Efficiency Evaluation of Bank Branches Via Data Envelopment Analysis: A Common Weight Approach

Tien-Hui Chen
Department of Tourism Management,
Far-East University, Taiwan

Yueh-Yun Wang
Department of Leisure and Sports Management,
Far-East University, Taiwan

Chien-Yu Huang
Department of Information Management,
National Taitung Junior College, Taiwan

I-Chiang Wang
Department of Marketing and Logistics Management,
Southern Taiwan University, Taiwan

Abstract

The flexibility of data envelopment analysis (DEA) in efficiency measure generally classifies many business units as efficient, since it bases on the standpoint of individual ones. However, for performance evaluation, the best efficiency of individual units may not ensure the best performance of their headquarters. This study applies the aggressive DEA model, a common weight approach, to the efficiency evaluation of a local bank and its branches. The advantages of this application are that it can not only attain the aggressive efficiency score of the headquarters but also can obtain a set of common weights of inputs/outputs for the efficiency computation and ranking of bank branches.

Keywords: Data envelopment analysis; Slack; Efficiency; Ranking; Bank industry