Sicheng He

sichenghe.weebly.com
hesich@iastate.edu

Contact Information

Department of Economics
Iowa State University
Ames, IA 50011-1054
Phone: 515-708-0740

Education

Ph.D., Economics, Iowa State University, May 2019 (expected)
M.A., Economics, Nankai University, June 2014
B.A., Economics, Nankai University, June 2011

Research Fields

Primary fields: Macroeconomics and Monetary Economics

Secondary field: Finance

Teaching Experience

Teaching Assistant, Iowa State University

Advanced Macroeconomic Analysis (Ph.D. Core), Recitation Instructor, Spring 2018
Macroeconomic Analysis (Ph.D. Core), Recitation Instructor, Spring 2017
Intermediate Macroeconomics, Recitation Instructor, Spring 2017
Intermediate Microeconomics, Lab Instructor, Fall 2018
Principles of Microeconomics, Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016, Fall 2017
Principles of Macroeconomics, Fall 2014, Spring 2015, Fall 2016, Fall 2017

Working Papers

"*Endogenous Growth: Innovation, Credit Constraints, and Stock Price Bubbles*" (Job Market Paper)

Abstract This paper studies the potential for rational bubbles in the innovation sector to affect long term economic growth. We show that stock market prices of R&D firms could include a bubble component when credit constraints are present. Bubbles are self-sustained in equilibrium by a "liquidity" premium that originates when credit constraints are relaxed. Bubbles expand borrowing and production capacity of R&D firms, stimulate innovation and increase the growth rate. Bubbles are magnified by tighter credit constraints and scarce investment opportunities. In contrast to Hirano and Yanagawa (Restud, 2017), in our model: (i) bubbles are incorporated as part of the stock price rather than providing value to an otherwise useless asset; (ii) bubbles can arise at any level of financial development. Finally, we show that bubbles can create permanent reallocation effects benefiting the innovation sector over other sectors.

"*Collateral Constraints, Financial Crisis, and Optimal Monetary Policy*", with Juan Carlos Cordoba

Abstract We use a generalized Kiyotaki and Moore model (1997) with collateral and cash-in-advance constraints to study the effects of financial and non-financial crisis and the effects of monetary policy both in the short and the long run. We then characterize optimal monetary policy in the Ramsey sense. We find that in the long run, the optimal monetary policy drives the social, but not the individual, shadow price of the collateral constraint to zero. This translates into a generalized version of the Friedman's rule, one that takes into account the degree of credit tightening. In the short run, optimal monetary policy is counter-cyclical, significantly offsetting the effects of financial shocks and reducing the welfare loss of the shocks.

"*Blockchain Innovation in Global Payments: Network Effects, Creative Destruction and Bubbles*"

Abstract This paper studies the dynamics of blockchain innovation, adoption and competition in the global

payment industry in the presence of a traditional technology. This paper builds a theoretical model with network effects to study the possible evolution path of the payments industry, how a particular technology can gain and lose its market share and whether there exist some technology which can maintain its dominant power. This paper also studies the role of bubbles, and show that they have positive and negative effect on the social welfare.

Presentation in Conference

RIDGE and Banco Central del Uruguay Forum: Workshop on Financial Stability — December 2018
Annual Meeting of the Missouri Valley Economic Association — October 2016

Awards

Iowa State University Teaching Excellence Award, 2018
Graduate Student Travel Grants, Iowa State University 2016, 2018

References

Professor Juan Carlos Cordoba (advisor)
Department of Economics
Iowa State University
Phone:515-294-5438
Email: cordoba@iastate.edu

Professor Joydeep Bhattacharya
Department of Economics
Iowa State University
Phone: 515-294-5886
Email: joydeep@iastate.edu

Professor Rajesh Singh
Department of Economics
Iowa State University
Phone: 515-294-5213
Email: rsingh@iastate.edu