

# GUOXUAN MA

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## EDUCATION

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**Pennsylvania State University, U.S.A.**

2016 - Present

Thesis: Young Firms' Financing Choices, Investment, and Growth  
Committee: Mark Roberts (Chair), David Argente, Karl Schurter  
Ph.D. in Economics 2022(expected)

**Hanqing Institute, Renmin University, China**

2013 - 2016

M.A. in Economics

**Nanjing University, China**

2009 - 2013

B.A. in Financial Engineering

## RESEARCH FIELDS

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Structure IO, Empirical Macroeconomics, Auctions, Firm Dynamics

## PUBLICATION

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**Can Catastrophic Long-Term Care Insurance Policies Increase Private Insurance Coverage and Reduce Medicaid Expenditure?**

*The B.E. Journal of Economic Analysis & Policy*

2017(1)

Guoxuan Ma and Wei Sun

**The Influence Factors of RMB Equilibrium Exchange Rate Fluctuation Analysis.**

*Economic Science (Chinese)*

2013(5)

Guoxuan Ma and Run Yu

## WORKING PAPER

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**Young Firms' Financing Choices, Investment, and Growth (Job Market Paper)**

**abstract** *This paper investigates the impact of access to different financing choices on young firms' future growth paths. According to the Kauffman Firm Survey data, over 2/3 of debt firms rely on credit card borrowing in the first five years of development. I construct a firm life-cycle model with financing constraints to address selection issues involved in the endogenous financing decisions. In this model, firms can simultaneously choose up to three debt financing sources: business bank loans, personal bank loans, and credit card borrowing. I find many firms increase their debt leverage, particularly through credit card borrowing, to avoid shrinking their businesses in bad times. Also, without credit card borrowing, debt firms quickly clear their debt within 4 years of development and assets accumulation level can drop by 11%. In the counterfactual analysis, I estimate how young firms react to the increasing financing cost caused by the local bank industry concentration. The increasing financing cost can lead to a rise in the ratio of debt firms with business bank loans by forcing firms that rely on credit card borrowing to clear their outstanding debt. When the financing cost is not too high for business loan borrowers, this selection mechanism can shift the firm size distribution to the right.*

## Information Asymmetry and Bidders' Behavior in Common Value English Auctions

**abstract** *In common value English auction, bidders may have different levels of private information about the selling item. Due to the learning effect of the common value part, bidders with more precise information may be able to manipulate the auction outcome through strategic bidding behavior. However, English auctions are usually challenged by model incompleteness problem (Bikhchandani et al., 2002). To overcome the identification challenge, I utilize moment inequalities implied by the bidder's bidding history to estimate the value distribution and develop a structural econometric model to study the effect of information asymmetry on bidding behavior. The paper finds that the information premium mainly comes from the informed bidder's screening effect and is independent of the number of participants. Applying the data from Chinese Justice Auction, the estimation result shows that the noisy part in signal is very large.*

### 'Conventional' Monetary Policy in OLG Models: Revisiting the Asset-substitution Channel

joint with Guanliang Hu, Wei Qiao and Neil Wallace (Under Review)

**abstract** *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.*

## WORKING IN PROGRESS

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### Recovering Heterogeneous Future Discount Factor Distributions: Application to Municipal Bond Auction

joint with Moyu Liao

## RESEARCH EXPERIENCE AND PROJECT

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RA for Mark Roberts Summer 2021

RA for David Argente 2019 - 2020  
*Data cleaning for Nielsen data*

- clean the massive Nielsen data on the cluster
- use Stata for empirical analysis on large dataset (millions of observations)
- match and merge the Nielsen data with television advertisement dataset

RA for Michael Gechter 2018 - 2019  
*Working on image recognition with the application of CNN*

- we apply the convolutional neural network (CNN) to do image recognition
- CNN framework: Theano (Python)
- process the satellite images with ArcGIS

## TEACHING EXPERIENCE

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Advanced Macro Theory I, for Ruilin Zhou & Shouyong Shi 2017-2018  
*graduate course*

Monetary Economics, for Qi Li 2018-2019  
*undergraduate course*

## AWARDS

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## COMPUTER SKILLS

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Python	Matlab	Webspider
R	Deep Learning	

## PRESENTATIONS

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### **Home Security or Social Security, Which one is better for Long Term Growth ?**

*The third annual graduate academic conference*

*May 2016*

Huazhong University of Science and Technology,

Wuhan, China

### **Asymmetric Information and Bidder's Behavior in Common Value English Auction**

*The 17th annual International Industrial Organization Conference*

*April 2019*

Rasing Star Session,

Boston, MA

## REFERENCE

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