

Production Function Studies of Indian Industries-A Survey

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Considerable work has been done on the theoretical and empirical problems of estimating the production functions of the Indian Industries. The studies were mainly aimed at analysing the contributory factors of output growth, returns to scale, partial and total productivity indices, technical progress, elasticity of factor substitution, etc. The period covered in these studies using the CMI (Census of Indian Manufactures) and ASI (Annual Survey of Industries) data estimating Cobb Douglas (CD), Constant Elasticity of Substitution (CES) and Variable Elasticity of Substitution (VES) production functions was from 1946 to 1975. The production function studies in India can be distinguished with respect to their objectives, type of production function used, choice of variables, data used, etc. The present survey covers those variants of production functions for Indian Industries but it differs from the previous ones (Banerjee, 1971; Chizmar, 1972; Panchamukhi in ICSSR, 1978; Mehta, 1980) in that the present survey paper attempts to review the works subjectwise or objectiveswise rather than merely authorwise.

The survey on production function studies of Indian Industries is taken up subjectwise because it is intended to serve two purposes:

- i) to search the gaps of researchable areas and isolating them subjectwise for further researches; and
- ii) to provide general or specific guidelines for research studies in different subject areas of this broad field which can be had only if the analysis of this survey is subjectwise.

The contributions of different authors and their studies naturally form part of this survey. Greater stress is given on development of the strands of thought/techniques. The survey is intended to provoke further research on the gaps identified and to provide guidelines for many studies to follow.