# Qianxue (Zoe) Zhang 张千雪

# **EDUCATION**

PhD in Economics, University of Warwick, UK	2024 (expected)
MRes in Economics, University of Warwick, UK (distinction)	2020
MSc in Economics, University of Cologne, Germany (top 5%)	2018
BSc in International Economy and Trade, BIT, China (ranked 1/33)	2016
Exchange student, University of Regensburg, Germany	Sep. 2014 - Feb. 2015
Additional Training	
NBER Research Innovation Boot Camp, Boston, US	2023
The $1^{st}$ Journal of International Economics Summer School, Crete, Greece	2023
The $32^{nd}$ Jerusalem Advanced School in Economic Theory on International	Economics 2022

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RESEARCH INTERESTS

International Trade, Macroeconomics, Growth and Innovation

## WORKING PAPERS

"Breaking Borders: The Impact of Knowledge Diffusion on the Gains from Trade" (Job market paper)

"Structural Transformation and Intrahousehold Bargaining: Evidence from Sub-Saharan Africa" (with Jiaqi Li), **funded by STEG PhD grant No. 1286**, pdf

"Estimating nonbalanced growth paths: three-factor model and structural change", pdf

#### PUBLICATION GOOGLE SCHOLAR

"The Hubei lockdown and its global impacts via supply chains", **Review of International Economics**, 2022, 30(4): 1087–1109.

#### WORK IN PROGRESS

"Green Transformation or Market Exodus? The impact of China's Environmental Regulations on Firms in Sub-Saharan Africa" (with Jiancong Liu)

"The influence of innovation on Small and Medium Enterprises marketing in developing countries" (with Bilawal Khan)

# PUBLICATIONS BEFORE PHD

"Does one path fit all? An Empirical Study on the Relationship between Energy Consumption and Economic Development for Individual Chinese Provinces", **Energy**, 2018, 150: 527-543 (with Yu Hao, Hua Liao)

"Does government expenditure affect environmental quality? Empirical evidence using Chinese city-level data", **Journal of Cleaner Production**, 2017, 161: 143-152. (with Shengling Zhang, Zhiyi Ding, Yu Hao.)

"A reexamination of the existence of environmental Kuznets curve for CO2 emissions: evidence from G20 countries", **Natural Hazards**, 2017, 85(2): 1023-1042. (with Guangyu Luo, Jia-Hsi Weng, Yu Hao.)

"Will income inequality affect environmental quality? Analysis based on China's provincial panel data", **Ecological Indicators**, 2016, 67:533-542. (with Heyin Chen, Yu Hao.)

"Is there convergence in per capita SO2 emissions in China? An empirical study using city-level panel data", **Journal of Cleaner Production**, 2015, 108A: 944–954. (with Yu Hao, Ming Zhong, and Baihe Li.)

#### RESEARCH EXPERIENCE

China National Scholarship

Outstanding Graduates of Beijing

Outstanding Graduates of Beijing Institute of Technology

First Prize Scholarship of Beijing Institute of Technology

Copyeditor for the Centre for Economic Policy Research (CEPR) Vox columns Research Assistant for Dr. Samantha Witte, University of Oxford	2022-present 2019-2020
Research Assistant for Prof. Yu Hao, Beijing Institute of Technology	2013-2016
TEACHING EXPERIENCE	
Senior Teaching Assistant, University of Warwick	
Economics I	2020-2022
International Economics	2021-2022
Teaching Assistant, University of Warwick	
Economics I	2019-2020
Thesis support, University of Warwick	
MSc Thesis Helpdesk	2022
HONORS, AWARDS AND GRANTS	
NBER Innovation Research Boot Camp conference travelling grant, \$1,000	2023
Warwick Economics Departmental Discretionary Fund, £4,000	2023
CEPR STEG PhD Research Grants, £14,640 (with Jiaqi Li)	2022-2023
Skeoch Scholarship, University of Warwick	2020-2024
Economics Departmental Scholarship, University of Warwick	2018-2020

2014

2016

2016

2013, 2014, 2015, 2016

## SEMINARS AND CONFERENCES

**2023** (D: plus discussion): 17th WEAI International Conference (D), 2023 CES North America Conference (D), 16th RGS Doctoral Conference in Economics (D), 21st annual GEP/CEPR post-graduate conference, 12th European Meeting of the Urban Economics Association (D), 5th QMUL Economics and Finance Workshop for PhD & Post-doctoral Students (D), Warwick-Oxford Macro Workshop, 11th Warwick Economics PhD conference (D), 1st JIE summer school (poster), 3rd Annual Southern PhD Economics Conference, EEA 2023, ETSG 2023 SURREY

**Before 2023** (D: plus discussion): Warwick Economics PhD forum (D), Warwick Economics Macro and International workshop, 2022 Newcastle Economics Research and Development Conference, Xiangjiang River Forum in Economics, Finance and Management for Young Scholars 2022, Chinese Economic Association Annual Conference 2022 (D)

## **SERVICE**

Panel member, RES Medal for Services to the Economics Profession 2022 - present Mentor for the Economics Applicant Mentoring Programme, University of Warwick 2022-2023 Co-organizer of the 10<sup>th</sup> Warwick Economics PhD conference, University of Warwick 2022 Conference Assistant of the Royal Economic Society Annual Conference 2019

#### REFEREEING

China Economic Review, Warwick Economics PhD Conference

## **SKILLS**

**Software**: Matlab, R, STATA, Python **Additional software training**:

Masterclass Automated Web Data Collection, University of Warwick

2022

Python for Web Development: Code First Girls, University of Warwick

2019

Language: Chinese (native), English (fluent), German (advanced, B2 level)

#### PERSONAL

Nationality: Chinese

#### REFERENCES

Prof. Roger Farmer University of Warwick Department of Economics +44 (0)24 761 50048 R.Farmer.1@warwick.ac.uk

Dr. Marta Santamaria University of Warwick Department of Economics marta.santamaria@warwick.ac.uk Prof. Dennis Novy University of Warwick Department of Economics +44 (0)24 761 50046 D.Novy@warwick.ac.uk "Breaking Borders: The Impact of Knowledge Diffusion on the Gains from Trade" (JMP)

Abstract: How does international knowledge sharing affect trade patterns, economic growth, and welfare across the globe? This paper tackles this question by estimating a novel dynamic trade model where heterogeneous firms innovate. I first document that knowledge diffusion and technology adoption are two key channels for acquiring foreign knowledge using comprehensive Chinese firm-level data on trade, patents, and citations. Based on these findings, I develop a dynamic general equilibrium model where firms learn from sellers when importing and choose to adopt foreign technologies when exporting. In the model, diffusion enhances productivity for all firms, and adoption further amplifies these gains by boosting the productivity of the most efficient firms. I structurally estimate the model with bilateral trade flows for the global economy. I find that knowledge diffusion substantially increases the gains from trade in all economies, ranging from 0.2% to 8.7%. However, foreign technology adoption can reduce welfare in knowledge-abundant countries as their technological advantages get eroded. Technology adoption therefore alters the conventional gains from trade, with developed countries potentially benefiting from higher trade barriers.

"Structural Transformation and Intrahousehold Bargaining: Evidence from Sub-Saharan Africa" (with Jiaqi Li)

Abstract: A standard structural change model with intra-household bargaining, connecting Ngai and Petrongolo (2017) and Blundell et al. (2005), predicts that moving out of agriculture increases the female bargaining position by an increase in female-to-male wage ratio due to the rising service sector. We reject this prediction using rich micro-level data from Sub-Saharan Africa with both two-way fixed effects estimation and instrumental variable approach. Suggestive evidence shows that around 20 percent of the effect is explained by changes in the gender composition of the service sector. To reconcile this fact, we build a two-sector general equilibrium model with social stigma against women working in the service sector to show that structural transformation can reduce female bargaining power if the social stigma is larger than a threshold jointly determined by female comparative advantage and substitutability of labor input between genders.

"Estimating nonbalanced growth paths: three-factor model and structural change"

**Abstract:** This paper proposes a new method of estimating non-stationary nonlinear dynamic general equilibrium models, with an application in the structural transformation context. By combining different sectoral growth rates with different factor intensities, I construct a three-sector general equilibrium model that generates a hump-shaped path for the size of the manufacturing sector while replicating the observed pattern of increasing and decreasing shares in services and agriculture. Using data for the United States and Sweden over the past decades, I implement a relaxation algorithm to solve the model for non-stationary paths of sectoral shares for given parameter values and then estimate the best fit for the model's parameters. A counterfactual exercise for China shows the importance of trade in explaining structural change. This method can be easily generalized to solve similar problems in different contexts.

Last updated: November 2023