



The Expert Signal Radar

Testing the Anticipatory Governance
Methodology (Q1 2026 MVP)

*Transforming scattered data into systemic,
actionable intelligence.*

The Mandate: Why Standard Analytics Fail in Interconnected Systems

The Old Paradigm: Reactive Diagnostics

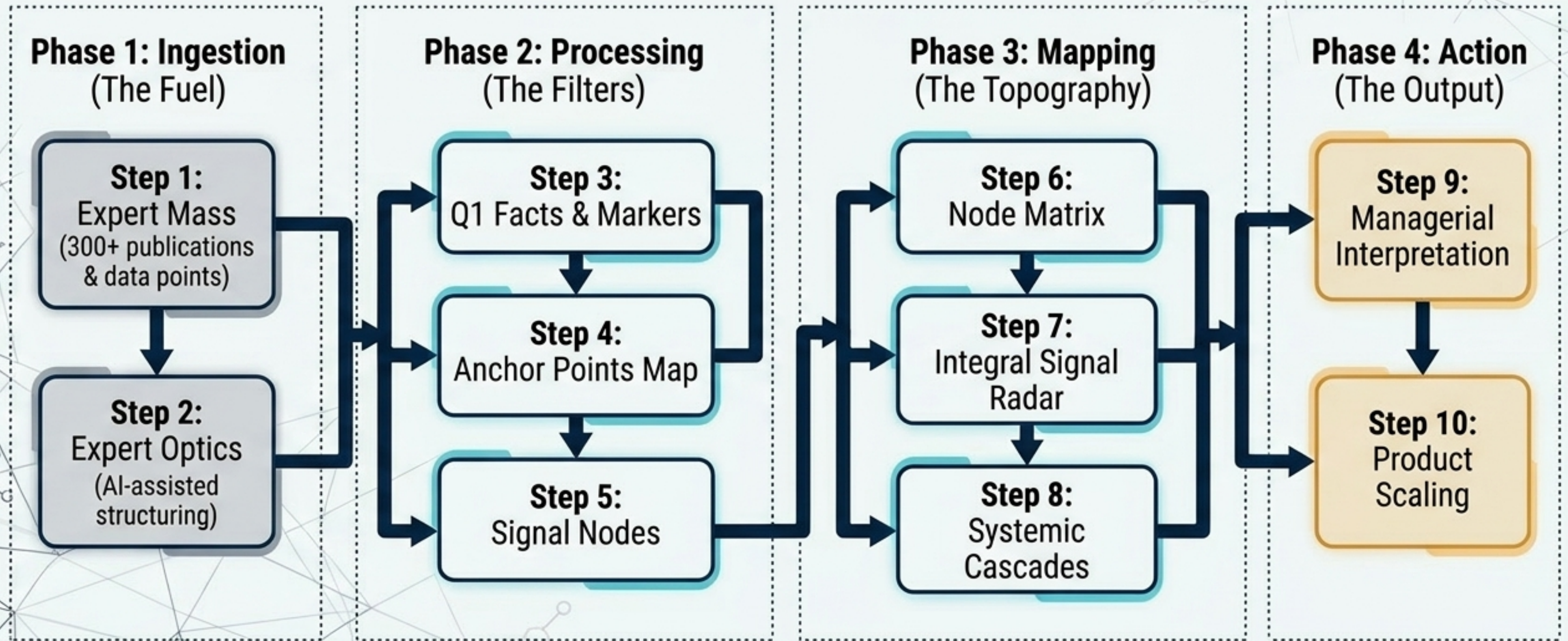
- Isolates risks by sector (e.g., Energy, Finance, Social).
- Responds to crises after they materialize.
- Relies on lagging statistical indicators.

The New Paradigm: Anticipatory Governance

- **Maps** vulnerabilities between sectors.
- **Stress-tests** managerial decisions before risks escalate.
- **Detects** early weak signals through expert professional optics.

The Q1 2026 MVP objective: Prove that a hybrid intelligence engine (AI + Expert Diagnostics) can reliably detect and map systemic tensions in the Kazakhstani economy before they cascade.

The Methodological Engine: From Raw Data to Systemic Intelligence



Structuring the Noise: The Hybrid AI-Expert Architecture



Top of Funnel (Data Mass): AI ingests and structures over 300 Q1 analytical publications, identifying recurring semantic overlaps and preparing signal candidates.

Middle of Funnel (Expert Validation): Human experts strip away the noise and validate candidates. The methodology explicitly refuses to average opinions, preserving distinct professional optics.

Bottom of Funnel (The Analytical Frame):
Every validated narrative must conform to a strict structural logic:

1. Observe
the Facts

2. Identify
the Causes

3. Define the
Constraints

4. Project the
Risks &
Consequences

Grounding in Reality: Q1 Anchor Points

Card 1 (Macro/Export): CPC Pipeline (KTK) Disruption



Jan 1-12

Data: January 1-12 extraction dropped by 35%. Tengiz down 50%, Kashagan down 60%. CPC Blend dispatch fell to 800-900k bpd.

Card 2 (Financial): Consumer Credit Expansion



2022

Present

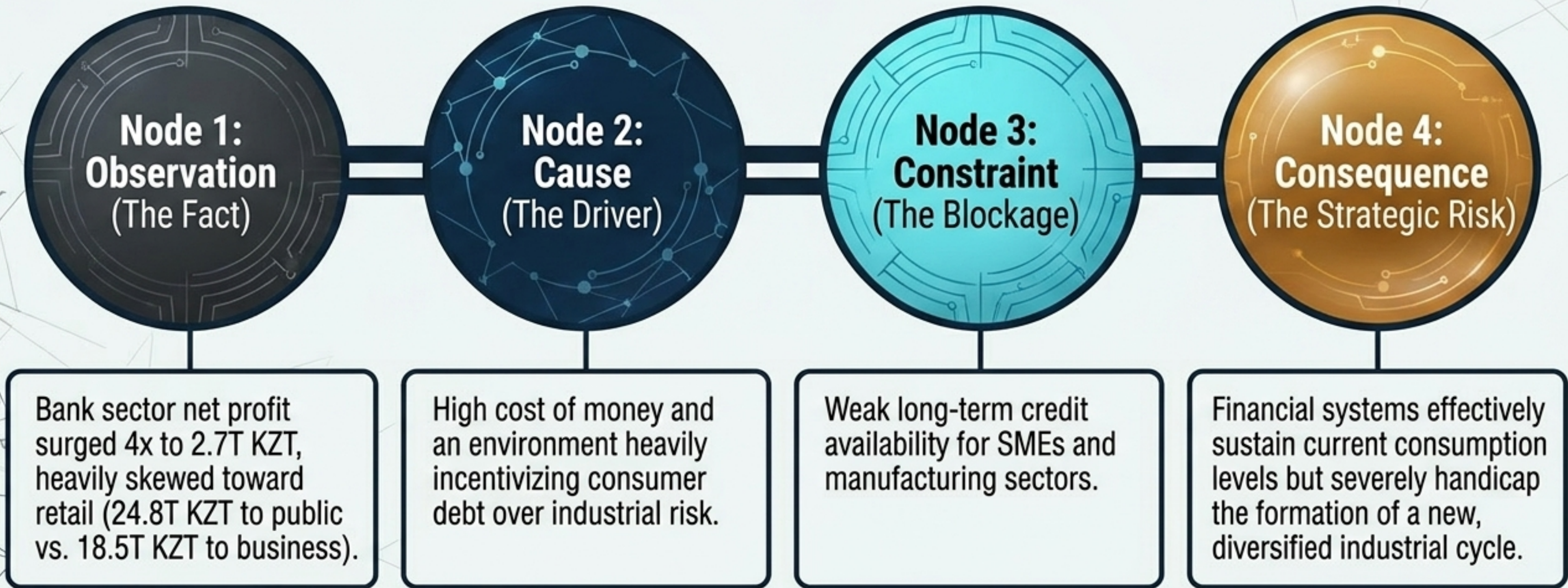
Data: Consumer credit reached 16.7 Trillion KZT (a 2.7x increase since 2022). Retail loans now account for 67.3% of all individual credit.

Card 3 (Social): The Income Reality



Data: 90% of the population earns under 189,000 KZT per family member. Official poverty is 5.3%, but alternative expert estimates range from 15% to 30%.

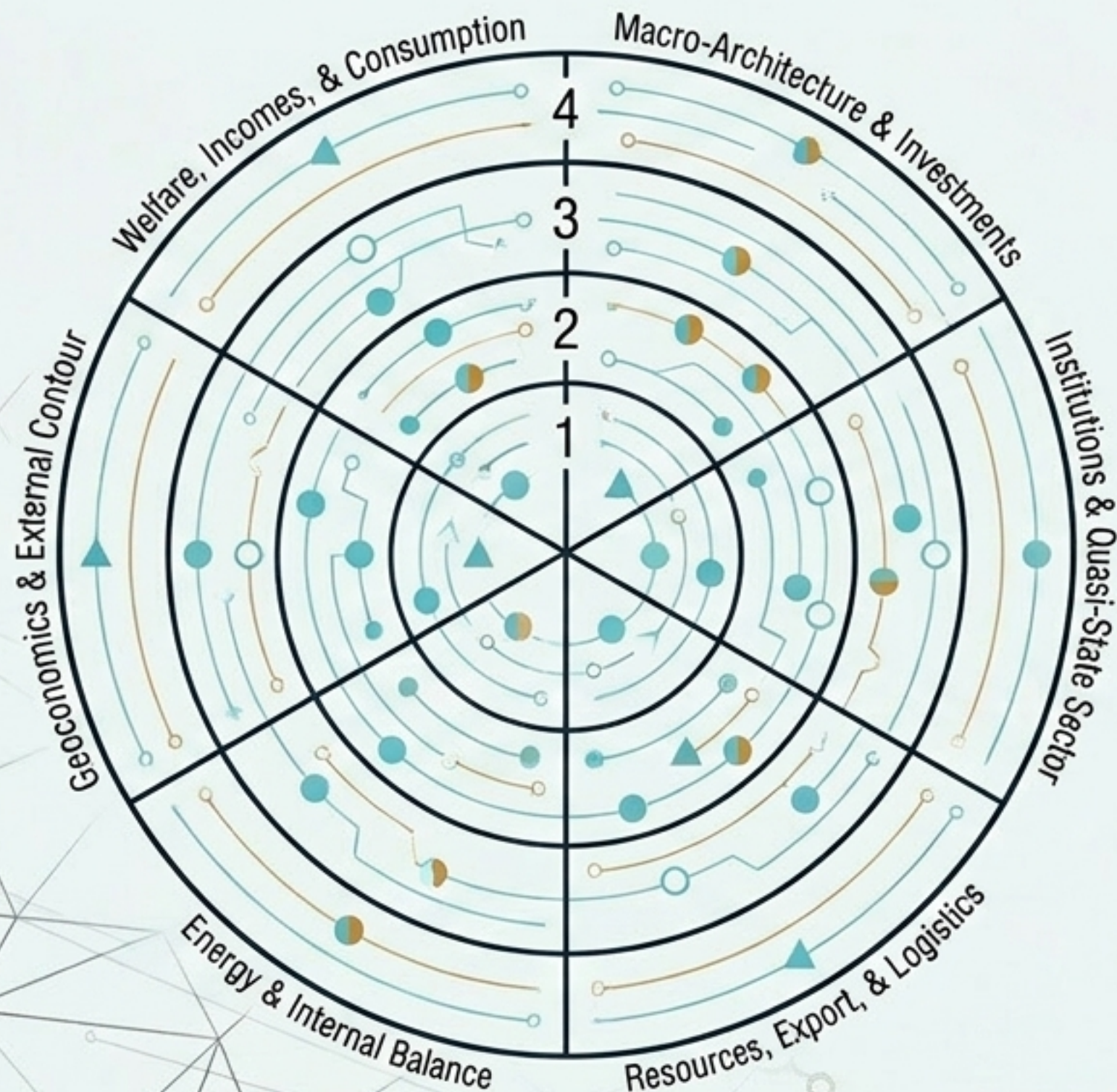
The Signal Node Formula: From Observation to Vulnerability



Methodological Rigor: The Evidence Typology

Grade Symbol	Meaning	Q1 Example
●	Solid Factual/Event Foundation: Signal is built on hard statistics or major Q1 events.	End of Cheap Energy: Wholesale fuel up 17% , rail logistics up 72% .
◐	Fact + Expert Interpretation: Factual base synthesized with expert consensus.	Middle-Class Vulnerability: Income data combined with debt load analysis.
○	Observation Zone: Emerging issues requiring ongoing tracking.	Cooling of Consumption: Early signs of retail pressure.
▲	Potential Amplification Zone: Long-term strategic risks dependent on shifting conditions.	Sanctions Redesigning Projects: Halt of the \$6.4B KMG-Lukoil project.

The Macro Topography: Q1 2026 Signal Radar



The 4 Rings (Depth of Systemic Presence)

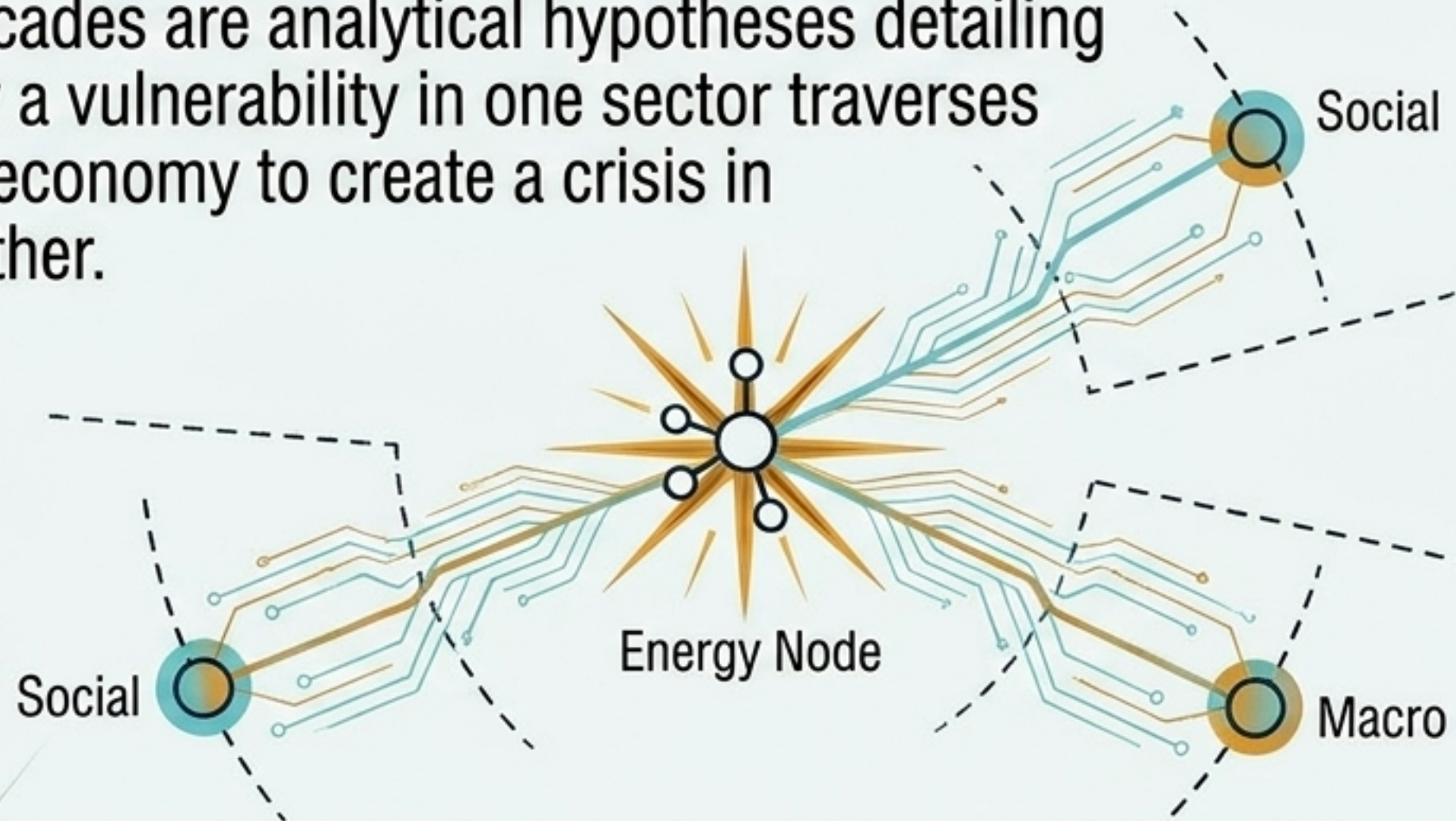
1. **Center:** Expressed Systemic Problems
2. **Inner:** Strongly Manifested Q1 Signals
3. **Middle:** Constant Observation Zones
4. **Outer:** Potential Amplification Zones

The 6 Sectors (The Slices)

- Welfare, Incomes, & Consumption
- Macro-Architecture & Investments
- Institutions & Quasi-State Sector
- Resources, Export, & Logistics
- Energy & Internal Balance
- Geoeconomics & External Contour

Cascades: Tracking the Transfer of Systemic Tension

Concept: A signal rarely remains isolated. Cascades are analytical hypotheses detailing how a vulnerability in one sector traverses the economy to create a crisis in another.



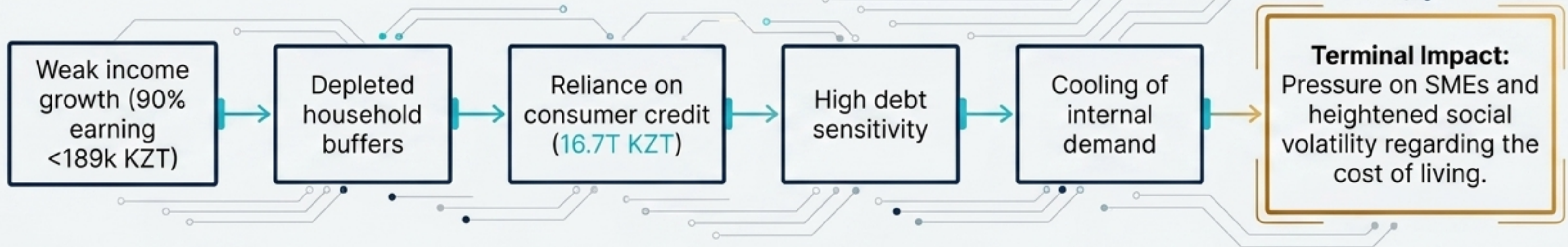
The Methodology of a Cascade

- **Origin (Q1 Anchor):** A localized factual disruption.
- **Transmission Mechanism:** The institutional or economic link carrying the tension.
- **Terminal Impact:** The secondary sector where the actual systemic failure occurs.

The Q1 MVP identified **5 primary cascades** and 2 overarching cross-sector frameworks (Polyeconomic and Geoeconomic).

Q1 Cascades: How Local Shocks Become Systemic Risks

Flowchart 1: The Social-Consumer Cascade

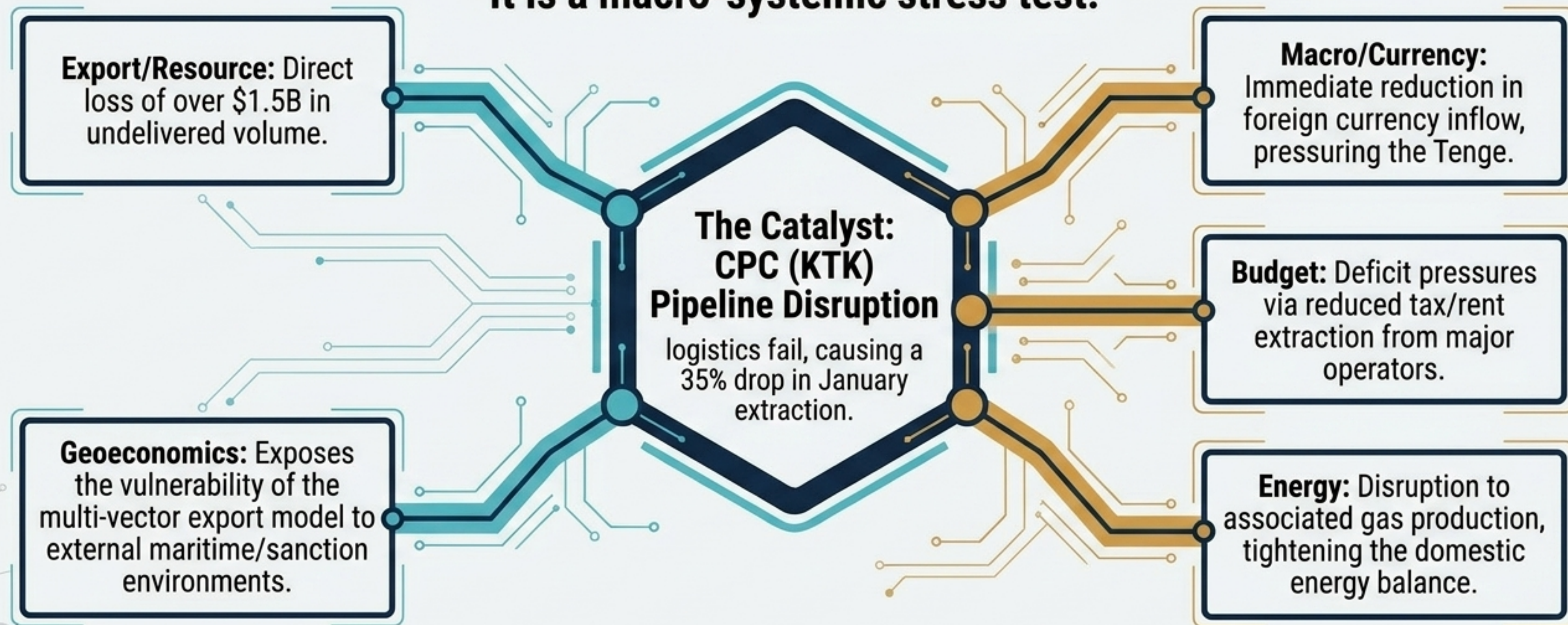


Flowchart 2: The Energy-Inflation Cascade



Synthesis: Risk Lives at the Intersections

The Takeaway: A logistics failure is never just a logistics failure.
It is a macro-systemic stress test.



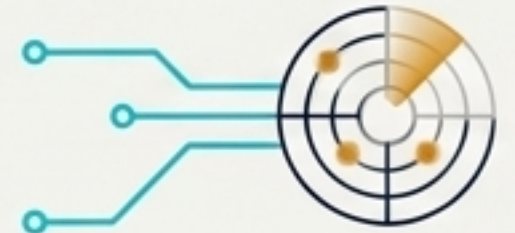
Managerial Interpretation: Upgrading Policy Decisions

The Isolated View

The Signal Radar View

Incomes are growing nominally.

Growth must be assessed against the **16.7T KZT debt burden**. Credit is artificially supporting consumption; structural demand is highly fragile.



Banks are highly profitable and stable.

Profitability driven by retail loans creates a **void in SME** long-term lending, **stalling** the industrial cycle.

IPOs bring quasi-state assets to market.

Packaging assets without institutional sanitation merely transfers corporate debt and infrastructure risk to **pension funds (UAPF)** and the **public contour**.

We maintain a neutral geopolitical stance.

Sanctions now dictate project design. Foreign policy must translate into **rigid project compatibility checks** (e.g., KMG-Lukoil halt).

Beyond the MVP: Scaling the Anticipatory Engine

