MACROECONOMICS & INEQUALITY

From Aggregate Abstraction to Heterogeneous Reality

BASED ON "CHAPTER 21: INEQUALITY" BY PER KRUSELL AND VÍCTOR RÍOS-RULL

The Paradigm Shift: Why Macroeconomics Embraced Inequality

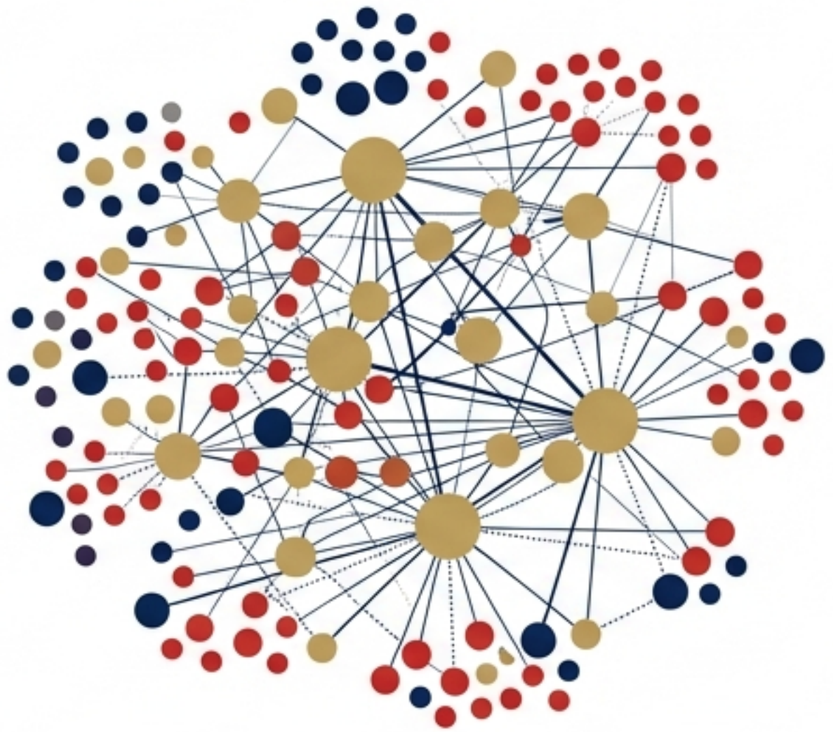
The Old Consensus (Representative Agent)

Focus on Aggregates.

Inequality viewed as a side effect of business cycles.

Assumption that the "average" agent represents the whole.

The New Reality (Heterogeneous Agents)



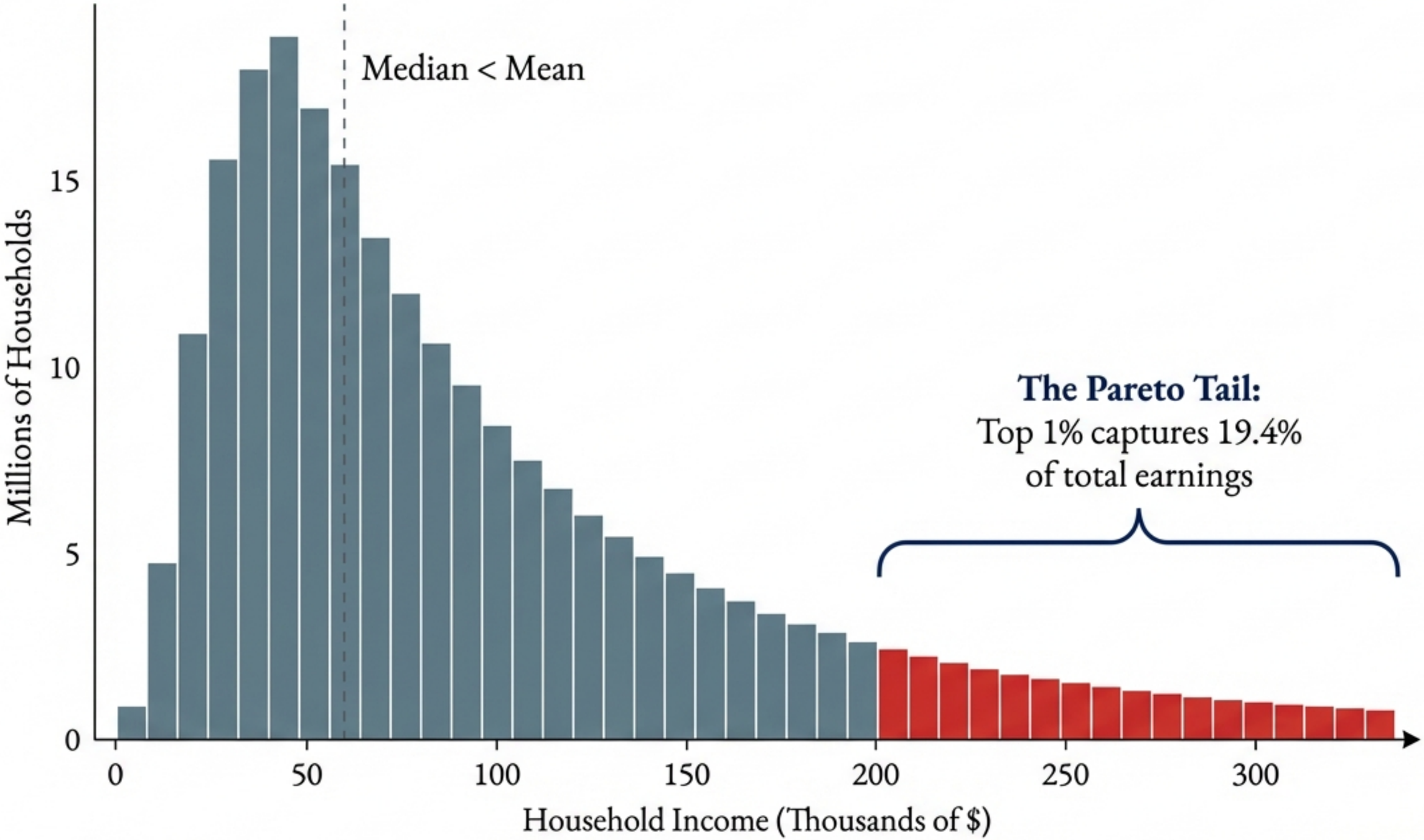
Inequality dictates outcomes.

Policy propagation hinges on variation in marginal propensities.

General equilibrium interactions drive the macro economy.

"The determination of inequality is, by its nature, a macroeconomic phenomenon."

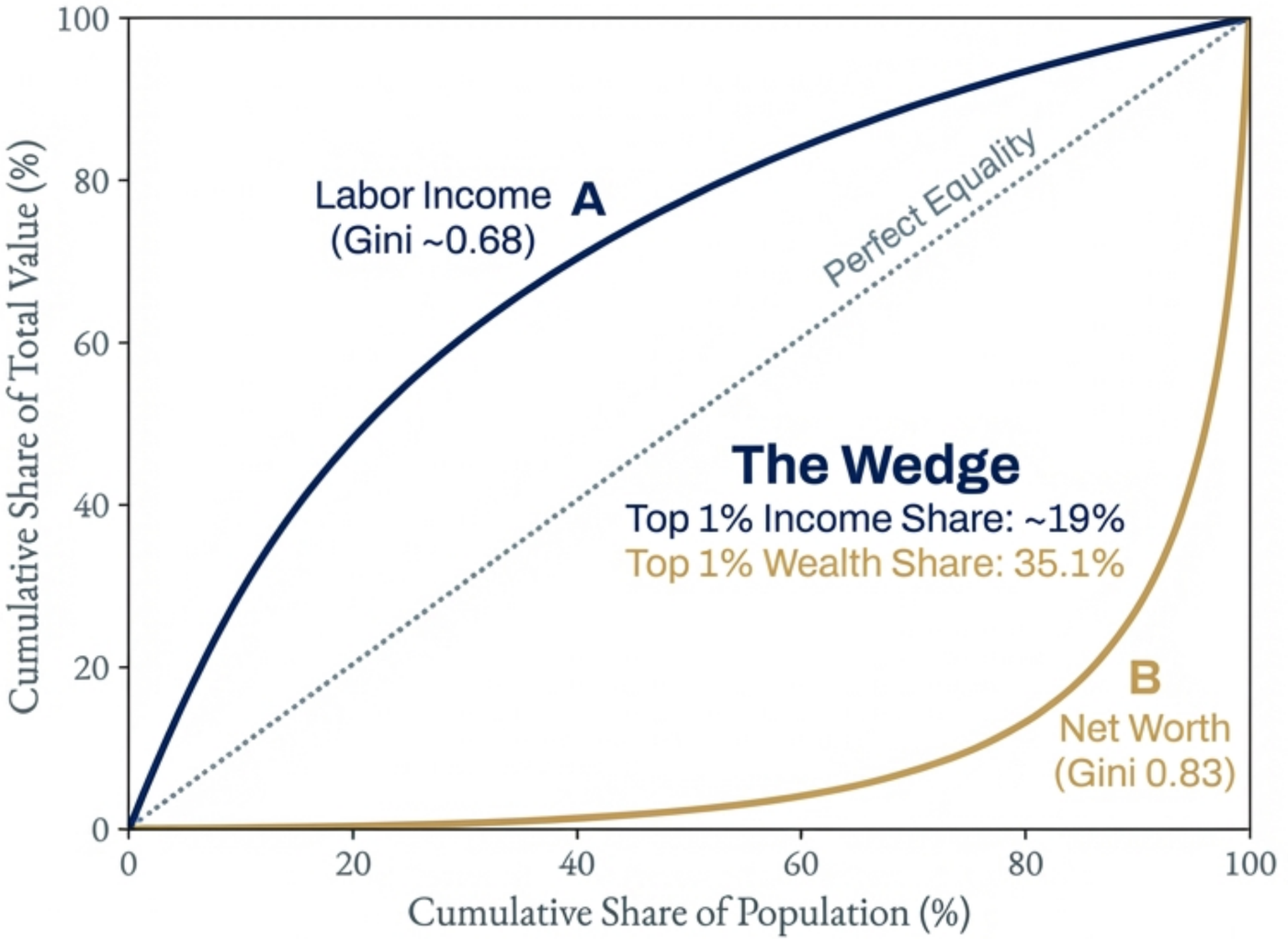
The Anatomy of Income: The Skew and the Tail



The “average” household does not exist. The distribution is defined by a heavy mass at the bottom and a thick tail of super-stars at the top.

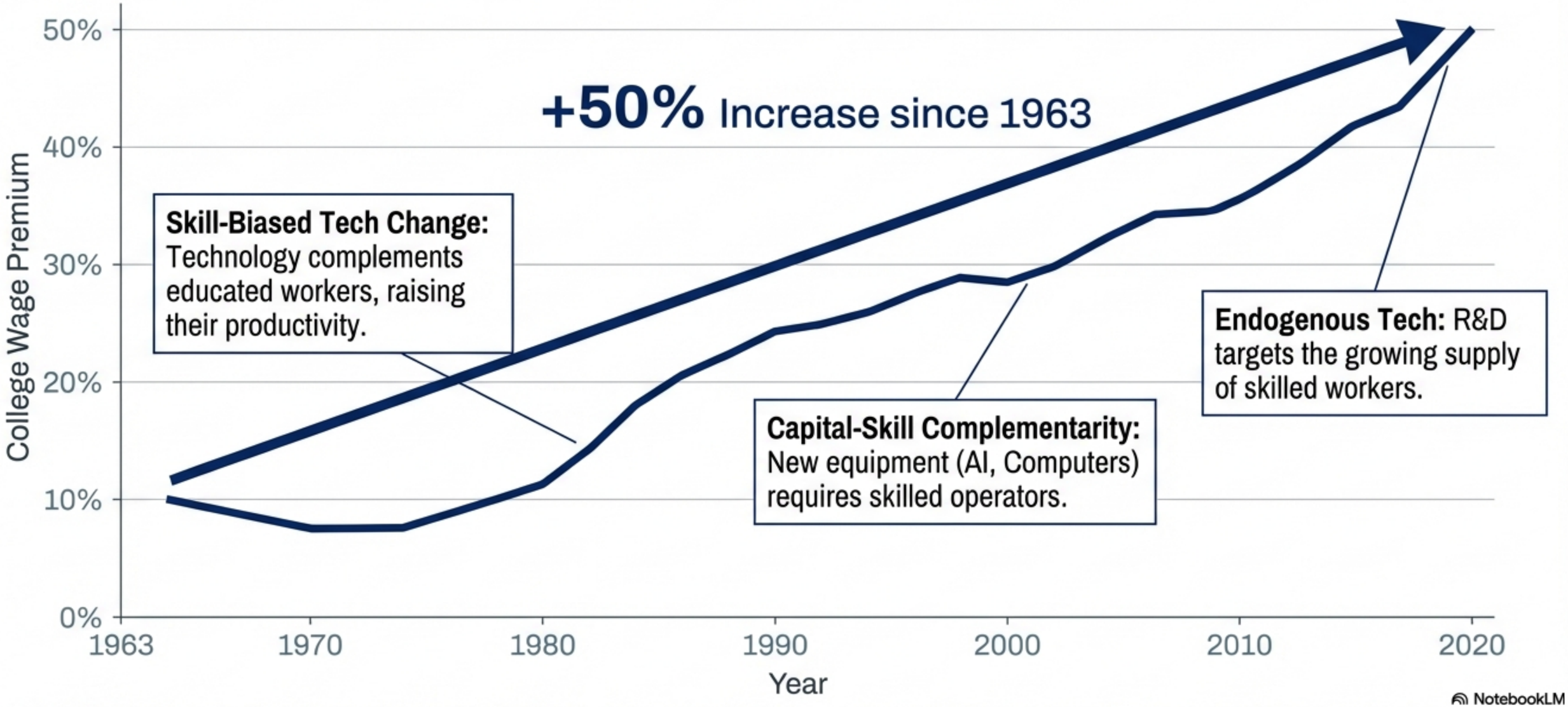
This skew pulls the Mean significantly higher than the Median.

The Inequality Wedge: Wealth Concentration Outpaces Income

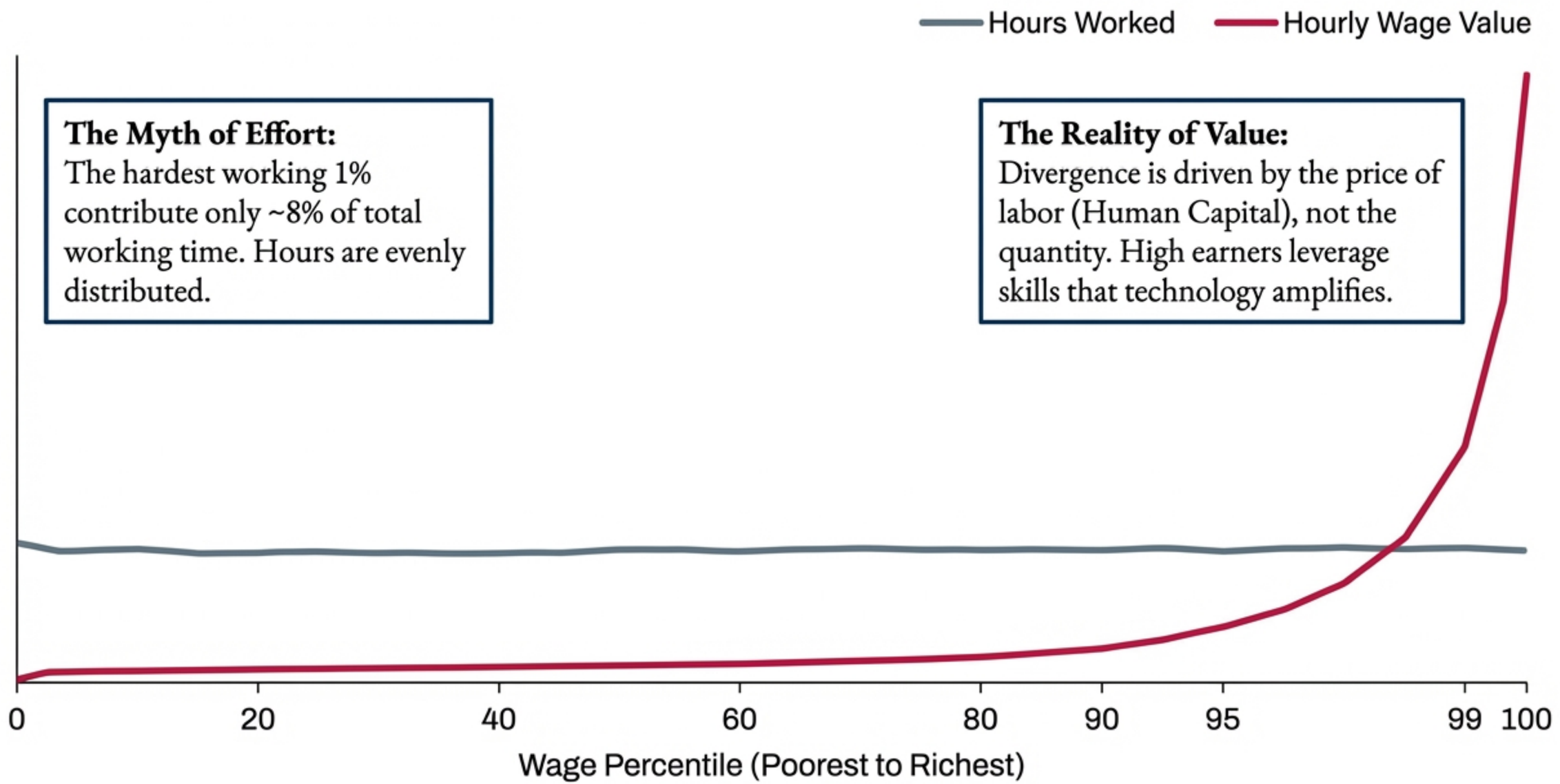


Bottom 40% Reality: The wealth-poorest 40% hold **effectively 0% of net wealth**.
Wealth accumulates differently than income due to asset appreciation.

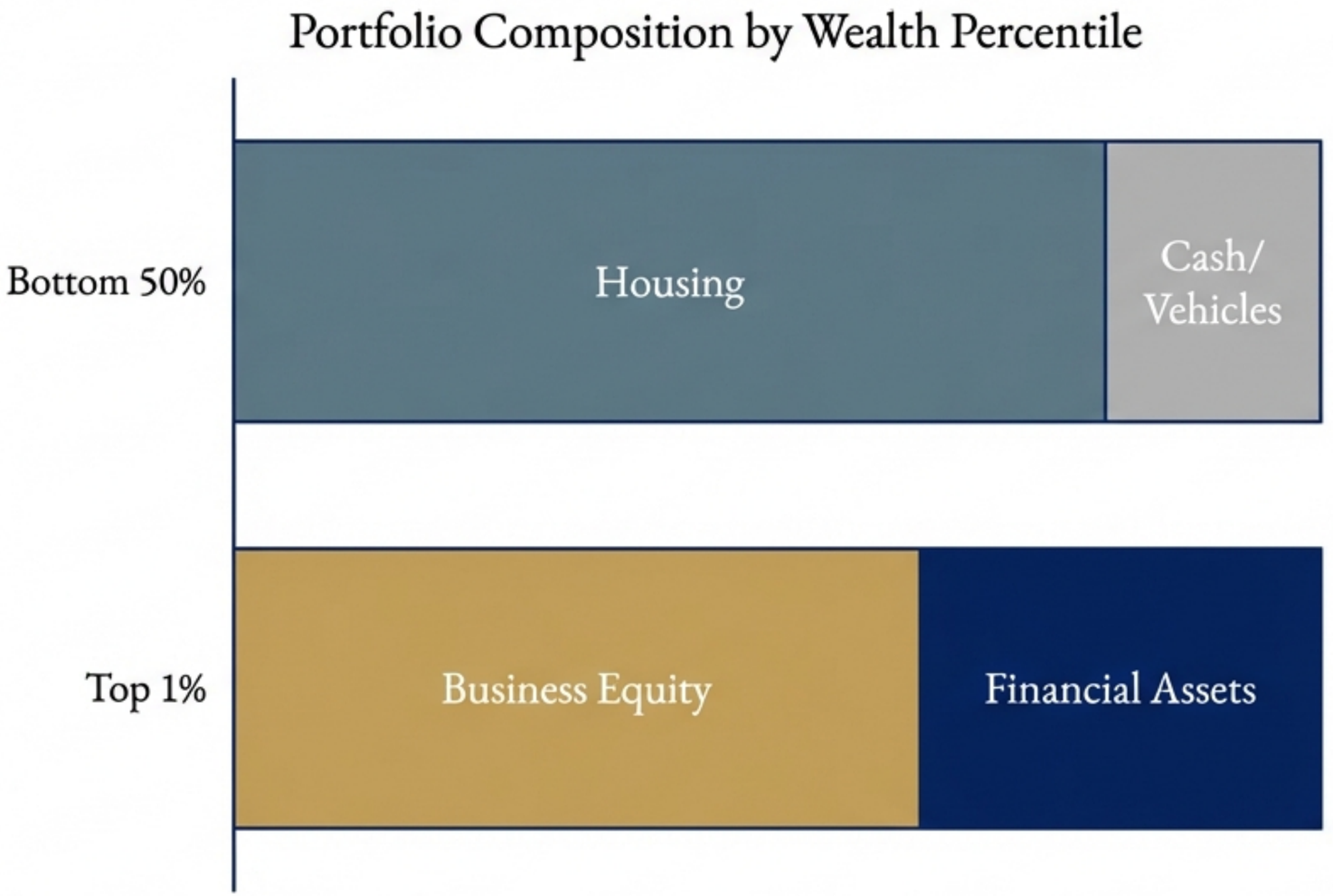
The Labor Split: The Rise of the Skill Premium

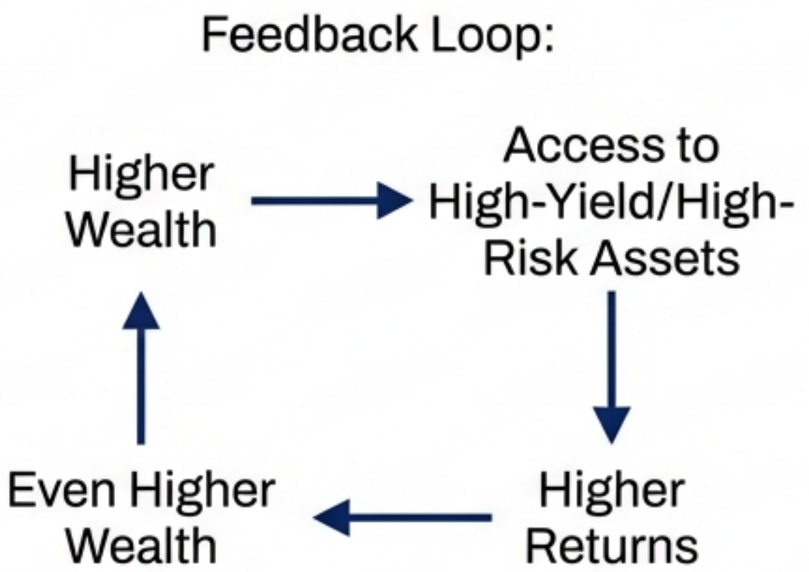


It’s Not About Hours. It’s About Human Capital.



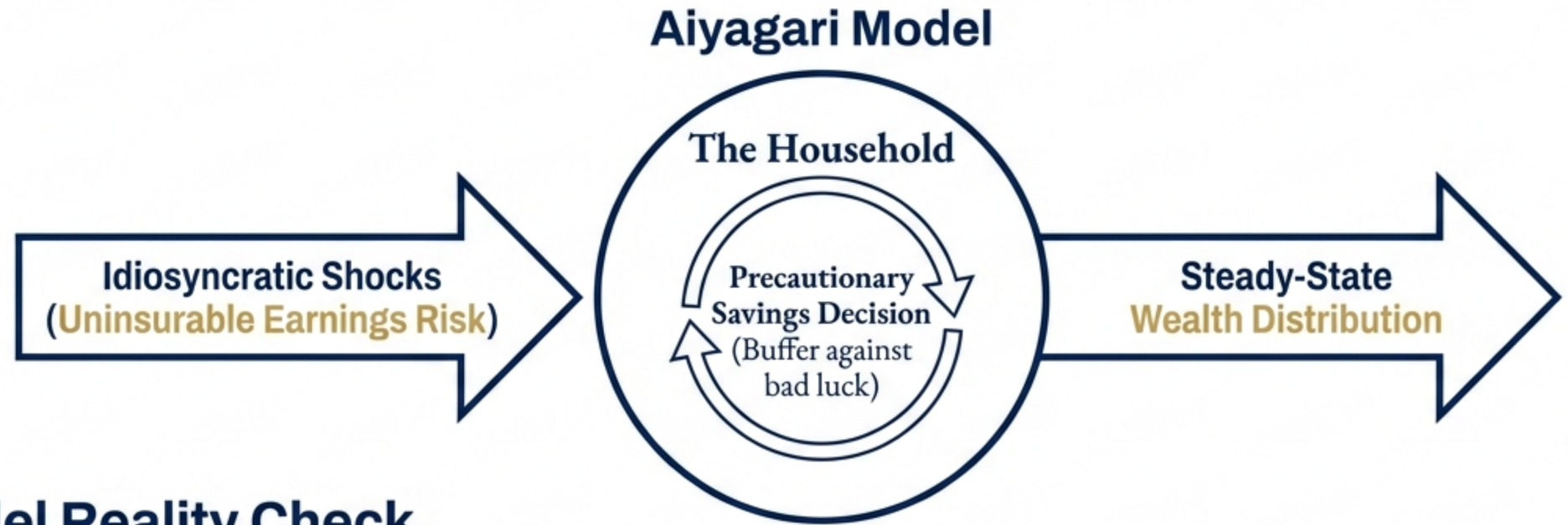
The Compounder: Portfolio Heterogeneity and Return Risk





The wealthy don't just have more money; they play a different game. They hold assets that compound, while the bottom 50% hold illiquid assets or cash with negative real returns.

Modeling the Mechanism: The Heterogeneous-Agent Framework



Model Reality Check

- **Standard Model Prediction**: Gini ~0.67
- **Real World Data**: Gini ~0.83
- **The Missing Variable**: To match reality, models must add **"Superstar" earnings shocks** or **"Return Heterogeneity"**.

The Philosophy of Distribution: Choice vs. Luck

	Mechanism	Implication
Discount Factor Heterogeneity	Patience varies. Some people (High Beta) delay consumption.	Inequality is a **CHOICE**. The rich are the virtuous/patient.
Return Risk / Random Growth	Stochastic Returns. Some get lucky (e.g., Crypto, Tech)	Inequality is UNINSURABLE RISK (LUCK). The rich are lottery winners.

Synthesis: "Random Growth" models (Kesten processes) successfully generate the Pareto tails observed in real data, suggesting luck plays a massive role at the very top.

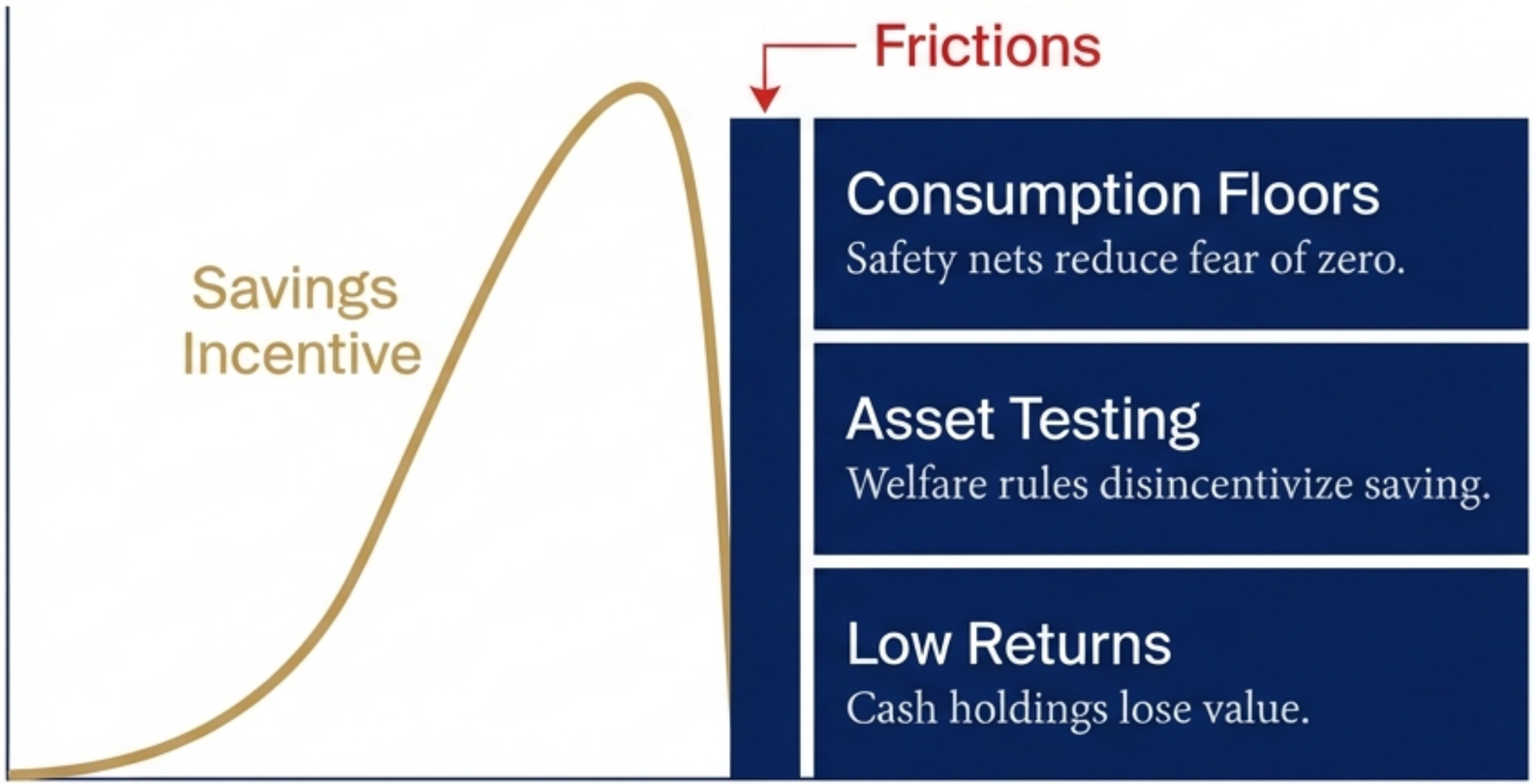
The Bottom Tail: Why the Poor Stay Poor

The Puzzle

Standard models predict the poor should save aggressively to avoid hitting zero assets. In reality, they don't.

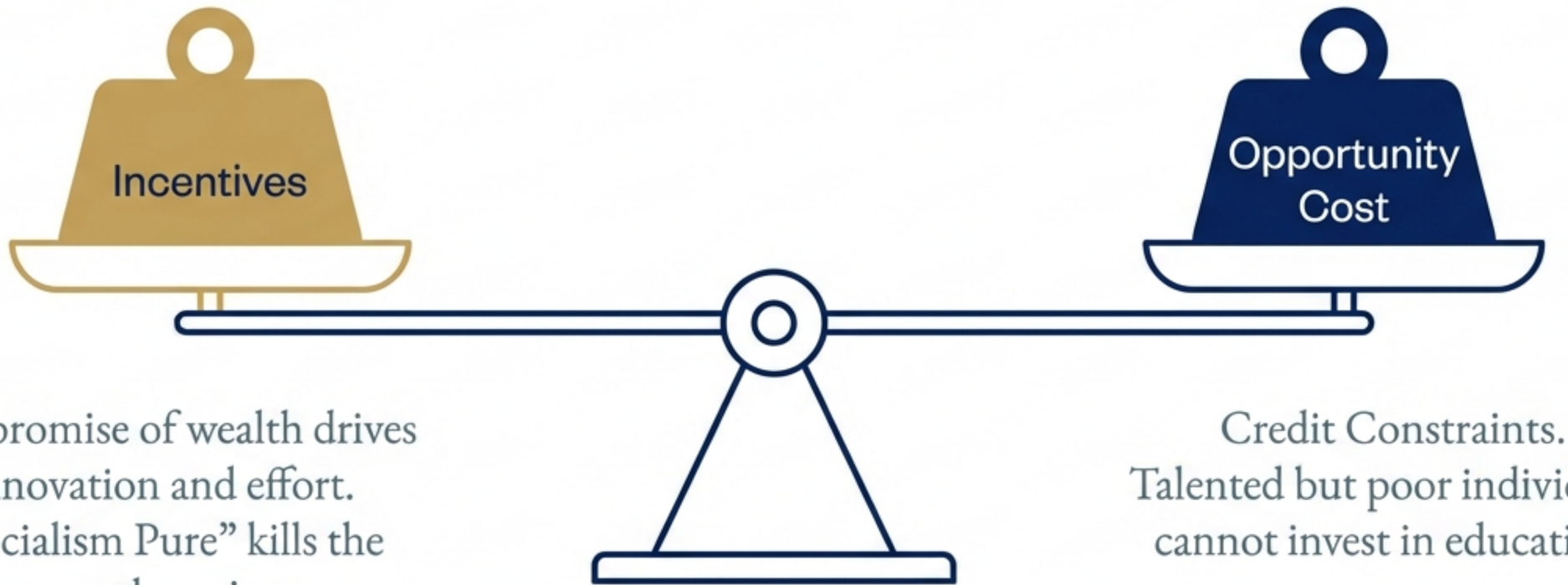
In reality, they don't.

The Poverty Trap



Result: A savings ceiling that traps the bottom quintiles.

The Growth Trade-Off: Incentives vs. Opportunity



The promise of wealth drives innovation and effort. "Socialism Pure" kills the growth engine.

Credit Constraints. Talented but poor individuals cannot invest in education.

The Lost Einstein Effect

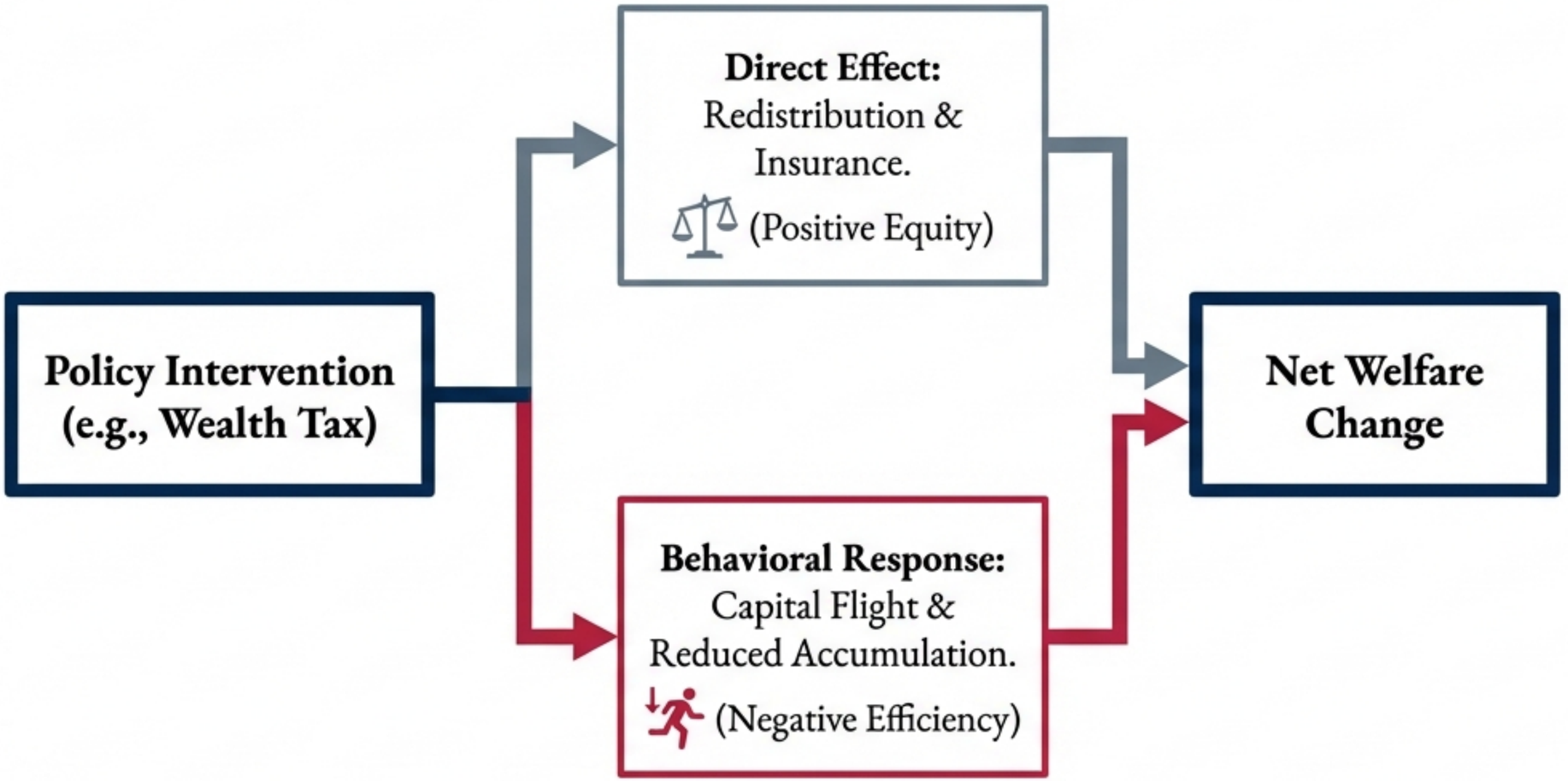
High inequality + Imperfect Credit Markets = Wasted Human Potential.

The Stimulus Transmission: Marginal Propensity to Consume (MPC)

Policy Insight: Stimulus works best here. Transfers to the liquidity-constrained have a high multiplier; transfers to the rich are absorbed into savings.

Source: Economic Journal Data Analysis, 2023

Policy in a Heterogeneous World: The Efficiency-Equity Tension

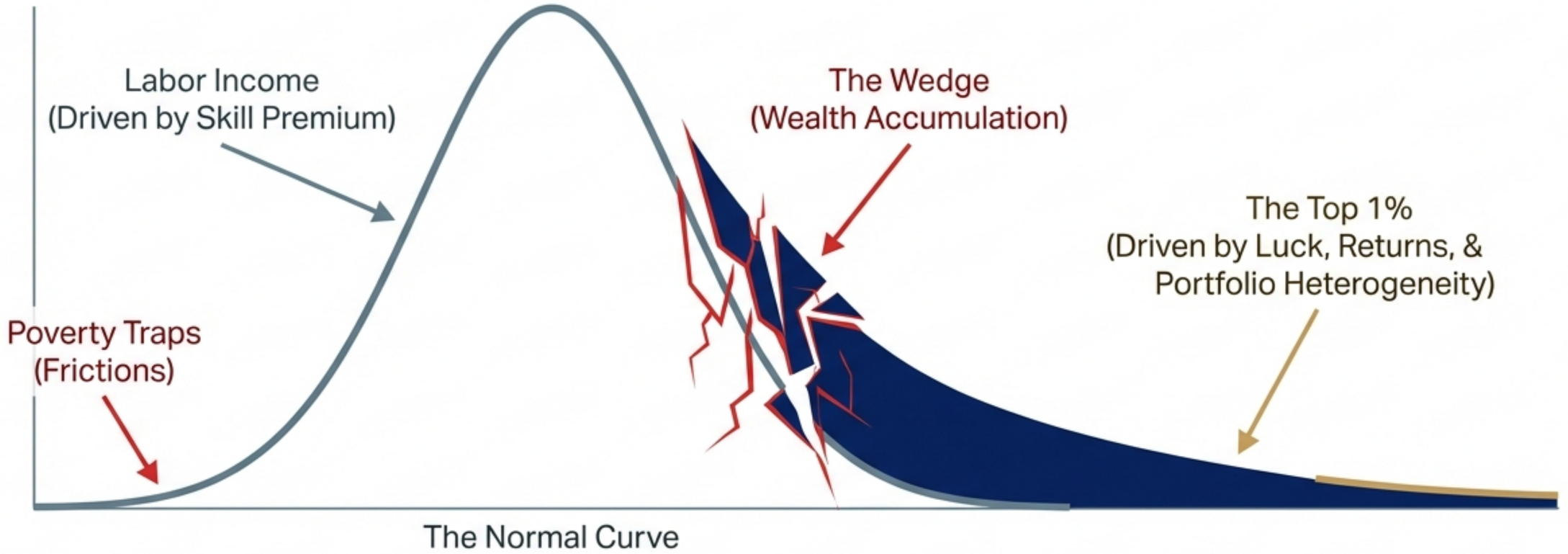


The "Lucas-Proof" Policy Challenge

We must design policies understanding that people will change their behavior to avoid taxes.
There is no free lunch.

Source: Economic Journal Data Analysis, 2023

Conclusion: The Economy is the Sum of Its Disparate Parts



The "Average Agent" is a myth.
Understanding the distribution is the only way to understand the aggregate.

Source: Economic Journal Data A

Sources & Further Reading

Primary Text:	Data Sources:
Krusell, P., & Ríos-Rull, V. (2025). Chapter 21: Inequality.	Survey of Consumer Finances (SCF) 2022 Kuhn and Rios-Rull (2025) Hubmer, Krusell, and Smith (2018) Katz and Murphy (1992) - Skill Premium Acemoglu and Autor (2011) - Task-based Models Aiyagari (1994) - Uninsured Idiosyncratic Risk