Markets as Multi-Agent Constraint Stabilizers —

An Informational Ontology Account

Abstract

This paper offers a structural account of markets as large-scale coordination regimes operating among interacting purposive systems under constraint. Working strictly downstream of the Informational Ontology and its completed derivative corpus, markets are analyzed not as moral institutions, efficiency mechanisms, or preference aggregators, but as emergent stabilizers that reduce trajectory interference at scale. The central claim is that markets function by compressing distributed and incompatible value structures into shared salience signals—prices—that enable coordination without shared meaning, intention, trust, or ethical alignment. Price is treated as a salience marker rather than a measure of value, truth, or worth. Market failures are characterized structurally as regime failures involving salience distortion, saturation, and informational noise, rather than as individual error or moral deficiency. The account explains why markets emerge under coordination pressure, why they feel impersonal and systemic, and why ethical or intentional coordination alone cannot scale to large populations, without endorsing or condemning markets or proposing institutional reforms.

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1. Scope, Authority, and Structural Posture

This paper is an application of the Informational Ontology (IO) framework and its completed derivative corpus. All ontological definitions, regime distinctions, exclusions, and structural commitments established therein are treated as fixed and authoritative. No

regime is revised, extended, repaired, or supplemented. No new explanatory primitives are introduced. The present task is strictly demonstrative: to show how existing IO resources account for a familiar and contested domain—markets—without importing external theoretical commitments.

The analysis is structural rather than evaluative. It does not justify markets, criticize markets, or compare markets to alternative coordination systems. It does not assess outcomes, endorse institutional arrangements, or recommend policy interventions. Where familiar economic terms such as market or price appear, they are employed as descriptive labels for structural phenomena rather than as imports from economic theory.

A strict non-normativity firewall is enforced throughout. Markets are not treated as moral arbiters, expressions of collective will, mechanisms of justice, or sources of legitimacy. Likewise, market failures are not treated as wrongdoing, irrationality, or ethical collapse.

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2. The Coordination Problem at Scale

Purposive systems generate trajectories that interfere combinatorially as system count increases. Local coordination mechanisms relying on shared meaning, trust, or ethical alignment fail to scale. Coordination pressure becomes structurally unavoidable, not due to moral failure but due to interaction density. At sufficient scale, some impersonal coordination regime must emerge to stabilize trajectories.

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3. Markets as Constraint Stabilization Regimes

Markets function as coordination regimes that stabilize interaction by reshaping constraints rather than aligning values. They reduce trajectory interference by constraining availability and expectation. Coordination occurs without shared goals, trust, or ethical agreement. Markets operate upstream of meaning and ethics, enabling coexistence among divergent purposive systems.

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4. Price as Salience Compression

Price functions as a salience marker, not a value measure. It compresses distributed, incompatible value structures into simple signals that guide coordination without interpretation. Prices track coordination pressure produced by interacting value-guided trajectories; they do not encode, aggregate, or represent those values themselves. Their authority derives from constraint, not truth or moral legitimacy.

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5. Markets as Ethical-Neutral Coordination Regimes

Markets are neither ethical nor unethical. They do not evaluate outcomes or arbitrate justice. Ethical regimes operate downstream, overlaying coordination once it exists.

Markets reduce interference without requiring moral recognition or shared evaluative standards.

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6. Regime Failure: Distortion, Saturation, and Noise

Market failures are regime failures. Salience distortion, saturation, and informational noise undermine coordination. Monopolies, bubbles, and crashes reflect breakdowns in salience-mediated stabilization, not moral or individual defects.

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7. Institutions and Governance as Secondary Constraint Layers

Institutions interact with markets as secondary constraint layers. They reshape salience landscapes by adding or removing constraints. Over-constraint and under-constraint both destabilize coordination. No endorsement or critique is implied.

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8. Algorithmic Markets, Salience Acceleration, and AI Alignment

Algorithmic markets accelerate salience feedback, producing instability analogous to AI alignment risks. The structural constraints referenced here—specifically salience acceleration, self-referential feedback, and instability under embedded prediction—are analyzed in full generality in Informational Ontology and AI Alignment, where these dynamics are treated independently of any particular market or economic instantiation.

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9. Conclusion: Coordination Before Evaluation

Markets are not moral systems. They are what large-scale coordination looks like when meaning, trust, and ethics cannot be shared. Coordination precedes evaluation. That restraint is the contribution.