Derivatives

Which Index Options Should You Sell?

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Working Paper

This paper explores historical return and risk properties of equity-hedged options across the S&P 500 option surface. We evaluate returns by estimating alpha to the S&P 500 index, and we quantify risk using three metrics: return volatility, losses under stress tests, and conditional value at risk. We show that analyzing option risk-adjusted alphas using different risk metrics leads to significantly different conclusions. We find that the most compensated options to sell on the S&P 500 surface per unit of stress-test loss are front-month options with strikes near-the-money and moderately below the index level. We apply these results to evaluate return expectations for short volatility strategies, potential added return from option selection, and implications for variance swaps.

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