



Universitat
Pompeu Fabra
Barcelona

Topics in Economic Theory IV: Industrial Organization

2025-2026 Academic Year
Master of Research in Economics, Finance and Management

1. Description of the subject

- Topics in Economic Theory IV
 - Total credits: 3 ECTS
 - Type of subject: Optative
 - Department of Economics and Business
 - Teaching team: Massimo Motta
- Code: 32077
Workload: 75 hours
Term: 2nd

2. Teaching guide

- Introduction

This course will offer an introduction to Industrial Organization (IO), models dealing with competition issues. The objective of the course is to show that (relatively) simple IO models have been and can be used to (a) address important policy questions, (b) explain the rationale behind business practices used by large companies, and (c) help antitrust agencies to understand their effects, thereby determining whether they are anti-competitive (and should be sanctioned) or not.

As such, the idea of the course is to stress that economic modelling is not an end in itself but it can be a means to help formulate economic policy and contribute to the solution of real-world problems.

- Teaching methodology

I shall deal with five important topics. For each of them, I will first offer a motivation and explain the reasons why it has raised the interest of economists, lawyers and policymakers; then I will briefly introduce the main economic issues, before entering into the details of one paper which has given a groundbreaking contribution to the understanding of the topic, and possibly mention the results of some follow-up papers. Finally, I will report on how the paper has influenced policy or particular antitrust cases.

1. Exclusive dealing. The possibility that exclusive contracts may have the effect of excluding as-efficient (or more efficient) competitors has been (and still is) one of the most controversial in the law & economics literature. The main reference will be the pathbreaking paper by Segal and Whinston (2000), and subsequent works by others. I will then briefly explain what are the main practical lessons from this literature and briefly mention the *Qualcomm exclusivity* case (involving the payment of billions of dollars to Apple for using exclusively Qualcomm chips), as well as the Google Android case (Google made payments to certain large manufacturers and mobile network operators on condition that they exclusively pre-installed the Google Search app on their devices), where the European Commission (EC) fined these companies for abuse of dominant positions. A similar case in the US led a District Court to judge that Google was guilty of monopolization. The remedy to Google's conduct is currently being decided (and in principle it may also result in Google having to divest some of its activities).
2. Tying. After explaining why it has long been thought that the practice of tying (whereby one firm sells two goods or services only jointly) would not lead to anti-competitive effects, I will discuss the papers by Carlton and Waldman (2003) and Choi et al. (2023), which offer (different)

rationales as to why this practice may harm consumers and markets. Two famous antitrust cases where tying is central to the allegations of the Antitrust Agencies are *US v. Microsoft* and the more recent *Google Android* case (Google required manufacturers to pre-install the Google Search app and browser app Chrome as a condition for licensing Google's app store, the Play Store). In the EU, Microsoft is being investigated for the integration of Teams in Windows

3. Vertical foreclosure. According to the influential Chicago School, a vertically integrated firm would have the ability but not the incentive to refuse or degrade an essential input it provides to a downstream rival. Accordingly, US Courts would rarely find a firm guilty for refusing to deal or for degrading its inputs. We shall briefly review raising rivals' costs theories of foreclosure and discuss Allain et al. (2016). Then, we shall use Motta (2024) to describe some simple theories which explain the anti-competitive rationale of self-preferencing in the *Google Shopping* case (where Google made links to its comparison shopping services more prominent and demoted links to its rivals), another case where the EC imposed a big fine on Google.
4. Killer acquisitions. In the last few years, the five big digital platforms (Amazon, Apple, Facebook, Google and Microsoft) have acquired more than 600 firms without triggering antitrust intervention. This has raised a hot debate on the effects of the acquisition of potential competitors, emphasized by the results of the paper by Cunningham et al. (2021). The authors show that in the pharmaceutical industry (but people think the same might happen in digital markets) a number of acquisitions by incumbents is motivated just by the desire to eliminate competitors (since after the acquisition of patents leading to competing drugs, development of those new drugs has been discontinued compared with patents which remained independent). This paper has also triggered a rich literature on the possible pro- and anti-competitive effects of acquisitions of start-ups.
5. Conglomerate mergers. If time allows, we shall also discuss a very recent paper by Chen and Rey (2023) which looks at the conditions under which mergers between firms which sell complements (or goods that are demanded together by consumers) may have anti-competitive effects. This is an important topic nowadays because in digital markets competition between platforms is likely taking the shape of competition among ecosystems. Recent relevant cases include the prohibition of Booking.com/e-Traveli and Adobe/Figma (which was abandoned after the US, EU and UK authorities made clear they were going to challenge the merger).

References.

- Segal and Whinston. 2000. Naked Exclusion: Comment. *American Economic Review*, 90(1): 296-309.
- Fumagalli and Motta. 2006. Exclusive Dealing and Entry, when Buyers Compete. *American Economic Review*, 96(3): 785-795.

- Ide, Montero and Figueroa. 2016. Discounts as a Barrier to Entry. *American Economic Review*, 106(7): 1849-77.
- Carlton and Waldman. 2002. The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries. *RAND Journal of Economics*, 33(2): 194-220
- Choi, Jeon and Whinston. 2023. Tying with Network Effects. Toulouse School of Economics Working Paper.
- Allain, Chambolle and Rey. 2016. Vertical Integration as a Source of Hold-up. *Review of Economic Studies*, 83(1): 1-25.
- Motta (2024). Self-preferencing and foreclosure in digital markets: theories of harm for abuse cases. *International Journal of Industrial Organization*.
- Cunningham, Ederer and Ma. 2021. Killer Acquisitions. *Journal of Political Economy*, 129(3): 649-702.
- Fumagalli, Motta and Tarantino. 2023. Shelving or developing? Optimal policy for mergers with potential competitors. Available at <https://sites.google.com/site/massimomottawebpage/>
- Chen and Rey. 2023. A theory of conglomerate mergers. Toulouse School of Economics Working Paper.

- Assessment and Grading System

There will be an oral assessment: students (in groups of two or three) will be asked to make a short presentation/discussion of a mutually agreed paper (not necessarily one of those listed in the references) related to the topics above. This will be during the quarter, at a mutually agreed time.