



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Public and Service Economics

2223-1-F6302N006

Learning objectives

The course intends:

- a) to offer basic and specialist knowledge about **Reasons, Tools and Effects of public intervention** in the markets of contemporary capitalist societies characterized by non-competitive conditions and strong market power in favor of private firms.
- b) to enable the student to **critically evaluate the policies of reduction of the aforementioned intervention** followed in various countries over the past three decades and to analyze the effects of the consequent elimination or privatization of the activities previously carried out by the public sector.
- c) to allow the student to acquire professional skills in the **planning and management of still existing public enterprises** still offering public services

Contents

The course is organized in two parts (modules), which cannot be separated.

The first part is called **Public and Service Economics**. It is dedicated to the study of the theory of business and market regulation in the public utility sectors where conditions of natural monopoly prevail. Economic theories that have dealt with this problem will be presented and discussed following their historical development and the relative results will be examined with reference to contexts characterized by both perfect information and information asymmetry. The theories that motivate the nationalization of natural monopolies and the theories that merely recommend regulatory rules of conduct to be imposed on private companies will be exposed and analysed. In the latter case, the study will cover both the Bayesian and the non-Bayesian (or anonymous) models of regulation of the natural monopoly. The main oligopoly models will be subsequently taken up and the most common forms of

regulation of these markets will be examined. Ample space will be dedicated to the analysis of the so-called competition for the market achieved through the application of auction mechanisms. In this context, specific cases of application of auction mechanisms to the regulation of sectors such as electricity, gas, telecommunications, etc. will also be treated.

The second part is called **Economics of regulatory choices** and deals with regulatory activity, carried out by applying the rules "to protect competition and the market as well as consumers", carried out through the activity of independent authorities. The historical profile of this form of "intervention" and the main guiding criteria for consumer and producer protection activities followed by the Authorities will be examined. Some cases derived from specific rulings of the European and national Anti Trust Authorities will be subsequently treated.

Detailed program

- L1 Allocation efficiency and perfect competition I
- L2 Allocation efficiency and perfect competition II
- L3 Perfect competition and efficient allocation
- L4 Natural Monopoly I
- L5 Natural Monopoly II
- L6 Multiproduct Natural Monopoly
- L7 Returns to scale and sub-additivity
- L8 Prices equal to MC and loss in the firms' balance sheet
- L9 The Hotelling model I
- L10 The Hotelling model II
- L 11 Non-distortionary forms of financing the subsidy
- L12 PROS and CONS of FB pricing
- L 13 The Second Best approach
- L14 SB prices I
- L15 The correction of SB prices for distributional purposes
- L16 Alternative and complementary interpretations of SB prices
- L17 The Loeb and Magat model
- L18 The introduction of uncertainty in FB and SB pricing.
- L19 The peak-load pricing
- L20 Peak-load, stochastic demand and rationing

L 21 Non- Bayesian regulation. Introduction.

L22 RoR regulation I

L22 RoR regulation II

L23 Price -cap

L24 Yardstick competition and applications

L25 Other regulatory schemes

L 26 Bayesian models of regulation and principal-agent

L27 Baron-Myerson

L28 Laffont-Tirole

L29 Demzets auction regulation and the Loeb and Magat model

L24 Auction theory I

L 25 Auction theory II

L26 Auction theory III

L27 Application Auctions to public franchise

L28
Application of Auctions to market design; various cases.

L 29 A (very) critical review of auction mechanisms and applications

L 30 Oligopoly and regulation

L 30 Cournot I basic model

L 31 Cournot II

L32 Cournot with $N > 2$

L 33 Bertrand I

L 34 Bertrand with $N > 2$

L 35 Social surplus in Oligopoly I

L 36 Public intervention in Oligopoly

IL 37 Vertical integration I

L 38 Vertical Integration II

L 39 Alternatives to vertical integration

- L 40 Horizontal Mergers I
- L 41 Efficiency gains
- L 42 Unilateral effects
- L 43 Cases of Antitrust I
- L 44 Cases of Antitrust II
- L 45 Cases of Antitrust III
- L46 Cases of Antitrust IV
- L47 Privatization in theory and practice
- L48 Privatization and social impoverishment
- L49 Should we re-nationalise previously privatized Public Utilities?

Prerequisites

Basic microeconomics as presented for instance in

H. Varian, Intermediate Microeconomics with Calculus, W. W. Norton & Company – 2014

is necessary.

Calculus and optimization are highly recommended

Teaching methods

Class lectures

Assessment methods

Final written exam (6 questions including 3 exercises; each question is divided into individual parts).

At the end of the first module (after about 45 h of frontal lectures) students can take an **intermediate test** related to the program treated until then in class. Passing the intermediate test (with a mark between 0 and 16; minimum 9) implies limitation of the content of the final test to the second part of the course only (always with a mark between 0 and 16; minimum 9). The intermediate test is not mandatory. In its absence, the student takes the complete exam relating to both parts / modules (score between 0 and 32 = 30 with honors; minimum 18).

Non-attending students cannot access the intermediate test and must take the complete test together with the attending students.

Textbooks and Reading Materials

- Bruno Bosco, **LEZIONI DI TEORIA DELLA REGOLAMENTAZIONE (Lectures on Regulation Theory)**, Second Edition, Giappichelli, Turin, 2020 (except the paragraphs indicated with double asterisk)
- M. Motta -M. Polo, **Antitrust. Economia e politica della concorrenza** (Antitrust and competition policy), Il Mulino, 2005 (chapters to be indicated at the beginning of the second module)
- Bruno Bosco, **Additional Lecture Notes** (Material included in the e-learning page of the course)

A purely supplementary ("not so hard going" and less thorough) bibliographic reference discussing specific regulatory topics and cases is

C. Decker, **Modern Economic Regulation**, CUP, 2015 (part III in particular)

Semester

First and Second

Teaching language

Italian

Sustainable Development Goals
