

TRACE MARKETS (TM) — Master Tracker

Living execution tracker for TRACE MARKETS platform. Focus: what exists, what is locked, what is next.

PROJECT VISION

Calm, structured manual for understanding markets. Explainable, forensic, long-term oriented decision system.

Not a trading bot. Not a charting toy.

PHASE 0 — FOUNDATIONS (LOCKED)

Status:  COMPLETE

- Project structure
 - Config system
 - Logging system
 - Raw → Processed → Intelligence pipeline
 - Weekly snapshot architecture
 - Deterministic snapshots
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PHASE 1 — DATA INGESTION (LOCKED)

Status:  COMPLETE

- Weekly price ingestion
 - Raw fundamentals ingestion
 - Raw write-once storage
 - Skip existing raw files
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PHASE 2 — PROCESSING LAYER (LOCKED)

Status:  COMPLETE

- build_processed_fundamentals
- financials table

- balance_sheet table
 - cashflow table
 - quality_metrics
 - valuation_metrics
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PHASE 2.5 — DATA QUALITY SYSTEM (LOCKED)

Status:  COMPLETE

- Coverage score
- Freshness score
- Confidence band
- Raw profiler
- Raw schema inspector
- Raw field inventory

Outputs embedded in processed:

`processed["quality"]` `processed["raw_profile"]` `processed["raw_schema"]` `processed["raw_field_inventory"]`

PHASE 3 — FORENSIC GOVERNANCE ENGINES

Status:  COMPLETE

Plugin-based registry architecture.

Registry

`src/trace_invest/validation/registry.py`

Engines:

1. Earnings Quality Engine
2. CLEAN / MINOR_MISMATCH / REPEATED_MISMATCH
3. Unusual Items Persistence Engine
4. NONE / ONE_TIME / PERSISTENT
5. Tax Rate Volatility Engine

- 6. STABLE / MODERATE / VOLATILE
 - 7. Capital Allocation Discipline Engine
 - 8. DISCIPLINED / QUESTIONABLE / POOR
 - 9. Balance Sheet Stress Engine
 - 10. STABLE / MANAGED / STRESSED
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PHASE 3.6 — GOVERNANCE RISK SCORE

Status:  COMPLETE

Composite scoring:

- governance_score (0–100)
- governance_band (LOW / MEDIUM / HIGH)
- top_risks[]

Based on weighted risk points from engines.

PHASE 3.7 — VALIDATION ORCHESTRATION

Status:  COMPLETE

- run_validation(processed)
 - Fraud flags
 - Governance engines
 - Governance score
 - total_flags
 - overall_risk
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PHASE 4 — DECISION INTELLIGENCE

Status:  COMPLETE (V1)

- conviction_score()
- generate_signal()
- Decision zones:

- EXIT
 - REDUCE
 - HOLD
 - ACCUMULATE
 - Journal entry creation
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PHASE 5 — BATCH MARKET PIPELINE

Status:  COMPLETE

- Universe-driven execution
- Per-stock try/except isolation
- Gentle rate limit
- Weekly snapshot writer
- Market summary generator

Outputs:

- snapshot.json
 - market_summary.json
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CURRENT UNIVERSE MODE

Target: NIFTY 500

Universe file:

data/universe/nifty500.json

MARKET SUMMARY (CURRENT)

Generated fields:

- total_stocks
 - by_decision_zone
 - by_overall_risk
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ARCHITECTURAL PRINCIPLES (LOCKED)

- Plugin engines
 - Registry based wiring
 - Defensive parsing
 - No exact string dependencies
 - Explainable outputs only
 - Immutable snapshots
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NEXT PHASE — PHASE 4B

Stability & Medians Layer

Planned engines:

- 5Y Median ROE
- 5Y Median Operating Margin
- 5Y Revenue CAGR
- 5Y FCF CAGR
- Variance bands

Purpose: Reduce noise and improve conviction accuracy.

FUTURE PHASES (NOT STARTED)

Phase 5 — Market Leaders Tables Phase 6 — UI Information Architecture Phase 7 — Watchlist & Journal UI
Phase 8 — Backtesting / Replay

NON-GOALS

- Intraday trading
 - Real-time streaming
 - Chart heavy UI
 - Black-box ML
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ONE-LINE STATUS

TRACE MARKETS is now a working forensic market intelligence engine capable of scanning hundreds of stocks weekly with explainable governance and decision outputs.

LATEST COMMIT — PHASE 4C / 4D

Status:  COMMITTED

Included:

- Stability Engines
 - median_roe
 - median_operating_margin
 - revenue_cagr
 - fcf_cagr
- consistency
- Stability Composite Score
 - stability_score
 - stability_band
- Valuation Sanity Engine
 - valuation_sanity
- Master Score Engine
 - master_score
 - master_band
- Pipeline Hardening
 - Safe JSON load for fundamentals.json
 - Per-stock isolation
 - Market summary generator

Commit Meaning: TRACE MARKETS now produces Trust (Governance), Strength (Stability), Price Sanity (Valuation), and a Master Composite Score for each stock.

(End of tracker)