Limitational Factors of Production and the Allocation of Resources

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Outline

1. Generalities:

Limitational factors of production are of two kinds:
strictly limitational and limitational only beyond
a certain boundary.
Production function should be defined from two points of view:
short and long run or firm production function and planning
production function.
Hence: definition of method of production
Connection between the two types of production functions
Brief consideration of the bearing of the distinction of
two types of production functions upon the classical analysis
of cost curves.

2. Construction of the production function for the industry as a
whole in the case where there are a limited number of methods
of production with limitational factors only.
Three cases:

a) all coefficients of production are constant

b) some coefficients of production are increasing

c) some coefficients of production are decreasing

Consideration of the case of substitutability

3. The production function of the industry can be used for solving
out the problem of optimum allocation of factors of production
when they are either fixed in amount or varying according to a
certain law. Technical price ratios in relation to the stability
of the position.
4. General analytical formulation of the problem under (3) leads in the case of constant coefficients of production to the well-known problem of maximizing a linear homogeneous function subject to a set of linear relations.

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