Seung Lee

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Office Contact Information

Program Director: Jonathan Robinson jmrtwo@ucsc.edu Graduate Program Coordinator: Sandra Reebie screebie@ucsc.edu

Education

University of California Santa Cruz

2012-Present

PHD in Economics, expected December 2016

Advisors: Kenneth Kletzer, Eric Aldrich, Lilia and Serguei Maliar

Thesis Title: Essays on Computational Economics and Finance

University of California Berkeley

1998-2000

BA in Economics with Honors

Fields

PRIMARY

Computational Economics, Financial Economics

Secondary

Mathematical & Quantitative Methods, Labor & Demographic Economics

Research Experience

Research Assistant to E. Aldrich, G. Laughlin and J. Grundfest 03/2015 – present

Work Experience

OLD MISSION CAPITAL CHICAGO IL 2007-2010

Derivatives Trader

American Stock Exchange New York NY 2003-2006

Proprietary Trader

Susquehanna International Group Chicago IL 2000-2002

Assistant Trader

Teaching Experience

University of California Santa Cruz 2012-2016

Teaching Assistant: Introduction to Microeconomics

Head Teaching Assistant: Introduction to Microeconomics

Grants

Center for Analytical Finance 2015

"An Entropy-Based Measure of Price Discovery" Amount: \$3000

Research Papers

Vote to Default: Heterogeneous Sovereign Default Model

Efficiency evolution and Social Security Insolvency

Job Market

Abstract: Inspired by the political events that followed after the sovereign debt crisis in Greece post 2009, I develop an overlapping generations model with aggregate and idiosyncratic shocks to analyze agent's decisions if each had a vote in whether the country should default or not. The hypothetical economy where agents vote to default almost became a reality in 2015 when Prime Minister of Greece asked the voting population whether the country should remain in the bailout program through a referendum. Model results exhibit similar patterns as the Greek referendum with the young and less wealthy more inclined to vote for default.

RELATIVE SPREAD AND PRICE DISCOVERY

with Eric Aldrich

with Lilia and Serguei Liliar

Abstract: We develop a theoretical model to highlight a previously unexplored mechanism of price discovery: relative minimum price increments for equivalent assets trading on distinct financial exchanges. Although conventional wisdom dictates that futures market assets lead equities equivalents in terms of price formation, our model predicts that the opposite should be true when particular relative price conditions hold for the bids and offers of each asset. We develop a new empirical measure of price discovery which is suited to asynchronous, high-frequency transaction and quotation data, and apply it to the highly liquid E-mini/SPY pair in order to test the predictions of the model. Empirical evidence strongly supports the model and further demonstrates that relative minimum contract size plays an additional role in the formation of prices.

Research Papers in Progress

Abstract: United States population has increasingly become older. The aging is expected to continue as life expectancy increases, more baby boomers reach retirement age and birth rate remain at today's levels. The demographic changes has impacted labor participation rates as well as the solvency of the Social Security Trust Fund. Social Security Administration projects the fund's insolvency around 2035. Given the "imminent" insolvency, policies such as increasing eligibility age and expanding the tax base have been proposed. These policies are usually

analyzed using many period OLG model with a hump-shaped age-dependent productivity profile. We believe this profile is dynamic as the population itself. We incorporate the dynamic age-dependent profile in an OLG framework in a closer look at insolvency of the Social Security Trust Fund.

References

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Eric Aldrich

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Lilia Maliar

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Seguei Maliar

Associate Professor of Economics Santa Clara University maliars@stanford.edu

Gregory Laughlin

Professor of Astrophysics Yale University laugh@ucolick.org