

Stablecoin Stability Assessment

Mountain Protocol USD (USDM)

March 18, 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, while noting risks related to asset custody. The reserve's assets comprise mainly short-term U.S. treasury bills with a weighted average maturity of 60 days. USDM's reserves are segregated from its issuer's assets (per the regulation) and kept with U.S.-based custodians. In our view, the creditworthiness and lack of public disclosure of the custodians represent an additional 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. This is due to USDM's limited secondary market liquidity, short track record, and reliance on less seasoned third parties than other stablecoins. Also, USDM has a temporary license that expires in July 2024; its extension is at the BMA's discretion.

A combination of stronger secondary market liquidity, a longer track record, and reliance on more-established third parties, including custodians with strong creditworthiness, 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.

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For more on our approach and definition of price stability, see our Analytical Approach: Stablecoin Stability Assessments »

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

Asset assessment

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

Adjustment

Negative (-1)

Stablecoin stability assessment score



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

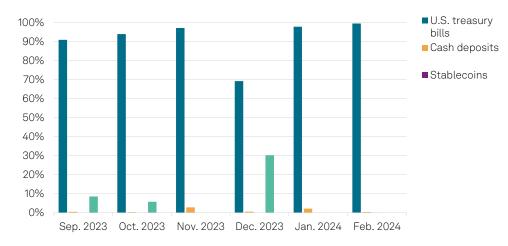
Asset assessment: 2 | Strong

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 with 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.

As of the February 2024 attestation report, 99.5% of the reserve comprised U.S. treasury bills all maturing before June 30, 2024 (see chart). 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. Under a specific investment mandate, USDM's reserves are invested either in (i) U.S. treasury bills (ii) U.S. government risk money market funds and ETFs (exchange traded funds), or (iii) reverse repurchase agreements backed by U.S. treasury bills, each asset having a final maturity limited to 397 days or less. Moreover, the investment manager ensures the weighted average maturity of these investments is limited to 60 days. There is a limited proportion of cash in USDM's reserves. Should this proportion increase, we may reassess the creditworthiness of bank account providers holding such cash. USDM's reserves are held by Mountain Protocol Ltd. on behalf of, and for the benefit of, eligible users with regulated financial institutions in bankruptcy-remote accounts segregated from the company's operating account. In our view, the creditworthiness of the custodians and lack of public disclosure about their creditworthiness could represent an additional source of risk for the stablecoin. Therefore, our overall asset assessment is 2 (strong).

Exposure to currency or interest rate risks 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 applied 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 compared with other stablecoins. In addition, USDM currently has a temporary license under Bermuda's Digital Asset Business Act, which expires in July 2024 and whose extension is at discretion of the regulator.

Governance: Transparent investment guidelines

- USDM's reserves are invested either in (i) U.S. treasury bills (ii) U.S. government risk money market funds and ETFs 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, such a reward could eventually decrease but is 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. The rebasing mechanism is present in a variety of other protocols (such as Lido Protocol for example) and it may lead to somewhat more reliance on Mountain Protocol Ltd.'s team.

Regulatory framework: A temporary license and unavailability of USDM in several countries including the U.S.

- USDM's temporary license under the Digital Asset Business Act expires in July 2024 and it is renewable at the BMA's discretion.
- We also 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

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 observe
 limited total value locked and low daily volumes of USDM transactions. The exclusion of
 certain jurisdictions and, more specifically, U.S. users of USDM could limit future growth of
 liquidity in the secondary market.
- Rebasing 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 are backed by an equal amount of USDM stored in a digital vault. The WUSDM does not rebase but instead accrues rewards over time. WUSDM accounts for the majority of USDM in circulation with about 132 million tokens out of total USDM of 152 million as of Feb. 29, 2024. This could further limit the available liquidity for USDM in the future.

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.
- 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: Less than a year in the stablecoin market

- Since its launch in September 2023, USDM has maintained a generally stable price. There is therefore no long track record of price stability, particularly during times of major market volatility.
- 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.

• As of Jan. 31, 2024, five months after its launch, USDM's market capitalization had reached \$154.5 million. It nevertheless represents a relatively small proportion of the stablecoins in circulation, at about 0.1% of the total market's capitalization.

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