DISSERTATION PROPOSAL

Tianyi (Robert) Yang

"Essays on Asset Management"

Monday, April 30th, 2018 10:00 am 322 GSIA (West Wing)

A significant portion of household wealth is managed by financial professionals and investment companies. As such, whether these entities have skills sufficient to justify their compensation is of great interest to both researchers and the general public. In this dissertation, we seek to further our understanding of the asset management industry. The first chapter explores theoretically the "supply chain" of asset managers. The second and third chapter each focuses on a particular type of investment, namely unit investment trust and venture capital.

In the first chapter, we consider a model of institutional investors that invest in other asset managers by extending Garleanu and Pederson (2015). The institutional investors can either acquire information directly or search for informed managers. The model allows for investor value-added and team production: informed managers matched with informed investors obtain an additional signal on asset value. In equilibrium, team production occurs only if its information gain is high relative to costs of search and information. If team production is present, informed investors always pay a higher fee for money management, while also reaping a larger benefit from the relationship with the matched manager. We propose measures for managerial skill in this context accounting for investor value-added and discuss efficiency implications.

We study unit investment trust (UIT) -- a redeemable investment vehicle with buy-and-hold portfolio and fixed lifespan. We construct a novel data set on UIT of top sponsors containing portfolio-level information. There is a significant degree of cross-sectional variation in both expense and portfolio composition. Results from matrix factorization on portfolios confirm that UITs follow specific investment strategies. We then explore motives for investing in UITs. A UIT incurs a higher expense if it has more holdings, invests more in international stocks and other closed-end funds. These imply transaction cost and exposure matters to investors. Next, we will investigate the performance of UIT from both its holding period return, and the abnormal returns of underlying companies around the date on which the portfolio of UIT is disclosed.

We develop a life-cycle theory of venture capitalist (VC) fund. In the model, investment stage cannot begin until fundraising is complete; hence, the initial size of VC is determined as the outcome of an optimal stopping problem. In the investment stage, a startup may arrive in each period, which VC decides whether to invest. The speed at which VC deploys capital depends both on the search effort, which affects the frequency of startup arrival, and on the average quality of the encountered startup, which is related to VC's skill. We propose to structurally estimate the model with data on VC size over time from VentureExpert. The estimated parameters are informative about the degree of heterogeneity in VC funds, in terms of their skills in valuation and search.