

# Namazu

A decentralized, perpetual parametric risk pool, where DAO members collaboratively structure and manage risk tranches, defining event exposures and capacity allocations. Liquidity Providers (LPs) supply capital to underwrite these tranches, earning premium yields by accepting proportional tail-risk exposure. The pool continuously operates without fixed maturities, dynamically adjusting to new risk configurations and capacity demands over time. DAO governance curates the marketplace's risk composition, ensuring transparency, capital efficiency, and modular risk underwriting in an open, continuous liquidity system.

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## Core Participants

- **DAO Members:** Propose, configure, and manage risk tranches and capacity allocations.
  - **Liquidity Providers (LPs):** Supply capital to underwrite DAO-defined tranches, earning yield.
  - **Coverage Buyers (Future Iterations):** Purchase slices of capacity through DAO-curated tranches.
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## Key Mechanics

### Pool Configuration

- LP Capital ( $C_{LP}$ )
- Capacity Tokens ( $C_{CT}$ ): Premium paid to activate coverage
- Leverage Ratio ( $L$ ):
- Tranche Allocations ( $T_i$ ): % exposure per event/tranche

### Expected ROI (LPs)

Expected Loss is: Where  $P_i$  = Probability of event  $i$ .

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## Example Configuration

- Mexico ( $T1$ ):  $P1 = 2\%$ ,  $T1 = 50\%$
- Japan ( $T2$ ):  $P2 = 3\%$ ,  $T2 = 50\%$
- Premium per tranche =  $8\%$

- LP Capital = \$1,000
- CT Premium Paid = \$200
- L = 5x

### Expected ROI (LPs):

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## Smart Contract Overview (Solidity MVP)

**deposit(uint256 amount):** LPs deposit stablecoins into the perpetual pool.

**purchaseCapacity(uint256 premiumAmount, uint256 duration):** DAO-triggered capacity inflows that stream premiums.

**updateTranche(bytes32 eventID, uint256 allocation, ...):** DAO defines and adjusts tranche allocations dynamically.

**requestOracleResolution(bytes32 eventID):** Trigger UMA Oracle for parametric event validation.

**settleOracleResolution(bytes32 eventID, uint256 timestamp):** Apply payouts and adjust pool capital proportionally.

**getNAV():** Dynamically computes NAV based on accrued premiums.

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## MVP GTM Strategy

- **Target Audience:** Crypto quant traders, risk-savvy LPs, structured product enthusiasts.
- **Narrative:** "Underwrite uncorrelated catastrophic risks and earn premium yields in a continuously adapting DeFi-native risk pool."
- **Pilot Zones to Launch:**
  - Mexico Pacific Coast (2-3% annual probability)
  - Japan Kanto Region (3-4% annual probability)
  - Chile Central (3% annual probability)
  - Philippines Luzon (3% annual probability)
- **Initial Pool Size Target:** \$50k - \$100k
- **Epoch Duration (for adjustments):** 2-4 weeks
- **CT Premium per Epoch:** 1%-2%
- **LP Expected APY (no events):** 25%-30%

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## Operational Flow

1. **DAO Members propose tranches** with defined event exposures and capacity allocations.
  2. **Premiums are streamed** into the pool based on active capacity.
  3. **LPs passively provide capital**, limited by DAO-defined leverage ratios.
  4. **NAV accrues** as premiums stream in over coverage periods.
  5. **Oracle validates events** upon occurrence, triggering proportional payouts from the pool.
  6. Post-event, **tranche allocations are updated** by DAO governance to recalibrate risk.
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## PoC

1. Deploy Solidity MVP
  2. Launch Alpha with curated Syndicator DAO members.
  3. Measure LP participation and NAV performance.
  4. Prepare tranche auction model for expanded capacity demand in V2.
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## Conclusion

This MVP establishes a perpetual, DAO-driven risk underwriting pool, enabling flexible and transparent exposure to catastrophic events. By combining dynamic tranche governance with LP passive capital flows, the system offers a novel framework for structured risk products in DeFi, targeting sophisticated risk enthusiasts and structured yield seekers.