The Efficiency of Jordan Insurance Companies and its Determinants using DEA, Slacks, and Logit models

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Abstract

This study aims to evaluate the technical efficiency in the Jordan insurance market, and examine the internal and external determinants that appear to affect the technical efficiency of the insurance companies. The study used panel data for 22 insurance companies operating inside Jordan over the period 2000-2016. Data Envelopment Analysis used to evaluate the technical Efficiency Scores, Slacks based and Logit models to examine the efficiency determinants. The study found that there is a slight development of technical efficiency for the Jordanian insurance companies during the study period. In addition, there is a substantial efficiency difference between insurance companies each year, and there is a variation at the level of efficiency for each company in each year. The results also showed that owners’ equity are among the most important internal determinants of companies’ efficiency, and there is a significant correlation between type, size, and return on assets of the insurer and its efficiency. This study provides insurance management with relevant indicators that would guide them to make efficient use of the resource base. The period of study also covers the period following the adoption of the Insurance Law and the issuance of most of the legislation related to the work of insurance companies.

Key words: Insurance, efficiency, DEA, Logit model, Jordan.