

Stablecoin Stability Assessment:

Mountain Protocol USD (USDM)

Dec. 6, 2024

Summary

S&P Global Ratings assesses Mountain Protocol USD (USDM)'s ability to maintain a stable price vis-à-vis the U.S. dollar at 3 (adequate). USDM was launched in September 2023 by Mountain Protocol Ltd., which is regulated by the Bermuda Monetary Authority (BMA).

Our asset assessment of 2 (strong) reflects USDM's highly liquid, low-risk reserves. We note risks related to asset custody on USDM assets directly owned (those assets directly invested in U.S. treasuries or equivalent, as opposed to tokenized funds). The reserve's assets comprise mainly short-term U.S. treasury bills with a weighted average maturity of 60 days, kept with U.S.-based custodians. USDM reserves also consist of tokenized funds invested in short duration U.S. treasuries and money market funds. USDM's reserves are segregated from its issuer's assets, in line with regulation. In our view, while the shift to tokenized funds allows for more transparency on the custodians, the lack of public disclosure on direct holdings of the custodians still represents a source of risk for USDM's reserves. USDM is a yield-bearing stablecoin, where rewards are distributed as additional USDM. The issuer has sole discretion about whether any reward will be distributed. Our analysis does not cover the level of yield or its continuity over time.

Our stablecoin stability assessment of 3 (adequate) results from a negative adjustment to the asset assessment. The adjustment reflects USDM's limited secondary market liquidity, short track record, and reliance on less-seasoned third parties than other stablecoins. On July 26, 2024, USDM obtained a Class F license (full and permanent license) under Bermuda's Digital Asset Business Act.

A combination of stronger secondary market liquidity, a longer track record, and reliance on more-established third parties for direct holdings could lead to a stronger stablecoin stability assessment. On the other hand, the stablecoin stability assessment could worsen if the sponsor starts to use riskier assets. A change in the reward methodology could also lead to a different assessment.

This report was not produced at the request of the stablecoin issuer or sponsor.

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For more on our approach and definition of price stability, see our [Stablecoin Stability Assessment Analytical Approach](#)

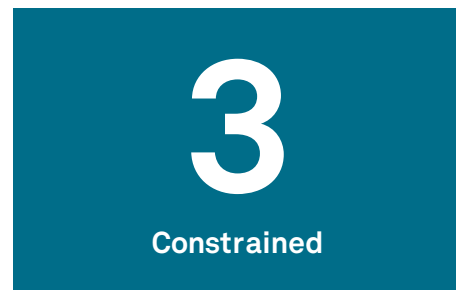
Asset assessment

1 Very strong
2 Strong
3 Adequate
4 Constrained
5 Weak

Adjustment

Negative

Stablecoin stability assessment



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

Asset assessment: 2 | Strong

1 | Very strong

2 | Strong

3 | Adequate

4 | Constrained

5 | Weak

USDM was launched in September 2023 and is a fiat-collateralized stablecoin. It is issued by Mountain Protocol Ltd., a Bermuda-based company regulated by the BMA as a digital asset business. Under this regulation, Mountain Protocol Ltd. must ensure USDM's reserves are kept separate from its own assets, using qualified custodians. This is reinforced by USDM's terms and conditions, where Mountain Protocol Ltd. expressly declares that there is no commingling of its operational assets with USDM's reserves.

Under a specific investment mandate, USDM's reserves are invested in securities with a final maturity limited to 397 days or less, in one of the three following assets: (i) U.S. Treasury bills; (ii) U.S. government risk money market funds and exchange traded funds (ETFs); or (iii) reverse repurchase agreements backed by U.S. Treasury bills. Moreover, the investment manager ensures the weighted average maturity of these investments is limited to 60 days. USDM reserves have always had a limited proportion of cash in the reserves, although as of the latest attestation report, there is currently no cash. If cash forms a significant proportion of the reserves in the future, the creditworthiness of the banks where the cash is held could become relevant for our asset assessment.

As of the September 2024 attestation report, 99.53% of the reserves comprised U.S. Treasury bills, as well as tokenized funds, all maturing before end-June 2025. The remainder consists of cash or other stablecoins (mainly USD Coin; USDC). USDM's reserve is managed by E.Q. Capital, a Bermuda-based investment manager.

Since our last review, a material proportion of USDM's reserves are no longer invested directly in U.S. Treasury bills or equivalent instruments. Instead they are invested through tokenized funds, namely BlackRock USD Institutional Digital Liquidity Fund Ltd. (BUIDL, the tokenized money market fund from BlackRock) and USTB (short duration U.S. treasury fund from SuperState).

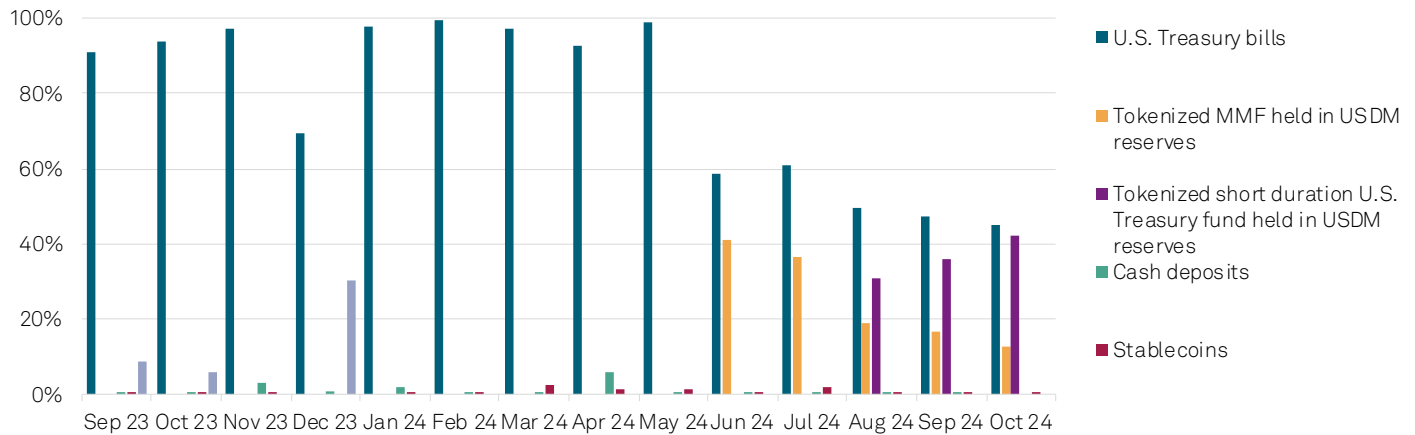
BUIDL invests 100% of its assets in cash, U.S. Treasury bills, and repurchase agreements that mature in 95 days or less upon purchase. Redemptions are available via USD intraday on business days and in USDC through the USDC-BUIDL swap smart contract developed by Circle and audited by Halborn. Bank of New York Mellon (AA-/Stable/A-1+) acts as custodian.

Superstate's USTB invests at least 95% of its assets in short-duration U.S. Treasury bills and up to 5% as cash. While we understand the duration of the fund could be up to a year, as of Oct. 18, 2024, the longest dated U.S. Treasury bills mature on Feb. 20, 2025, with a weighted average duration of less than a month. Redemptions are available via US dollars intraday on any business day. UMB Bank N.A. (A-/Stable/A-2) acts as custodian.

USDM's reserves are held separately from Mountain Protocol Ltd.'s own accounts for the benefit of eligible users with regulated financial institutions in bankruptcy-remote accounts segregated from the company's operating account. In our view, while the shift to tokenized funds allows for more transparency on the custodians, the creditworthiness of the custodians and lack of public disclosure about their creditworthiness on direct holdings still represent a source of risk for the stablecoin. Therefore, our overall asset assessment is 2 (strong).

Exposure to currency or interest rate risk appears limited. USDM's reserves are composed of U.S. dollar-denominated assets, which limits exposure to currency exchange risk. Exposure to interest rate risk is contained, in view of these assets' short-dated nature.

Breakdown of USDM's reserves since its launch in September 2023



Source: Mountain Protocol Ltd

Adjustment: Negative

Neutral **Negative**

Overall adjustment

We apply a negative adjustment to the asset assessment due to USDM's limited secondary market liquidity, short track record, and reliance on less seasoned third parties for direct holdings compared with other stablecoins. On July 26, 2024, USDM obtained a Class F license (full and permanent license) under Bermuda's Digital Asset Business Act.

Governance: Transparent investment guidelines

- USDM's reserves are invested either in (i) U.S. Treasury bills (direct holding or through tokenized funds); (ii) U.S. government risk money market funds and ETFs (direct holdings or through tokenized funds); or (iii) reverse repos backed by U.S. Treasury bills. It also includes a marginal portion of cash or other stablecoins (mainly USDC).
- Under the Digital Asset Business Act and per USDM's terms and conditions, the reserves backing USDM are segregated from the operational assets of USDM's issuer, Mountain Protocol Ltd.
- USDM is a yield-bearing stablecoin where rewards are distributed as additional USDM through a daily rebasing mechanism. These rewards are generated by interest from the assets in USDM's reserves. Mountain Protocol Ltd. has full discretion on whether to distribute any rewards. In addition, these rewards could decrease but are floored at zero. As such, there is no possibility for the rebasing mechanism to result in a value of USDM that is lower than \$1. We do not analyze the level of yield distributed to USDM holders or its continuity over time.
- We note that the rebasing mechanism adjusts the total supply of USDM and then alters the balance of all USDM holders to represent their share of the total supply in a single transaction block that is instantaneous for all USDM holders. The rebasing mechanism is

managed by Mountain Protocol Ltd., which assumes the role of oracle (input of market data/info) and is expected to update the rewards based on prevailing interest rates.

Regulatory framework: Fully licensed under the Bermudan regulation, but unavailable in several countries including the U.S.

- On July 26, 2024, the BMA upgraded USDM's license to a Class F license (full and permanent license). We note that USDM is not available in certain countries, including the U.S. This is due to uncertainty on the treatment of yield-bearing stablecoins by regulators globally.

Liquidity and redeemability: Weak secondary market liquidity, but upcoming partnerships

- Primary users whose accounts have been approved by Mountain Protocol Ltd. can redeem their USDM for another stablecoin--USDC--or U.S. dollars. Thanks to a collaboration with Wintermute, Mountain Protocol Ltd. facilitates redemptions in USDC 24 hours a day, seven days a week (24/7), while redemptions for U.S. dollars are available during U.S. bank opening hours. Redemption could take up to two business days if the amounts are significant. As is the case for other stablecoins, the availability of parties that can support 24/7 payments remains limited. Therefore, the redemption of USDM for fiat currency is constrained by the U.S. banking system's operating hours.
- Non-approved USDM holders must go through the secondary market for redemptions. Currently, USDM is available on one decentralized exchange (DeGate). There are also several liquidity pools on the Curve Finance platform, where USDM can be exchanged. We note the liquidity on these Curve pools has significantly increased since our last review. The exclusion of certain jurisdictions and, more specifically, U.S. users of USDM, could still limit future growth of liquidity in the secondary market.
- USDM has announced a series of partnerships with, among others, Chainlink (integration of USDM on the Chainlink Cross-Chain Interoperability Protocol) and Ethena Labs (USDM will constitute a portion of the USDE reserves). Mountain Protocol has also applied for the recent RWA Tokenisation Grand Prix initiative from SKY/MakerDAO for which results are still to be announced. These partnerships could significantly improve the usage and liquidity of USDM over time.
- Rebasings stablecoins such as USDM is complex using decentralized finance applications, since the amount of stablecoins in circulation changes frequently over time. This might limit the stablecoin's usage. Therefore, Mountain Protocol Ltd. launched a wrapped USDM (WUSDM), which is backed by an equal amount of USDM stored in a digital vault. The WUSDM does not rebase but instead accrues rewards over time.

Technology and third-party dependencies: Audited smart contracts and bug bounty programs

- USDM is deployed on the Ethereum blockchain as an ERC-20 token, which is the technical standard for interchangeable tokens on that platform.
- The smart contract was last audited in December 2023 by OpenZeppelin, which did not mention any high-risk features in its audit report.

- The smart contract is open source, uses a reliable upgrade mechanism, and has secure access control. In addition, two different bug bounty programs (Immunefi and Security Center by OpenZeppelin) offer incentives to identify and report vulnerabilities.
- Mountain Protocol Ltd. plays the role of oracle in the rebasing mechanism and is expected to update the daily rewards based on prevailing interest rates. The rebasing mechanism is present in a variety of other protocols (such as Lido Protocol for example).
- In our view, USDM relies on less seasoned third parties than other fiat-based stablecoins. USDM's reserves are managed by E.Q. Capital, a Bermuda-based investment manager, and are verified every month by Nephos Group, a U.K.-based accounting firm.

Track record: Just more than a year in the stablecoin market

- USDM was launched in September 2023. Since then, it has maintained a generally stable price. It is worth noting that beginning of April 2024, a significant redemption of US\$74 million occurred which had no significant effect on the USDM price.
- Because of the daily rebasing mechanism, USDM has potential for arbitrage, which could lead to higher price volatility, for example, due to increased demand for USDM before rebasing and a rise in sales of USDM after rebasing. However, considering that the transaction costs could be larger than the rewards generated by daily interest rate changes, this strategy would very likely be unprofitable.
- After 12 months of existence, USDM's market capitalization fell to US\$59.3 million (as of October 2024), compared with US\$154.4 million in January 2024, due to a large withdrawal. USDM represents a relatively small proportion of the overall stablecoin market, with less than 0.1% of the total market capitalization as of Oct. 30, 2024.

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