## Helsinki School of Economics Technology Management and Policy

# 38E050 Advanced Topics: Economics of Competition and Competition Policy

**Period** 7.3. - 29.4.2005

Lectures Tue and Thu 14-16 at A401

No lectures on 17. and 22.3.

No lectures during Easter Break (24. and 29.3.)

## **Teacher**

Markku Stenborg, PhD (Penn State)

Contact information:
Markku Stenborg, BoF & CEA Inc.
markku.stenborg@bof.fi, io@cea.fi, www.cea.fi
tel +358 10 831 2558
fax +358 10 831 2560

Office Hours: At appointment after classes

Course homepage: <a href="http://www.cea.fi/hkkk.htm">http://www.cea.fi/hkkk.htm</a>

#### Introduction

The course covers topics in theoretical and empirical issues related to strategic competition and competition policy. These include market delineation, market dominance, mergers, coordination of market conduct, predation, IPRs, and technology issues.

### **Prerequisites**

I assume you have covered Intermediate Microeconomics, Intermediate Industrial Organization or have some similar background such as Managerial Economics, and related basic Game Theory. You should understand basic concepts such as Nash equilibrium and the basics of oligopoly theory. Also, you should be able to read and follow basic mathematical notation such as partial derivatives and to solve simple optimization and equilibrium problems. I also assume that you have understanding of basic econometrics so that you can follow empirical papers.

## **Textbooks**

Some usefull textbooks and articles are

- Motta, M. (2004), Competition Policy: Theory and Practice, Cambridge University Press
- Besanko, Dranove & Shanley (2000), Economics of Strategy, 2nd ed., John Wiley

- Church & Ware (2000), Industrial Organization: A Strategic Approach, McGraw-Hill
- Phlips (1989), Applied Industrial Economics, Cambridge University Press
- Shapiro (1989), "Oligopoly Theory", in Handbook of Industrial Organization,
   (Vol. 1), Schmalensee & Willig (eds.), North Holland, 1989
- Bresnahan (1989), "Empirical studies of industries with market power", in Handbook of Industrial Organization
- Ordover and Saloner (1989), "Predation, Monopolization, and Antitrust", in Handbook of Industrial Organization

We shall also look at or go through some papers. Tentative papers are mentioned below at course outline. I will distribute few articles, some of which are required and some of which are for background information. Also these will be available for download from the course web-site http://www.cea.fi/hkkk.htm.

#### **Evaluation**

The grade will be composed of two items, an assignment and a final exam.

The assignment will be an analysis of an actual Competition Law case, and will be handed out during the course. The weight of the assignment will be one quarter toward the final grade, exept that you need to get a passing grade for the assignment to get a passing grade for the course.

In the final exam, there will be four questions, and you need to answer to two of them. You should expect to have at least one applied question and one technically oriented question.

## **Course Outline (tentative)**

## 1. History and objectives of competition policy

- Brief history of competition laws and enforcement in the US and EU
- Objectives for competition policy
- Motta, Chapter 1
- Kovacic and Shapiro (1999) "Antitrust Policy: A Century of Economic and Legal Thinking", UC Berkeley, Working Paper No. CPC99-09

## 2. Market power and welfare

- Market power, and allocative and productive efficiency
- Competition policy and innovation
- Market power and entry: contestable markets; sunk costs; switching costs
- Motta, Chapter 2

### 3. Market definition and market power

- Main tests for product and geographic market definition.
- How to measure market power
- Motta, Chapter 3
- Section 1 "Market Definition" from the US Merger Guidelines, http://www.usdoj.gov/atr/public/guidelines/hmg.htm
- Hosken et al. (2002) "Demand System Estimation and its Application To Horizontal Merger Analysis"
- Rubinfeld (2000) "Market Definition with Differentiated Products: The Post Nabisco Cereal Merger", Antitrust Law Journal, Vol 68, pp. 163-185
- Nevo (2001) "Measuring Market Power in the Ready-to-Eat Cereal Industry", Econometrica 69
- Slade (2004) "Assessing Market Power and Market Dominance in UK Brewing", mimeo, Journal of Industrial Economics, forthcoming

 Cases: Volvo/Scania, Market Definition, p. 5-21; and Gencor/Lonrho, Relevant Product Markets, p. 4-13

#### 4. Cartels and tacit collusion

- What is collusion: the economist's and the legal view reconciled
- Analysis of repeated games: factor which facilitate collusion
- Tacit collusion under secret price cut
- Exchange of information
- Ex-ante and ex-post measures to fight collusion
- Motta, Chapter 4
- Vasconcelos, H. (2004), "Tacit Collusion, Cost Asymmetries and Mergers", Rand Journal of Economics
- de Roos, N. (2004) "A Model of Collusion Timing", International Journal of Industrial Organization
- Symeonidis, G. (2003), "In Which Industries Is Collusion More Likely? Evidence From The U.K.", *Journal of Industrial Economics*
- Cases: and Gencor/Lonrho, Platinum, parts B4-B7 p. 27-42.

### 5. Horizontal mergers

- Merger regulation in the EC
- Single firm dominance (unilateral effects of mergers)
- Joint dominance (coordinated effects of mergers)
- Which variables matter? How to deal with merger cases?
- Motta, Chapter 5
- Rubinfeld (2000), "Market Definition with Differentiated Products: The Post Nabisco Cereal Merger", Antitrust Law Journal, Vol 68, pp. 163-185
- Epstein and Rubinfeld (2001), "Merger Simulation: A Simplified Approach with New Applications", Antitrust Law Journal
- Nevo (2001), "Measuring Market Power in the Ready-to-Eat Cereal Industry", Econometrica 69
- Slade, M.E. (2004), "Market Power and Joint Dominance in UK Brewing", Journal of Industrial Economics
- Dube (2000), "Product Differentiation and Mergers in the Carbonated Soft Drink Industry", mimeo, University of Chicago
- Cases: Commission's UPM/Haindl decision, Competitive Assesment, p. 9-36;

#### 6. Vertical restraints

- Vertical externalities: the double marginalization case
- Horizontal externalities: the free-rider problem
- Combining vertical restraints to internalize externalities
- Welfare effects of vertical restraints: intra-brand vs inter-brand competition
- Vertical foreclosure: exclusive dealing and other instruments
- Motta, Chapter 6

### 7. Price discrimination

- The welfare effects of price discrimination
- The competitive effects of price discrimination
- Anti-dumping: protectionism in disguise
- Motta, Chapter 7.4
- Case: Deutsche Post

## 8. Predatory practices

- Predatory prices: long-purse and reputation story
- Product proliferation
- Tests of anti-competitive behavior
- Motta, Chapter 7.1-7.2
- Bolton et al. (2000), Predatory Pricing: Strategic Theory and Legal Policy",

- Georgetown Law Journal Vol 88
- Farrell & Katz (2001), "Competition or Predation? Schumpeterian Rivalry in Network Markets", mimeo, UC Berkeley
- Case: Deutsche Post

## 9. IPRs, New Economy and Antitrust

- Lind et al (2002), "Innovation and Competition Policy. Part I Conceptual Issues", Economic Discussion Paper 3, Office of Fair Trading
- Katz & Shapiro (1998), "Antitrust in Software markets", mimeo, UC Berkeley
- Shapiro (2002), "Competition Policy and Innovation", STI Working Papers, OECD
- Hart (2000), "Antitrust and Technological Innovation in the U.S.: Ideas, Institutions, Decisions, and Impacts, 1890-2000", mimeo, Harvard