

Product Mix in the Output Matrix of Indian Economy

Debdas Bandyopadhyay and K. C. Majumdar

1. INTRODUCTION

In practice it is seen that for a given classification of commodities and industries, commodities are produced not only as characteristic or principal products but also as industrial by-products and/or commodity joint products. In other words, industries produce, along with its principal products, principal products of other industries, and output matrix, instead of being identity matrix (as in standard case) becomes rectangular with non-zero off-diagonal elements. On the other hand information on cost structure is available *not* for individual commodities produced in the economy but for individual industries. Presence of product mix in the industry output matrix thus deprives us of information on input cost structures of individual commodities.

The purpose of this study is to examine empirically the nature and extent of product mix for Indian economy, 1979-80 and their impact on input cost structures of individual commodities and structural interdependence. The analysis is carried out in two stages : first by analysing the output matrix, next by examining its impact on input cost structures of individual commodities and the input-output analysis based upon them. The paper is organised as follows In the next section we briefly describe the tools required for the analysis, in the third section we carry out the analysis with information made available for Indian economy, 1979-80 by Planning Commission (1981). The final section is devoted to conclusion.

2. NOTATIONS :

PRIME INDICATES TRANSPOSITION, COLUMN VECTORS ARE UNPRIMED

- S_1 : Set of industries
- n : No. of industries
- S_c : Set of commodities
- m : No. of commodities