

Academic Biography

My name is Lin Yen-Ju

Specialization: Industrial Organization, Regional Economics, and Policy analysis

Publication

- Lin, Y. J., Lin, Y. S., Chou, T-H & Shih, P. C. (2024). “Environmental policy, licensing strategy, and social welfare”. *Journal of Economics* (SSCI), 1-19. 本人 first author (<https://link.springer.com/article/10.1007/s00712-024-00873-y>)
- Shih, P. C., Lin, Y. S., & Lin, Y. J. (2024). “Input price, bargaining power, and a multi-input-multi-product firm”. *The Japanese Economic Review* (SSCI), 75(1), 69-92. Corresponding author (<https://doi.org/10.1007/s42973-022-00117-y>)
- Ku-Chu Tsao, Yan-Shu Lin, Yen-Ju Lin (2023). “Centralized decision strategy in ownership investments and export policy”. *The Journal of International Trade & Economic Development* (SSCI), 1-13. Corresponding author (<https://doi.org/10.1080/09638199.2023.2271083>)
- Yen-Ju Lin (2022). “Consumer welfare, licensing, and exclusive dealing with vertically- and horizontally-differentiated products”. *International Review of Economics & Finance* (SSCI), 80, p147-158. (MOST 108-2410-H-431-005) 本人 first author and corresponding author (<https://doi.org/10.1016/j.iref.2022.02.035>)
- Lin, Y. J., Lin, Y. S., & Shih, P. C. (2022). “Welfare reducing vertical licensing in the presence of complementary inputs”. *Journal of Economics* (SSCI), 137(2), 121-143. (MOST 107-2410-H-431-001) first author (<https://doi.org/10.1007/s00712-022-00782-y>)
- Chen, K. H., Chen, P. H., Lin, Y. J. and Chi, C. F. (2021) “To sell the cow and drink the milk: how could China harmonize its growth and risk? ”, *International Journal of Finance and Economics*, (SSCI), p1-16. (<https://doi.org/10.1002/ijfe.2306>)
- Lin, Y. J., Y. S Lin and K. I. Tu, (2016), “Strategic input outsourcing and equilibrium location choice”, *The Annals of Regional Science* (SSCI), 56(1), p83-99. (MOST- 101-2410-H-431-006) first author (<https://doi.org/10.1007/s00168-015-0720-y>)

- Lin, Y. J, Y. S. Lin, and Z. W. Wu, (2014), “Welfare Economics of Economic Integration In the Presence of VIIT”, *Academia Economic Papers*. 42(4), p647-679. (TSSCI, Econlit) first author (<https://www.proquest.com/openview/75943bc3c44279337d449d48bda4fff4/1?pq-origsite=gscholar&cbl=386375>)
- Liang, W. J, Y. J. Lin, and H. H, (2012), “Heterogeneous Duopoly, Spatially Discriminatory Pricing, and Optimal Location”, *The Annals of Regional Science* (SSCI) , 49, p845-860. (<https://doi.org/10.1007/s00168-011-0445-5>)
- Liang, W. J, and Y. J. Lin, (2009), “Optimal Trade Policy under Cournot Competition with Horizontal Differentiation”, *Taiwan Economic Review*, 37(2), (TSSCI, Econlit) p161-184. (<https://www.airitilibrary.com/Publication/alDetailedMesh?DocID=10183833-200906-200907140034-200907140034-161-184>)

In this course, we will explore how firms compete, how industries develop, and how government policies influence markets. We will examine real-world applications, such as why McDonald's and Burger King often open next to each other and how environmental policies drive investments in green technology, using relevant economic theories.

Each week, we will discuss academic articles related to these topics. I will lead the discussion for some papers, while others will be presented by you. Each student will deliver a 80-minute presentation using PowerPoint, and these presentations will be part of your final grade. Additionally, participation in discussions—including asking and answering questions—will also contribute to your score. Active engagement will deepen your understanding of these complex topics.

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Week 2-5: Free Entry and Market Efficiency

Key Question: Does allowing more firms into the market always benefit society?

We typically think **more competition = better for consumers**. But is this always true? These papers challenge that idea.

Mankiw & Whinston (1986) and **Ghosh & Morita (2007)** show that **too much competition can sometimes be inefficient**.

Basak & Mukherjee (2016) extend this to **vertically related industries**, where input suppliers affect competition.

Han et al. (2022) examine how this works in an **open economy** (where firms also compete with international businesses).

week	title	
1	Introduction/Evaluation	
2	• Mankiw, N. G., & Whinston, M. D. (1986). Free entry and social inefficiency. <i>The RAND Journal of Economics</i>, 48-58. (Lin)	Classic literature
3	• Chen, J., Mukherjee, A., & Zeng, C. (2023). Social efficiency of entry in a vertical structure with third degree price discrimination. <i>The BE Journal of Theoretical Economics</i>, 23(1), 223-243. (Lin)	Free entry with input pricing
4	• Cao, H., & Wang, L. F. (2020). Social efficiency of entry in a vertically related industry revisited. <i>Economics Letters</i>, 192, 109200. • Basak, D., & Mukherjee, A. (2016). Social efficiency of entry in a vertically related industry. <i>Economics Letters</i>, 139, 8-10.	Free entry with cost asymmetry
5	• Han, T. D., Haque, M. E., & Mukherjee, A. (2022). Social efficiency of entry in an open economy. <i>The BE Journal of Economic Analysis & Policy</i>, 22(1), 203-219. • Mukherjee, A. (2019). Profit raising entry in a vertical structure. <i>Economics Letters</i>, 183, 108543.	Free entry with open economy

Real-World Example: Think about how many coffee shops are in your neighborhood. If too many open, they might **lower prices too much, reducing profits and leading to business failures**. That's one example of how "**too much competition**" can be inefficient. (Mankiw, N. G., & Whinston, M. D. (1986))

Week 6-7: Input Pricing, Ownership, and Licensing

Key Question: How do firms that control essential inputs shape competition?

- If you've ever wondered why **Apple designs its own chips** while **other smartphone companies buy from Qualcomm**, these papers will explain why.

- **Li & Shuai (2022)** discuss how **horizontal shareholding** (when firms own shares in their competitors) influences pricing.
- **Milliou (2020)** We often assume that when a company merges with its supplier, it will use its own production for inputs rather than buying from external sources. However, real-world evidence suggests that many vertically integrated firms continue to outsource parts of their production. This paper explores why that happens and how it affects competition..
- **Shih et al. (2024)** examine how **complementary inputs** (e.g., software and hardware in a phone) affect firm behavior.

6	• Li, Y., & Shuai, J. (2022). Input price discrimination and horizontal shareholding. Journal of Regulatory Economics, 61(1), 48-66. (Lin) • Alipranti, M., Petrakis, E., & Skartados, P. (2022). On the pro-competitive effects of passive partial backward ownership. Economics Letters, 213, 110376.	Input pricing and Horizontal shareholding Input pricing and Backward shareholding
7	• Milliou, C. (2020). Vertical integration without intrafirm trade. Economics Letters, 192, 109180. • Lin, Y. J., Lin, Y. S., & Shih, P. C. (2022). Welfare reducing vertical licensing in the presence of complementary inputs. Journal of Economics, 137(2), 121-143. (Lin)	Vertical licensing and input pricing Vertical licensing and complementary input Bakaouka, E., & Milliou, C. (2018). Vertical licensing, input pricing, and entry. International Journal of Industrial Organization, 59, 66-96.

Week 8: Multi-Product Firms

Key Question: How do companies that sell multiple products compete differently?

- Many big companies **don't just sell one product**—think of **Amazon** (e-commerce, cloud services, advertising).
- **Kopel et al. (2017)** and **Shih et al. (2024)** analyze how firms **price and strategize when they sell multiple products**.
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8	• Kopel, M., Löffler, C., & Pfeiffer, T. (2017). Complementary monopolies and multi-product firms. <i>Economics Letters</i>, 157, 28-30. • Shih, P. C., Lin, Y. S., & Lin, Y. J. (2024). Input price, bargaining power, and a multi-input-multi-product firm. <i>The Japanese Economic Review</i>, 75(1), 69-92. (Lin)	Multi-product firm
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Real-World Example: Apple sells **both iPhones and MacBooks**—how does selling both affect the pricing of each?

Week 10-13: Innovation, Investment, and Environmental Policies

Key Question: How do firms balance profits and sustainability?

- **Papadopoulos et al. (2019)** and **Lestage & Li (2022)** discuss whether allowing firms to **discriminate on input pricing** leads to **better investment decisions**.
- **Li & Wang (2022)** and **Fukuda & Ouchida (2020)** ask whether **corporate social responsibility (CSR) helps or harms the environment**.
- **Bárcena-Ruiz et al. (2023)** explore whether firms should **disclose their "green" innovations** or keep them secret.

10	• Papadopoulos, K. G., Petrakis, E., & Skartados, P. (2019). Product innovation transfer under passive partial ownership holdings. <i>Economics Letters</i>, 177, 22-25. • Lestage, R., & Li, Y. (2022). Input price discrimination can encourage downstream investment and increase welfare. <i>Economics Letters</i>, 217, 110697.	Innovation and investment
11	• Strandholm, J. C., Espinola-Arredondo, A., & Munoz-Garcia, F. (2023). Being green first: Simultaneous vs. sequential abatement decisions. <i>Economics Letters</i>, 227, 111123.	Environmental issue

	• Fukuda, K., & Ouchida, Y. (2020). Corporate social responsibility (CSR) and the environment: Does CSR increase emissions?. <i>Energy Economics</i>, 92, 104933. (Lin)	
12	• Hirose, K., & Matsumura, T. (2023). Green transformation in oligopoly markets under common ownership. <i>Energy Economics</i>, 126, 106892. • Poyago-Theotoky, J., & Yong, S. K. (2019). Managerial delegation contracts, “green” R&D and emissions taxation. <i>The BE Journal of Theoretical Economics</i>, 19(2), 20170128.	Environmental issue
13	• Lin, Y. J., Lin, Y. S., Chou, T. H., & Shih, P. C. (2024). Environmental policy, licensing strategy, and social welfare. <i>Journal of Economics</i>, 1-19. (Lin)	Environmental issue

Real-World Example: Tesla **sells patents for free** to encourage electric vehicle adoption. But should all firms make their green technology open-source? (Bárcena-Ruiz et al. (2023))

Week 14-16: Spatial Competition & Location Decisions

Key Question: Why do similar businesses often cluster together?

- **Hotelling (1929)** first showed that businesses **tend to move toward the center of the market**, which explains why **gas stations, fast-food chains, and banks** are often located close together.
- **d’Aspremont et al. (1979)** challenged this by arguing that, under certain conditions, firms will **try to stay far apart**.
- **Hamilton et al. (1989)** and **Liang et al. (2006)** compare two types of competition:
 - **Price competition:** Firms cluster together.
 - **Quantity competition:** Firms spread out.

14	• Hotbllino, H. (1929). Stability in competition. The economic journal, 39(153), 41-57. (Lin) • d'Aspremont, C., Gabszewicz, J. J., & Thisse, J. F. (1979). On Hotelling's" Stability in competition". <i>Econometrica: Journal of the Econometric Society</i>,	Location
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	1145-1150.	
15	• Liu, Y., Gupta, S., & Zhang, Z. J. (2006). Note on self-restraint as an online entry-deterrence strategy. <i>Management Science</i>, 52(11), 1799-1809. • Hamilton, J. H., Thisse, J. F., & Weskamp, A. (1989). Spatial discrimination: Bertrand vs. Cournot in a model of location choice. <i>Regional Science and Urban Economics</i>, 19(1), 87-102.	Location
16	• Poddar, S., & Sinha, U. B. (2004). On patent licensing in spatial competition. <i>Economic Record</i>, 80(249), 208-218. • Liang, W. J., Hwang, H., & Mai, C. C. (2006). Spatial discrimination: Bertrand vs. Cournot with asymmetric demands. <i>Regional Science and Urban Economics</i>, 36(6), 790-802. (Lin)	Location
17	Final examine	
18	Flexible learning	

Real-World Example: Why are **McDonald's** and **KFC** often in the same area, but luxury brands like **Rolex** and **Chanel** are more spread out? These theories explain why.

What You'll Gain from This Course

By the end of this course, you will:

- ✓ ☐ **Understand how firms make strategic decisions** about pricing, competition, and location.
- ✓ ☐ **Analyze the trade-offs between competition and efficiency** in different industries.
- ✓ ☐ **Develop critical thinking skills** by reading and presenting academic research.
- ✓ ☐ **Apply economic theories to real-world business and policy issues.**

Your Role in the Course

- ☐ There are 16 papers to be evenly distributed.
- ☐ You will **present at least one paper** (80 minutes) with a **PowerPoint**.
- In the report, please explain the meaning of the mathematical formula, the purpose of the calculation, and the calculation process.
- ☐ You are encouraged to **ask and answer questions**—active participation is key!

Evaluation

Component	Weight (%)	Description
Paper Presentation	40%	Present a research paper (90 min) with slides; evaluated on clarity, depth, and discussion facilitation.
Class Participation	20%	Engage in discussions by asking/answering questions; contribute meaningful insights.
Research Proposal	40%	Short research proposal applying course concepts.

Necessarily condition: Pre-class preparation

● Paper Presentation (40%)

Each article should be presented for at least 90 minutes.

Summary of the paper (theoretical framework, key findings).

- ☐ Critical analysis (strengths, weaknesses, alternative interpretations).
- ☐ Real-world application (how the findings apply to industries or policies).
- ☐ Engagement (answering classmates' questions and stimulating discussion).
- ☐ Evaluation Criteria:
 - Clarity & Organization (10%) – Well-structured presentation with clear slides.
 - Depth of Understanding (10%) – Demonstrates strong grasp of the paper.
 - Critical Thinking (10%) – Goes beyond summarizing; includes critique and insights.
 - Discussion Facilitation (10%) – Encourages class participation and answers questions effectively.

- Encourage slow, clear speech – Remind students to speak slowly during presentations.
- Use visual aids – Diagrams and real-world examples help explain abstract theories.
- Repeat key concepts – Summarize complex ideas in simple words before moving forward.

● Class Participation (20%)

Encourage **active discussion!** Students should **ask questions, challenge ideas, and engage in debates.** I will assign students a key question.

- ☐ **Evaluation Criteria:**

- **Quality of Questions (10%)** – Thought-provoking, analytical, and relevant to the topic.
- **Contributions in Discussion (10%)** – Shares insights, responds to peers, and connects theories to real-world issues.

□ **Tip:** To encourage **participation from quieter students**, you can ask everyone to prepare **one discussion question per class**.

● **Short Response Essays (20%) (Encourages in-depth learning)**

Students submit 3 papers (500-800 words each) during the semester, choosing from key papers.

□ **Evaluation Criteria:**

- **Summary (5%)** – Concisely explains the paper's main arguments.
- **Analysis & Critique (10%)** – Identifies strengths, weaknesses, and extensions.
- **Real-World Connection (5%)** – Applies insights to industries, policies, or historical cases.

□ **Example Prompts:**

- "Does free entry always improve social welfare? Compare at least two papers in your response."
- "How do input pricing strategies affect firm behavior? Provide a real-world example."

● **Research Proposal (20%) (Develops analytical writing skills through essays)**

Students write a **3-5 page research proposal** using course concepts.

□ **Structure:**

1. **Research Question** – What economic issue will you explore?
2. **Literature Review** – How does existing research relate to your topic?
3. **Methodology** – What model or data would you use?
4. **Expected Contribution** – Why is this study important?

I'm looking forward to getting to know you all and having a great semester together!"