

Executive Stock Options with Effort Disutility and Choice of Volatility

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We consider the problem of an executive who receives call options as compensation. He can influence, with his effort, the stock price. Besides, through the choice of projects, he determines the level of volatility of the stock. The executive is risk-averse and also experiences disutility from the effort. In this framework, we also introduce the problem of a company that simultaneously wants to minimize overtime volatility and maximize final expected value of the price of the stock. We characterize (and compute numerically for the logarithmic case) the optimal strike price the company should choose.

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