

GUOXUAN MA

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EDUCATION

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

Structure IO, Empirical Macroeconomics, Auctions, Firm Dynamics

PUBLICATION

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

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

abstract *This paper investigates the impact of financing choices among heterogeneous young firms on their future growth paths. Young firms' heterogeneity stems from firm owners' characteristics, (e.g., educational background and work experience). However, the relationship between firm heterogeneity and access to financing is less well known in the literature of firm dynamics. Using Kauffman Firm Survey data, I construct a firm life-cycle model with financing constraints that allows different types of firms to simultaneously choose multiple channels, including business loans, personal loans, and credit card borrowing. A key assumption in the model is the unlimited but costly borrowing from credit card channels. This paper uses the model to quantitatively evaluate each channel's role in young firms' long-run growth paths, I show that the credit card channel is essential for firms to maintain business activities, especially for small firms. When the unlimited borrowing assumption is removed, rather than borrowing up to the limit, many young firm owners will turn to self-financing and no longer take any form of debt. My model also tests young firms' response to the higher financing cost from the increasing concentration in the financial market. The simulation result indicates that in a specific scenario, a higher financing cost can push firms to reduce the share of borrowing from high-cost channels and better utilize the business loans for growth, resulting in a higher growth trajectory.*

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 (submitted)

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

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

joint with Moyu Liao

RESEARCH EXPERIENCE AND PROJECT

| | |
|---|--------------------|
| RA for Mark Roberts | <i>Summer 2021</i> |
| RA for David Argente | <i>2019 - 2020</i> |
| <i>Data cleaning for Nielsen data</i> | |
| <ul style="list-style-type: none"> • 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 | <i>2018 - 2019</i> |
| <i>Working on image recognition with the application of CNN</i> | |
| <ul style="list-style-type: none"> • we apply the convolutional neural network (CNN) to do image recognition • CNN framework: Theano (Python) • process the satellite images with ArcGIS | |

TEACHING EXPERIENCE

| | |
|---|------------------|
| Advanced Macro Theory I, for Ruilin Zhou & Shouyong Shi | <i>2017-2018</i> |
| <i>graduate course</i> | |
| Monetary Economics, for Qi Li | <i>2018-2019</i> |
| <i>undergraduate course</i> | |

AWARDS

Bates White Award, Dept. of Economics, Penn State
Graduate Assistantship, Dept. of Economics, Penn State

2019
2016-Present

COMPUTER SKILLS

| | | |
|--------|---------------|-----------|
| Python | Matlab | Webspider |
| R | Deep Learning | |

PRESENTATIONS

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

Rising Star Session,

Boston, MA

REFERENCE

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