

Decomposition of Industrial Output Differentials into Scale and Efficiency Effects: A Case Study of India

Gauri Agarwal

IIS (Deemed to be) University, India

Abstract

This study aims to analyze the influence of labor and capital on industrial output levels in both developed and less developed states of India. Using secondary panel data from the period 1998-2018, I have estimated Cobb-Douglas production functions for both types of states. Subsequently, the industrial output differential between less developed and developed states in India has been decomposed into scale and efficiency effects. The primary conclusion drawn from this study is that labor and capital significantly impact industrial output in Indian states. The scale effect, attributed to capital, is more pronounced in developed states, whereas the impact of labor is greater in less developed states. Furthermore, the efficiency effect, link to capital, is found to be more prominent in less developed states.

Key Words: Industrial Output, Labour Employed, Total Capital, Output Differentials, Scale Effects, Efficiency Effects