



Department of Economics
ECON 5304 W
Topics in Industrial Organization
Winter 2025

Instructor: Zhiqi Chen
Office: D895 Loeb Building
Phone: 520-2600 extension 7456
Email: zhiqi.chen@carleton.ca
Office Hours: Mondays 10:15am – 11:15am

Lecture Day and Time: Mondays 11:35am – 2:25pm

Mode of Delivery: In person

Brightspace Course Page: <https://brightspace.carleton.ca/d2l/home/283699>

Course Description

Topics may include vertical restraints and vertical integration, innovation and research and development, network economics, contract theory, search theory and advertising, and industry studies.

Learning Outcomes

Students will acquire the main elements of economic theories pertaining to vertical relationships among firms and the applications of these theories to competition policy.

Texts & Course Materials

Students are not required to purchase textbooks or other learning materials for this course.

Useful References

Belleflamme, Paul and Martin Peitz, *Industrial Organization: Markets and Strategies*, Cambridge University Press 2010

Armstrong, Mark, and Robert Porter, *Handbook of Industrial Organization*, volume 3, Amsterdam: North-Holland, 2007

Schmalensee, Richard, and Robert Willig, *Handbook of Industrial Organization*, volumes 1 and 2, Amsterdam: North-Holland, 1989

Church, Jeffrey and Roger Ware, *Industrial Organization: A Strategic Approach*, Boston: Irwin McGraw-Hill 1999 (available online at https://works.bepress.com/jeffrey_church/23/)

Martin, Stephen, *Advanced Industrial Economics*, 2nd edition, Oxford: Blackwell Publishing, 2001

Tirole, Jean, *Theory of Industrial Organization*, Cambridge: MIT Press, 1988

Topics

- I. Vertical Integration
- II. Resale Price Maintenance and Exclusive Territory
- III. Exclusive Contracts
- IV. Tying Arrangements
- V. Buyer Power

Evaluation

Midterm Examination:	45% (To be held in class on March 10)
First Paper Review:	15% (Due by 11:59pm on February 3)
Second Paper Review:	15% (Due by 11:59pm on March 24)
Third Paper Review:	15% (due by 11:59pm on April 7)
Class Participation:	10%

Any student who fails to write the midterm exam without a valid medical or equivalent excuse will receive a zero for the exam. With a valid excuse, a substitute exam will be scheduled.

Standing in a course is determined by the course instructor, subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

About the Paper Reviews: Each student will select three (3) journal articles and write a short review of each article. The length of each review should be 2 or 3 pages, in 12-point font and double-spaced. Articles selected for reviews should be published since 2018 (inclusive) in the following five journals: *RAND Journal of Economics*, *Journal of Industrial Economics*, *International Journal of Industrial Organization*, *Journal of Economics and Management Strategy*, and *American Economic Journal: Microeconomics*. Paper reviews should be submitted electronically through Brightspace.

Late submission of a paper review will result in a deduction of 1% for each day past the due date, up to a maximum deduction of 5%, from the marks for the review.

Use of Brightspace

Students are advised to check the course website in Brightspace regularly for course materials and updates. Lecture slides and a problem set will be posted at the Brightspace course website.

Course Materials

Student or professor materials created for this course (including presentations and posted notes, assignments and exams) remain the intellectual property of the authors. They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author.

Plagiarism, Resources and Mental Health, Academic Accommodations

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found [HERE](#).

Reading List

I. Vertical Integration

Allain, M.-L., C. Chambolle and P. Rey (2016), “Vertical Integration as a Source of Hold-up,” *Review of Economic Studies*, 83(1): 1-25

Ghili, S. and M. Schmitt (2024) “Risk Aversion and Double Marginalization,” *Journal of Industrial Economics*, 72(2): 762-806

Levy, N., Y. Spiegel & D. Gilo (2018), “Partial Vertical Integration, Ownership Structure, and Foreclosure,” *American Economic Journal: Microeconomics*, 10(1): 132-180

Ordover, J.A., G. Saloner and S. C. Salop (1990), “Equilibrium Vertical Foreclosure” *The American Economic Review*, 80(1): 127-142

Ordover, J.A., G. Saloner and S. C. Salop (1992), “Equilibrium Vertical Foreclosure: Reply,” *The American Economic Review*, 82(3): 698-703

Perry, M.K. (1989) “Vertical Integration: Determinants and Effects,” in *Handbook of Industrial Organization*, volume 1

Reiffen, D. (1992) “Equilibrium Vertical Foreclosure: Comment,” *The American Economic Review*, 82: 694 - 697

Salop, S.C. and D.T. Scheffman (1983) “Raising Rivals’ Costs,” *The American Economic Review Papers and Proceedings*, 73(2): 267 – 271

Schmalensee, R. (1973) “A Note on the Theory of Vertical Integration,” *Journal of Political Economy*, 81: 442 – 449

Vernon, J. and D. Graham (1971) “Profitability of Monopolization by Vertical Integration,” *Journal of Political Economy*, 79: 924 – 925

II. Resale Price Maintenance and Exclusive Territory

Bernheim, B.D., and M.D. Whinston (1985) “Common Marketing Agency as a Device for Facilitating Collusion” *RAND Journal of Economics*, 16: 269-281

Gabrielsen, T.S. and B.O. Johansen (2017) “Resale Price Maintenance with Secret Contracts and Retail Service Externalities,” *American Economic Journal: Microeconomics*, 9(1): 63–87

Hunold, M. and J. Muthers (2017) “Resale Price Maintenance and Manufacturer Competition for Retail Services,” *RAND Journal of Economics*, 48: 3–23

Jullien, B., and P. Rey (2007) “Resale Price Maintenance and Collusion,” *RAND Journal of Economics*, 38: 983-1001

Katz, M.L. (1989) “Vertical contractual relations,” in *Handbook of Industrial Organization*, vol. 1

Winter, R.A. (1993) “Vertical Control and Price versus Nonprice Competition,” *Quarterly Journal of Economics*, 108: 61 – 76

III. Exclusive Contracts

Aghion, P. and P. Bolton (1987) “Contracts as Barriers to Entry,” *American Economic Review*, 77: 388 – 401

Calzolari, G. and V. Denicolò (2013) “Competition with Exclusive Contracts and Market-Share Discounts.” *American Economic Review*, 103(6):2384-2411

Calzolari, G. and V. Denicolò (2015) “Exclusive Contracts and Market Dominance.” *American Economic Review*, 105(11):3321-51

Calzolari, G., V. Denicolò and P. Zanchettin (2020) “The Demand-Boost Theory of Exclusive Dealing,” *The RAND Journal of Economics*, 51(3):.713-738

Chen, Z. and G. Shaffer (2014) “Naked Exclusion with Minimum-Share Requirements,” *RAND Journal of Economics*, 45(1): 64–91

Mathewson, G.F. and R.A. Winter (1987) “The Competitive Effects of Vertical Agreements: Comment,” *American Economic Review*, 77: 1057 – 1062

Rasmusen, E.B., J.M. Ramseyer and J.S. Wiley, Jr. (1991) “Naked Exclusion,” *American Economic Review*, 81: 1137 – 1145

Segal, I.R. and M.D. Whinston (2000) “Naked Exclusion: Comment,” *American Economic Review*, 90: 296 – 309

IV. Tying Arrangements

Carlton, D.W. and M. Waldman (2002) “The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries,” *RAND Journal of Economics*, 33: 194 – 220

Chen, Z. and T.W. Ross (1993) “Refusal to Deal, Price Discrimination and Independent Service Organizations,” *Journal of Economics and Management Strategy*, 2: 593-614

Chen, Z., T.W. Ross and W. Stanbury (1998) “Refusals to Deal and Aftermarkets,” *Review of Industrial Organization*, 13: 131-151

Miao, C. (2010) “Consumer Myopia, Standardization and Aftermarket Monopolization,” *European Economic Review*, 54: 931-946

Whinston, M.D. (1990) “Tying, Foreclosure, and Exclusion,” *American Economic Review*, 80: 837 – 859

V. Buyer Power

Caprice, S. and P. Rey (2015) “Buyer Power from Joint Listing Decision,” *Economic Journal*, 125:1677–1704

Chen, Z. (2003) “Dominant Retailers and Countervailing Power Hypothesis,” *RAND Journal of Economics*, 34: 612 - 625

Chen, Z. (2008) “Defining Buyer Power,” *Antitrust Bulletin*, 53(2): 241 - 250

Chen, Z. (2019) “Supplier Innovation in the Presence of Buyer Power,” *International Economic Review*, volume 60, issue 1 (February 2019), 329-353

Dobson, P.W. and M. Waterson (1997) “Countervailing Power and Consumer Prices,” *Economic Journal*, 107: 418 - 430

Inderst, R. and C. Wey (2007) “Buyer Power and Supplier Incentives,” *European Economic Review*, 51: 647 – 667

Shaffer, G. (1991) “Slotting Allowances and Resale Price Maintenance: A Comparison of Facilitating Practices,” *RAND Journal of Economics*, 22: 120 - 135

Von Ungern-Sternberg, T. (1996) “Countervailing Power Revisited,” *International Journal of Industrial Organization*, 14: 507 - 520