

Xin Zhang

Office Contact Information

Toulouse School of Economics
1 Esplanade de l'Université, Office T540
Toulouse 31000, France

Contact Information

xin.zhang@tse-fr.eu
<https://sites.google.com/view/xinzhang-xz/>
(+33) 06 28 94 96 88

TSE Placement Officers

Professor Johannes Hörner
johannes.horner@tse-fr.eu

TSE Placement Administrator

Louise Strachan
louise.strachan@tse-fr.eu

Professor Mateo Montenegro
mateo.montenegro@tse-fr.eu

EDUCATION

Doctoral Studies

<i>Ph.D. in Economics</i> , Toulouse School of Economics	2021–2026 (expected)
<i>Visiting Scholar</i> , Northwestern University, Department of Economics	Jan–Apr 2025

Prior Education

<i>M.Sc. in Economic Theory and Econometrics</i> , Toulouse School of Economics	2019–2021
<i>B.Sc. in Economics and Management</i> , Zhongnan University of Economics and Law	2015–2019

REFERENCES

Pierre Dubois

Toulouse School of Economics
pierre.dubois@tse-fr.eu

Isis Durrmeyer

Toulouse School of Economics
isis.durrmeyer@tse-fr.eu

Thierry Magnac

Toulouse School of Economics
thierry.magnac@tse-fr.eu

RESEARCH INTERESTS

Primary field: Industrial Organization

Secondary fields: Health Economics, Food Economics

TEACHING EXPERIENCE

Teaching Assistant

Toulouse School of Economics	
Game Theory, Master	2022, 2023, 2024
Intermediate Econometrics, Master	2024
Introductory Econometrics, Undergraduate	2024
Empirical Industrial Organization, Master	2023
Industrial Organization, Undergraduate	2023

OTHER POSITIONS

Research Assistant to Isis Durrmeyer, Toulouse School of Economics	2022
Research Assistant to Mathias Reynaert, Toulouse School of Economics	2021, 2020
Research Assistant to Jie Shuai, Zhongnan University of Economics and Law	2016–2018
Intern at Guotai Junan Securities, Wuhan	2017

AWARDS AND FELLOWSHIPS

Mobility grant, Toulouse School of Economics	2025
Doctoral fellowship, Toulouse School of Economics	2019–2026
Student research award, Zhongnan University of Economics and Law	2019

WORKING PAPER

Patent Challenge and Generic Entry - Job market paper with Hanlin Zhao

Evergreening is a common strategy in the pharmaceutical industry, where innovators extend patent protection by filing multiple follow-on patents with minor modifications. This practice delays generic entry, limits competition, sustains high drug prices, and harms consumers. A key policy response, the Hatch–Waxman Act curbs such behavior by granting 180 days of marketing exclusivity to the first successful generic challenger, thereby incentivizing challenges to trivial patents. This study examines how the duration of exclusivity affects generic firms' incentives to initiate challenges. We develop a two-stage structural model that endogenizes firms' challenge decisions and estimate the fixed costs of generic entry using moment inequalities. Our results indicate that the current 180-day exclusivity increases challenges by about 4%. Extending the exclusivity period substantially promotes entry in markets previously unchallenged: a two-year exclusivity raises the challenge rate to 15.38%. The exclusivity length needed to stimulate challenges varies across therapeutic classes. For instance, achieving a 20% challenge rate requires roughly two years for antimicrobials but less than one year for blood products or genitourinary drugs.

Tax Exemption for Feminine Sanitary Products: Evidence from the U.S Market

Feminine sanitary products are essential for women; however, unlike other necessities that are tax-exempt, they are often subject to taxation. This paper employs a Difference-in-Difference approach to examine the impact of repealing a 6.75% tax on sanitary products in the U.S. market. The results show that prices fell by 5.3%, indicating an incomplete pass-through of the tax exemption. Nevertheless, the repeal did not significantly improve affordability once consumers' substitution from smaller to larger pack sizes is taken into account. Furthermore, we evaluate policy options using a constant expenditure model to compare the tax repeal with four alternative interventions. We find that providing low-income consumers with a \$2 coupon offers the greatest improvement in product access, albeit at the cost of higher overall prices.

WORK IN PROGRESS

Consumer Demand with Unobserved Stockpiling and Intertemporal Price Discrimination

with Pierre Dubois and Thierry Magnac

Prescribing Behavior in Medical Deserts

with Philippe Choné, Pierre Dubois and Lionel Wilner

PRESENTATIONS

2025 TSE Empirical Micro Workshop, IO Lunch Seminar at Northwestern University, Brown Bag Seminar at Kellogg School of Management

2024 TSE IO Workshop, EEE Luchon workshop

2023 TSE IO Workshop

2017 CES Annual Conference, China

OTHER ACTIVITIES

Service: Mentor, Women in Economics Mentorship Program, TSE (2022–2023);

Co-organizer, TSE IO Workshop (2023–2024) and IO Reading Group (2024–2025)

OTHER INFORMATION

Software: Matlab, Stata, R, Python, SAS

Languages: English (fluent), French (intermediate, B1), Mandarin (native)

Citizenship: China