

Program of a Lecture Course
“The Theory of Industrial Organization-I”
Oleg Eismont

The course analyzes the problems of the real economy that cannot be described within the framework of a classical economic theory that is taught by traditional micro- and macroeconomics. The students are presumed to be familiar with the standard courses in micro- and macroeconomics at the graduate level. The lecture course corresponds to a master’s level. As the basic materials for studies, textbooks and papers in periodicals and monographs are used.

The course includes 14 lectures, 6 seminars midterm and final exams. The final grade is the weighted average of the grades at the midterm (30%) and final (70%) exams.

Consumer Surplus and Public Welfare (1 lecture).

Estimation of public welfare within the framework of partial equilibrium analysis. Quasilinear utility function and measure of public welfare. Compensated and equivalent variations. Public welfare and Hicksian and Marshallian demand functions. Consumer surplus as an approximate measure of public welfare.

Tirole J., 1988, *The Theory of Industrial Organization*, The MIT Press.

Varian H., 1992, *Microeconomic Analysis*, W.W. Norton & Company.

Willig R., 1976, Consumer’s Surplus Without Apology, *American Economic Review*, vol. 66, 589-597.

Economic Theory of Bundling (1 lecture).

Bundling as a marketing tactics. Price discrimination and bundling. Heterogeneous consumers. Pure components strategy, pure bundling strategy, and mixed bundling strategy. Superiority of mixed bundling relative to pure bundling. Conditions for mixed bundling strategy to be dominant over pure components strategy. Independent distribution of reservation prices. Homogeneous consumers. Commodity bundling and consumer surplus.

Adams W.J., and J.L. Yellen, 1976, “Commodity Bundling and the Burden of Monopoly”, *Quarterly Journal of Economics*, vol. XC, 475-498.

McAfee R.P., J. McMillan, M.D. Whinston, 1989, “Multiproduct Monopoly, Commodity Bundling, and Correlation of Values, *Quarterly Journal of Economics*, vol. CIV, 371-383.

Mergers and Acquisitions.

Horizontal Mergers and Acquisitions (2 lectures).

Types of mergers and acquisitions: horizontal, vertical, conglomerates. Examples of mergers and acquisitions within the last decade. Mergers of firms with identical production costs. Condition of a merger profitability. Mergers of firms with differing production costs. Reaction of a firm to a change in output by all other firms on the same market. Condition of industry output increase, resulting from a merger.

Horizontal mergers and public welfare. Herfindal-Hirshman index as a measure of public welfare. Condition under which horizontal merger results in higher public welfare.

Farrel J., and C. Shapiro, 1990, Horizontal Mergers: An Equilibrium Analysis, *American Economic Review*, vol. 80, 107-126.

Salant S.W., S. Switzer, and R.J. Reynolds, 1983, Losses from Horizontal Merger: The Effects of an Exogenous Change in Industry Structure on Cournot-Nash Equilibrium, *Quarterly Journal of Economics*, vol. 98, 185-199.

Vertical Mergers (1 lecture).

Effect of a vertical merger on output of final and intermediate products. Vertical mergers and market foreclosure. Vertical mergers and profits of integrated and unintegrated firms.

Martin S., 1993, *Advanced Industrial Economics*, Blackwell.

Salinger M.A., 1988, Vertical Mergers and Market Foreclosure, *Quarterly Journal of Economics*, vol. 77, 345-356.

Oligopoly with Supply Functions (1 lecture)

Model of oligopoly when oligopolists choose supply functions. Equilibrium in supply functions (SFE). Symmetric oligopoly. Multitude of equilibrium states. Differences from Cournot and Bertrand models. Application to electricity markets.

Green R.J. and D.M. Newbery, 1992, Competition in the British Electricity Spot Market, *Journal of Political Economy*, vol. 100, 929-953.

Klemperer P.D. and M.A. Meyer, 1989, Supply Function Equilibria in Oligopoly Under Uncertainty, *Econometrica*, vol. 57, 1243-1277.

Product Differentiation

Location Models (1 lecture).

Linear city, linear transportation costs. Quadratic transportation costs. Stability of equilibrium states. Circular city. Welfare implications.

Shy O., 1995, *Industrial Organization*, The MIT Press.

Tirole J., 1988, *The Theory of Industrial Organization*, The MIT Press.

Differentiated Goods, Increasing Returns to Scale, and Monopolistic Competition

(1 lecture).

Markets for differentiated goods. The problems solved by consumers and producers. Market equilibrium under free entry conditions. Effects of fixed costs and market size on product diversity and output.

Dixit A.K., and J. Stiglitz, 1977, Monopolistic Competition and Optimum Product Diversity, *American Economic Review*, vol. 67, 297-308.

Shy O., 1995, *Industrial Organization*, The MIT Press.

Industrial Agglomeration (1 lecture).

Phenomenon of industrial agglomeration. Increasing returns to scale as a driving force of agglomeration. External and internal mechanisms of increasing returns to scale. The role of transportation costs. A simple model of industrial agglomeration: two regions, two production factors (perfectly mobile workers and immobile farmers). Competition and market size – the main factors affecting the process of industrial agglomeration. Effects of transportation costs, fixed costs, a share of immobile factor on industrial agglomeration. Stability of distributed and agglomerated equilibria. Multiple equilibria and hysteresis.

Krugman P., 1991, Increasing Returns and Economic Geography, *Journal of Political Economy*, vol. 99, 483-499.

Krugman P., 1991, *Geography and Trade*, The MIT Press.

Krugman P., 1995, *Development, Geography, and Economic Theory*, The MIT Press.

Economics of Innovations (1 lecture).

Model of the innovation process. Patent race. Market structure and innovation efforts. Incentives for innovations. Socially optimal and market investments into R&D. Patent life.

Loury G.L., 1979, "Market structure and Innovation", *Quarterly Journal of Economics*, vol. XCIII, No. 3, 395-410.

Tirole J., 1988, *The Theory of Industrial Organization*, The MIT Press.

Imperfect Competition and Macroeconomics (1 lecture).

Theories of business cycles. Increasing returns to scale and stability of economic equilibrium. Price rigidity as a source of business cycles. Explanations of price rigidities: kinked demand

curve, menu costs. Market monopolization and price rigidity. Small menu costs and large business cycles during economic booms and busts.

Externalities, corrective taxes, and market structure. Possibility of a negative effect of Pigou tax on public welfare under monopoly.

Mankiw G., 1985, Small Menu Costs and Large Business Cycles: A Macroeconomic Model of Monopoly, *Quarterly Journal of Economics*, vol. 100, 529-537.

Buchanan J.M., 1969, External Diseconomies, Corrective Taxes, and Market Structure, *American Economic Review*, vol. 59, 174-177.

Rotemberg J.J., and G. Saloner, 1987, The Relative Rigidity of Monopoly Pricing, *American Economic Review*, vol. 77, 917-926.

Advertising (1 lecture)

Why do some firms spend so much on advertising? Persuasive and informative advertising.

Dorfman-Steiner equation. Advertising as a signal of product quality. Do tastes differ and change? Advertising and social welfare.

Nelson P., 1974, Advertising as Information, *Journal of Political Economy*, vol. 82, 729-754.

Nichols L.M., 1985, Advertising and Economic Welfare, *The American Economic Review*, vol. 75, 213-218.

Stigler G.J. and G.S. Becker, 1977, De Gustibus Non Est Disputandum, *The American Economic Review*, vol 67, 76-90.

Analysis of Particular Industries and Enterprises.

Airlines (1 lecture)

Effects of deregulating air companies. "Hub and Spokes" system and its efficiency.

Shy O., 1995, *Industrial Organization*, The MIT Press.

Theatres and restaurants (1 lecture).

Why in developed market economies there are queues in theatres, restaurants, etc.? Network externalities in services consumption and nonmonotonicity of demand function. Instability of equilibrium, corresponding to profit maximization, and limitedness of prices and supply of services.

Becker G., 1991, A Note on Restaurant Pricing and Other Examples of Social Influences on Price, *Journal of Political Economy*, vol. 99, 1109-1116.

Economics of Show Business (1 lecture).

Why relatively small number of people in show business, sports, book publishing, etc. earn a lot of money and dominate on markets? Effect of imperfect substitution: lesser talent is a poor substitute of larger talent. Dependence of demand function on quality. Increasing returns to scale in show business production. Demand and supply structure. Market equilibrium. Convexity of revenue function, depending on talent. Continuous distribution of performers on talent, and rent dissipation. Outstanding performer and rent value.

Rosen S., 1981, The Economics of Superstars, *American Economic Review*, vol. 71, 845-858.