ABSTRACT

Production efficiency and technical progress are crucial elements in analyzing industries’ international competitiveness and growth trends. One way to assess competitiveness of countries or economic sectors within them considers the tendency of their unit costs of production to decline, which is expressed by positive growth rates of their Total Factor Productivity (TFP). A methodology developed by Fare et al. (1994), and derived from the Data Envelopment Analysis (DEA) approach, allows for the estimation of TFP growth rates and its components, technical efficiency, and technical change. We use a firm-level panel data to apply this methodology to compute TFP growth rates for five selected Indian manufacturing sub-sectors in 1991-2011. Our results show the aggregate of all period the selected manufacturing sub-sector namely, Transport Equipment, Metals, Non-metals, Miscellaneous and Diversified is 4.00, 5.00, 3.00, 5.00 and 7.00 per cent respectively, over the period study.

KEY WORDS: Technical Efficiency Change, Technical Change, Total Factor Productivity Growth, Malmquist Index.