ANGDI LU

SINGAPORE MANAGEMENT UNIVERSITY

angdi-lu.com
angdi.lu.2015@phdecons.smu.edu.sg

Contact Information
School of Economics
Singapore Management University
90 Stamford Road
Singapore 178903, Republic of Singapore
Cell: (65) 8573-8645

Personal Information: Born 14/05/1992. Female. Chinese Citizen.

Undergraduate Studies:
B.A., International Economics, School of Economics, Fudan University, 2015.

Graduate Studies:
Ph.D. in Economics, Singapore Management University, 2015 to present.
Thesis Title: Three Essays on Quality of Tradable Products
Expected Completion Date: May 2020

Thesis Committee and References:

Pao-Li Chang (advisor)
School of Economics
Singapore Management University
90 Stamford Road
Singapore 178903
Phone: (65) 6828-0830
Email: plchang@smu.edu.sg

Yuan Mei
School of Economics
Singapore Management University
90 Stamford Road
Singapore 178903
Phone: (65) 6808-5212
Email: yuanmei@smu.edu.sg

Amanda Jakobsson
School of Economics
Singapore Management University
90 Stamford Road
Singapore 178903
Phone: (65) 6808-5467
Email: ajakobsson@smu.edu.sg

Teaching and Research Fields:
Primary fields: International Trade, Economic Geography
Secondary fields: International Macroeconomics, Applied Microeconomics

Teaching Experience:
Instructor:
2019   International Economics B (Undergraduate)

Teaching Assistant:
2019   Global Economy: Issues and Challenges (MBA)
2018-2019   Economics of Globalization (Undergraduate)
2018-2019   Advances in Singapore and ASEAN Economies (DBA)
2018   Intermediate Microeconomics (Undergraduate)
2017   Introductory Statistics

Conference and Seminar Presentations:

Invited Talks:

2019   Fudan University, School of Economics

Conference Presentations:

2019   Asia-Pacific Trade Seminar, University of Tokyo
                        Biennial Conference of China Development Studies, Shanghai Jiao Tong University
                        Industrial Organization and Growth Conference, Nanjing Audit University
                        Singapore Economic Review Conference, Nanyang Technological University

Member:

                        American Economic Association, Econometric Society

Honors, Scholarships, and Fellowships:

2019   Graduate Instructor Fellowship, Singapore Management University
2015-2019   Research Scholarship, Singapore Management University
2014   Academic Scholarship, Fudan University

Working Papers:

"Quantifying Quality Specialization Across Space: Skills, Sorting, and Agglomeration"
with Pao-Li Chang and Xin Yi, *Job Market Paper*

Abstract: We quantify the supply-side determinants of quality specialization across space. Specifically, we complement the quality specialization literature in international trade and study how larger cities specialize in higher-quality goods within a country. In our general equilibrium model, firms in larger cities produce goods with higher quality, because agglomeration benefits accrue more to skilled workers who are also more efficient in upgrading quality. Two channels are at work in our model. The first channel is through the treatment effect of agglomeration, such that firms become more productive if they locate in a larger city. The second channel works through sorting, in that more productive firms receive higher agglomeration benefits and endogenously sort into larger cities. These two effects are further mitigated by the increasing skill premium with respect to city size, though the latter is dominated in the spatial equilibrium. Using firm-level data from China, we structurally estimate the model and find that product quality is on average 23% higher in big cities than that of small cities. We further find that agglomeration forces account for half of the quality difference in big cities while sorting of firms accounts for another half. A counterfactual policy to relax land use regulation in housing production raises the quality of goods produced in big cities by 5.5% and (indirect) welfare of all residents by 6.2% through reallocation of economic activities across space.

"Quantifying the Transition Dynamics of Trade Liberalization: Roy Meets Heckscher-Ohlin"
with Xin Yi

Abstract: Upon the accession to WTO, factories in China were initially exporting matches and shoes. They only started to export more high-tech products such as electronic components in recent years. Similar patterns can also be found in Taiwan and South Korea. We quantify this pattern and its distributional consequences by developing a Ricardian-Heckscher-Ohlin model with dynamic Roy elements, which extends an old literature on dynamic Heckscher-Ohlin models (Findlay and Kierzkowski, 1983) with occupational choice and occupation-specific human capital accumulation. Given an abrupt trade liberalization, a country that is relatively more productive in some sectors may not have comparative advantage in the initial period, because the supply of occupation-specific human capital in these industries is limited. Furthermore, exports of these goods will grow slowly as it takes time for workers to accumulate occupation-specific human capital. As such, comparative advantage is endogenous as occupation-specific skill supply increases overtime. We quantify this transition dynamics under a North-South two-country settings and calibrate the parameters using data from China and the United States. The welfare implications are such that trade liberalization hurts North occupations with fast accumulation of specific human capital

more initially. The impact gradually extends to other occupations in later years although aggregate welfare increases. Our work implies that the priority of trade adjustment assistance programs matters.

"Information Frictions, Pro-Competitive Effects, and the Search for Quality"
with Xin Yi

Abstract: We study the pro-competitive effects of reducing information frictions on product quality across space. To do so, we introduce monopolistic competition, heterogeneous firms, and quality upgrading into a sequential search model with trade (Allen, 2014). In our general equilibrium model, heterogeneous producers must search to learn about quality-augmented price index elsewhere and to decide whether to compete in a specific destination based on the degree of local competition. Our model predicts that a fall in information frictions such as the building of ICT infrastructures (e.g., faster mobile networks) will lead to spatial penetration of cheaper and higher-quality products, enhance local competition, and induce quality upgrading. We qualitatively test the predictions of our model using unit value data and variations in ICT infrastructures across Chinese cities. We are currently calibrating the general equilibrium model to discuss its quantitative implications over welfare, and we are exploiting for more empirical evidences using China Custom data.

Work in Progress:

"Trade Wars and Trade Talks with Global Value Chains"
with Pao-Li Chang and Xin Yi

Abstract: We study optimal trade policies in the presence of global value chains through the lens of a quantitative trade model with profit shifting and political economy motives (Ossa, 2014). We introduce input-output linkage into the model, characterize the equilibrium in changes with hat algebra, and further quantify the level of optimal tariffs, trade war Nash tariffs, and trade agreement tariffs using the MPEC algorithm for large-scale numerical optimization. We are currently quantifying the model using sectoral data on trade, production, and input-output linkages from 30 countries.

"Uncertain about Uncertainty: The Impact of Trade Wars on Exporter Confidence"
with Xin Yi

Abstract: This paper studies the impact of higher-order uncertainty on exporters during trade wars. To do so, we introduce higher-order uncertainty and coordination of production (Angeletos and La'O, 2013) into a two-country model with trade policy uncertainty. In particular, we assume that exporters in each country hold imperfect beliefs regarding the probability of a trade war. As a result, we show that there is an additional channel in which exports are dampened by the probability of a trade war, and it is independent of the expected value of exports under perfect information. Quantitatively, we find that this extra trade-dampening effect magnifies when the probability of a trade war rises. We label this effect as the fall in "exporter confidence" because it involves changes in higher-order expectations. Currently, we are applying a machine learning algorithm to extract a textual measure of belief disagreement about trade policy from a database of daily newspapers. We intend to use this measure in the calibration of our quantitative model.

"Does Market Integration Lead to Spatial Concentration of Higher-Quality Products? Evidence from Expansion of China's Highway System"
with Xin Yi

Computer Skills: Matlab, Julia, Stata, ArcGIS, API (R and Python), LaTeX, MS Office

Languages: English (fluent), Mandarin Chinese (native), Cantonese (native)