Managerial utility-adjusted asset risk- and debt-taking incentives

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Abstract

This paper extends the model of Dittmann and Yu (2011) by allowing effortand risk-averse managers to increase the firm's equity volatility through two of the latter's determinants within the contingent claims model, i.e. asset volatility and debt. In order to derive managerial debt-taking and asset risk-taking incentives, we endogenize the manager's financing and investment decision-making processes within the framework of a principal-agent problem and formalize the dependence of firm value on managerial action choices. We characterize the direction and magnitude of shareholders-manager agency costs associated with financing and investment policies when the manager has full discretion over the firm's policies, and where the choice of riskiness of the firm's assets and the amount of the discount debt issue define, respectively, the firm's investment and financing policies. Given that we derive managerial incentives from the manager's incentive compatibility constraint through the use of the first-order approach, we obtain utility-adjusted incentive measures that reflect both firm characteristics and managerial compensation structure, and further show that both financing and investment policies under the second-best are determined by the ratio of the manager's expected utility changes induced by his policy choices. Finally, we derive the manager's debt-taking and asset risk-taking hurdle rates, which define the minimum percentage change in firm value required by the manager in order to issue debt and increase the riskiness of assets, respectively.