

# QI Qianru

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## EDUCATION

The University of Chicago Chicago, Illinois, U.S.A.

- Visiting student at the Graduate School of Business Aug.2007-present

Purdue University, Krannert School of Management West Lafayette, Indiana, U.S.A.

- PhD candidate in Economics, GPA: 3.8/4.0 Aug. 2005-present

- Purdue Research Fund Grant during the 2008-09 academic year.

The University of Kaiserslautern Kaiserslautern, Germany

- Master of Science in Computational Mathematics Aug. 2003- Aug. 2005

- Visiting Student in Max Plank Institute- Magdeburg

- 2-year Scholarship from Fraunhofer Institute and Visiting Fellowship from Max Plank Institute

Beijing Normal University Beijing, China

- Bachelor of Science in Management Science Sept. 1999- July 2003

- Excellent Graduate Student of Beijing City 2003

## RESEARCH INTERESTS

Applied General Equilibrium Theory, Entrepreneurship, Household Finance, Development Economics

## WORKING PAPER

“Endogenous Equity Market Non-Participation: The Effects of Human Capital Investment”

Abstract: This paper endogenously produces stock market nonparticipation in a dynamic search model in which households make investment decisions between a human capital market and a stock market. Specifically, the reason for non-participation is that people would rather invest all their money in human capital than in stock, when the rate of return to human capital is higher and safer. Since human capital return changes with household demographic characteristics like age, wealth, health status, the model can explain the variance of participation rates across households in the equilibrium. I also use data from the Panel Study of Income Dynamics (PSID) and apply duration analysis to identify the magnitude of the effects of the human capital investment on stock market participation. The empirical results match all the major implications of the model.

## PUBLICATIONS AND TALKS

- “Endogenous Equity Market Non-Participation: The Effects of Human Capital Investment”,

8th Trans-Atlantic Doctoral Conference, London Business School, forthcoming May 17 2007

Macroeconomic Workshop, Purdue University, March 25 2007

- “Dynamic Model Reduction in Biochemical Reaction Network”, Max-Planck, March 2005
- “Algorithm Design for Optimal Character Recognition”,  
Industrial Mathematics Seminar, Fraunhofer Institute, May 2004
- “The Investigation on the National College Entrance Exam”, Huang He 3(2003), China

## **RESEARCH EXPERIENCE**

Max Plank Institute Magdeburg, Germany

Visiting Student and Research Assistant Mar. 2005- Aug. 2005

- Applied mathematical manifold theory and reduced the complexity of a biochemistry system by 90% (i.e. from 900 reaction equations to 90 equations) without significantly changing the solution.
- Simulated the biochemistry reaction process using Matlab.

Fraunhofer Institute, Optimization Department Kaiserslautern, Germany

Research Assistant Sept. 2003-Aug. 2005

## **PROJECTS**

“Optimal Utilization of Colored Gemstones”

- Designed software for automated grinding process of gemstones using C++;
- Invented an adaptive hierarchical approximation algorithm and reduced the computational time by 98.6%.(i.e. from 14 hours to 12 minutes)

“Supply Chain Management”

- Developed software to help international companies manage their time schedule for each project.
- Visualized all planning levels ranging from the strategic design of supply chain networks to short-term planning of logistics activities using Visual Basic

## **TEACHING EXPERIENCE**

Purdue University West Lafayette, Indiana

Instructor Summer 2007

- Macroeconomics (Econ 252), had sole responsibility for a class of 46 undergraduate students.
- Outstanding Graduate Student Instructor 2007, Krannert School of Management, Purdue University

### **Teaching Assistant:**

- “Game Theory”(Ph.D), Professor C.D.Aliprantis Spring 2007
- “Macroeconomics I”(Ph.D), Professor Yili Chien Fall 2007
- “Mathematical Economics” (Ph.D), Professor C.D.Aliprantis Spring 2006
- “Statistics and Probability theory”(Ph.D),Professor Rabee Tourkey Fall 2006

## **COMPUTER/FOREIGN LANGUAGE SKILLS**

- Software: Stata/SAS/SPSS/Eviews, Matlab/ Maple, Latex
- Programming: C\C+ +. Visual Basic, Visual Foxpro , Visual C+ +
- Chinese,English,German

## **REFERENCES**

C.D Aliprantis (Chair)

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and Professor of Mathematics

Krannert School of Management

Purdue University

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