Research Statement

Qichao Shi
Department of Economics
Lehigh University

During my graduate training, I have developed a strong belief that empirical research should be guided by appropriate theory and theoretical research should be inspired by empirical observations. This view has influenced my approach to research as well as the topics I find interesting. I consider myself to be an *applied microeconomist with broad theoretical and empirical interests* in the fields of industrial organization, experimental economics, applied econometrics, and labor economics. Although my fields may seem disparate initially, my agenda is tightly focused on the influence of information on market strategies. I have developed theoretical models in order to cast new light on a topic of interest; and where appropriate, I have conducted empirical work to determine whether the theory is an adequate description of reality.

This statement first summarizes my current doctoral research classified by methods, followed by a brief future research plan.

1 Current Research

1.1 Experimental study: strategic behavior of selling product rankings

In the first chapter of my dissertation, *An Experimental Study of Selling Expert Advice*, I design and conduct a lab experiment to explore the interaction between a product expert, who offers to sell a product ranking, and an incompletely informed consumer. The consumer considers acquiring the expert's product ranking not only because the expert has superior information about the quality of the products the consumer is considering, but also because the expert can directly influence consumer utility of a product by the product's rank. There are multiple equilibria in this setting with strategic information transmission: ones in which the expert ranks products in a manner that is consistent with the consumer's intrinsic utilities of the products, and ones in which the expert does not. Across the three treatments we examine, which vary by the consumer's possible intrinsic utilities, we find evidence that product experts are likely to select a ranking methodology that involves considerable uncertainty about the final product ranking, even though doing so involves ranking products in a manner that is inconsistent with consumer intrinsic utility.

1.2 Theoretical study: market strategies with incomplete information

The other two chapters of my dissertation theoretically investigate marketing strategies in environment with asymmetric information.

Chapter 2, *Third-Party Product Rankings and Advertising*, revisits firms' information disclosure behavior with third-party product rankings. We find that firms may not have incentive to inform consumers about attribute quality if that would reduce product differentiation, a result that is consistent with most existing studies. We examine the firms' advertising strategies in a scenario with third-party product reviews. Informative advertising will play the same role as costly information disclosure. However, informing consumers through advertising a third-party is subject to a free-rider problem. Unlike informative advertising, with persuasive advertising firms choose to promote different product attributes. In addition, when firms cannot hide information about quality, they may have more incentive to influence consumers' preference by persuasive advertising.

In Chapter 3, *Behavioral Return Policies with Two-sided Asymmetric Information*, I model a retailer's optimal return policy for an environment in which consumers are heterogeneous in return propensities. An optimal return policy needs to deal with a two-sided asymmetric information problem between sellers and consumers. When making a purchase decision, particularly for on-line shopping, consumers usually do not have complete information about a product attribute concerning quality, texture, or fit. In such cases, a liberal return policy could increase consumer expected utility by reducing risk. However, it also leads to return fraud or abuse. For example, if it is costless for customers to order multiple shoes to test sizes, they may do so. With free returns, sellers need to bear a big cost if they lack such information about customers' return behavior. As a result, a generous return policy might only increase the amount of orders but not profits. If the seller could identify consumers with higher return propensities, he may have incentive to adopt a discriminatory restrictive return policy, possibly barring some consumers from return products. I am in the process of working on the behavioral response in a dynamic setting by consumers to this policy.

1.3 Empirical study: income inequality

I am also working on one empirical study about income inequality, *Sources of Income Inequality from a Global Perspective: Evidence of Country Heterogeneity*, which is an extension of my master's thesis that has been published as *Impact of Economic Globalization on Income*

Inequality: Developed Economies vs Emerging Economies. Although many studies have suggested various sources of income inequality, due to limitations of data and estimation methods, they failed to examine the country heterogeneity. Using a cross-country panel data covering 175 countries from the year 1980 to 2015, this study estimates an overall impact on income inequality using new estimation methods: multiple imputed fixed effects model, common correlated effects estimator and subsample analysis. Overall, we find that economic globalization, financial development and GDP per capita are related to the rising income inequality in recent years. Our findings also confirm country heterogeneity: economic globalization is the main source of rising inequality within emerging countries, while within advanced countries more factors are related to the rising of income inequality, including human capital, technology, economic globalization and financial development. Specifically, only economic globalization contributes to the rising of income inequality in both emerging and advanced countries. We further decompose globalization and find that FDI is the main factor across all countries while export plays a role in advanced countries.

2 Future Research

In the immediate future, I plan to finish my ongoing projects, some of which were described above. Besides those, I am open to working in areas in the broadly defined field of applied microeconomics.

Specifically, I am actively thinking about two new projects. The first that stems from my job market paper is to explore whether people update their beliefs based on Bayes' rule. Although Bayesian updating is a foundation of game theory, few studies have examined in an experimental environment whether people do so. I think there are at least two forces that might prevent this updating. One is cognitive cost based on the presumption that humans are cognitively lazy and reluctant to change their minds. The other is a salience effect in which people might not pay enough attention to the exact expected payoffs of their alternatives but rather they focus only on some salient values.

The second project is to empirically investigate firms' strategic information disclosure behavior. As discussed in the second chapter of my dissertation and other existing studies, incomplete information disclosure is one potential outcome in a strategic information transmission scenario, but whether this happens in the real business world still needs to prove.