

Regulation Policy and Economics of Regulation

Class No. 1 (file 1): Introduction

Objectives of Today's Class

- (1) To understand an overview of this course, and a basic frame of mind upon taking the lecture
- (2) To comprehend a relationship between regulation and competition policy

Notice

(1) The files I deal with in the classes I take charge will be put on view in my website (<http://dbs.iss.u-tokyo.ac.jp/~matsumur/PUBR2009.html>). If you forget the address at all, it can be traced through the website of Institute of Social Science. There will be no handouts of hard copies from the next class on, and each of you will be expected to download the appropriate files which I'll do my best to upload in 48 hours before each class.

(2) The term-end exam is planned on in February, most likely on a same Friday when this lecture gets held, the date of which will be notified as soon as it becomes finalized.

(3) And which will be principally conformed to the schedule of Faculty of Economics.

(4) While the class is being planned to be cancelled on November 20, please pay attention to a notice on the billboard as the change is not improbable.

Rules Regarding This Course (Part Matsumura Takes Charge)

- (1) Ask questions and speak out any time during the class.
- (2) There'll be occasions that I call you.
- (3) I won't check attendance, but will evaluate voicing your opinion during the class as an overall class contribution mark. I'll welcome any kind of remarks.
- (4) I'll also welcome your questions and comments after the class as well. There are cases where some opinions that deserve extra points if voiced during the class may not get any if done after the class.

Objective of Course

To learn a viewpoint to analyze the actual **regulations** of Japan by utilizing the tools of micro economics and theory of games

- **Economic Regulations**

→ Correction of errors in marketplace: improvement of economic efficiency

- **Social Regulations**

→ Achievement of social objectives outside of economic efficiency

In the classes I, Matsumura, take charge, the former (**Economic Regulations**) will be primarily focused.

Developments of Course

In 2005: Regulation and Competition Policy (4 credits)

In 2006: Regulation Policy (2 credits)

From 2007 onward: Regulation Policy and Economics
of Regulation (2 credits)

Feature of Microeconomics

Decision making (choice) by an individual economic unit
→ Structure of whole society

Methodological individualism in an exaggerated way

On one hand, a choice anchored by individual economy
relies upon the structure of whole society.

While decision making by an individual economic unit cannot
be realized unless the structure of whole society is finalized,
the structure of whole society cannot be determined without
decision making by an individual economic unit.

⇒ System of concurrent decision

System of Microeconomics

It is capable to analyze every decision making in principle. First, one starts from a choice as to what and how much to produce and consume.

- Consumer's theory and producer's theory (individual's decision making)
- Theory of market equilibrium (to close the system of concurrent decision

→ First theorem of welfare economics = Market equilibrium is Pareto-efficient as long as the following three conditions are met:

(a) complete market, (b) perfect competition, (c) complete information

Market Failure: (1) Imperfect Competition

Perfect competition: Each and every economic unit is a price taker.

Price consumer: An economic unit that considers that its own behavior does not influence the price.

Purchaser (seller) is a price taker.

→ A consumer (producer) who does not consider that his/her own purchase volume (production volume) influences the market price.

Imperfect competition: There exists at least one consumer who is not a price consumer (price controller), i.e., **a very normal world**.

Theoretical grounds for perfect competition:

(a) Cournot's Limit Theorem, (b) Bertrand Model, (c) Evolutionary Stability, Relative-Profit Maximization Model

Response to Market Failure Accompanying Imperfect Competition

(1) To remove factors standing in the way of competition, and promote competition or maintain competitive circumstances, thereby alleviating losses caused by imperfect competition

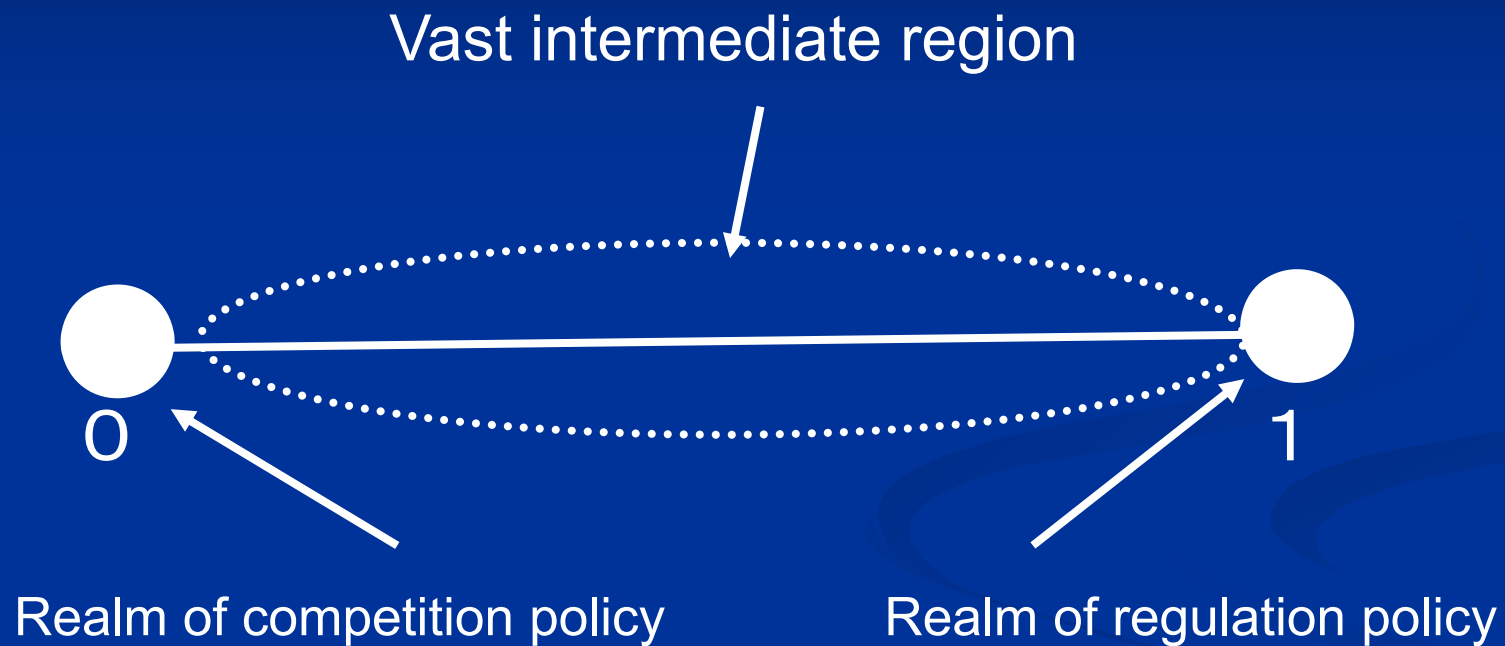
Presupposing free competition → Realm of competition policy and antitrust law

(2) Tough to maintain competitive circumstances

→ To give up the idea of competition, and by presupposing the state of imperfect competition, alleviate losses in economic welfare through regulation

→ Realm of Regulation Policy

Continuity Between Competition Policy and Regulation Policy



Continuity Between Realm of Competition Policy and That of Regulation Policy

(a) Continuous substitutability between regulation policy and competition policy

(1) To have an understanding of a possibility that, even in the fields of natural monopoly markets where restriction has been considered imperative, competitive mechanism works.

~Theory of Contestable Market (Class No. 2)

Upon meeting certain conditions, it is possible to change the realm of regulation policy to that of competition policy.

Dealing with the same issue, the selection as to which one is superior, either competition policy or regulation policy, has turned out to change up to varying degrees of given indicators.

Continuity Between Realm of Competition Policy and That of Regulation Policy

(a) Substitutability between regulation policy and competition policy

(2) Substitutability between barriers to entry and competition policy

In a market where entry and exit are free, a certain type of competition policy exerts no influence on consumer surplus.

~Where barriers to entry are removed, there is no need for a certain type of competition policy (Davidson and Mukherjee, 2007, IJIO).

(3) Continuity of policy measures

An offer of wholesale service (close to a realm of free competition) or a connection (close to a realm of regulation)

~ **At the same time, it's a means of discretion regulation (Class No. 11)**

Coexistence of Competition Policy with Regulation Policy

(b) Regulation policy and competition policy play complementary functions.

A scheme to introduce **partial** competition has progressed in a field of a natural monopoly market where control by regulation had traditionally been considered to be imperative. ~ Telecommunications, electric power, and city gas

Nonetheless, without definite regulation, a competitive mechanism does not work at all. → Necessity to enforce regulation policy and competition policy at the same time
~ **Argument over essential facilities**

Inversely, there is a scheme that is fundamentally competitive, but including partial regulation.

(E.g.) Last Safeguard Regulation, some price cap regulation

Interactivity Between Competition Policy Realm and Regulation Policy Realm

(c) Numerous effects of network externalities turn up in the traditional realm of free competition.

Possibility of ex-post facto competitive restriction ~ Same issue as seen bottleneck facilities in communication, electricity, etc., city gas, and railway

Possibility to extend experiences of bottleneck restriction to other fields (i.e., to extend the realm of regulation policy to that of competition policy)

(E.g.) Is it all right to leave up to a general statute such problems as Microsoft, Google, Apple?

Continuity Between Realm of Competition Policy and Policy Leaders of Regulation Policy

(d) Competitive competition policies

(1) Competitive assessment in back of regulation reform

→ Government offices involved in the undertakings also go on to conduct competitive assessment.

(2) Competition policies meant for specific industries vs. ones under general statutes

(3) Competition between the merger examination and industry revitalization/enhancement of competitiveness

Indivisibility Between Competition Policy and Realm of Regulation Policy

Barriers are being lowered between competition policy and regulation policy.

→ Learning the two separately is unadvisable.

⇒ Competition/regulation policies in the 2005 academic year

A course of 4 credits is undesirable in terms of curriculum.

⇒ From the 2006 academic year, it has been divided into Competition Policy (2 credits) and Regulation Policy (2 credits).

And yet, in reality, it's desirable to learn the two simultaneously, nonetheless.

(Second best way) **To venture to take up some topics highly relevant to Competition Policy ← Which regrettably is far from enough, though, due to a tight schedule.**

Externalities

Typical example of market failure that occurs when the condition in (a) is not met.

Externalities (environmental pollution, or the like), public goods

⇒ As to private economic entities, it's necessary for Government to directly impose restraints, or indirectly control by taxation.

Government actions are important in the context of regulation as in environmental regulations; the subject is to be discussed in such forms as network externalities within the range of this course.

Market Failure Due to Incomplete Information

Complete information: all the people have the same information.

Perfect information: all the people have all the information.

Information being incomplete ~ Information being asymmetrical ~ Information being maldistributed

- Typical examples of market failure attributable to maldistribution of information

- (a) Moral hazard

- (b) Antiselection (adverse selection)

- Response to maldistribution of information

⇒ Signaling ⇒ And which causes another new market failure (Law and Economics 2)

**Point in question upon considering regulation policy
(Classes No. 5 and 13)**

Eligible Students (School of Public Policy, Graduate School)

- Desirable to take courses on rudiments of economics, or microeconomics (probably sufficient with microeconomics leaned in undergraduate years)
- Desirable to take a course on competition policy
- Grad students of 2nd year, as well as those of 1st year, are welcome. ~ The course aims to be beneficial to students with job hunting/civil-service examinations imminent.

Eligible Students (Undergraduate)

- Desirable to take courses on an industrial organization
- It is risky for students to commit their graduation to this course. (This doesn't mean that taking the credits is difficult: it means that I won't grant the credits automatically even if a student writes on an answer paper, "Please give me the credits as I already got the place of employment.")

Basic Knowledge Required

- Rudiments of microeconomics: price taker, marginal revenue, marginal cost, average cost, fixed cost, variable cost, demand curve, supply curve, consumer surplus, producer's surplus, market failure, externalities, public goods, expected utility, asymmetrical nature of information, (incomplete nature of information, moral hazard, antiselection (adverse selection), signaling
- Rudiments of game theory: strategic form game, extensive form game, Nash equilibrium, reaction curve, backward inductive, sub game perfect equilibrium, commitment, empty threat, repeated game

Out of the above-listed terms, if there are **5 or more** that you have not heard of, please consult with the instructor in charge (“don’t remember” being permissible).

Text

Viscusi, W. K., J. E. Harrington, and J. M. Vernon,
Economics of Regulation and Antitrust, 4th Edition,
MIT Press, 2005.

Schedule 1

(Basic Theories)

Class No. 1 (Oct 9): Introduction, regulatory impact assessment (RIA)

Class No. 2 (Oct 16): Economic analysis of oligopolistic market (Text's chapters 1, 2, 5)

Class No. 3 (Oct 23): Market competitiveness and economic welfare (Text's chapters 5, 6, 7, 12)

(Theories of Regulation)

Class No. 4 (Oct 30): Basic theory of regulation (Text's chapter 10)

Class No. 5 (Nov 6): Natural monopoly (Text's chapter 11)

Class No. 6 (Nov 13): Network externalities and switching cost (Text's chapters 12, 15, 18)

Class No. 8 (Dec 4): Vertical merger, essential facilities and access regulation (Text's chapters 8, 12, 15, 18)

Schedule 2

(Various Regulations and their Reform in Japan)

Class No. 9 (Dec 11): Regulation of electric power market
(Text's chapters 12, 18)

Class No. 10 (Dec 18): Regulation of gas market (Text's
chapters 12, 18)

Class No. 11 (Jan 8): Regulation of telecommunications
market (Text's chapter 15)

Class No. 14 (supplementary lecture period): Regulation of
transportation/traffic industries (Text's chapter 17)

(Social Regulations and Method of its Assessment)

Class No. 7 (Nov 27): Regulatory impact assessment, risk
assessment

Class No. 12 (Jan 15): Regulation on environment, health
and safety

Class No. 13 (Jan 22): Asymmetrical nature of information
and design of market institution

Class No. 15 (term-end exam period): Exam