Efficiency Analysis Of Non-Life Insurance Companies In Terms Of Underwriting Process With Data Envelopment Analysis

Abstract

Efficiency analysis with DEA, attract quite few attention in finance sector. In literature all over performance of companies examined in general. However analysis of the activities performances carried out by the company can be researched with data envelopment analysis. In this paper, in order to analyze the effectiveness of underwriting processes for insurance companies primarily inputs and outputs are determined. These input and output variables were obtained from annual reports of the 12 insurance companies operating in Turkey. Efficiency analysis were made by using models of CCR and BCC with utilizing EMS program. Thus, according to both models efficient and inefficient companies were determined. In addition, scale efficiencies of insurance companies which were evaluated were also examined. Finally, by using specific input and output variables analysis of insurance companies which has been developed to see performance of companies relative to single activity.

Keywords: Data Envelopment Analysis, Insurance, Efficiency, Underwriting