

GUANLIANG HU

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EDUCATION

Ph.D., Economics, Pennsylvania State University, USA *2016-2022 (expected)*
Thesis: The Nature of Stochastic Volatility and Aggregate Fluctuations
Committee: Jonathan Eaton (Co-Chair), Russell Cooper (Co-Chair), Neil Wallace, Jingting Fan, David Argente
M.Phil. candidate, Economics, Shanghai University of Finance and Economics, China *2012-2016*
B.A., Economics (with distinction), Shanghai University of Finance and Economics, China *2007-2011*

RESEARCH INTERESTS

Macroeconomics, International Economics, Firm Dynamics

RESEARCH PAPERS

— Job Market Paper

“The Nature of Stochastic Volatility and Aggregate Fluctuations”

— Other Working Papers

“Exporting like China: The Determinants of Trade Status” (Under Review)

joint with Russell Cooper, Guan Gong and Ping Yan, NBER Working Paper No.28289

“‘Conventional’ Monetary Policy in OLG Models: Revisiting the Asset-substitution Channel” (Under Review)

joint with Guoxuan Ma, Wei Qiao and Neil Wallace

“Uncertainty, Trade Collapse, and Investment Efficiency”

— Publications (Pre-Doctoral Work)

“The Role of Returns to Scale in Measuring Frictions in Resource Allocation: Revisiting Misallocation and Manufacturing TFP in China”

joint with Guan Gong, *Economics Letters*, 2016

“Efficiency of Resource Allocation and Manufacturing Total Factor Productivity in China”

joint with Guan Gong, *Economic Research Journal*, leading article, 2013 (In Chinese)

— Work in Progress

“An IRBC Model of Importer and Exporter Dynamics”

“Exporting from China: The Sources and Consequences of a Trade War”

joint with Russell Cooper, Guan Gong and Ping Yan

“Dynamic Factor Demand: Implications for Misallocation”

joint with Russell Cooper, Guan Gong and Ping Yan

JOB MARKET PAPER ABSTRACT

“The Nature of Stochastic Volatility and Aggregate Fluctuations”

Recent papers have pointed to the role of increased volatility in generating aggregate fluctuations. Despite the widespread use of this approach, the commonly specified model has two main inconsistencies relative to the data: (i) the economy recovers from a downturn induced by a volatility shock much faster in the model than in the data; and (ii) in the model, a large volatility shock leads to an increase in investment dispersion, while in the data, a large volatility shock often coexists with a decrease in investment dispersion. This paper introduces a more general information structure that allows for a richer specification of volatility shocks. I find a new type of volatility shock that arises in the context of an information extraction problem, making it more difficult for firms to infer their fundamentals. In my model, the new type of volatility shock fits both firm-level and aggregate data better than the standard formulation, resolving the aforementioned inconsistencies with the data.

OTHER WORKING PAPER ABSTRACTS

“Exporting like China: The Determinants of Trade Status” (Under Review)

joint with Russell Cooper, Guan Gong and Ping Yan, NBER Working Paper No.28289

This paper studies the exporting decision of Chinese manufacturing firms. The economic framework stresses the dynamic decision by both state and private controlled entities to export in a model with labor adjustment costs. In this complex environment, a simple decision rule whereby export status depends only on current productivity does not hold. Nor does this rule match data patterns. The estimated model is used to understand the factors that influence export status. The analysis highlights the economic significance of labor adjustment costs in shaping both employment and trade dynamics.

“‘Conventional’ Monetary Policy in OLG Models: Revisiting the Asset-substitution Channel” (Under Review)

joint with Guoxuan Ma, Wei Qiao and Neil Wallace

Conventional monetary policy involves actions by the monetary and fiscal authorities: the former sets a nominal interest rate and the latter sets lump-sum taxes to finance the implied flow of interest payments on government debt. We model such policy within an overlapping generations framework and show that absent any other frictions the magnitude of the nominal interest rate gives rise to asset substitution between government debt and either private debt or capital — substitution which has both real and nominal effects. Such substitution is not in standard New Keynesian models because those models use a dynastic specification in which government debt is not net wealth.

“Uncertainty, Trade Collapse, and Investment Efficiency”

This paper studies the impact of increased uncertainty on international trade flows. The economic framework stresses the dynamic decisions to import and export in a small open economy with uncertainty fluctuations and capital adjustment costs. Crucial features of this model are the existence of non-convex costs of importing foreign inputs and ordering domestic inputs, and the investment efficiency gains by combining domestic and foreign investment inputs. In this environment, an increase in uncertainty will cause a “wait-and-see” effect on capital adjustment, particularly on importing foreign inputs. Moreover,

the “wait-and-see” effect induces export capacity misallocation (from capital misallocation). These two effects will result in international trade being more volatile than aggregate output. I structurally estimate the model using Colombian firm-level data. The estimated model can explain the Great Trade Collapse of 2008–2009.

RESEARCH EXPERIENCE

Research Assistant for Jonathan Eaton	<i>Summer 2021</i>
Research Assistant for Neil Wallace	<i>Summer 2019</i>

TEACHING EXPERIENCE

Instructor

International Economics (Online Undergraduate)	<i>Summer 2020</i>
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Teaching Assistant

The Economics of Uncertainty, for Neil Wallace	<i>2019-2021</i>
Macroeconomic Analysis (Ph.D.), for Neil Wallace	<i>2018-2019</i>
Introductory Macroeconomic Analysis and Policy, for Pitchayaporn Tantihkarnchana	<i>2018</i>
Introductory Microeconomic Analysis and Policy, for Austin Boyle	<i>2017</i>
Labor Economics, for Jadrian Wooten	<i>2016-2017</i>

HONORS AND AWARDS

Department of Economics Graduate Assistantship, Pennsylvania State University	<i>2016-2022</i>
Graduate National Scholarship, China	<i>2013, 2015</i>
Academic Excellence Award, Shanghai University of Finance and Economics (×5)	<i>2010-2015</i>
Graduate with Distinction: College Graduate Excellence Award of Shanghai	<i>2011</i>
Undergraduate National Scholarship, China	<i>2010</i>

PROFESSIONAL ACTIVITIES

Seminars and Presentations: PSU Trade and Development Workshop (2018-21), PSU Macro Workshop (2019-21)

SKILLS

Programming: Matlab, Stata, Fortran, L^AT_EX
 Languages: Chinese (native), English (fluent)

REFERENCES

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 Department of Economics
 Pennsylvania State University
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