The Pricing of Risk and Sentiment: A Study of Executive Stock Options

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Abstract

We derive a closed-form solution for the subjective value of employee stock options in a world with jump risk where risk aversion may be offset by positive sentiment. Using all recorded executive ESOs issued between 1992 and 2004, we derive subjective value to be about 50% of market value. Sentiment is priced at 14% risk-adjusted, annualized return. Regressions show that subjective value is related positively to sentiment and negatively to the proportion of total wealth tied up in ESOs. We find from executive compensation data that subjective value is more than double the corresponding market value, indicating a high level of over-confidence or insider information.

Joint Work with Charles Chang and Li-jiun Chen