ME COLLATERAL

POWERED BY

MERCURY PROTOCOL

AN ALTERNATIVE STORE OF VALUE FRAMEWORK FOR MEME ECONOMICS

Nov 2023

ABSTRACT

This Whitepaper introduces MERCURY COLLATERAL (ME), an intelligent alternative for MEME-themed crypto assets pioneered by Mercury protocol, a novel re-engineered meme token economics that transitions from a price-based trading strategy to time-based dynamics, ensuring enhanced token reliability and price independence. The Mercury protocol introduces advanced standards, featuring a unique time-bound sell ratio lock mechanism with liquidity protection to prevent market price manipulation by large investors. It also innovates a new dimension of fair launch that ensures equitable token distribution and establishes new use case standards to drive revenue for long-term sustainability. Additionally, ME collateral is backed by a pool of stable assets locked in a crypto reserve called Burn Vault to provide minimum guarantee price support, where the investors can cash out without impacting the market price. As a result, the investors are encouraged to HODL for an extended period, which fundamentally makes the economic model much safer than MEME and other reflection-based cryptocurrencies without disrupting its fun culture.

Disclaimer: The Mercury protocol is loosely based on the three-dimensional asset class model called the JOKER protocol, published by a DeFi research team at the Dubai Blockchain Summit in October 2023. Our project draws inspiration from certain philosophies outlined in the JOKER protocol whitepaper, envisioning an enhancement of MEME and reflection economics.

While the JOKER protocol focuses on advancing liquidity-owned protocols like Olympus DAO and Ampleforth with DeFi 3.0 dynamics, the Mercury Protocol addresses the volatility affecting MEME token economics. It is essential to note that before the complete implementation of the Mercury Protocol project, the underlying logic may change without prior notice. We intend to transparently communicate our vision and objectives, providing clarity on the project's alignment with the principles of the JOKER protocol.

1. INTRODUCTION

1.1 THE MAJOR CRYPTO MARKET PROBLEM

Unpacking the Challenges: MEME Assets and Their Impact on the Crypto Industry

In the ever-evolving cryptocurrency market landscape, MEME economics has emerged as a unique asset subset, often characterized by its playful branding and viral nature. While these assets may capture attention and garner a dedicated community, their underlying economics have raised concerns beyond humor.

The Volatility Quandary: MEME assets tend to be highly volatile by their very nature. While volatility is inherent in crypto, the extreme price fluctuations associated with MEME assets pose a significant challenge. This volatility not only discourages everyday users from considering these assets as a reliable investment class but also introduces an element of unpredictability that affects market stability.

Speculative Trading Takes Center Stage: One of the primary issues plaguing MEME assets is their susceptibility to speculative trading. Traders often engage in short-term maneuvers, manipulating prices for quick gains. This speculative dominance distorts the market and shifts the focus away from the fundamental utility and value creation that these coins could offer.

Governance Woes: Governance structures within MEME ecosystems often need improvement, leading to decision-making challenges and protocol upgrades. Effective governance is paramount for adapting to market changes and addressing issues promptly. With it, MEME assets can avoid stagnation and a loss of user trust.

Limited Revenue Model: Despite their popularity, MEME assets often need more diverse and practical use cases. This limitation constrains adoption and utility, preventing these coins from contributing meaningfully to the broader crypto industry beyond speculative trading.

BITCOIN CORRELATION AND PRICE FLUCTUATION

One of the critical crypto market investment risks is that the value of almost all crypto projects is pegged to Bitcoin. As a result, the entire market comes down when Bitcoin goes down. High correlations in the decentralized market prohibit diversification due to several price fluctuations affecting all cryptocurrencies.

The main factor for such price fluctuations is when big investors cash out in bulk, which completely crashes the token price. Innovative experiments to implement adequate control have existed for so long where DeFi researchers introduced several protocols to minimize price fluctuations and de-correlate market dependencies. In theory, to design such price-resistant crypto-asset models,

1) A mechanism must exist where significant large investors' cashouts are controlled to preserve small investors.
2) A mechanism must also exist where investors can exchange crypto assets for FIAT or other stable assets without impacting the market price.

1.2 VALUE PROPOSITION

Mercury Protocol designed an innovative, risk-free, price-resistant investment class for the crypto economy with three fundamental characteristics.

A) Minimize price volatility footprint resisting corrections

B) Burn Vault reserve for buybacks

C) Revenue model for long-term sustainability

For example, suppose an investor buys $1000 worth of an asset class as a long-term investment; their purchase power must gradually grow like a plant, irrespective of the crypto market position, bitcoin price, or other economic shocks. After experimenting with several price-resistant models and testing, we are proud to introduce a novel smart meme asset class called ME COLLATERAL, an intelligent store of value governed by MERCURY PROTOCOL by solving several cryptocurrency market corrections.

2. ME COLLATERAL – A BETTER ALTERNATIVE TO MEME ECONOMICS

ME aims to be an intelligent, NON-DEPRECIATING alternative to meme token standards with all the characteristics of playful trends by introducing three innovative protocol operations that help increase purchasing power significantly over time.

A. **TIME-LOCK SELL RATIO** is a novel design that prevents investors from selling their assets in large quantities. This mechanism regulates purchase power by enforcing a time lock on the holder's wallet, which prevents one from selling or transferring more than 1% of the asset in 24 hours. By enabling the time-lock, asset holders, especially whales, can't manipulate the price significantly, increasing long-regulated purchase power.

B. **BURN VAULT** is a new decentralized reserve pool similar to the Bretton Woods FIAT-Gold Reserve system that provides a minimum collateral price guarantee to investors irrespective of the market condition during the panic period.

C. **CONTROLLED UNLOCK** prevents exchange liquidity fluctuation to a greater extent by locking a portion of the user's profit from token swaps back in the liquidity pool and decentralized reserve pool, enhancing the overall market price of the crypto asset.

3. WHAT PROBLEMS DOES MERCURY PROTOCOL SOLVE?

A. STRATEGIC REVENUE GENERATION FRAMEWORK FOR MEME ASSETS

Mercury Protocol transcends the traditional meme model, transforming daily trading activity into a robust revenue stream through strategic Burn Vault and Time Lock mechanisms in the chaotic landscape of meme tokens, where fleeting hype often outshines real utility. This system generates sustainable income, benefits the treasury, and empowers continuous buybacks. As the floor price steadily rises, a virtuous cycle takes hold, attracting further investment and solidifying the value of your holdings. Unlike fleeting trends, Mercury Protocol builds on a foundation of real utility and tangible financial benefit, fostering a thriving community where the shared pursuit of fun coexists with long-term financial security.

B. TIME-BOUND BUY-SELL RATIO

Mercury protocol controls the time-demand equilibrium every 24 hours using the Time-Lock mechanism tied to the number of tokens each investor holds in their wallets. Time-Lock ensures that the market cap of the collateral persists and the growth is consistent by adjusting the selling threshold dynamically.

C. WHALE-PROOF DEFI FARMING

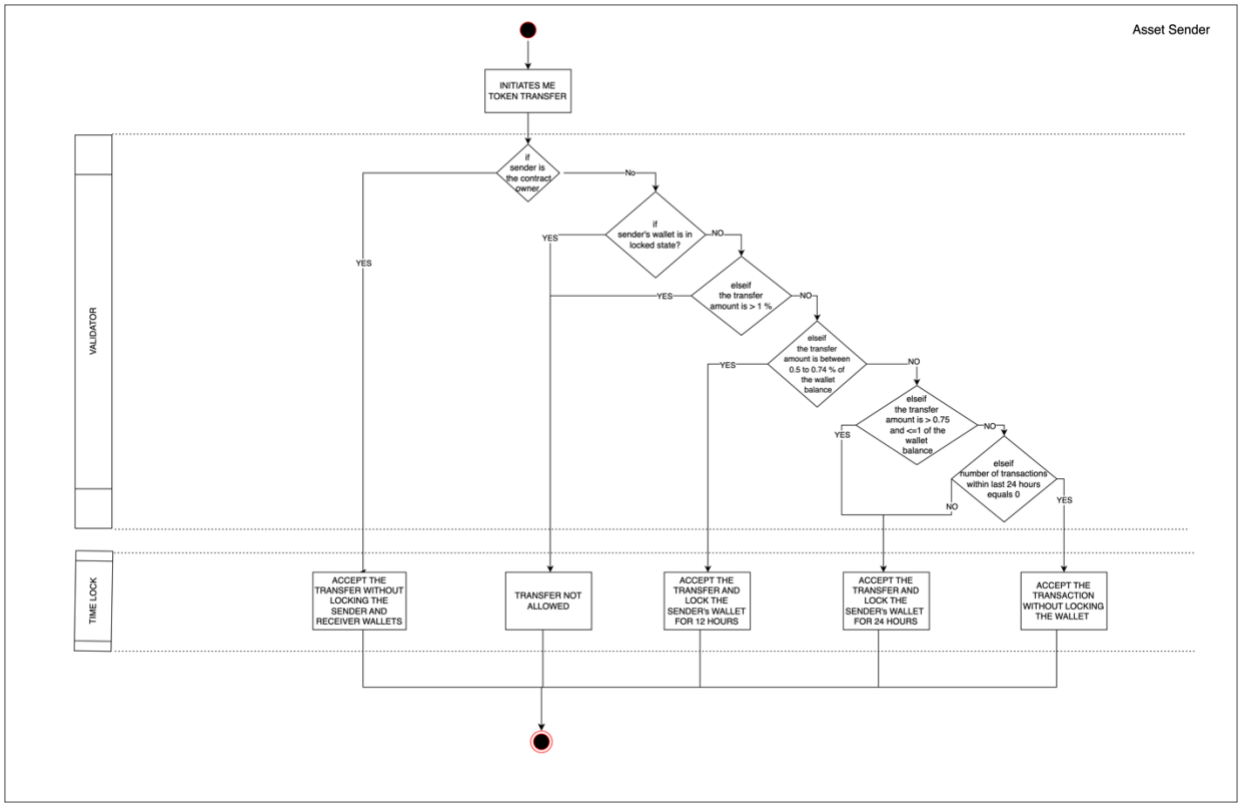
Due to their extensive portfolio allocation, whales usually eat a higher percentage of all DeFi farming benefits than average users. MERCURY protocol fundamentals potentially limit the staking percentage across all wallets, and as a result, the benefits are evenly distributed to the users.

D. VALUE PROTECTION

Mercury protocol fundamentally brings the same GOLD characteristics as a store of value in MEME tokens, making it a worthy investment to de-risk from the value collapse through its floor price encashment mechanism. In addition, Mercury is introducing a new way of fair launch where all the early investors will be provided with the same price per token standard via a novel fair-dutch auction.

4. TECHNICAL ARCHITECTURE

MERCURY PROTOCOL will be implemented as Solidity Smart Contracts, including an Open Zeppelin layer to assist with corrections as required. The contract enforces several rules to maintain price balance when a transaction occurs, as given below.



A) If the transaction originates from the contract Owner, the receiver gets 100% of the transaction amount without a fee.

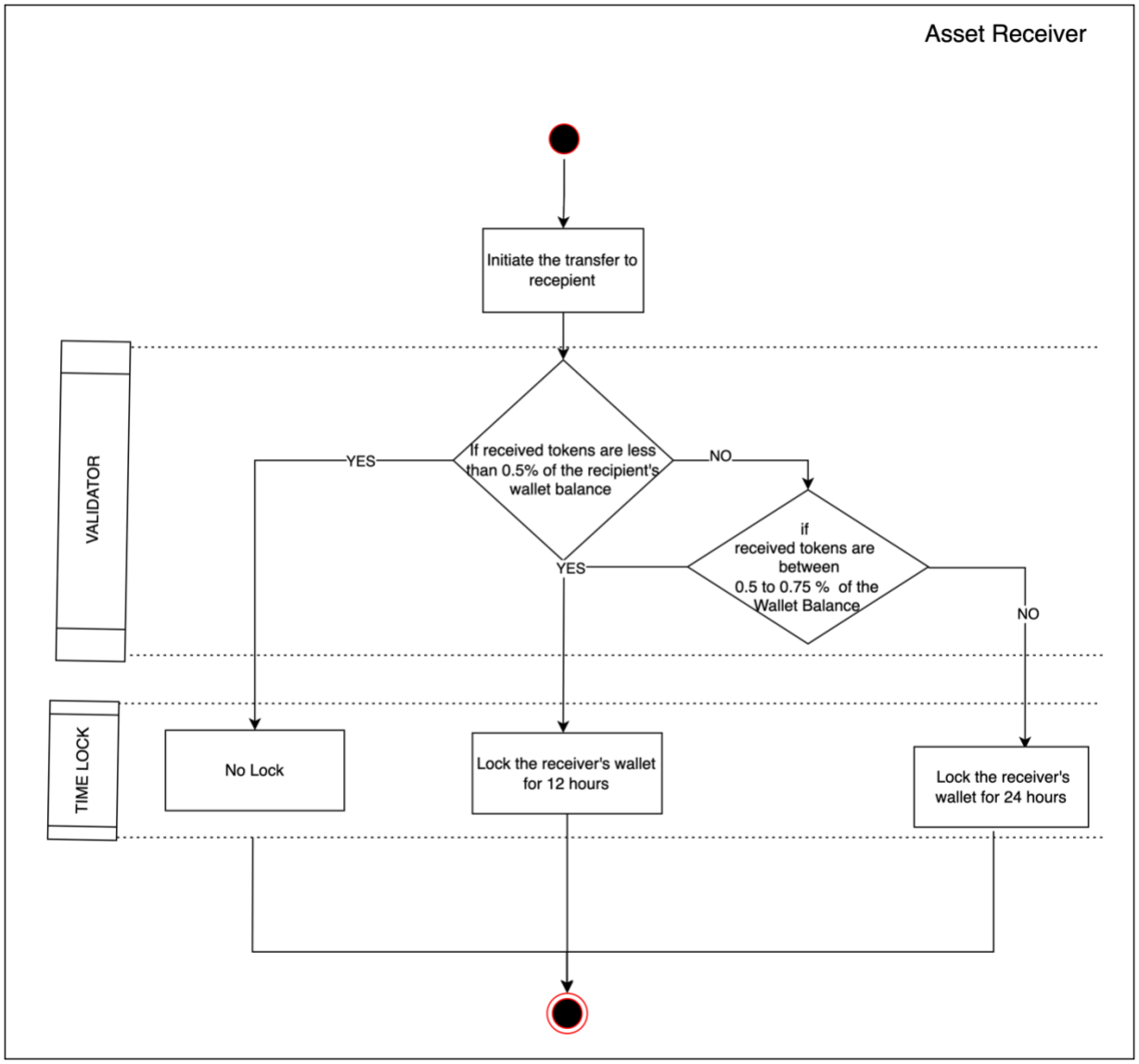
B) The contract will enforce the following when a user initiates a transaction.

i. If the transfer amount is 0.75 % of the sender's balance, the address will be locked for 24 hours.

ii. If the transfer amount is between 0.5% and 0.75% of the sender's balance, the address will be locked for 12 hours.

iii. If the transfer amount is below 0.5 % of the sender's balance, No lock occurs.

iv. A sender can make only two transactions within 24 hours.



C) The contract also enforces the following when a user receives a transaction.

i. If a recipient receives more than 0.75 % of the wallet balance, the contract will lock the wallet for 24 hours.

ii. If a recipient receives between 0.5% and 0.75 % of the wallet balance, the contract will lock the wallet for 12 hours.

iii. If a recipient receives less than 0.5% of the wallet balance, there won't be any lock, and the user can transfer funds instantly.

4.1 BURN VAULT

The primary objective of the burn vault design is to provide investors with a way to cash out their holdings without impacting the market price. Burn Vault receives revenue through two services: taxing and unlocking fees. Taxing: After every transaction, 1% of the transaction amount is deducted as tax and accumulated in a separate contract as stablecoins called Burn Vault.

The protocol does the following two steps once a transaction amount is deposited.

1) Convert the received amount into a stable asset through an exchange
2) Lock the converted stable asset in the Burn Vault

Unlock Service: The protocol fosters stability by capping daily sales at 1%, maintaining equilibrium. To provide users with flexibility, a unique feature enables swapping up to 50% on decentralized exchanges. The twist? Half of this swapped amount is directed into our Burn Vault, a reservoir growing daily with transaction volumes. When users decide to cash out, they simply send their tokens to the Burn Vault address. In return, the Vault credits their wallets proportionally, aligning with the protocol's price. This innovative mechanism ensures liquidity while reinforcing the strength of the Burn Vault, a core element of our dynamic ecosystem.

VAULT PRICING MODEL:

The Burn Vault Swap price varies every minute and depends on the following two variables

a) Total ME Supply (A)
b) Total USD Value locked in Vault (B)

The protocol sets a new price dynamically in the Vault using the following formula.

Vault Price Per Asset = (Total USD Value locked in Vault)/ (Total ME Supply)

The protocol brings forth significant benefits and carefully implemented restrictions to optimize user interactions. For example, consider a scenario where the total circulating supply is 100,000 tokens, and the total Value Locked is $2,000, resulting in a Vault Price set at $0.02 (calculated as 2000 / 100,000). If users send 100 token assets to the Burn Vault, they receive $2 in return (calculated as 100 tokens multiplied by $0.02). Notably, the protocol restricts a holder from swapping more than 0.01% of the total circulating supply using the Burn Vault within 30 days. This strategic limitation ensures balanced utilization and prevents potential misuse of the Burn Vault feature. Moreover, tokens swapped via the Burn Vault are permanently removed from circulation, fostering scarcity and contributing to sustained increases in the token's price, ultimately enhancing the overall investment value.

4.2 PROTOCOL OPERATIONS

PRECHECK: The protocol rigorously enforces two levels of precheck restrictions:

Transaction Frequency Limit: Investors are restricted from making more than two transactions from a single wallet within 24 hours.

Transaction Amount Limit: Investors are prevented from transferring more than 1% of their wallet balance within a 24-hour timeframe.

POST CHECK: The protocol establishes consistent purchase power increase after each transaction, utilizing four innovative protocol dynamics:

A) **Circulating Supply Regulation:** 4% of the transaction amount is permanently burned, regulating the token supply.

B) **Reward Distribution:** 4% of the transaction amount is equally distributed among holders, regulating exponential rewards.

C) **Selling Pressure Regulation:** 1% of the transaction amount is accumulated in the Burn Vault, regulating selling pressure fluctuations.

D) **Liquidity Provision:** 1% of the transaction amount is locked in the Liquidity Pool (LP), regulating exchange liquidity fluctuations.

These post-check operations collectively contribute to a balanced and dynamic protocol, ensuring sustained growth and stability in the ecosystem.

4.3 TIME-LOCK DYNAMICS AND ALP DEMONSTRATION

Let's examine the application of time-lock mechanics and Automatic Liquidity Provision (ALP) in various scenarios using Sam's wallet with 20,000 ME tokens:

SCENARIO 1: Sam attempts to sell 1000 tokens, but the validation precheck fails as it exceeds the 1% daily limit. Consequently, the contract disallows the transaction.

SCENARIO 2:

Sam sells 100 ME tokens, with the validation precheck passing due to the transfer amount being 0.5% of the wallet balance, within the acceptable 1% daily limit. The contract approves the transaction, initiating the following six protocol operations:

i. Increases the daily transaction counter by 1.
ii. Locks the wallet for 12 hours since it reaches 50% of the 1% limit.
iii. Accumulates 1% (1 ME token) of the transaction amount in Burn Vault.
iv. Sends 1% (1 ME token) of the transaction amount to the exchange liquidity pool.
v. Burns 4% (4 ME tokens) of the transaction amount forever from circulation.
vi. Distributes 4% (4 ME tokens) of the transaction amount as rewards equally among holders.

SCENARIO 3:

Sam sells 200 ME tokens, meeting the 1% daily limit criteria. The contract approves the transaction, initiating the same six protocol operations with adjusted quantities:

i. Increases the daily transaction counter by 1.
ii. Locks the wallet for 24 hours since it reaches 100% of the 1% limit.
iii. Accumulates 1% (2 ME tokens) of the transaction amount in Burn Vault.
iv. Sends 1% (2 ME tokens) of the transaction amount to the exchange liquidity pool.
v. Burns 4% (8 ME tokens) of the transaction amount forever from circulation.
vi. Distributes 4% (8 ME tokens) of the transaction amount as rewards equally among holders.

SCENARIO 4:

Sam initiates three consecutive sell transactions of 50 ME tokens each:

TRANSACTION 1:

The 1st transfer is 0.25% of the wallet balance, satisfying the 1% daily threshold. The contract approves the transaction, implementing five protocol operations:

i. Increases the daily transaction counter by 1 (Total Transaction in 24 hours = 1).
ii. Accumulates 1% (0.5 ME tokens) of the transaction amount in Burn Vault.
iii. Sends 1% (0.5 ME tokens) of the transaction amount to the exchange liquidity pool.
iv. Burns 4% (2 ME tokens) of the transaction amount forever from circulation.
v. Distributes 4% (2 ME tokens) of the transaction amount as rewards equally among holders.
vi. Note: There won't be any wallet lock since the % of the transaction amount is less than 0.5%.

TRANSACTION 2:

The 2nd transfer is also 0.25% of the wallet balance, within the 1% daily threshold. However, the wallet locks for 24 hours as the total transactions reach the 24-hour limit. Six protocol operations are executed:

i. Increases the daily transaction counter by 1 (Total Transaction in 24 hours = 2).
ii. Locks the wallet for 24 hours because the total transaction reaches the 24-hour threshold.
iii. Accumulates 1% (0.5 ME tokens) of the transaction amount in Burn Vault.
iv. Sends 1% (0.5 ME tokens) of the transaction amount to the exchange liquidity pool.
v. Burns 4% (2 ME tokens) of the transaction amount forever from circulation.
vi. Distributes 4% (2 ME tokens) of the transaction amount as rewards equally among holders.

TRANSACTION 3:

Although the transfer amount complies with the 1% daily threshold, the wallet is locked after the 2nd transaction. Consequently, the contract disapproves the 3rd transaction.

5. FINAL THOUGHTS

ME Collateral powered by Mercury protocol represents a groundbreaking crypto experiment, introducing a smart haven MEME asset class for investors, guaranteeing perpetual value growth. The protocol pioneers a revolutionary shift in meme token mechanics by transitioning from a price-based trading strategy to a time-based system and unlocks diverse opportunities in DeFi, fostering intelligent economics that genuinely benefit all participants. We firmly believe that ME will fuel extensive innovation in the future crypto landscape due to its scarcity, non-dilutive nature, immunity to market distortions, resilience to economic shocks, and backing by another crypto asset, reinforcing integrity and trust.