

# DISSERTATION PROPOSAL

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## **“Essays in Business Cycles, Unemployment, and Investment”**

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10:00 am

324 GSIA (West Wing)

In the first chapter, we analyze the implications of quasi-hyperbolic discounting preference for endogenous economic fluctuations in a three-period overlapping-generations economy with pure exchange. Specifically, we examine the local stability and equilibrium indeterminacy around a monetary steady state. By exploring the parameter space, we discuss how preference and endowment allocation affect the dynamic stability of an economy. We also study the conditions for the existence of endogenous deterministic cycles and derive the sufficient analytical condition. In three-period overlapping-generations models, local indeterminacy and the existence of cycles no longer implies each other, unlike two-period models.

In the second chapter, we study the unemployment fluctuations that arise from the strategic interactions of firms in a Shapley-Shubik dynamic oligopolistic market game. It is well known that the conventional Diamond-Mortensen-Pissarides (DMP) indirect search model cannot generate the observed volatility in unemployment and labor market tightness. We introduce a more flexible labor allocation rule, and alter the wage determination process according to market game. The model also allows for price effect implied by imperfect competition in the output market. We then study how each of the modified elements contribute to generating fluctuations in unemployment and labor market tightness by calibrating the model.

In the third chapter, I study the relationship between firms' characteristics and the acquisitions they make. Specifically, I use statistical model of natural language to infer the latent structure about why firms “bought what they bought”. The text data come from acquisition press releases attached with 8-K announcements. As a further step, I propose to exploit firms' R&D expenditure data to study the tradeoff between internal innovation activities and external technology acquisitions.