

Partial Factor Productivity and Total Factor Productivity

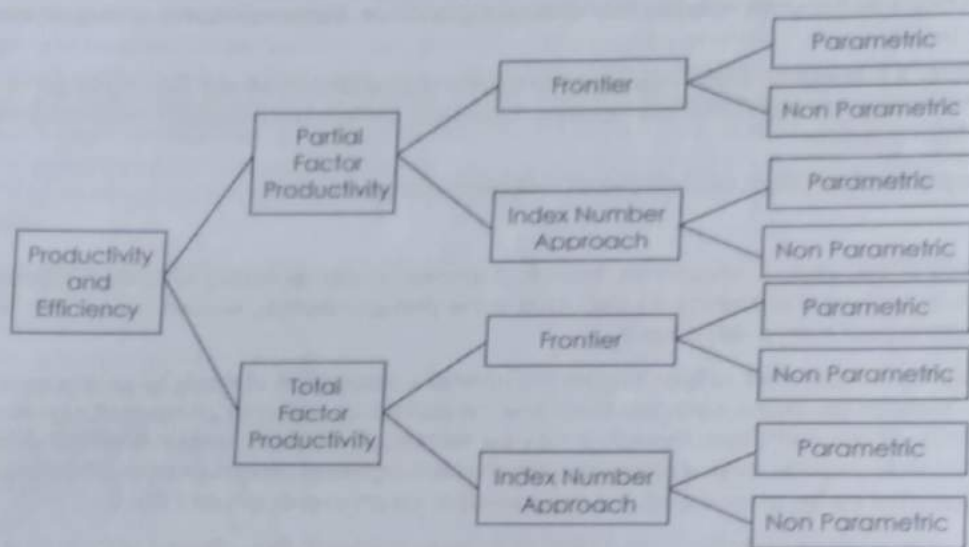


Fig: Approaches to the measurement of Productivity and Efficiency

The above summarizes the various approaches to the measurement of productivity and efficiency identified from the literature. In general, productivity and efficiency can be measured on a 'Partial' factor or 'Total' factor basis. Partial Factor Productivity (PFP) refers to the change in output owing to the change in the quantity of one input, whereas Total Factor Productivity (TFP) refers to the change in output owing to changes in the quantity of more than one input. Examples of PFP are material yield, output per man-hour etc. A comprehensive example of TFP is Return On Investment (ROI) or overall profitability index which is broken up into several parts through product profitability and capital turnover rate.

In general, in an industrial context, goods and services are produced by a combination of many factors or inputs. The output of goods and services cannot be used as a measure of the productivity of any one of the inputs. The output is only a measure of the joint efforts of all inputs to achieve results. This is the main disadvantage of measuring productivity and efficiency using the PFP approach. To overcome this shortcoming of PFP, TFP has been developed. TFP measures overall productivity and efficiency by considering all inputs and all outputs in the production process. With full technical efficiency, producing maximum potential output from the allocated inputs.

1.3 FINANCIAL PERFORMANCE ANALYSIS

Financial performance analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of balance sheet and profit and loss account. It also helps in short-term and long term forecasting and growth can be identified with the help of financial performance analysis. The dictionary meaning of 'analysis' is to resolve or separate a thing in to its element or components parts for tracing their relation to the things as whole and to each other. The analysis of financial statement is a process of evaluating the relationship between the component parts of financial statement to obtain a better understanding of the firm's position and performance. This analysis can be undertaken by management of the firm or by parties outside the firm namely, owners, creditors, investors.

In short, the firm itself as well as various interested groups such as managers, shareholders, creditors, tax authorities, and others seeks answers to the following important questions:

1. What is the financial position of the firm at a given point of time?
2. How is the Financial Performance of the firm over a given period of time?