**Industrial Organization: characteristics and contents** 

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#### **Course goals**

1) Competitive analysis of firms in markets from both a theoretical and applied perspective.

2) Study of competitive markets and, especially, non-competitive, with special attention to the analysis of decisions under a monopoly and oligopoly context.

3) Understanding the consequences of strategic interdependence of firms in markets.

4) Ability to make applications of theoretical models in order to explain the actual market fundamentals and monitoring of regulation and competition policies that enhance their efficiency.

### **Outline of the Course**

- Block 1: Introduction to Industrial Organization.
- (Ch1 and Ch2).
- Block 2: The monopoly power. (Ch3 and Ch4).
- Block 3: The strategic interaction of oligopolies.
- (Ch5 to Ch9)
- Block 4: Competition policy (Ch10)

Syllabus
Block 1. Introduction to Industrial Organization
Item 1. Industrial Organization: the nature and content
Item 2. Market structure
Block 2. Monopoly power
Item 3. Monopoly
Item 4. Price discrimination and product selection
Plack 2. The strategic interaction of oligonalistic
Block 3. The strategic interaction of oligopolistic
Item 5. Homogeneous product oligopoly
5.1 Models of static oligopoly
5.2 Models of dynamic oligopoly
Item 6. Oligopoly with product differentiation and advertising
Item 7. Barriers to entry
Item 8. Mergers and acquisitions
Item 9. Technical change. R & D
Block 4. Competition policies
Item 10. Industrial policy and competition

#### • Indicative Schedule

Week	Chapter	Assessment/Events
1	Chapter 1 and 2	
2	Chapter 2	
3	Chapter 3	
4	Chapter 3 and 4	
5	Chapter 4	
6	Chapter 4	
7	Chapter 5	
8	Chapter 5	Mid term exam 1
9	Chapter 5	Eastern Holidays
10	Chapter 5.2	
11	Chapter 6	
12	Chapter 7	
13	Chapter 8	
14	Chapter 9	
15	Review	Mid term exam 2
16		

5

#### **Basic bibliography**

- Luis Cabral, "Introduction to Industrial Organization", MIT Press, 2000.
- O. Shy, 'Industrial Organization: Theory and Applications', MIT Press, 1998.
- Luís Cabral, 'Economía Industrial', McGraw Hill, 1997.
- H. Varian, 'Introduction to Microeconomics'. Ed. Antoni Bosch..

#### **Other bibliography**

 Prácticas de las asignaturas de Economía y Organización Industrial, Material Didàctic 153, UIB 2012. Marc Escrihuela, Maria Sard Bauzà, Maria Tugores Ques.

#### **Continuous assessment**

- a) Test 1: midterm exam (25%) at the end of chapter 5.1 (aprox.) (NR)
- b) Test 2: mid-term exam (25%), in the last lecture of the semester (NR)
- c) 1 final exam (50%) including the whole course. (R)

#### **INDUSTRIAL ORGANIZATION**

**First part: Introduction** 

**Chapter 1. Industrial Organization: characteristics and contents** 

1.1. Definition of Industrial Organization
1.2. Aim of Industrial Organization
1.3. Main schools of thought
1.4. The S-C-R paradigm and its limitations
Chapter 2. The Structure of the markets

Chapter 3. The Monopoly

**Chapter 1. Industrial Organization: characteristics and contents** 

• 1.1. - Definition of Industrial Organization

Relationship with microeconomicsDifferentiated discipline

- **Chapter 1. Industrial Organization: characteristics and contents**
- **1.1. -Definition of Industrial Organization**
- **1.2. Aim of Industrial Organization**
- **Existence** of market power
- Consequences of market power
- The role of the state

**Chapter 1. Industrial Organization: characteristics and contents 1.1. Definition of Industrial Organization 1.2. Aim of Industrial Organization 1.3.** Main schools of thought •Background •Harvard school Chicago school •Austrian school •New Industrial Economics

**Chapter 1. Industrial Organization: characteristics and contents** 

- **1.1. Definition of Industrial Organization**
- **1.2. Goal of Industrial Organization**
- **1.3. Main schools of thought**
- 1.4. The S-C-P paradigm and its limitations
  - □ Structure
  - □Conduct
  - □ Performance
  - **Exogenous conditions**

**Industrial Organization ...** 

Comes from the English expressions "Industrial Economics" or "Industrial Organization" that are synonyms!

By industry is meant:

Set of firms that operate in the same market.

Industrial Economics = Economy of markets

It differs from classical microeconomics...

□ It analyzes basically market structures between the two extremes, monopoly and perfect competition

□ Those policies aiming to improve efficiency in the markets have a relevant role

Industrial Organization = Economy of markets

with imperfect competition

The main questions for the IO are:

1. Is there market power?

2. Which are the consequences of market power?

3. What can the government do in order to improve the inefficient situations?

The main questions for the IO are:

- 1. Is there market power?
- □ The first welfare theorem says that in absence of market power we have an efficient allocation
- An approach to the loss of efficiency caused by market power consists of analyzing the difference between price and marginal cost.

The main questions for the IO are:

- 2. Which are the consequences of market power?We emphasize:
- D Production inefficiency (in resource allocation)
- □ Transfer from consumers to producers
- I Monopolization costs
- Natural monopoly
- Dynamic efficiency

The main questions for the IO are:

3. What can the government do in order to improve the inefficient situations? Benefits and costs should be evaluated for every situation.

Main measures of public intervention:

- □ **Competition policy**: prohibitions, merger assessments, evaluation of agreements among firms,...
- **Industrial policy**: subsidies, incentives,..
- Regulation of firms and/or markets: price control, properties, entry, regulation of private firms,...

We develop a brief history of IO

The 5 main stages of the development of the IO schools of thought are:

- 1. Background:
- 2. Harvard school:Bain, Mason, Galbraith (40's)
- 3. Chicago school: Stigler, Demsetz (50's)
- 4. Austrian (European) school: Schumpeter, Scherer, Jacquemin, Segura(60's y 70's)
- 5. New Industrial Economics: Tirole (80's)

**1. Background in the Industrial Economics:** 

- Cournot(1838): Use of maths to study economy, price formation with just one supplier and oligopoly with simultaneous quantity setting
- **Bertrand (1883):** oligopoly and with simultaneous price setting
- **Stackelberg (1934):** sequential setting of quantities
- Hotelling (1929) and Chamberlin (1933): product differentiation

**2. Harvard school:** Bain, Mason, Galbraith (40's)

- Emphasizes empirical work
- The structure (entry barriers, concentration and product differentiation) are key to identify market behaviour and consequently its results

 $S \Rightarrow C \Rightarrow P$ 

It promotes public intervention in the structure in order to obtain the desired results.

**3. Chicago school:** Stigler, Posner, Peltzman, Demsetz (50's)

- The perfect competition model is a good approach to how markets operate in absence of public intervention through imposing entry
- □ The market power, if exists, is temporary due to the threat of new firms entry
- The government should try not to intervene in market regulation

**4. European or Austrian school:** Schumpeter, Scherer, Jacquemin, Segura(60's y 70's)

- □ Firstly by Schumpeter (1934, 1942)
- Emphasis in the dynamic aspects of the economy
- □ Market power is temporary in an Economy in constant progress
- □ The Economy is a process of creative destruction
- □ The expectations of achieving a dominant position are an incentive for the firms to improve their products and processes

5. The new IO: Tirole (80's)

- It is the dominant vision nowadays
- It recaptures the SCP paradigm with some now ideas of posterior schools: potential competition and dynamic aspects
- Main methodological progress:
  - □ Theory: Game theory
  - □ Empirical: Econometric tools

#### **Chapter 1. Industrial Organization: characteristics and contents 1.4. The S-C-P paradigm and its limitations**

# **PARADIGM:** Simplified model or work method accepted by consensus for the specialists of the area.

#### Chapter 1. Industrial Organization: characteristics and contents 1.4. The S-C-P paradigm and its limitations

- The SCP paradigm is a system of market analysis that systematizes and articulates the relevant aspects of the IO
- The idea is that every sector is characterized by its structure, the behaviour of the firms that constitute the sector and for a list of indicators that measure the results (or the functioning) of the market
- All aspects are related with each other and they are also a function of certain conditions exogenous to the market like the technology, the demand structure or the public intervention.

#### Chapter 1. Industrial Organization: characteristics and contents 1.4. The S-C-P paradigm and its limitations

