

# **A Paradigm Shift in the Quantitative Assessment of Behavioral Economic Models: Re-evaluating Rational Actor Assumptions**

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**Abstract.** This paper investigates the critical shortcomings of traditional rational actor models in behavioral economics, emphasizing the need for an updated framework to account for psychological factors influencing economic decisions. Employing advanced econometric techniques and a dataset spanning two decades, we analyze deviations from rationality across multiple demographic segments. Our findings reveal significant behavioral anomalies that challenge established economic theories, suggesting that conventional models may inadequately predict real-world economic behaviors. This study contributes to a growing body of literature advocating for a more nuanced understanding of economic decision-making processes, paving the way for revised theoretical foundations and empirical methodologies in economics research.

**Keywords:** Behavioral Economics, Rational Actor Model, Economic Decision-Making, Cognitive Biases, Empirical Analysis, Predictive Accuracy, Policy Interventions

## **Introduction**

The global economy faces unprecedented challenges in the 2024-2026 horizon, ranging from inflationary pressures and shifting labor markets to the adverse effects of climate change and technological disruption. Central to these issues is the reliance on traditional economic models that assume rational decision-making by individuals. However,

increasing empirical evidence suggests that human behavior is often irrational, influenced by cognitive biases, social norms, and emotional responses. As we grapple with complexities like the pandemic's lingering economic effects and geopolitical uncertainties, it becomes imperative to reassess the foundational assumptions underlying economic theories. This paper aims to critically evaluate the rational actor model, a cornerstone in economic theory that has dominated the field for decades. We explore alternative frameworks that incorporate behavioral insights and psychological factors into economic analysis. By employing sophisticated econometric methods, we analyze longitudinal data to identify significant deviations from rational behavior across diverse populations. These insights provide a deeper understanding of the economic phenomena currently faced by policymakers and stakeholders alike. Additionally, we outline how the integration of behavioral economics into mainstream economic thought may enhance predictive accuracy and inform more effective policy interventions. By restructuring the way we understand economic behavior, we can better equip ourselves to navigate the complexities of the modern economic environment. In summary, the structure of the paper is as follows: first, we define and contextualize the problem; second, we discuss our methodological approach; third, we present and analyze our findings; and lastly, we conclude with implications for future research and policy formulation.

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## References

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