Economics of Competition Policy Programme of a Course at the Autoridade da Concorrência

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This course aims at giving an introduction to the economics of competition policy, focusing in particular on some recent developments. I shall use simple economic arguments to analyse competition policy issues in a rigorous but non-technical way, with the objective of finding sound, robust, administrable antitrust policy recommendations. The course will be accessible to both economists and lawyers.

1. Introductory elements

- a. Market power and welfare
 - i. Market power reduces allocative and productive efficiency
 - ii. Dynamic efficency: Competition policy and innovation
 - iii. Why free entry does not eliminate dominance: markets with fixed sunk costs, switching costs, network externalities, two-sided markets.
- b. Market power and market definition
 - i. How to measure market power
 - ii. How to define relevant (product and geographic) markets for antitrust purposes.

2. Cartels and horizontal agreements

- a. Cartels
 - i. What is collusion: economics
 - ii. Analysis of repeated games: factors which facilitate collusion
 - iii. What is collusion: practice
 - iv. A case: Woodpulp
 - v. Enforcement of prohibition of cartels: fining issues, leniency programmes
- b. Horizontal agreements
 - i. Trade-off between market power and efficiency gains
 - ii. Joint-ventures
 - iii. Cross-licensing
 - iv. Patent pools

3. Horizontal mergers

- a. Single firm dominance (unilateral effects of mergers)
- b. Joint dominance (coordinated effects of mergers)
- c. The importance of efficiency gains: a simple framework of analysis
- d. Merger regulation in the EC

4. Abusive practices

- a. Exclusive dealing
 - i. Chicago School critique

- ii. "Naked exclusion": scale economies with several buyers
- iii. Factors which help exclusionary contracts
- iv. Pro-competitive effects of exclusive dealing
- v. A case: Ice-Cream
- b. Price discrimination
 - i. Price discrimination and its welfare effects, in general
 - ii. Price discrimination in the EU: Parallel imports
 - iii. Price discrimination as a monopolization device
- c. Rebates
 - i. Definitions
 - ii. Rebates in antitrust law
 - iii. Cases: Michelin, South African Airways, Napp
- d. Predatory pricing
 - i. Theories of predation: reputation, signalling, "long purse" predation
 - ii. Predation: practice
- e. Excessive pricing
 - i. Arguments against excessive price actions in antitrust law
 - ii. A four-condition test for 'intervention'
 - iii. The burden of proving excessive prices
 - iv. Cases: Napp, Veraldi-Alitalia
- f. Margin squeeze (and refusal to deal)
 - i. Economic rationale
 - ii. Incentive effects
 - iii. Cases: Genzyme, IMS Health
- g. Tying and bundling
 - i. Efficiency effects
 - ii. Tying as a price discrimination device
 - iii. Exclusionary tying (independent goods)
 - iv. Exclusionary tying (complementary goods)
 - v. Tying: practice
- h. Interoperability and abuse in network industries

5. Vertical restraints and vertical mergers

- a. Vertical externalities: the double marginalisation case
- b. Horizontal externalities: services by retailers and the free-rider problem
- c. Inter-brand competition
 - i. Strategic use of restraints (exclusive territories)
 - ii. Vertical restraints as collusive devices
- d. Welfare effects of vertical restraints: intra-brand vs inter-brand competition
- e. Vertical mergers
 - i. Possible foreclosure effects
 - ii. How to analyse vertical mergers

The textbook for this course is Motta, M. (2004), *Competition Policy: Theory and Practice*, Cambridge University Press. This book covers most of the material we shall deal with in the course. However, there will be some material which is new, and this is true in particular

for the part on abusive practices, where there is an insightful recent economic literature (see below for references).

Since participants will be officials of a Competition Authority, knowledge of basic competition law will be taken for granted. In case, Chapter 1 of Motta (2004) offers some introductory remarks to EC law (as well as a short history of competition law), which may be helpful to read before the course. (Of course, Chapter 1 is no substitute of law textbooks such as Goyder's, Whish's and others.)

During the course, we shall focus on the intuitions behind economic arguments, and we shall not analyse models in detail. Participants with a strong background in industrial organization and/or microeconomics may want to look at some of the original papers which will be analysed during the course. The following is a partial list of original articles which may be instructive to read. A more complete bibliography can be found in Motta (2004), and additional very recent articles may be more properly cited in the course.

Some references

1. Introductory elements

Schmidt, K. M. (1997), "Managerial Incentives and Product Market Competition", *Review of Economic Studies* 64(2), 191-213.

Shaked, A. and J. Sutton (1983), "Natural Oligopolies", *Econometrica* 51, 1469-1484.

Farrell, J and P. Klemperer, 2007. "Coordination and Lock-In: Competition with Switching Costs and Network Effects," *Handbook of Industrial Organization*, Elsevier.

2. Cartels

Bernheim, Douglas B. and Michael D. Whinston (1990), "Multimarket Contact and Collusive Behavior", *Rand Journal of-Economics* 21(1), 1-26.

Green, E. and R. Porter (1984), "Non-Cooperative Collusion Under Imperfect Price Information", *Econometrica* 52, 87-100.

McCutcheon, B. (1997), "Do Meetings in Smoke-Filled Rooms Facilitate Collusion?" *Journal of Political Economy*, 105: 330-50.

3. Horizontal mergers

Farrell, J. and C. Shapiro (1990), "Horizontal Mergers, An Equilibrium Analysis", American Economic Review 80,107-125.

Perry, M.K. and R. Porter (1985), "Oligopoly and the Incentive for Horizontal Merger", American Economic Review 75, 219-227.

Salant, S., S. Switzer and R. Reynolds (1983), "Losses From Horizontal Merger: The Effects of an Exogenous Change in Industry Structure on Cournot-Nash Equilibrium", Quarterly Journal of Economics 98, 185-199.

4. Abusive practices

Aghion, P. and G. Bolton (1987), "Contracts as a Barrier to Entry", *American Economic Review* 77, 388-401.

Bolton, G. and D. Scharfstein (1990), "A Theory of Predation Based on Agency Problem in Financial Contracting", American Economic Review 80, 93-106.

Crémer, J., P. Rey and J. Tirole. 2000. "Connectivity in the Commercial Internet." *Journal of Industrial Economics*. 48: 433-72

Fumagalli, C. and M. Motta (2006), "Exclusive Dealing and Entry, When Buyers Compete", *American Economic Review*.

Kreps, D. and R. Wilson (1982), "Reputation and Imperfect Information", Journal of Economic Theory 27, 253-279.

Rey, P. and J. Tirole (2007), "A Primer on Foreclosure", in Armstrong and Porter, Handbook of Industrial Organization, Vol. 3.

Segal, I. and M. Whinston (2000), "Naked Exclusion: Comment." American Economic Review. 90: 296-309.

Whinston, M. (1990), "Tying, Foreclosure, and Exclusion", American Economic Review, 80: 837-59.

5. Vertical restraints and vertical mergers

Mathewson, G.F. and R.A. Winter (1984), "An Economic Theory of Vertical Restraints", *Rand Journal of Economics* 15, 27-38.

Rey, Patrick and Jean Tirole (1986), "The Logic of Vertical Restraints", *American Economic Review* 76, 921-939.

Riordan, M.H. and S.C. Salop (1995), "Evaluating Vertical Mergers: A Post-Chicago Approach", *Antitrust Law Journal* 63, 513-568.