

ON-CHAIN ANALYTICS & TOKEN FUNDAMENTAL ANALYSIS FRAMEWORK



"Flows > Stocks applies to crypto too. We track protocol revenue flows, user acquisition dynamics, and valuation fundamentals systematically."

Lighthouse Macro Digital Asset Research

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TABLE OF CONTENTS

1. Framework Overview
2. LHM Sector Taxonomy
3. The Three Pillars of Token Analysis
4. Metric Categories & Definitions
5. LHM Proprietary Ratios
6. The 19-Point Scoring System
7. Microstructure Analysis
8. The Perfect Setup
9. Verdict Logic & Screening
10. Position Sizing & Risk Management
11. Trading Rules Framework
12. Red Flags & Warning Signs
13. Data Sources & Vendor Infrastructure
14. Python Implementation

1. FRAMEWORK OVERVIEW

Philosophy

- **Revenue quality matters:** Fees from organic usage > fees from incentivized activity
- **Dilution is the enemy:** Token incentives are stock-based compensation, treat them as expenses
- **Users are customers:** DAU/MAU trends reveal product-market fit
- **Cash flow beats narrative:** Earnings > hype

2. LHM SECTOR TAXONOMY

We strip away marketing terms ('GameFi,' 'SocialFi') and categorize by economic function.

LHM Sector	Economic Function	Key Metric	Examples
Layer 1 (Settlement)	The economy itself	Blockspace Demand	ETH, SOL, AVAX
Layer 2 (Scaling)	Execution bandwidth	L2 Fee - L1 Rent	ARB, OP, BASE
DeFi - DEX	Trading services	Volume / TVL	UNI, CRV, RAY
DeFi - Lending	Banking services	Revenue / TVL	AAVE, COMP, MKR
DeFi - Derivatives	Leverage and hedging	Notional / OI	GMX, DYDX, HLP
Liquid Staking	Staking derivatives	Take Rate	LDO, RPL, JTO
Infrastructure	Oracles, indexers	Integrations	LINK, GRT, PYTH
Stablecoins	USD-pegged issuers	Outstanding Supply	USDC, USDT, SKY
RWA	Off-chain collateral	AUM / Yield	ONDO, CFG

Key Insight: L1 chains are infrastructure, not businesses. Their 'token incentives' are security budget (paying validators), not marketing spend. Judge L1s by fees and usage, not revenue.

6. THE 24-POINT SCORING SYSTEM

Every crypto position receives a composite score from 0-24 points across three equally-weighted dimensions. The 24-point system mirrors the 12 Macro Pillars (Diagnostic Dozen x 2 = 24).

Dimension	Points	Components
Technical	0-8	Price vs 200d, Price vs 50d, 50d vs 200d, Relative Strength
Fundamental	0-8	Subsidy Score, Float/Unlock, Revenue Trend, Valuation
Microstructure	0-8	Funding Rate, Liquidations, Exchange Flows, OI/Leverage

Design Rationale: Technical tells you *when* to enter. Fundamental tells you *what* to own. Microstructure tells you *who else* is positioned. All three matter equally.

Conviction Tier Assignment

Total Score	Conviction Tier	Position Weight
20-24	Tier 1 (High Conviction)	15-20%
15-19	Tier 2 (Standard)	8-12%
10-14	Tier 3 (Reduced)	4-7%
<10	Tier 4 (Avoid)	0%

Section Minimums (Disqualifiers)

Section	Minimum	Rationale
Technical	4/8	Below this, trend is broken
Fundamental	3/8	Below this, thesis is weak
Microstructure	2/8	Below this, positioning dangerous

5. LHM PROPRIETARY RATIOS

Subsidy Score

Is the protocol organic or paying users to stay?

$$\text{Subsidy Score} = \text{Token Incentives} / \text{Revenue}$$

Range	Signal	Action
< 0.5	ORGANIC	Tier 1 candidate
0.5 - 2.0	SUBSIDIZED	Monitor trend
> 2.0	UNSUSTAINABLE	Avoid

Note: L1 chains are exempt. Their 'incentives' are security budget.

Float Ratio

Is there a VC unlock overhang?

$$\text{Float Ratio} = \text{Circulating Supply} / \text{Total Supply}$$

Range	Signal	Action
> 70%	Healthy	Most supply trading
50-70%	Acceptable	Monitor unlocks
20-50%	Caution	Significant unlocks coming
< 20%	PREDATORY	Massive dilution ahead

8. THE PERFECT SETUP

A 'Perfect Setup' represents maximum conviction and justifies maximum position sizing. All six elements must align:

- **1. PRIMARY TREND ALIGNED:** Price > 50d MA > 200d MA, both MAs rising
- **2. RELATIVE STRENGTH CONFIRMED:** Outperforming BTC on 30d and 90d timeframes
- **3. CONSOLIDATION PRESENT:** 10-30 days of sideways price action, volatility compressing
- **4. MOMENTUM COOLED BUT NOT BROKEN:** Z-RoC pulled back but never hit -1.0
- **5. BREAKOUT TRIGGER:** Price breaks consolidation range, volume spike >1.5x average
- **6. MACRO REGIME SUPPORTIVE:** MRI < +1.5, LCI > -1.0, BTC not in death cross

This is the only setup that justifies maximum position sizing.

9. VERDICT LOGIC & SCREENING

LHM Verdict Categories

Verdict	Meaning	Action
TIER 1 (Accumulate)	Strong fundamentals, organic traction	Build position
TIER 2 (Hold)	Decent fundamentals, reasonable value	Maintain exposure
NEUTRAL (Watch)	Mixed signals	Watchlist only
CAUTION (Low Float)	Good metrics but unlock overhang	Avoid until unlocks
AVOID (Vaporware)	High FDV, minimal revenue	Do not touch
AVOID (Unsustainable)	Subsidy Score > 2.0	Ponzi dynamics
AVOID (Dead)	No developers, no users	Abandoned

10. POSITION SIZING & RISK MANAGEMENT

Macro Regime Multipliers

Position sizing is adjusted based on the broader macro environment. Even great setups deserve smaller positions in hostile regimes.

Regime	Multiplier	Conditions
SUPPORTIVE	1.0x	MRI < +0.5, LCI > 0, BTC golden cross
NEUTRAL	0.6x	MRI +0.5 to +1.0, mixed signals
RESTRICTIVE	0.3x	MRI > +1.0, LCI < -0.5, BTC death cross

Position Sizing Formula

Final Position Size = Base Weight x Conviction Multiplier x Regime Multiplier x Liquidity Adjustment

11. TRADING RULES FRAMEWORK

Unconditional Rules (Never Override)

RULE #3: Never buy when underperforming BTC on 30d AND 90d. NO EXCEPTIONS.

RULE #5: Never chase when price > 15% above 50d MA. NO EXCEPTIONS.

Conditional Rules (Context-Dependent)

RULE #1 (Below 200d MA): Default no new longs. Override allowed in mature downtrend (>60 days) with 50% sizing and tight stops.

RULE #2 (Death Cross): Default no new longs. Override allowed >60 days into death cross with 50% sizing and positive relative strength.

RULE #4 (Z-RoC < -1.0): Reduce 50% minimum. Full exit if combined with other violations.

11. TECHNICAL OVERLAY BOOK

The Core Book is macro-driven. When MRI is elevated and the regime multiplier compresses position sizes, the Technical Overlay Book provides a structured way to participate in pure technical setups. This is not an override of macro. It's a separate, smaller allocation.

Portfolio Structure

Book	Allocation	Approach	Direction
Core Book	70-100%	Macro + Fundamental + Technical	Long only
Technical Overlay	0-30%	Pure technical (trend + momentum)	Long or Short

Activation Criteria

- Core Book is in defensive mode ($MRI > +1.0$)
- At least 3 clear technical setups exist (long OR short)
- BTC or SPX showing directional trend (not chop)
- You explicitly decide to activate (not automatic)

Technical Book Scoring (9-Point System)

Component	Points	What It Measures
Trend Structure	0-3	Price vs 50d vs 200d alignment
Momentum (Z-RoC)	0-3	Direction and magnitude
Relative Strength	0-3	vs BTC (63d and 252d)

Minimum score to enter: 7/9

Position Limits & Stops

Parameter	Longs	Shorts
Max per position	5%	3%
Hard stop	10%	8%
Technical stop	Close below 50d MA	Close above 50d MA
Momentum stop	Z-RoC crosses below 0	Z-RoC crosses above 0
Time stop	20 trading days	20 trading days

Short-Specific Requirements

- Price < 50d < 200d (both MAs falling)
- Z-RoC < -1.0 (strongly negative, not just below zero)
- Relative strength RED on both 63d and 252d
- Clear breakdown, not just weakness
- NOT extended (price not >10% below 50d MA)

The Technical Book is NOT: A way to override macro when impatient, a license to trade every setup, or a replacement for the Core Book. It's optional.

APPENDIX: Z-RoC Indicator Settings

Recommended Parameters

Parameter	Value	Rationale
ROC Length	21 days	1 month of trading days
Z Lookback	252 days	1 year for normalization
Smoothing	5-day EMA	1 week, filters noise
Robust Z	Yes (median/MAD)	Handles fat tails
Winsorize	± 3.0	Caps extreme readings

Interpretation

- **Z-RoC > +2.0:** Strong momentum, overbought in context
- **Z-RoC > 0:** Positive momentum
- **Z-RoC < 0:** Negative momentum
- **Z-RoC < -1.0:** Momentum breakdown (exit signal for longs)
- **Z-RoC < -2.0:** Oversold, potential capitulation

Benchmark

For crypto relative strength: **CRYPTO30 Index** (Pepperstone) or CRYPTOCAP:TOTAL. BTC-weighted but provides defensible benchmark for crypto-native conversations.

14. DATA SOURCES & VENDOR INFRASTRUCTURE

Vendor	Strength	Use Case	Priority
Token Terminal	Standardized financials	Fundamental analysis	P0 - Essential
Glassnode	Deep on-chain	Holder distribution, flows	P0 - Essential
Coinglass	Derivatives aggregation	Microstructure scoring	P0 - Essential
CryptoQuant	Exchange flows	Verification, alerts	P1 - Important
DefiLlama	Free TVL data	TVL cross-reference	P1 - Important
Messari	Governance	Token unlocks	P2 - Nice to Have

MACRO, ILLUMINATED.



That's our view from the Watch. Until next time, we'll be sure to keep the light on....

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