FACULTEIT ECONOMIE EN BEDRIJFSKUNDE

UNIVERSITEIT GENT

Invitation

You are cordially invited to the public defense to obtain the academic degree of

DOCTOR OF BUSINESS ECONOMICS

by Yingmin Wei

The Impact of Foreign Direct Investment on R&D Networks, Innovation, and Productivity

Supervisor:
Prof. dr. André Spithoven

Tuesday, 16 September 2025 at 16h00
In room 'Faculteitsraadzaal', Campus Tweekerken, Tweekerkenstraat 2, 9000 Ghent
Please confirm your attendance no later than 10 September via this link

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Abstract

Foreign direct investment (FDI) and research and development (R&D) are widely recognized as two key drivers of economic development. Governments often anticipate that FDI brings in much-needed capital, advanced technologies, marketing expertise, and managerial know-how. However, scholars hold divergent views on the relationship between FDI and R&D in host countries with variations in research samples, including cultural, economic, and policy contexts. This dissertation contributes to the literature by examining the impact of FDI on R&D networks, innovation, and productivity utilizing a panel dataset of firms located in Belgium. According to their ownership structure, these firms are categorized into two groups—foreign-owned firms and domestic-owned firms (so-called local firms). Three empirical analyses are conducted based on their differences.

Study 1 (Chapter 2) dives into the impact of foreign ownership on R&D networks. we compare foreign-owned firms with domestic-owned firms on building R&D networks, focusing on their preference on R&D partners regarding locations (referring to geographic proximity) and group membership locations (referring to organizational proximity), and the difference on network breadth and depth. We find that foreign-owned firms typically possess greater capacity to build extensive R&D networks and to transcend geographic barriers but reinforce organizational proximity, fostering international and intra-group R&D cooperation.

Study 2 (Chapter 3) examines the causal impact of cross-border M&As on target firms' innovation output and the role of R&D cooperation in their relationship, utilizing staggered difference-in-differences (DiD) and difference-in-difference-in-differences (DDD) models. However, it is concerning that these R&D-active firms tend to exhibit lower innovation output after being acquired through cross-border mergers and acquisitions (M&As), particularly from the 5th to the 9th year, compared to the R&D-active firms that remain domestically owned. We also find tentative evidence that firms engaged in R&D cooperation do not experience this negative effect.

Study 3 (Chapter 4) explores FDI spillovers to domestic firms' productivity, especially comparing FDI spillovers that are sourced from R&D-active foreign affiliates and non-R&D-active foreign affiliates, with the interactions with local firms' absorptive capacity (R&D active or not, R&D cooperative or not). We find that the productivity spillovers from foreign affiliates to domestic firms vary depending on whether the foreign affiliates are R&D active. The absorptive capacity of domestic firms—whether they engage in R&D activities or R&D cooperation—also play a moderating role in their ability to absorb and benefit from different types of foreign affiliates.

The findings of the three empirical analyses provide fresh insights for policy makers and decision makers when they consider FDI and R&D. From the perspective of innovation development of the host countries, we suggest policymakers coordinate between FDI policies and science, technology and innovation policies. Of course, stimulating R&D is not the only reason or motivation for the host countries to attract FDI. We suggest they consider various factors and adopt a balanced and nuanced approach when formulating policies aligned with their development goals.

Curriculum vitae

Yingmin Wei (°1993, Henan) holds the degree of Master of Management Science in Management Science and Engineering (2020, Tongji University). She joined the International Economics Research Group at Ghent University (Faculty of Economics and Business Administration) in 2020 as a PhD Student. Study 1 is accepted by 'International Business Review'. Study 2 is under second round review in 'Journal of International Management'. Study 3 is under review in 'Research Policy'. She presented her research at several international conferences, including CONCORDi2023 (Sevilla, Spain). ECIE 2024 (Paris, France), FEB research day 2023&2024(Ghent, Belgium). Another of her studies, which is not included in the dissertation, was published in 'European Journal of Innovation Management' (EJIM, https://doi.org/10.1108/EJIM-05-2024-0614).