# SEUNG JOO LEE
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**BUSINESS ADDRESS:**
Department of Economics
530 Evans Hall, #3880
Berkeley, CA 94720-3880

**DESIRED RESEARCH AND TEACHING FIELDS:**

| PRIMARY | SECONDARY |
|---|---|
| Macroeconomics | International Macroeconomics and Finance |
| Monetary Economics | Theory (Corporate Finance, Contract) |
| Asset Pricing | |

**FIELDS OF CONCENTRATION:**
Macroeconomics, Finance, International Economics

**DISSERTATION TITLE:**     "Essays on Uncertainty and Stabilization"

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| Expected Date of Completion: | May 2022 |
| Principal Advisor: | Professor Yuriy Gorodnichenko |
| Other References: | Professors Nicolae Gârleanu, Pierre-Olivier Gourinchas, Chen Lian, and Maurice Obstfeld |

**PRE-DOCTORAL STUDIES:**

| | DEGREE | DATE | FIELD |
|---|---|---|---|
| Seoul National University | M.A. | 2014 | Economics |
| Seoul National University | B.S. | 2012 | Physics |

**PAPERS:**

- **Monetary Policy as a Financial Stabilizer** (with Marc Dordal i Carreras) **(Job Market Paper)**
  **Abstract**: We develop a New-Keynesian framework with stock markets that features a potential for self-fulfilling financial uncertainty arising from its interaction with risk-premium, wealth, and aggregate demand. Our model remains tractable, providing closed-form expressions for higher-order moments tied to the financial uncertainty and their relations to the rest of the economy.  We re-examine the optimality of conventional monetary policy rules and show that the `Taylor principle' no longer guarantees determinacy, with sunspots in aggregate financial volatility not precluded by aggressive targeting of inflation and output gap alone. We characterize the joint dynamic evolution of financial volatility, risk-premium, asset prices, and the business cycle in a rational expectations equilibrium with sunspots, and uncover that variations in financial uncertainty generate reasonable crises and booms along the business cycle that are consistent with our empirical estimates based on the US data. As this pitfall of the traditional policy rules lies in their inability to target the expected return on aggregate wealth, the relevant rate in stochastic environments, we then propose a `generalized' Taylor rule that targets risk-premium and asset price, and describe the necessary conditions that restore determinacy and achieve the *ultra-divine coincidence*: the joint stabilization of inflation, output gap, and risk-premium. Finally, we revisit the zero lower bound (ZLB) and show it amplifies the duration, severity, and welfare costs of fluctuations in financial volatility. Alternative policies such as forward guidance reduce these welfare costs on average, but risk worsening economic situations with a non-zero probability, raising interesting trade-offs for policymakers.

- **A Unified Theory of the Term-Structure and Monetary Stabilization** (with Marc Dordal i Carreras)
  **Abstract**: The failure of conventional monetary policy to stabilize the economy at the zero-lower bound (ZLB) has made unconventional interventions more prevalent in recent times, which calls for a new macroeconomic framework for properly analyzing these policies. In this paper, we develop a New-Keynesian framework that incorporates the term-structure of financial markets and an active role for government and central bank's balance sheet size and composition. We show that *financial market segmentation* and the household's *endogenous portfolio reallocation* are crucial features to properly understand the effects of Large-Scale Asset Purchase (LSAP) programs. We propose a new micro-foundation based on imperfect information about expected future asset returns that easily accommodates distinct degrees of market segmentation across asset classes and maturities, while providing intuitive and tractable expressions for the household's portfolio shares. Our analysis reveals that government's issuance of risk-less bonds stimulates the economy when conventional monetary policy is constrained at the ZLB, which is consistent with the literature on the so-called "safe-asset shortage problems". We also find that central bank's bond purchases across different maturities act as a major determinant of the level and slope of the term-structure, and yield-curve-control (YCC) policies that actively manipulate long-term yields are powerful in terms

of stabilization both during normal times and at the ZLB. As a drawback, YCC policies increase the likelihood of ZLB episodes and their durations, thereby locking the central bank in a position in which the short-term rate is less useful as a policy tool.

- **Managerial Incentives, Financial Innovation, and Risk-Management Policy** (with Son Ku Kim and Sheridan Titman)
  **Abstract**: This paper examines risk management issues from the perspective of a firm run by an effort and risk-averse manager. We show that when shareholders observe the risk choice, but not the manager's effort, the optimal compensation contract will direct managers to expose the firm to less risk than they would in the full information environment (e.g., execute costly hedges). Innovations in risk management technology, e.g., the introduction of a futures market, always improves the efficiency of the manager's compensation contract when the risk choice can be observed, and this efficiency gain continues to hold under some circumstances when the manager's risk choice cannot be observed by shareholders. In other cases, however, due to the incentive problems associated with the hedging choice, financial innovation can lower welfare.

- **Ignorance is Bliss: Ex-Ante vs. Ex-Post Information Systems in an Agency Model** (with Jin Yong Jung and Son Ku Kim)
  **Abstract**: This paper studies the value of ex-ante information in a principal-agent model where such information is about random variables that affect the agent's utility and the timing of information revelation is an issue. We show that the principal and the agent's commonly observing information on those random variables ex-ante (i.e., before the agent takes an action) adds no value to their observing it ex-post (i.e., after the agent has taken an action). We also show that there is a negative relationship between the amount of ex-ante information contained in an information system and its efficiency in the principal-agent relation.

## WORK IN PROGRESS:
- **Note on Indebted Demand and a Government's Dilemma** (with Marc Dordal i Carreras) (In Progress)

- **The Big Push: US Vietnam War Spending and the East Asian Tigers** (with Oliver Kim, Nathan Lane, and Krisztina Orban) (In Progress)

- **A Contractual Risk-Management** (with Jin Yong Jung) (In Progress)


## PROFESSIONAL EXPERIENCE:
### TEACHING:
Teaching Assistant, Department of Economics, U.C. Berkeley (Fall 2019- Spring 2021)
Econ 182. International Monetary Economics (Fall 2019, Fall 2020)
Econ 134. Macroeconomic Policy from the Great Depression to Today (Spring 2020)
Econ 202B. Graduate Macroeconomic Theory (Spring 2021)

### MILITARY SERVICE:
Junior Faculty Officer at the Korea Military Academy (Fall 2016- Spring 2019)
Teaching various undergraduate economics courses to Republic of Korea Army cadets

### REFEREEING:
Journal of Economic Theory, Journal of Political Economy

## FELLOWSHIPS AND AWARDS:
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| 2021-2022 | Doctoral Completion Fellowship (U.C. Berkeley) |
| 2019-2022 | The Janet T. New Graduate Fellowship (U.C. Berkeley) |
| 2014-2016 | Regents Fellowship (U.C. Berkeley) |
| 2012-2014 | Full Scholarship for Master Students (Seoul National University) |
| 2009-2012 | National Science and Technology Scholarship for Undergraduate Students (Seoul National University) |
| Pre-2009 | Gold Prize in the Korea Physics Olympiad and one of finalists for the Korean Team for IPhO 2008 |

## OTHER INFORMATION:
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| Affiliations: | American Economic Association |
| Languages: | English, Korean |
| Citizenship: | Republic of Korea |