The Effect of Performance Measures on Risk in Capital Investment Decisions

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Background

Growth and innovation involve risk, and firms often struggle to get managers to take sufficient risk. Accounting performance measures (ROI, residual income) may affect risk-taking, and effects may differ based on individuals’ inherent risk preferences. No prior empirical evidence on effects of ROI and residual income on behavior.

Experiment Design

100 Ps from Amazon Mechanical Turk; Repeated risky project choice. Performance measure manipulated between Ps.

Additional Results

Process evidence: ROI may allow individuals to more easily meet aspiration for positive outcome, freeing them to pursue more risk. Experiment results suggest when ROI is the measure used, individuals take more risk than when residual income is the measure used. Using ROI as a performance measure leads to more risk-averse individuals, risk-taking under ROI is found mainly in relatively more risk-averse individuals, and inherent preferences for risk interact with the performance measure used in risk-taking.

Conclusion

Using ROI as a performance measure leads individuals to make riskier project selections than when residual income is used. The performance measure used interacts with individuals’ inherent preferences for risk – increased risk-taking under ROI is found mainly in relatively more risk-averse individuals.