Working Paper

What Can Betting Markets Tell Us About Investor Preferences and Beliefs? Implications for Low Risk Anomalies

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An empirical puzzle in financial markets, known as the low-risk anomaly, is that riskier assets earn lower risk-adjusted returns than less risky assets. We relate the low risk anomaly to the Favorite-Longshot Bias in betting markets, where returns to betting on riskier "longshots" are lower than returns to betting on "favorites," and provide novel evidence to both anomalies. Synthesizing the evidence, we study the joint implications from the two settings for a unifying explanation. Rational theories of risk-averse investors with homogeneous beliefs cannot explain the cross-sectional relationship between diversifiable risk and return in betting markets. Rather, we appeal to models of non-traditional preferences or heterogeneous beliefs. We find that a model with reference-dependent preferences, featuring probability weighting and diminishing sensitivity, two features of Cumulative Prospect Theory, best fits the data, and is able to capture the choice and the amount to bet.

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