Abstract

The financial system of a country is highly related to the performance of its banks. As Malaysia is moving towards achieving a high income-economy country status by 2020, the performance of its banking sector should be monitored closely. The Data Envelopment Analysis (DEA) technique has been used extensively to measure bank efficiency and one recent study focuses on banks in Malaysia from 2000 to 2010. However, our study analyses amore recent data, that is the five-year data cycle from 2009-2013. Moreover, this paper aims to demonstrate the adoption of two DEA models, the radial input-oriented model and the slack -based measure model to measure the annual efficiency of nine Malaysia commercial banks from 2009 to 2013. Both DEA models measure the efficiency but with different conceptions. The results from the traditional radial input DEA model show that two banks that were fully efficient every year in those five- year periods were BIMB and Maybank, while the highest efficiency average score for the nine banks was achieved in 2009. Results from the SBM-DEA model give a little different picture where only BIMB maintained efficiency annually in that 5-year period, however the highest efficiency average of the banks took place in 2009 as well. The two DEA models can be considered as complementing each other since the traditional radial model measures efficiency based on the distance of any existing decision-making unit (DMU) from the optimal DMUs, while the SBM model measures efficiency of a DMU based on the DMU's weighted average of the DMU's normalized input and output slacks. The use of two DEA models in measuring efficiency could be extended in other sectors since the results would give a better picture about the performance of the production system under study.