Levitas Finance Whitepaper Version 1.0 - July 2025

Tagline: Volatility, On-Chain. Hold Fear Like a Token.

1. Executive Summary

Levitas Finance introduces the first ERC-20 tokens that track crypto implied-volatility indexes. Unlike perp contracts, BVIX and EVIX are fully-collateralized, composable assets that can be bought, LP'd, collateralized or integrated into any DeFi primitive. The protocol is governed by LEVI, enabling token holders to steer fees, oracles, incentives and treasury deployment.

2. Mission

Bring native volatility exposure to every crypto wallet—trust-minimised, permissionless and instant.

3. The Volatility Gap in DeFi

Current offering	Drawback
Perp futures (Bitfinex, gTrade)	Liquidation risk, no LP utility
Volmex CVI / DVOL indexes	Off-chain, not tokenised
Structured notes	Closed, custodial

Problem: Traders, LPs and protocols have no on-chain instrument to hedge or speculate on volatility. Vol remains the most under-used asset class in DeFi.

4. Solution Overview

- Vol Tokens BVIX (BTC vol) & EVIX (ETH vol) track Volmex BVIV / EVIV 1-month implied-vol indexes.
- Over-collateralised Vaults minting requires ≥ 120 % collateral in USDC or wETH.
- **Redemption at NAV** users can always burn 1 vol token for its oracle price value, less a 0.2 % fee.
- Uniswap v3 Pools tight-range liquidity + arb keeps the secondary price glued to NAV.

Result: passive peg stability without active market making.

5. Design & Mechanics

5.1 Oracle

• Off-chain bot signs Volmex BVIV / EVIV price every hour (DERIBIT DVOL fallback).

- Prices pushed to on-chain Oracle contract (EIP-3668 & CCIP-Read pattern).
- Median-of-3 feed (primary, backup, and keeper TWAP) mitigates spoofing.

5.2 Mint / Redeem

- 1. User deposits collateral → Vault.
- 2. Vault mints vol tokens at **NAV = Index × 1 USD**.
- 3. Upon redemption, vault returns collateral minus redemption fee.
- 4. Collateral ratio dynamically floats 120 200 % based on 30-day realised vol.

5.3 Liquidity & Peg

- Core pools: BVIX/USDC, EVIX/USDC (Uniswap v3 Base & Arbitrum).
- Protocol deploys concentrated liquidity at ± 1 % around NAV.
- Arbitrage loop: if pool price > NAV, traders mint & sell; if price < NAV, buy & redeem.
- Protocol rewards LPs in LEVI until organic depth ≥ \\$10 m.

5.4 Risk Parameters

Parameter	Default	Range (DAO-controlled)
Collateral ratio	150 %	120 – 300 %
Mint / redeem fee	0.2 %	0–1 %
Oracle heartbeat	1 h	15 m-4 h
Emergency shutdown gap	5 % de-peg	2-10%

6. Token Suite

6.1 BVIX & EVIX

- ERC-20, 18 decimals.
- Dynamic supply, always fully-backed.
- Usable as collateral (integration live with TBD).

6.2 LEVI (Governance)

- Fixed 100 m supply (no inflation).
- Distribution (genesis allocation ↓):

Bucket	Allocation	Vesting / Unlock	Purpose	Example Spend
Community & LP Rewards	45 %	Emitted over 4 years (weekly decay, gauge-directed)	Bootstrap liquidity, reward users	EVIX/USDC incentives, governance bribes, social airdrops

Bucket	Allocation	Vesting / Unlock	Purpose	Example Spend
Protocol Treasury	20 %	8 % liquid at TGE, remainder linear over 24 months	Strategic partnerships, grants, buybacks	Oracle grants, bug-bounty top-ups, DAO ops
Core Contributors	15%	12-month cliff → 24-month linear	Compensate founding team & future hires	Dev salaries, hiring, legal & infra
Seed Investors	10 %	6-month cliff → 18-month linear	Provide early capital & network	Liquidity runway, market-making
Ecosystem Reserves	10%	DAO-controlled, unlocked after on-chain governance	Future expansions & emergency back-stop	Cross-chain bridges, M&A, token swaps

[•] Utility: vote, fee share, gauge-style emissions.

7. Economics

7.1 Backing & Solvency

- Vault assets marked to oracle price every block.
- If collateral ratio < 120 %, minting halts and fees auto-route to recap fund.
- Insurance pool seeded with 2% of LEVI supply to cover oracle exploits.

7.2 Fees

Action	Fee	Recipient	Purpose
Mint	0.2 %	Treasury	Oracle + insurance
Redeem	0.2 %	Treasury	Keeps peg tight
Oracle update	0.01 % of TVL / update	Keepers	Data integrity
Swap	0.05 % (pool)	LPs	Passive income

10% of all protocol fees auto-buyback LEVI and return to stakers.

7.3 Incentives

- Dual rewards (LEVI + trading fees) for LPs during bootstrap (first 6 months).
- Vote-escrowed LEVI (veLEVI) directs APY to preferred pools ("Curve model").

8. Use Cases

- Hedge: Portfolio managers park 5 % in EVIX to offset ETH gamma exposure.
- Speculate: Traders long BVIX pre-halving or CPI print.
- Yield: Delta-neutral funds farm BVIX/USDC with hedged spot.
- Structured Products: Build callable notes, rebase vaults, vol-weighted indices.

9. Architecture

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Oracle Bot → Oracle Contract → Mint/Redeem Router

Collateral Vault

Uniswap v3 Pools (BVIX/USDC, EVIX/USDC)

Users + Protocols
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Contracts are upgradable via 2-of-3 multisig until DAO takeover (Q1 2026).

10. Governance

- Off-chain Snapshot (token-weighted) \rightarrow on-chain execution via Safe module.
- Q1 2026: migrate to full on-chain Governor Bravo.
- Proposals cost 0.1 % of supply to avoid spam.

11. Roadmap

Quarter	Milestone
Q3 2025	Testnet live (Base & Arbitrum) – BVIX/EVIX, oracle, vault, Uniswap pools
Q4 2025	Mainnet Beta, LEVI emissions, audits (Trail of Bits + Spearbit)
Q1 2026	DAO launch, CEX listings, ETH Mainnet
Q2 2026	CBOE-VIX token, Momentum ("MOMO") tokens, cross-chain expansion

12. Risks & Mitigations

Risk	Mitigation
Oracle manipulation	Signed data + 3-of-3 median, 15 % fail-safe buffer

Risk	Mitigation
Liquidity shortage	Scheduled LEVI drip until depth target
Vol collapse (vol < 5 %)	Dynamic collateral ratio + shutdown if < 1 %
Smart-contract exploit	3 audits, 500k USDC bug bounty with Immunefi
Regulatory	Tokens map to statistical indexes, not securities; legal opinion from DLx Law

Appendix A - Collateral Ratio Mathematics

Target Collateral Ratio (CR)

CR = (Total Collateral Value) ÷ (Outstanding Vol Tokens × Oracle Price).

Let:

- **C** = total collateral in USD.
- Poracle = latest index price (e.g., BVIV).
- **S** = token supply.

Then $CR = C / (S \times Poracle)$.

The protocol enforces $CR \ge CR_min = 120\%$ on mint. If CR dips below this threshold (e.g., from a sudden vol spike), minting pauses and all fees route to the recap fund until $CR \ge 120\%$ again.

13. Disclaimer

This document is for informational purposes only and does not constitute financial advice or an offer of securities. Volatility tokens are experimental and may lose value. Consult your legal and tax advisors before participating.

"Buy fear. Hold calm."