

# MICROECONOMICS

The discipline belongs to a cycle of humanitarian and socio-economic training. Microeconomics is one of two components of modern economic theory.

Microeconomics examines economic phenomena (production, supply, demand, consuming, etc.) at the level of individual economic units (firms, consumers, employees, etc.). It explains how and why economic decisions are taken at the level of these subjects, e.g. how firms allocate their resources for various purposes.

The purpose of the discipline among students is formation of real knowledge and understanding of the law, studying principles of rational behavior of individual economic actors to achieve their goals with limited resources, survey by individual microsystems of a decision-making mechanism, and analysis of economic relations between society and firms in the market condition.

Studying discipline covers the following topics:

- Fundamentals of supply and demand. Demand and law of demand. Mathematical and graphics methods of expression the law of demand. Changes in demand and changes in the volume of demand and their graphical representation. The main factors that affect on the demand and influencing its changes. Supply and the law of supply. Mathematical and graphics methods of expression the law of supply. Changes in supply and changes in the volume of supply and their graphical representation. The main factors that affects on the supply and influencing its changes. Market equilibrium of supply and demand. The market response to changes in supply and demand. Consequences analyses of the changes in supply and demand on the equilibrium price and the equilibrium quantity of goods. The concept of consumer surplus and producer surplus. Practical application of equilibrium analysis.

- Elasticity of demand and supply. The concept of elasticity of interrelated indicators. The basic properties of elasticity. Estimation of elasticity of growing and decreasing function. The elasticity of a step function. The method of elasticity calculation. Types of elasticity of demand. The relations between the elasticity of demand for private good price and producer's income. The elasticity of demand. The coefficient of elasticity of demand. Forms of elasticity of supply and their depending on time interval. The value of flexibility in the micro-economic models.

- Elements of the theory of consumer behavior. The usefulness of the economic good. Economic consumer choice. A process of consumption and changes of marginal utility and total usefulness. The basic rule of maximizing total usefulness. Functional and non-functional demand. The main hypothesis of the theory of ordinal. Indifference curve, its main point and construction. The marginal rate of substitution and its definition with help of indifference curves. The main properties of the marginal rate of substitution. Forms of indifference curves. The properties of indifference curves. Map of indifference. The budget constraint of the consumer. Consumer equilibrium. The optimal choice of goods by consumer, selection criteria.

- Analysis of consumer behavior. Consumer reaction to changes in income. Changing consumer's optimum when changing his income. Curve "income-consuming". Positive and negative slope of the "income-consuming". Engel curves. Tornquist options. Changing consumer's optimum when changing price for goods. Building individual demand curve. Variants for the curve "price-consuming" location. The concept of ordinary goods and Giffen goods. A substitution effect and an income effect. Determination of the substitution effect and income effect of Hicks and Slutsky. Interaction substitution effect with income effect.

- Fundamentals of manufacturing processes. Factors of production and their classification. The production and the concept of the production function. Factors of production. The production function as an economic model of technology, methods of construction of the production function. Economic assumptions that determine the production functions. The properties of the production function. Technological and economic efficiency.

- Production in the short run. The law of diminishing returns of production factors. Changing the limit, and the average total product for the production phase. Production in the long run. Cobb-Douglas function. Curve equal to the product - isoquant. Properties of isoquant. Isoquant map. The marginal rate of technical substitution. The properties of the marginal rate of technical substitution. Changes in technology, scale change in the long term. Returns to scale.

- Production costs. Economic and accounting approach to determining costs. Opportunity costs. The structure of the accounting costs. The structure of the economic costs in the short term. The law of increasing marginal costs. Production costs in the long run. Isocosts concept: definition, construction, properties. Isocosts map. The balance of a manufacturer: a choice of a combination of factors of production according to the criteria of minimizing costs or maximizing output. The balance of a manufacturer. Rule to minimize overall costs and maximize overall profit rule. Production capacity, the relations curves of average costs in the short and long terms. The concept of minimum efficient size of the company. Selection of the optimal size of the company.

- Analysis of market structures. The company in the perfect competition market. General characteristic of perfect competition market. Market demand and the demand for company products in terms of pure competition. Features of the market of perfect competition. In perfectly competitive firm and conditions of its operation. Market demand and the demand curve for firm products in terms of pure competition. Selection of the optimal production volumes of purely competitive firm in the long run. Efficient use of resources in terms of pure competition.

- Monopolistic market. Model of absolute monopoly and its characteristics. The concept and features. Monopolistic market in the short and long terms. Influence of price elasticity of demand on the monopolist's behavior. Selection of the optimal production volumes by monopolist in the short and long terms. The efficiency from using resource in a monopoly. The supply curve of a monopoly and its formation. Power of monopoly. Lerner Index. Factors which

determine the monopoly power. Price discrimination. Comparative analysis of perfect competition and monopoly.

- Market of monopolistic competition. The demand curve of monopolistic competitor and its location. Market behavior of monopolistic competitor. Selection of the optimal production volumes in the short and long term, for firm which exist in the market of monopolistic competition. Redundant production capacity. The impact of advertising on demand, prices, production volumes and average costs in the short and long term. Monopolistic competition in a social balance.

- Oligopolistic market structure. The characteristics of the oligopoly. Cooperative and non-cooperative behavior. Duopoly. The main forms of non-cooperative behavior: price war - Bertrand model, "Prisoner's Dilemma", Cournot model, Stackelberg model. Oligopolistic pricing. Oligopolistic pricing model: price war and its consequences; cartel and legal trade; secret and silent conspiracies (price leadership). Oligopoly and economic efficiency

- Market of manufacture factors. Labor market. Demand for labor in conditions with perfect and imperfect competition in the product market. Formation of individual, industry and market demand for labor. The price elasticity of demand for labor and its factors. The substitution effect and the effect of costs. Equilibrium in a perfectly competitive labor market. Capital markets and natural resources. Demand and supply of capital. The concept of selection in time. Introduction to the analysis of investment decisions. The land market. The land as a factor of production. Land rent.

- Public balance and efficiency. Walras equilibrium model. The equilibrium in an exchange economy. Pareto-efficiency in the public exchange.