Industrial Economics

Industrial Organization

Chrysovalantou (Valanta) Milliou

AUEB – Erasmus Program

Slides

Industrial Organization: Markets and Strategies

Paul Belleflamme and Martin Peitz, 2d Edition

Course Overview

Instructor: Chrysovalantou (Valanta) Milliou, Professor
https://www2.aueb.gr/users/milliou/

Communication with instructor: cmilliou@aueb.gr

Office hours: Thursday 10:00 –11:00 & 14:00 – 15:00
(AUEB main building, central part -corridor across room Δ0)

Eclass: https://eclass.aueb.gr/courses/ERASMUS151/
(course announcements; lecture slides; (solved) problem sets)

Teaching Method: Weekly lectures (Thursday 11:00 – 14:00)

Level & ECTS credits: Advanced (appropriate mainly for 3rd or 4th year students of Economics), 6 ECTS

Course Overview

Firms take decisions in response to prevailing market conditions.

Industrial Economics studies the decisions of firms in markets with imperfect competition (most markets nowadays) and their effects on market participants.

"The study of imperfectly competitive markets"

It analyses the way firms compete – interact and decide strategically in different types of imperfectly competitive markets.

It also explores a number of business practices, such as cartels and mergers, and their implications on welfare.

It does so using tools of Microeconomics and basic Game Theory, combining theoretical models with real world applications.

Examples of questions that it addresses:

How should firms set prices? How much should a firm produces? How the intensity of competition affects firms' decisions? Should firms merge? How will the market respond if two firms merge? How much should firms invest in innovation/advertising? What should policymakers do to keep the economy working well?

Usefulness of Industrial Economics:

It provides conceptual analysis tools for the study of markets and firms' strategy, in order to understand, evaluate, and anticipate.

- For industrial companies and strategy consulting firms, it helps analysing and anticipating firms' behaviour in markets.

  Practical implications for managers: how to decide on market strategy (prices, investments, R&D, product variety, advertising, supply chain,...)

- It helps the design and application of regulation, competition policy, industrial policy, innovation that take actions in order to avoid the negative effects of limited market competition and/or of business practices that can reduce market competition.
- For competition (antitrust) policy consulting firms.
- For the understanding of what is happening in the business world... the "business news" (see next slide)

BusinessWeek

Google, Apple: Two Mobile Software Visions

Smartphone apps should be browsed, not downloaded, a Google exec says. Apple and others beg to differ

Product differentiation

FT.com FINANCIAL TIMES

Horizontal merger

Kirin-Suntory merger to spur consolidation

By Michiyo Nakamoto
Published: July 14 2009 17:40 | Last updated: July 14 2009 17:40

Kirin confirmed on Tuesday it was in early merger talks with Suntory, its local rival, in a move that is likely to trigger further consolidation in Japan's food and drinks sector.

The New York Times | International Herald Tribune

Barnes & Noble Plans an Extensive E-Bookstore

E-book pricing has become one of the most delicate topics in book circles. Publishers are concerned that by selling new books at such low prices, e-book retailers will undercut sales of hardcover editions, which average about $26, and eventually erode publisher margins.

"The pricing policies won't remain static," Mr. Lynch said in an interview. "We're working with our publishers on various pricing models. As the pricing model evolves over time, we will adjust."

Pricing strategies

guardian.co.uk

Big pharma 'delaying' cheaper drugs

European commissioner unveils inquiry results and attacks industry for impeding generic drugs' entry to market

Entry deterrence

How to do Industrial Economics?

Joseph Schumpeter (1954), *History of Economic Analysis:*

"What distinguishes the scientific economic analyst from other people who think, talk and write about economic topics, is a command of three main techniques:

history, statistics and theory

- theory being defined as "box of tools" or a set of models that permit one to deal analytically with broad classes of cases by focusing on certain properties or aspects they have in common".

→

In Industrial Economics, we develop quite general and simple **models** ('toy models'), so that they can apply to a large variety of cases.

Note: There are other related courses such as Empirical Industrial Organization Behavioral Industrial Organization, Economics of Competition Policy.

Course Assessment - Grading:

- 30% mid-term written exam in class
- 70% final written exam

Problem Sets & Exercise Classes:

Problem sets (solutions will be provided in the eclass)

Exercise classes with Teaching Assistant

Main Textbook:

Belleflamme, P. and M. Peitz, (2015), *Industrial Organization: Markets and Strategies,* Cambridge University Press

Other Textbooks:

Pepall, L., D. Richards and G. Norman (2014), *Industrial Organization: Contemporary Theory and Empirical Applications*, Wiley Editions

More introductory: Cabral, L. (2000), *Introduction to Industrial Organization*, MIT Press

More advanced: Tirole, J. (1988), *Theory of industrial organization*, MIT Press

Competition policy: Motta, M. (2004), *Competition Policy: Theory and Practice*, Cambridge University Press

Prerequisite knowledge:

- Intermediate knowledge of Microeconomics (including basic knowledge of Game Theory)
- Linear algebra & basic calculus (optimization/profit maximization problems - derivatives/differentiation)

Electronic Device Policy:

Laptops and smartphones are a large tax on concentration/mental bandwidth.

Strong recommendation against their use during lectures.

If you really benefit from note-taking, please talk to me for individual exception.

No use of earphones during class.

Smartphones muted during class.

Course Outline - Roadmap:

1. **Basic Concepts**
2. **Monopoly**
   Basic Monopoly; Multi-product Monopoly; Price Discrimination
3. **Static Oligopoly**
   Competition in Prices (Bertrand Model); Competition in Quantities (Cournot Model)
4. **Dynamic Oligopoly**
   Sequential Decisions (Stackelberg Model); Entry
5. **Product Differentiaton in Oligopoly**
   Horizontal Product Differentiation; Vertical Product Differentiation
6. **Cartels & Tacit Collusion**
7. **Horizontal Mergers**
8. **Vertically Related Markets**
9. **Investments in R&D**