Essays on Financial Economics
Dissertation Summary

Rui Luo
Washington State University

Essay I. Corporate investment, financial policies, and managerial inconsistent time preference (Job Market Paper)

In this paper, I attempt to explore whether managerial self-control problems – modeled as time-inconsistent, present-biased preferences – lead to distortions in firm investment, financing and dividend decisions. Time-inconsistent CEOs are impatient – they have the human tendency to grab immediate rewards and to avoid immediate costs. As a result, present-biased managers procrastinate some good investment projects that incur immediate costs and preproperate borrowing and dividend payout which involve immediate rewards to shareholders. My paper contributes to the literature by proposing a new self-control based explanation for suboptimal investment and financial decisions. Unlike managerial myopia which stems from the short-term focused desire to mislead the market by boosting current accounting numbers, managerial inconsistent time preference could exist even if the manager has a long decision horizon and believes he is maximizing firm value. I first test my prediction via reduced-form regressions by constructing two proxies for present bias: the CEO's time preference revealed in their personal portfolio decisions and their press portrayal. I find that firms with present-biased managers significantly invest lower, borrow more and pay more dividends. These results are robust to alternative interpretations including myopia, inside information and risk aversion. I then formulate a dynamic investment model in which the value-maximizing top decision maker has inconsistent time preference. Simulation results of the model confirm my present-bias argument: managers cut investments, hold more debt and make more dividend payments if they exhibit self-control problems. These effects destroy firm value by 5.4% to 6.3%. My findings suggest that a manager whose incentives are perfectly aligned, who has a long decision horizon, and who does not face any information asymmetries may still make suboptimal investment and financial decisions if he lacks enough self-control to make optimal choices in a time-consistent manner.

Essay II. Corporate site visits, information asymmetry, and disclosure regulation (with Y. Jin, J. Sun and X. Xu)

Corporate site visit refers to the visit that analysts and investors pay to firms and is a prevalent and valuable form of information gathering activity in capital market. Starting from 2009, firms listed on the Shenzhen Stock Exchange in China were mandated to disclose site visit information in their financial reports while firms listed on the Shanghai Stock Exchange were not required to do so. Using a unique data set of 20,328 site visits, this paper examines how corporate site visits affect information asymmetry and whether this impact is influenced by the regulation on site visit information disclosure. Compared with other information gathering activities, corporate site visits are under researched primarily due to the lack of data. We expand the literature by examining the information asymmetry effect of corporate site visits. The paper also contributes to literature on regulation of financial reporting and disclosure by comparing the information asymmetry effect of site visits between regulated and unregulated firms. Using the adverse selection component of bid-ask spread and standard deviation among analyst forecasts as proxies for information asymmetry, we find that overall site visits reduce the information asymmetry. However, the reduction of information asymmetry is not significantly different between firms that are mandated to disclose and those that are not. Thus, our paper suggests that the SZSE's regulation on site visit information disclosure is not effective or useful, at least in terms of reducing corporate information asymmetry.

Essay III. Corporate Hedging in Incomplete Markets: A Solution Under Price Transmission (with T. R. Fortenbery)

This paper provides a dynamic minimum-variance hedge for firms in incomplete markets. Since futures contracts exist for a limited number of assets, some sources of price risk cannot be directly hedged. Hedging markets are thus incomplete for many firms. By identifying the price transmission mechanism between input and output prices in a classical complete-market model, we extend the literature by presenting a dynamic hedge that enables firms to minimize both input and output price fluctuations through a single tradable futures contract even in incomplete markets. The model conditions on the direction of price transaction between inputs and outputs, and on the availability of futures contracts. We assume a two-factor diffusion model for the underlying asset and a stochastic mean-reverting spread. The results are hedge ratios that are the weighted average of the classic direct hedging and cross hedging ratios. We apply our results to the problem of a hypothetical jet fuel producer. We find that our model leads to a more effective hedge (more volatility reduction).