

Application of DEA to Identify the Firm's Efficiency A Case Study of
Taiwan's Computer Manufacturers

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Abstract

The goal of this study is to examine the level and determinants of Taiwan computer manufacturers. For this purpose, we used data envelopment analysis (DEA) as first stage to identify the efficiency of each firm. In the second stage, we used Tobit regression model to regress the efficiency scores derived from DEA on key explanatory variable which reflects firm profitability and performance. These computing firms have been establishing skills workers, engineering improvement, managerial know-how mechanisms and access to foreign market to enhance the efficiency of domestic firms. These firms, since the presence of foreign partnership may enhance local firms' efficiency and competitiveness.

Keyword : Efficiency, DEA, Regression analysis, Taiwan computer's manufacturers