

# Jinyu Gao

Email Address: [gaojinyu111@gmail.com](mailto:gaojinyu111@gmail.com)

Personal Website: <https://jinyugao.github.io/>

## RESEARCH INTERESTS

Science of Science, Innovation, Scientometrics, Bibliometrics, and Network Analysis

## EDUCATION

**Master of (Management), Corporate Management**, University of Chinese Academy of Sciences, Beijing, China, 2020-2023

- *Thesis title: Study of scientist's mobility effects on research output.*
- *GPA: 3.79/4.0*
- *Outstanding Student Award, University of Chinese Academy of Sciences, 2021-2023, (Top 25%)*

**Bachelor of (Economics), Financial Engineering**, Tianjin University of Finance and Economics, Tianjin, China, 2016-2020

- *Thesis title: Price linkage characteristics between stock index and stock index futures.*
- *GPA: 3.64/4.0*
- *The Third Prize Scholarship, Tianjin University of Finance and Economics, 2016-2019, (Top 25%)*
- *The Third Prize of the 11<sup>th</sup> National Undergraduate Mathematics Competition (non-mathematics major), Chinese Mathematical Society, 2019, (Top 35%)*

## RESEARCH EXPERIENCE

**Research Assistant**, Center for Informationalization and Information Management, Peking University, China, supervised by Prof. Yi Bu, July 2023 - now

**Teaching Assistant**: Organization Behavior, School of Economics and Management, University of Chinese Academy of Sciences, Beijing, China, Fall 2022

## PUBLICATIONS

- Tang, C, & **Gao J.** (2022). *Analysis of the Synergy of the Science and Technology Talent Policy Compound System: Taking the Guangdong-Hong Kong-Macao Greater Bay Area as an Example*[J]. *Science and Technology Management Research*, 42(13), 115-122.  
汤超颖, & 高晋宇. (2022). 科技人才政策复合系统协同度分析:以粤港澳大湾区为例. 科技管理研究, 42(13), 115-122.

## WORKING PAPERS

- **Gao Jinyu, Bu Yi.** *The citation disadvantage of female-as-corresponding-author research teams in biology.* Accepted by iConference 2024, Poster.
- **Gao Jinyu, Bu Yi.** *Inequity of the development of national innovation capacity.* In preparation.

## RESEARCH PROJECTS

### **Inequity of the development of national innovation capacity.**

September 2023 – present

- *Target data source: OpenAlex*
- *Distinguish three types of scientific innovation capacities – specifically, digging, bridging, and jumping ability – based on three kinds of knowledge combinations, namely established combination, predicted combination, and unexpected combination, which is assessed from abstract data using linkage prediction methods.*
- *Elucidate the relationship between innovation capacities and national disciplinary development. Determinate the main innovation capacities portfolio that forced the formation and transition of national advantage disciplines in specific cases.*

### **The citation disadvantage of female-as-corresponding-author research teams in biology.**

June 2023 – September 2023

- *350,438 journal papers published in 2010 in biology were retrieved from the SciSciNet data lake.*
- *A null model randomly exchanged the author sequence for each paper and held a constant number of female and male authors, and found the higher rank trend of women in the mixed-gender teams' author sequence in the biology field.*
- *The marginal analysis of team size and team type on citations reflected that female-as-corresponding-author research teams tend to receive less citations.*

### **Study of scientist's mobility effects on research output.**

September 2021 - June 2023

- *95,387 papers of 882 Chinese scientists, as well as 26,173 papers from 61 new research institutions that scientists flowed into were retrieved from the Web of Science database.*
- *The Time-varying difference-in-difference model illustrated that mobility reduced the quantity of scientific output and had no significant impact on the quality of scientific research output indexed by the Journal Impact Factor.*
- *Knowledge base similarity between scientists and flowed-in institutions, calculated through the Web of Science subject category, improved the quality of scientific research output after career mobility.*

## **Analysis of the synergy of the scientific and technological talents policy compound system: Taking the Guangdong-Hong Kong-Macao Greater Bay Area as an example**

December 2020 - September 2021

- *210 scientific and technological talent policies in the Guangdong-Hong Kong-Macao Greater Bay Area from 2017 to 2021 were collected from the website.*
- *A policy quantification framework was constructed from three aspects of policy objectives, policy formulation, and policy implementation.*
- *The synergy degree model of the compound system reflected that the synergy degree of scientific and technological talent policies in the Guangdong-Hong Kong-Macao Greater Bay Area was relatively low.*

## **Price linkage characteristics between CSI 300 stock index and CSI 300 stock index futures**

September 2019 - June 2020

- *986 trading days' the daily closing prices of the Shanghai and Shenzhen 300 stock index spot and the Shanghai and Shenzhen 300 stock index futures from January 4, 2016, to January 16, 2020, were downloaded from the CSMAR and RESSRT database.*
- *The BEKK-GARCH model demonstrated that there is a two-way volatility spillover effect between futures and spot market.*
- *The VAR-DCC-GARCH model revealed that the price linkage relationship between futures and spot market was obvious and the dynamic correlation coefficient was stable above 0.9.*

## **SKILLS**

- *Software: Python, R, Linux, Stata, Eviews, Gephi, UCINET, Pajek*
- *Languages: Mandarin Chinese (Native), English (IELTS 7.0)*

## **SERVICE**

**Journal Reviewer:** Information Processing & Management