

A Summary of the Principles of Microeconomics

- 1) Microeconomics is the study of choice, because
 - a) resources are limited and
 - b) wants are unlimited.
- 2) Individuals attempt to maximize their welfare subject to the constraints that they face.
 - a) Consumers maximize their utility subject of their budget constraint.
 - b) Producers maximize their profits, the most important element of their utility, subject to the constraints imposed on them by markets and technology.
- 3) Alternatives are chosen for which the benefits exceed the costs.
 - a) For consumers, who operate in an environment of diminishing marginal utility, the criterion is $MU_x/P_x = MU_y/P_y$, where MU is marginal utility and P is the price, while
 - b) for producers, operating in an environment of increasing marginal costs, it is marginal revenue = marginal cost.
- 4) As a result of I.-III., economists conclude that:
 - a) the quantity demanded is
 - (1) negatively related to its own price,
 - (2) positively related to income if it is a normal good and negatively related if it is an inferior good,
 - (3) positively related to the price of substitutes and negatively related to the price of complements ,
 - (4) positively related to tastes, and
 - (5) positively related to the number of consumers and
 - b) the quantity supplied is
 - (1) positively related to its own price,
 - (2) positively related to technological change,
 - (3) negatively related to the prices of the factors of production, and
 - (4) positively related to the number of suppliers.
- 5) In addition to the direction of impact described in IV., economics is interested in the responsiveness of quantity to changes in other variables. The concept that describes responsiveness is elasticity.
 - a) Elasticity is the percent change in a dependent variable, usually quantity, due to a percent change in an independent variable.
 - (1) If it is greater than proportional, i.e., one, it is elastic.
 - (2) If it is less than proportional, it is inelastic.
 - b) The concept of elasticity can be applied to own price, income or other prices (cross price elasticities of demand).
 - c) The response to a price change, i.e., the price elasticity, is strongly influenced by the availability of substitutes, so that it is usually greater in the long run than in the short run, for example.

- 6) Because of the configuration of the demand(-) and supply(+) curves, markets in which producers and consumers can easily enter and exit will clear, i.e., the quantity demanded will equal the quantity supplied.
 - a) If there is a temporary shortage ($Q_d > Q_s$), then the price will increase until equilibrium is reestablished.
 - b) If there is a temporary surplus ($Q_d < Q_s$), then the price will decrease until equilibrium is reestablished.
- 7) Normally, the outcome described in VI. will be efficient, i.e., goods will be produced at minimum average cost (production efficiency) and the goods will be distributed to those individuals who place the highest value on them (allocation efficiency) given the distribution of income, about which economics has little to say from an equity perspective.
- 8) Economic activity occurs in
 - a) competitive markets in which there are no significant barriers to entry,
 - b) monopolistic markets in which there are significant barriers to entry,
 - c) oligopolistic markets in which there are some barriers to entry and the few firms recognize their interdependence and
 - d) monopolistically competitive markets in which numerous firms sell slightly differentiated products.
- 9) In input markets, the demand for an input is a derived demand based on the marginal revenue product, which is the product of the marginal revenue of the output and the marginal product of the input.
- 10) The output determined by individual decisions will not produce efficient results when
 - a) there are external effects, e.g., pollution,
 - (1) with negative externalities, firms produce too much and
 - (2) with positive externalities, firms produce too little.
 - b) there are natural monopolies which have the characteristic that average cost decreases over the output for which demand exists e.g., certain pipelines,
 - c) there are public goods, which are defined as goods
 - (1) that can be consumed by additional individuals at no additional cost and
 - (2) no one can be excluded from the consumption of the goods, e.g., national defense, or the government restricts entry without attempting to solve the market failure presented in i) – iii) ., e.g., taxi licenses.
- 11) Economic analysis is not restricted to just decisions involving monetary prices. All choices involve economic decisions. The family has been an interesting area for the application of economic analysis. Central to economics is the role of incentives. If the opportunity for specialization of labor between men and women, which is a reason why men and women marry, is reduced; we would expect to observe fewer and less stable marriages because the incentive to marry and stay married has been reduced.