

How Systems Concentrate Power — And What It Takes to Change Them

The Oligarchic Capture Model, Told as a Story

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What this paper shows

Why do societies with very different political systems, cultures, and histories keep producing the same patterns? Wealth concentrates at the top. The middle becomes more fragile. The bottom becomes harder to escape. Institutions gradually tilt toward those who already have the most.

This is not a coincidence. It is not the result of bad actors. And it is not unique to any one country or political system.

This paper presents a mathematical model — built up from first principles, step by step — that explains *why* these patterns emerge wherever currency-based economic systems operate. The model shows that concentration is not a failure of the system. It is the system working as its own internal rules dictate.

The mathematics are presented in full in the rigorous version. This version tells the same story in plain language, using equations only when they make something clearer than words alone can.

How wealth concentrates — not by accident

Start with the simplest possible picture. Two people in an economy. Each can earn, save, invest, and spend. Each faces both opportunities and risks.

Now add one structural feature: wealth generates advantage. If you have more, you can access better opportunities, absorb setbacks more easily, and grow at a faster rate. This is not controversial — it is observable in every economy on Earth.

The mathematical consequence is straightforward. When wealth generates additional wealth, even small initial differences compound over time. The person who starts slightly ahead reaches the acceleration region sooner, compounds more advantage, and arrives at stability already far above the other.

This is not about intelligence, effort, or virtue. It is about the mathematics of compounding advantage. The system amplifies whatever differences already exist.

The five forces

The model identifies five structural forces that, together, govern how wealth evolves:

1. **Baseline growth** — the general economic engine that creates value for everyone.
2. **Reinforcement** — the rate at which existing wealth generates additional advantage. This is the engine of concentration.
3. **Saturation** — the counterforces that arise at scale: diminishing returns, complexity costs, administrative overhead, market limits. These slow growth at the top but do not reverse it.
4. **Fragility** — the penalty for being at the bottom. Fee barriers, compounding debt, exclusion from stabilizing institutions. The poorer you are, the harder it is to recover from any setback.
5. **Volatility** — exposure to shocks. Crucially, this is not equally distributed. People with less wealth are typically forced into riskier situations — unstable work, unfavorable credit, fewer options — while those with more can diversify, wait, and buffer.

When these five forces interact, the result is not random inequality. It is a specific, predictable pattern of concentration.

The volatility paradox

One of the model's most striking findings concerns volatility. Even if two people have identical earning potential — the same baseline growth, the same reinforcement — the one exposed to more risk will fall behind over time. Not occasionally. Systematically.

This matters because in the real world, the people least able to absorb shocks are the ones most exposed to them. A medical emergency, a job loss, an unexpected expense — these hit harder and last longer when there is no cushion. Over time, repeated asymmetric shocks produce divergence that is structurally inevitable, even without any difference in ability or effort.

The poverty trap

Near the bottom, a different dynamic takes over. The fragility penalty grows larger as wealth shrinks. Debt compounds. Barriers to recovery multiply. The expected trajectory becomes negative — not because of bad choices, but because the system imposes costs that exceed any realistic growth.

Once a person enters this region, self-recovery is structurally unlikely without external intervention. This is not a moral judgment. It is what the mathematics show.

The architecture of inequality

When these forces act across an entire population over time, they do not produce a smooth gradient from rich to poor. They produce something more structured: three distinct zones, each governed by different rules.

The three zones

The poverty basin. This is not simply “low wealth.” It is a region of structural disadvantage where expected growth is negative, shocks are devastating, and recovery is extremely difficult. People who fall into this region tend to stay there. Even when positive shocks occur, they are often insufficient to push someone out of the basin.

The mobility band. This is the middle region where movement is still possible in both directions. It is often mistaken for stability, but in reality it is highly unstable. Small differences — timing, connections, luck — can determine long-term outcomes. This is where inequality is actively generated.

The saturation plateau. Here, people have accumulated enough wealth that growth slows. This might appear to be a limitation, but it is actually a form of protection. These people are insulated from downward shocks and their position becomes stable. Saturation does not make them equal to others — it makes them secure.

Over time, the distribution stretches and then hardens. The mobility band narrows as people are sorted upward or downward. The poverty basin absorbs more of the population. The plateau stabilizes a small group at the top.

This is one of the most important findings of the model: inequality is not just a number (like a ratio or index). It is a *structure* — an architecture with zones, flows, and boundaries that can shift, harden, or collapse.

Stability at the top does not mean stability of society

The top stabilizes because saturation buffers it from shocks. The bottom remains trapped. The middle erodes.

This produces a system in which things can look stable on the surface while becoming increasingly fragile underneath. People still go to work. Markets still function. Institutions still operate. But under the surface: the mobility band is thinning, recovery times are lengthening, more households are one shock away from downward mobility.

This is the essence of a tipping point. Not a single dramatic event, but a quiet accumulation of fragility until small disturbances are no longer damped but amplified.

The model identifies **middle-class erosion** as one of the clearest early warning signals. The middle is not just another wealth band — it is the region that gives the system

resilience. When it narrows, resilience concentrates at the top, fragility becomes widespread below, and institutions lose their stabilizing base.

Why reform usually fails

If the problem were caused by a single mechanism, a single solution might work. But the model shows that oligarchic capture emerges from the *interaction* of multiple forces simultaneously. This is why partial fixes tend to fail.

Growth alone is not enough

Economic growth benefits everyone in absolute terms, but because it applies multiplicatively to existing wealth, it benefits those who already have more. Rising tides lift all boats, but they lift yachts faster than dinghies. If reinforcement is the engine of divergence, growth accelerates that engine.

Redistribution alone is not enough

Even strong redistribution can fail if the underlying forces remain intact. Transfer wealth to the bottom — but if fragility is still high, volatility is still asymmetric, and reinforcement still favors the top, the redistribution is gradually undone. One-shot redistribution without structural change is like bailing water without fixing the hull.

Moreover, for redistribution to offset reinforcement-driven divergence, it must grow with the gap. A fixed transfer rate is insufficient if the gap itself keeps widening. This means anti-oligarchic design generally requires adaptive rather than static redistribution — which is politically difficult to maintain.

Regulation alone is not enough

Constraining accumulation at the top (stronger saturation) limits growth without addressing the forces pushing people downward. The poverty trap persists. The mobility band still erodes. The overall structure remains.

The central finding

The model's strongest conclusion on intervention:

Oligarchic capture is multi-causal. Therefore, anti-oligarchic transition must also be multi-dimensional. No single-parameter intervention is sufficient to reverse the system's long-run trajectory.

To actually reverse concentration — not merely slow it — the model shows that reinforcement must be suppressed, fragility must be reduced, volatility must be equalized, accumulation must be constrained, and institutional feedback must be redirected. All

simultaneously. Partial approaches produce temporary effects that the system gradually absorbs and overcomes.

The system defends itself

The model would be incomplete if it treated people as passive carriers of wealth trajectories. In reality, people respond to their situation — and those responses feed back into the system in ways that make it remarkably persistent.

Behavior reinforces structure

At the bottom, stress compresses time horizons. Long-term planning becomes difficult. Immediate needs dominate. This leads to decisions that are locally rational but globally harmful — a cycle that looks like poor decision-making from the outside but is a structural consequence of operating under pressure with no margin.

At the top, risk avoidance and preservation behavior produces rigidity. The system becomes unstable at the bottom and rigid at the top.

Meanwhile, people copy what appears to work. Strategies effective for those with resources spread to those without them — where they often fail. Success narratives propagate without the structural context that made them possible.

Over time, repeated patterns become norms. What once seemed unacceptable becomes normal: extreme inequality, precarious employment, constant competition. The system is no longer just structurally stable — it is culturally stabilized. People stop questioning it, not because it works well, but because it is familiar.

Institutions lock it in

The most powerful stabilizing mechanism is institutional capture. When wealth reaches a certain scale, it converts into institutional influence: political contributions, regulatory pressure, media ownership, control over research agendas. And that influence is used — consciously or not — to adjust the rules in ways that further favor concentration.

This creates a second-order feedback loop. Wealth concentrates. Concentrated wealth gains institutional influence. Institutional influence adjusts the rules. Adjusted rules further concentrate wealth.

At that point, the system is no longer merely drifting toward inequality. It is actively maintaining it. Inequality becomes oligarchy when economic concentration is translated into institutional control — and that control stabilizes and protects the concentration.

This does not require conspiracy. It can emerge naturally from the coupling of wealth and institutional influence. But the result is the same: a system that resists change at every level — structural, behavioral, and institutional.

What a different system requires

If the current system is a self-reinforcing attractor — a configuration that draws the system toward itself and resists departure — then changing it means moving to a *different* attractor. Not reforming within the current one, but shifting to a fundamentally different structural configuration.

The model constrains what such a system can look like. Not all imaginable alternatives are structurally viable. Many proposals fail not because they are morally wrong, but because they violate constraints that the mathematics reveal. Here are the eight that matter:

1. Stability must be distributed

Instead of relying on a few large stabilizing agents (wealthy individuals, major corporations, centralized institutions), resilience must be spread across many participants. Failure in one part of the system must not cascade through the whole.

2. Survival must be decoupled from market position

Access to food, shelter, healthcare, and stability must not depend entirely on wealth. This does not eliminate markets or incentives. It removes the catastrophic downside — the difference between “if I fail, I lose everything” and “if I fail, I recover and continue.” That single change alters risk behavior, decision-making, and long-term dynamics.

3. Reinforcement must be flattened

Effort and participation must produce meaningful returns across the distribution, not only at the top. This means broader access to opportunity, reduced barriers, and shared infrastructure — so that equal effort produces more equal outcomes.

4. Runaway accumulation must be constrained

Not by stopping growth, but by preventing growth from translating into structural control. The critical distinction: being successful within a system versus becoming powerful enough to shape the system itself.

5. Fragility must be reduced

No fee barriers to participation. No compounding debt penalties. No exclusion from essentials due to lack of money. No threshold costs that make recovery impossible. Fragility reduction is not a compassionate add-on — it is a structural prerequisite for a non-oligarchic system.

6. Institutions must serve the system, not the top

Institutional influence must not scale disproportionately with wealth. Rules must reinforce system-wide stability rather than protecting concentration.

7. The system must work with human behavior

A system that requires people to behave “against their nature” will fail. If cooperation produces better outcomes than exploitation, cooperation becomes the norm. If short-term extraction is rewarded, extraction dominates. The design must align incentives with sustainability.

8. Adaptation must be distributed

Excessive centralization produces rigidity, slow adaptation, and vulnerability to capture. Local decision-making and distributed experimentation must be enabled.

These are not optional features. They are structural requirements. A system that violates any of them will either collapse or drift back toward oligarchy.

How we get there

Knowing what a different system requires is not the same as knowing how to build one. Real societies are not blank slates. People need to eat, work, maintain infrastructure, and survive the present while building something different.

The model suggests several principles for viable transition.

Lower fragility first

High fragility is one of the strongest stabilizers of the current system — not because it makes the system healthy, but because it makes it hard to escape. When people are one paycheck from collapse, they cannot think, organize, or build alternatives. Reducing everyday fragility — housing, healthcare, food, debt — is not a side effect of transition. It is a prerequisite.

Build before asking people to believe

People cannot be persuaded into a future that does not yet exist. They need evidence. Functioning prototypes — a mutual aid network, a cooperative childcare system, a shared resource model — change what people believe is possible. A single working example does more than a thousand arguments. Small but real wins create positive feedback: visible success builds trust, trust enables participation, participation strengthens the alternative.

Sequence matters

Even beneficial changes can backfire if introduced in the wrong order. Remove stabilizing structures before replacements are ready, and people experience not liberation but disorientation. They often retreat to familiarity — even when the familiar system is harmful.

A viable sequence: reduce fragility, build parallel systems, expand trust, shift institutions, and only then weaken old dependencies — once replacement capacity is real.

Work on two tracks

Track A increases immediate resilience inside the existing system. Track B builds and institutionalizes alternative logic. Both must reinforce each other. Track A without Track B produces survival without transformation. Track B without Track A produces idealism unsupported by lived capacity.

Expect resistance

This is not pessimism — it is what the model predicts. Any stable regime generates forces that protect it. Those who benefit from the current system — materially, institutionally, or psychologically — will resist change. Some resistance will be overt. Some will be subtle: narrative distortion, procedural delay, delegitimization of alternatives. Implementation must include resilience against sabotage and enough distributed buy-in that alternatives cannot be easily isolated.

The ongoing challenge

The model predicts one more thing: even after transition, the tendency toward concentration does not disappear. It is built into the dynamics of any system where advantage can compound.

This means that a post-transition society is not finished. It is not a destination to arrive at and then preserve unchanged. It is a dynamic system that must continuously monitor itself, detect drift, and adjust.

The signs of drift are recognizable. Fewer people making decisions. Access becoming conditional. Informal power replacing formal transparency. People adjusting their expectations downward: “That’s just how it works now.”

A healthy system responds when these signals first appear — not when they have already become entrenched. This requires built-in feedback mechanisms, distributed governance, transparency, and most importantly a culture that treats self-correction as strength rather than failure.

The deepest insight of the entire model is this: the goal is not perfection. It is continuous alignment with reality. Things will go wrong. What matters is whether they are corrected before they become destructive.

A system that watches itself, learns from itself, and adjusts itself — without collapsing or hardening — is not just more efficient. It is more humanly livable over time.