year.
- USDT's assets are subject to quarterly reporting and third-party attestations by an independent auditor. This reporting is less frequent than for other stablecoins, which are generally subject to monthly reporting and attestation. The most recent attestation was in September 2024, conducted by BDO Italia, an independent member firm of BDO International Ltd. The auditor reviews the issuer's assets at the end of the quarter.
- Tether also regularly publishes on its website the liabilities related to USDT in circulation, and the value of the assets in the reserve. However, these numbers are not reviewed by the auditor and there is no breakdown of the composition of the assets.
- In 2024, Tether announced a corporate restructuring that introduced four divisions--Finance, Data, Power, and Education--broadening its scope beyond stablecoin development. Alongside this, Tether has made strategic investments in areas such as artificial intelligence and Bitcoin mining. While these activities could support business diversification and potential growth, they may also reflect an expanded risk profile. According to Tether, these activities are separated from the stablecoin reserve management.

Regulatory framework: Lack of regulation and information about asset segregation

- USDT is registered with the Financial Crimes Enforcement Network, a bureau of the U.S. Department of the Treasury. This requires the issuer to comply with anti-money-laundering and know-your-customer requirements.
- However, unlike some other issuers of stablecoins, Tether International Ltd. and Tether Ltd., incorporated in the BVI and Hong Kong, respectively, are not subject to regulation or supervision by an authoritative body. This contrasts with certain stablecoin issuers that are subject to regulatory oversight by an authority, such as the New York State Department of Financial Services (NYDFS) and are required to follow rules set by the NYDFS' stablecoin guidance. We see the lack of regulation and supervision of USDT as a weakness.
- Additionally, there is no publicly available information regarding the segregation of USDT's assets or the extent to which they are insulated from broader corporate risks, such as a bankruptcy of the issuer or financial impacts from Tether's non-stablecoin ventures. According to Tether, these activities are separated from the stablecoin reserve management. While Tether's reserve reports highlight overcollateralization, the lack of detailed disclosure on reserve segregation practices limits visibility into how effectively these reserves support USDT's stability.
- Regulatory scrutiny of stablecoins is intensifying globally. The EU's Markets in Crypto Assets (MiCA) regulation, set to take effect in December 2024, will require stablecoin issuers to obtain e-money authorization within the EU. As of now, Tether has not secured this license, which may expose USDT to potential delisting risks on European platforms such as Coinbase. While this requirement has not yet affected Tether's market position, the evolving regulatory landscape underscores the increasing complexity for stablecoin issuers operating across multiple jurisdictions. Non-compliance with MiCA or similar regulatory frameworks could pose future challenges for Tether in maintaining market access, liquidity, and adoption of USDT.

Liquidity and redeemability: Lack of primary redeemability is partly offset by strong secondary market liquidity

- USDT can be redeemed directly on Tether's website but subject to certain conditions. Redemption is restricted to USDT holders with a verified account, which requires payment of a \$150 verification fee. The verification process is subject to know-your-customer, anti-money-laundering, and counter-terrorism-financing requirements. Direct redemption is also subject to a minimal liquidation threshold of \$100,000 and a fee of 0.1% or \$1,000, whichever is higher.
- USDT holders that do not meet these requirements have to go through the secondary market. Considering the size of USDT's market capitalization, and its wide market reach, liquidity on the secondary market is generally strong on centralized and decentralized exchanges.
- The availability of parties that can support redemption payments 24 hours a day, seven days a week, remains limited. Therefore, the redemption of USDT is constrained by the banking system's operating hours.

Technology and third-party dependencies: No high risks cited in the previous audits but the smart contract is not open source

- USDT is available on 16 blockchains. The top-three blockchains account for 97.8% of USDT in circulation: Tron (51.3%), Ethereum (45.2%), and Avalanche (1.3%) as of Oct. 27, 2024.
- The smart contract was audited by OpenZeppelin in January 2018, and again by Callisto Network in July 2019. OpenZeppelin's audit revealed no critical or high-severity concerns. The audit report recommended several best practices to address possible vulnerabilities, most of which were subsequently incorporated into the smart contract. Similarly, the Callisto Network audit did not uncover any critical problems, with none of the findings deemed high or medium in severity. However, the auditors identified three issues of low severity and noted risks related to owner privileges: pausing of transfer, blacklisting, burning of blacklisted assets, and application of a transaction fee. Tether runs a bug bounty program that offers incentives to identify and report vulnerabilities, but this does not cover security vulnerabilities related to the smart contract.
- USDT's smart contract source code is not open source, unlike that of most other stablecoins. It has, however, been verified and is written in industry-standard programming language, such as Solidity. There is no dependence on an oracle to connect to external market data and information.
- Since almost all the reserves are held and managed off the blockchain, there is less reliance on that technology. Therefore, a major disruption of a blockchain network is likely to have a limited impact on the stability of the stablecoin.

Track record: A good recent track record of stability

- USDT launched in October 2014, and is the longest-standing stablecoin, with the largest volume in circulation.
- USDT has maintained a notable level of price stability in recent years and over the past 12 months. During the period of significant market volatility following the Terra Luna failure in May 2022 and FTX collapse in November the same year, USDT's price exhibited minor fluctuations but subsequently regained its usual stability.
- In March 2023, during the Silicon Valley Bank (SVB) failure, USDT maintained its price stability relative to the U.S. dollar. During that period, some other stablecoins deviated from their peg either as a direct impact of having their reserves at SVB or indirectly from the general market sentiment. This situation may have increased the demand for USDT as market participants sought alternative stablecoins.
- USDT's market capitalization has recovered since March 2023. It increased to \$120 billion in October 2024, from \$87 billion in November 2023. The Terra Luna crash and FTX collapse led to a decline to a low of \$65 billion in December 2022 from \$83 billion in April 2022.
- In 2024, USDT has maintained its market position with continued growth in adoption and trading volumes. While evolving regulatory landscapes have posed challenges, USDT's dominance remains strong, with its market capitalization nearly 3.5x that of the next largest stablecoin. However, the rise of other stablecoins with enhanced regulatory credentials and increasing adoption could introduce competitive pressures over time.

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