Chengzi Yi

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FIELDS OF INTEREST

Macroeconomics, Firm Dynamics, Firm Heterogeneity, Trade, Financial Frictions

REFERENCES

Prof. Russell Cooper
Department of Economics
European University Institute
Italy
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Prof. Alexander Monge-Naranjo
Department of Economics
European University Institute
Italy
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EDUCATION

European University Institute　　　　　　　　　　　　　　　　　2020–2026(expected)
Ph.D. in Economics

Fudan University　　　　　　　　　　　　　　　　　　　　　　　　　　2016–2020
Ph.D. in Finance

Hong Kong Polytechnic University　　　　　　　　　　　　　　　　　　2011–2012
M.A. in Finance

Guangdong University of Foreign Studies　　　　　　　　　　　　　　　2007–2011
B.A. in French & B.A. in Economics

RESEARCH

Export Dynamics of Multi-Product Firms with (Non-)Differentiated Products

What determines export sorting among firms? This paper explores how product differentiation interacts with heterogeneous firm characteristics to shape export dynamics. Using sectoral data across 16 European countries and Slovenian firm-level data, I document two stylized facts. First, exporter labour productivity premiums (the difference in average labour productivity between exporters and non-exporters) are systematically lower in more differentiated sectors. Second, exporters in more differentiated sectors exhibit greater product concentration, suggesting a "star-product effect." I develop a dynamic structural model incorporating both firm-level productivity affecting marginal costs across all products and firm-product-market-specific appeal shocks. The model features a productivity-appeal interaction where the relative importance of firm efficiency versus product-market-specific characteristics varies with the degree of product differentiation, and economies of scope from shared fixed costs that generate the star-product effect. Calibrating separately for high-differentiation (machinery) and low-differentiation (food) sectors, I find that productivity heterogeneity explains 88% of labour productivity variances in food sector, while appeal shocks explain 65% in machinery sector.

Collateral Constraints and Asset Composition

Presented at BOFIT Seminar (2024/11/26), Bank of Finland; European Doctoral Programme Jamboree (2024/06/07), Barcelona; Marco Working Group (2024/04/18), European University Institute

This paper investigates how collateral constraints influence firms' investment allocation between real estate and non-real estate capital. I develop a model that incorporates adjustment costs and collateral constraints, where capital assets differ in both adjustment costs and pledgeability. Using data from Chinese listed firms, I estimate the model and demonstrate that financial frictions and adjustment costs play critical roles in shaping firms' capital investment behavior. The model explains the observed high proportion of real estate in firms' capital composition, especially for smaller firms. Introducing collateral constraints improves the model's fit to the data. The estimation results indicate significantly higher fixed costs for adjusting real estate capital and greater pledgeability of real estate assets. Removing financial frictions leads to lower aggregate capital and revenue due

to zero collateral value and reduced capital investments, whereas eliminating both frictions increases them. A real estate crisis, where real estate becomes non-pledgeable, can distort firms' investment decisions and overall economic output, resulting in a 4.6% decrease in aggregate TFPR and a 0.3% reduction in aggregate revenue.

Revisiting the Investment Regressions: State-owned Firms vs. Private Firms in China

Presented at Finance Seminar (2023/05/23), Universitat Pompeu Fabra

The investment regression on a sample of Chinese listed firms shows that there is a significant correlation between investment rate and cash flow ratio after conditioning on average Q. This is true for both state-owned firms and private firms, which are conventionally considered to have different financial conditions. As noted by Cooper and Ejarque (2003), the violation of the constant-returns-to-scale assumption creates a wedge between average Q and marginal Q and can lead to a spurious cash effect in the investment regression even when there are no financial frictions. Following their argument, this paper examines the investment regression results of the Chinese firms by estimating a standard Hayashi's (1982) model which allows for decreasing returns to scale. The estimation results suggest that despite the decreasing returns to scale of capital, the presence of financial constraints brings the standard capital adjustment model closer to the data moments of both state-owned and private firms in China.

Product Differentiation and Export Dynamics of Multi-destination Multi-product Exporter

with Marius Gruenewald

This project investigates how product differentiation affects the export decisions of multi-destination, multi-product firms. We utilise Colombian export data to examine distinct expansion patterns in both product and geographic dimensions for exporters of non-differentiated versus differentiated goods.

VISITING EXPERIENCES

Visiting Researcher — 2024/11
Bank of Finland Institute for Emerging Economies

Visiting Student — 2023/03–2023/07
Universitat Pompeu Fabra

Visiting Student — 2018/09–2019/03
London School of Economics and Political Science

PROFESSIONAL ACTIVITIES

External Research Consultant — 2024/05–present
The Competitiveness Research Network

Co-Organizer — 2021/09–2022/06
Macro Working Group, European University Institute

TEACHING

Graduate TA, Dynamic Economics: Simulation Based Estimators — 2022/01–2022/03
Russell Cooper, EUI PhD Core Course

Graduate TA, Financial Theory and Policy — 2017/02–2017/06
Lijian Sun, Fudan University Master Advanced Course

Undergraduate TA, Econometrics — 2022/09–2022/12
Giampiero M. Gallo, NYU Florence Undergraduate Course

Other TA, Digital Currencies and Digital Finance — 2023/05–2023/12
Thorsten Koeppel & Olena Havrylchyk, Central Banking Supervision and Banking Supervision Executive Education Programme

Other TA, Machine Learning: Tools and Applications — 2022/06
Iman Van Lelyveld & Dieter Wang, Florence School of Banking and Finance

Other TA, International Finance — 2019/07–2019/08

SHORT COURSES & SUMMER SCHOOLS

Firm Dynamics in Macro-Finance *BSE (Andrea Caggese)*	2022/07
Production and Financial Networks *CEMFI (Alireza Tahbaz-Salehi)*	2021/08
Beliefs and Social Networks *EABCN (Johannes Stroebel)*	2021/06

AWARDS & GRANTS

Grants for Foreigners *Italian Ministry of Foreign Affairs & International Cooperation*	2020–2024
Outstanding Graduate *Fudan University*	2020
State Scholarship *China Scholarship Council*	2018
Outstanding Ph.D. Student *Fudan University*	2017

SKILLS

Programming: Julia, Python, MATLAB, R, Stata

Languages: Chinese (Native), English (Fluent), French (Intermediate)

OTHER PROFESSIONAL EXPERIENCE

Financial Officer *Guangdong Materials Import & Export Corp.*	2013–2015
Assistant Business Officer *The Bank of East Asia*	2012–2013