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TA for Intermediate Macroeconomics, Fall 2008-Spring 2009.

At Peking University (China): \Best Teaching Assistant Award", CCER, 2007

TA for Intermediate Macroeconomics, Fall 2007.

TA for Chinese Economy and Economic Reform, Fall 2006-Spring 2007.

TA for Intermediate Microeconomics, Spring 2006.

Presentations

\Static and Dynamic Gains from Importing Intermediate Inputs: Theory and Evidence", 2012, *submitted*.

The Econcon Conference, Princeton University, Princeton, United States, August 16-17st, 2012.

Department of Economics, Tsinghua University, China, April 27th, 2012.

Department of Economics, Southwestern University of Finance and Economics, Chengdu, China, April 18th, 2012.

National School of Development, Peking University, Beijing, China, April 11th, 2012. (In Chinese)

Internship

Marketing and Development Strategy, Cummins Inc.(East Asia), Beijing, China, May-July 2008.

Fellowships and Awards

China-America Academic Exchange Program Fellowship, California, United States, Fall 2008-Spring 2009.

Outstanding Graduates of Beijing, Beijing Government, 2004.

National Scholarship of China, Ministry of Education, China, 2003.

First Class Award, China Youth University for Political Sciences, 2000-2004.

Language and Skills

English (uent), Chinese (native). Matlab, Stata.

References

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Thesis Summary My research interests cover topics in both Industrial Organization and International Trade, with an emphasis on measurement of productivity, research and development (R&D), innovation, and the interaction between rm heterogeneity and rm activities. Thesis title: *Essays on Firm Heterogeneity and Activities in Industrial Organization and International Trade"*

1. \Static and Dynamic Gains from Importing Intermediate Inputs: Theory and Evidence", 2012, Submitted (Job Market Paper)

EXTENDED ABSTRACT: Studies using micro data have found that rms that import some of their inputs from abroad have higher productivity than non-importing rms. There are several reasons for this correlation. On the one hand, more productive rms are more likely to import inputs, as they may have the largest potential gains from importing inputs. On the other hand, importing may have a positive impact on rm productivity through di erent channels. Existing studies have emphasized the role of \quality and variety e ects", arguing that the higher quality and increased variety of imported inputs can improve the productivity performance of importing rms. Alternatively, importing may have a dynamic impact on rms' future productivity, through exposure to foreign advance technologies, productivity, and R&D.

This paper constructs a dynamic model to characterize a rm's decision to purchase imported inputs or rely exclusively on domestically-supplied inputs. This model provides a uni ed framework to analyze the determinants of a rm's import decision and to quantify its e ect on rm value and productivity. A novel aspect of this model is that it allows an empirical decomposition of the pro t gains from importing into a static e ect, which arises from the quality and variety e ects as discussed in the literature, and a dynamic productivity e ect, which arises from the dynamic impact of importing on rm's future productivity.

I structurally estimate the dynamic model of import demand using a plant-level data set from Colombia. The empirical results show that more productive plants and larger plants (measured by capital size) tend to import intermediate inputs, and that the total gain from importing inputs from abroad is large. The counterfactual analysis shows that importing increases rm value, which is de ned as the discounted future pro t, by 0.87% to 22.28% in the six industries examined: Basic Industrial Chemicals, Pharmaceuticals, Plastics, Leather Shoes, Printing and Publishing, and Clothing. The decomposition of the import gain into its static and dynamic components reveals that the major e ect of importing occurs through the dynamic e ect on future rm productivity.

2. \Production Function Estimation with Unobserved Input Price Dispersion", with Paul Grieco and Shengyu Li, 2012.

ABSTRACT: This paper introduces a method to consistently estimate production functions when only intermediate input expenditure, rather than input prices and quantities, is observed. The traditional approach to dealing with unobserved input quantities | using de ated expenditure as a proxy | requires strong assumptions for consistency and is likely to su er from omitted price bias. In particular, we show that the traditional approach tends to underestimate the elasticity of substitution and bias estimates of the distribution parameters. Our approach applies to a general class of production functions with a mild identi cation restriction. As a demonstration, we apply our approach to the CES production function. A Monte Carlo experiment illustrates that the omitted price bias is signi cant in the traditional approach, while our method consistently recovers the production function parameters. We apply our method to a rm-level data set from Colombian manufacturing industries. The empirical results are consistent with the predictions of the model and the Monte Carlo experiment.

3. \Unraveling E ects of Demand Shocks on Production Function Estimation and Firm Behavior", with Pradeep Kumar, 2012.

ABSTRACT: The traditional productivity measures estimated using revenue-based rm-level data have both demand side and production side shocks embedded in them. In order to separate these two shocks, a small literature has exploited output price data but this data is typically not available in rm-level production data set. In this paper, we use inventory data to disentangle and separately identify demand and productivity shocks without using any price data. Introducing a demand shock into the model also addresses the multi-collinearity bias pointed out by Ackerberg, Caves and Fraser (2006). Finally, we use our estimates to explain entry/exit dynamics and nd that demand shocks are a more important driver of rm-turnover than productivity shocks.

4. \Biased Technology and the Contribution of Technological Change to Economic Growth: Firm-Level Evidence from China\, 2012. (Draft Coming Soon)

ABSTRACT: Virtually all of the empirical literature on production function estimation that has followed the seminal paper by Olley and Pakes (Econometrica, 1996) begins with a framework in which technology di erences, both across rms and over time, are Hick's neutral. In this framework, technology di erences cannot explain variations in factor shares across production observations. In the Chinese manufacturing sectors we observe large variations in the capital-labor ratio across production units. These variations are unlikely to be explained by factor price variations combined with reasonable magnitudes of the elasticity of substitution and Hick's Neutral technology di erences.

In this paper, I develop and estimate an empirical model with factor-biased technology di erences and use it to analyze the sources of productivity di erences across Chinese rms. The basic idea of the estimation is that the choice of inputs contains information about the unobserved factor-augmenting productivities; therefore, we can invert the input demand functions to recover the unobserved productivities. I estimate the model using a rm-level data set of four Chinese Manufacturing industries: Clothing, Paper and Paper Board Making, Production Equipments, and Motor Vehicles. The empirical results provide rm-level evidence of biased technological change over time and biased technological dispersion across rms. The results also show that large rms have a higher capital-labor e ciency ratio and that biased technological dispersion explains a large part of the dispersion of capital-labor ratios across rms.

I apply the recovered rm-level factor-biased productivities to analyze the contribution of technological change to the growth of the four Chinese industries. The results show that technological change contributes to the growth of gross output by 1.81%-3.10% annually and the value added by 12.67%-21.16%. This is higher than the combined contribution of the growth of capital and labor. I also nd that capital e ciency grows much faster than labor e ciency in China, and the contribution of technological change to economic growth is mainly due to the growth of capital e ciency. These results shed light on the sustainability of growth in these industries.