FIN03

The Market's Implied Loss Aversion and Stock-Index Option Pricing, under Power-Log Utility Investor Preferences

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Abstract

We use investor preferences modeled with Power-Log utility functions, physical probabilities, and equilibrium between equity-index spot and options markets, to test prospect theory's decreasing marginal sensitivity to losses postulate at the aggregate level. We find that the equilibrium downside power in the Power-Log utility function is consistently and significantly negative, implying increasing marginal sensitivity to losses in the market, which contradicts prospect theory. We use the market's implied loss aversion in turn, to calculate near the money stock-index option prices; they are consistently and significantly closer to market prices than Black-Scholes-Merton prices, which provides validation for our methodology.

Conference Track

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