

Abstract

The stability of the economic system of a country very much depends on its banking industry. Data Envelopment Analysis (DEA) has been applied widely for measuring efficiency of banks. Limited studies, however, have employed the radial and non-radial DEA models to evaluate efficiency of banks without considering the ranking of the fully efficient banks since those banks have the same efficiency score. Considering the weakness of the radial and non-radial DEA, this paper aims to calculate the banks efficiency of nine commercial banks in Malaysia from 2004 to 2013 by adopting the two-stage of super efficiency slack-based measure (SE-SBM) model. This model can discriminate between the efficient banks and recalculate their efficiency scores. Then, the selected banks were able to be ranked according to their final efficiency scores. Moreover, comparative analyses of the efficiency of the banks and the year-wise efficiency of the selected banks were also conducted. The methodology consists of two stages. In the first stage the SBM model is run to classify efficient and inefficient banks. In the second stage the super efficiency model is run to rank the efficient banks obtained from the first stage by calculating their super efficiency scores. Our empirical results show that: (1) the efficiency status of the banks fluctuated over the examined period, the high number of the efficient banks is achieved in the years 2006 and 2008, while the year 2012 has the lowest number of the efficient banks. (2) the ranking of the banks fluctuated in the studied period. (3) most of the banks are inefficient in terms of their average efficiency scores. This paper has two limitations. First, the paper did not integrate undesirable output, despite it deals with non-interest income. Second, performance evaluation of Malaysian commercial banks was only compared among the Malaysian banks.