Sicheng He

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Contact Information

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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, R&D, Credit Constraints and Bubbles*" (Job Market Paper)
Abstract This paper provides a theoretical study on how bubbles affect innovation and growth by developing an endogenous growth model with credit constraints. This paper finds that stock price bubbles for R&D firms exist when there are credit constraints. Bubbles do not violate transversality conditions because they reduce the credit constraints when a R&D firm has an investment opportunity thus they get a liquidity premium. This crowd in effect is weakened by indirect crowd out effects. When a certain kind of resource is allocated among different sectors, bubbles in R&D sectors also attract resource from other sectors and encourage R&D activities.

"*Optimal Monetary Policy with Collateral Constraints*", 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 Meetings 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

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