

SOCIAL SCIENCE

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Cherepanov E.V. On the question of quantitative interrelations description between the categories of consumption and production

From the middle of the XIX century when William Jevons and J. Dupuis introduced basic categories of microeconomics, the functional relations between these categories in a mathematical sense, were little known. The purpose of the article is to develop an approach to quantitative description of the processes of consumption and production (trade) from common viewpoints. Characteristics of consumption (value and cost of goods, the costs of the manufacturer (seller), consumer surplus, etc.) are considered as a function of consumption. Under the consumption demand it is understood the implemented demand at a unit of time. The parameters of the derived functions can be considered as variable costs of the seller (manufacturer). The notion of value (utility) of money for goods is discussed. It is based on the analysis of the money exchange for goods. The relation described by a deterministic approach to the presentation of this material in stochastic terms, using the continuous analogues of multinomial distribution is considered.

Key words: demand, consumption, utility, value, surplus, cost, tangible and intangible costs, benefit, money value, Dirichlet distribution and polynominal distribution.

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