
Empirical Analysis of Commercial Banks in Malaysia Using Data Envelopment Analysis (DEA) Model

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ABSTRACT

The aim of this study is to evaluate the financial performance of domestic commercial banks in Malaysia over the period from 2001 to 2011. The sample consist of eight domestic commercial bank listed in the Malaysian Stock Market (Bursa Malaysia). The study uses secondary data, which were mainly taken from the annual reports of the banks extracted from the DataStream of Thomson Reuters. DEA efficiency scores were used in the bank performance analysis. The data envelopment analysis (DEA) through its intermediation approach used interest expense and non-interest expense as the input variables and advances, loans and investments as the output variables in the efficiency score analysis. DEA results shows that the overall mean scale efficiency score (92.98%) is found to be higher than that of technical efficiency score (71.33%) implying that during the period of study, domestic banks have been inefficient in controlling their costs rather than efficiently operating by optimizing the economies of scale due to their size.

Keywords: Bank Size, Asset Management, Operational Efficiency, Financial Ratios

INTRODUCTION

Banks are considered the mainstay of the global economy, providing capital fund for governance, innovation, job creation, infrastructure, and overall prosperity of the economy (Alkhatib, 2012). There have been wide and extensive studies in the last few decades on the evaluation of financial performance of financial institutions around the globe. This global attention can be attributed to the increasing globalization and competitive nature of the financial industry and international financial markets.

The era preceding the Asian financial crisis of 1997 witnessed the fragmentation of the Malaysian banking system with 77 domestic banking institutions comprising among others 22 domestic commercial banks and 16 foreign commercial banks. However, in 2000 Bank Negara Malaysia (BNM) which is the central bank of the country initiated and carried out a holistic restructuring, consolidation and rationalization in the banking industry in Malaysia. Today there are 27 commercial banking institutions in Malaysia with 8 domestic and 19 foreign commercial banks. Beginning from 2001, the financial sector has recorded an expansion of 7.3% at an average annual rate to account for 11.7% of real GDP in 2010 compared to 9.7% in 2001. Domestic banks have now accumulated strong capital base and loan loss buffers, with great improvements in underwriting and risk management practices, as well as strengthened governance structures and discipline.

The Financial Sector Master Plan (FSMP) of 2001 to 2010 implementation witnessed the expansion of the sector by an annual growth rate of 7.3%. During this period, the Malaysian financial system has become increasingly more diversified and competitive. Risk Weighted Capital Ratio (RWCR), Return on Equity (ROE) and Return on Asset (ROA) of the domestic

commercial banks improved from 4.2% to 11.7%, 1.1% to 1.6% and 13.7% to 16.7% respectively between the years 2000 to 2010. According to Bank Negara Malaysia (BNM) assessment report, domestic banks have reinforced their role as a key contributor of growth in the Malaysian economy. As the country aspires to transform itself to a developed and more competitive economy by 2020 under the Economic Transformation Plan of the Government, financial sector is expected to play a crucial role in this transition process based on productivity gains and innovation as envisioned in the Financial Sector Blue Print 2011-20 (FSBP) released by BNM in 2012. The FSBP projected that Total Assets of the banking sector is estimated to grow to nearly three times of GDP by 2020 from 2.4 times in 2010.

There exist considerable expectations of the Malaysian government from this sector: “a strong, comprehensive and progressive financial system underpins Malaysia’s vision to become a developed nation by 2020” (Najib, 2011). Effective and efficient financial institutions and markets, with built-in flexibility to adapt to market needs and opportunities are central to the optimal allocation of capital to new areas of growth. In the FSBP, it is assumed that the financial system will play a key role in spurring new areas of growth and facilitating economic transformation of the country in the present decade: BNM aspires to evolve a robust financial ecosystem that will further enhance the competitiveness and dynamism of the financial sector globally. It is pertinent to mention here that according to the Financial Sector Blue Print (FSBP) 2011-2020, BNM is expected to pursue the process of liberalizing the financial sector further and hence the competitive pressure on the domestic financial institutions is likely to gain strong head-wind in the coming years. As the evolution of the marketplace continues at a rapid pace in Malaysia under the policy of liberalization of BNM, it has become essential for domestic banks to remain efficient not only to withstand the competitive pressure, especially from the foreign players and globally, but also to thrive in an evolving environment. According to Berger, Hunter & Timme (1993) efficiency implies improved profitability, greater amount of funds channelled in, better prices and services quality for consumers and greater safety in terms of improved capital buffer in absorbing risk. Financial performance of banks can be measured as the difference between the bank’s position and its best production frontier. The two main approaches used in evaluating banking efficiency are viz.: parametric approach such as Stochastic Frontier Approach (SFA) and non-parametric approach such as Data Envelopment Analysis (DEA). The debate on which is a better approach is still ongoing (Luciano & Regis, 2007).

The Malaysian banking sector’s underlying structure remain on stable and sound ground, despite the continuing concerns in US and Europe in terms of slow economic growth rate, high profile sovereign debt calamities and fiscal issues. Factors that we keep close watch on - such as liquidity, Profitability, asset quality, funding and capitalization - continued to show up favourably on our radar (BNM, 2013). Against this background, Rating Agency Malaysia (RAM) Ratings has reiterated a stable and sound outlook for the Malaysian banking sector. Supported by strong domestic demand, increase in government spending on infrastructural projects and accommodative monetary conditions the Malaysian economy is anticipated to expand by 5.3% in 2013, after having advanced by 5.6% last year. Loan expansion in the Malaysian banking sector will remain fortified by strong private consumption, financing requirements for the nation’s numerous pump-priming projects and the friendly and conducive borrowing environment. Credit growth pressure will be well cushioned by banks’ comfortable liquidity and funding positions as well as sound and efficient capital base. In terms of asset quality, the banking industry’s gross impaired-loan ratio is at a record low and is expected to remain relatively stable.

Given the aspirations of government from the country's banking system in ensuring the economic transformation process, the paper is aimed at evaluating the profile of the changing dynamics of efficiency in domestic banks pre and post-merger exercise in the year 2000 and assess the drivers of efficiency and productivity changes in order to gain insight into the possible policy interventions/guidance that might be necessary by BNM to nudge the bank towards attaining greater level of efficiency and productivity.

METHODOLOGY

This study evaluates the financial performance of domestic commercial banks in Malaysia for the period from 2001 to 2011. Data Envelopment Analysis is carried out using the BCC model to measure the efficiencies of the banks. The sample size of this study contains eight domestic commercial banks operating in Malaysia.

The relevant and required data for the purpose of this study was extracted from the annual reports; income statements and balance sheets of the respective commercial banks generated from the DataStream of Thomson Reuters. DEA input orientation approach was used to estimate the efficiency scores of the selected commercial banks.

DATA ENVELOPMENT ANALYSIS

Data Envelopment Analysis (DEA), introduced by Charnes et al. (1978), is a non-parametric technique for evaluating the relative efficiency of decision-making units (DMUs), using multiple inputs to produce multiple outputs. It is formed as the piecewise linear combinations that connect the set of best practice observations, yielding a convex production possibility. Then it identifies the relatively "best practice" decision making units (DMU) on the efficient frontier and determines the inefficiencies for the others in the sample accordingly. Therefore, DEA does not require the explicit specification of the form of the underlying production relationships (Bauer, Berger, Ferrier, & Humphrey, 1998). The most efficient banks are rated to have an efficiency score of one, while the less efficient institutions score between zero and one.

The DEA can be implemented either using an input or output orientation. In the output-orientation, one measures the extent to which output may have been raised for the given level of inputs used by the unit, whereas under the input orientation approach, the objective is to estimate the degree of potential input savings for a given realized output level of the unit (Bougnol et al., 2010).

The objective of the input oriented VRS linear programming model is to minimize input while maintaining the levels of outputs. Let $Y_j = (y_{1j}; \dots; y_{rj}) \geq 0$ and $X_j = (x_{1j}; \dots; x_{ij}) \geq 0$, $j = 1; \dots; N$, be the observed output and input vectors generated from an underlying production possibility set $T = \{(X; Y) | \text{outputs } Y \text{ can be produced from inputs } X\}$ for a sample of N banks in Malaysian economy. The efficiency score for Bank j_0 , θ_j is obtained by solving the following BCC model of DEA:

Maximize θ_j

s:t:

$$\sum_{j=1}^N \lambda_j x_{ij} \leq \theta_j x_{ij_0} \quad i = 1, 2, \dots, m \quad (1)$$

$$\sum_{j=1}^N \lambda_j y_{rj} \geq \theta_j y_{rj_0} \quad r = 1, \dots, s. \quad (2)$$

$$\sum_{j=1}^N \lambda_j = 1 \quad (3)$$

$$\lambda_j \geq 0 \quad j = 1, \dots, j_0, \dots, N$$

where $\lambda_j \geq 0, j = 1, \dots, j_0, \dots, N$

The Θ so obtained from the above model describes the input reduction rate. The higher the value of Θ , the more efficient the DMU is. The efficiency measured from the above procedure is static in nature, as the performance of a production unit is evaluated in reference to best practice in a given year/period.

TECHNICAL AND SCALE EFFICIENCY

In order to have an insight into the efficiency in the usage of input parameters, the DEA was carried out with the input orientation approach of analysis.

Table 1: Efficiency and Return to Scale Profile (DEA Efficiency Score)

DMU (Banks)	Efficiency	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Average
AFFIN	Technical	43.97%	84.19%	59.28%	45.48%	80.75%	70.13%	67.78%	54.15%	100.00%	96.15%	63.18%	69.55%
	Scale	90.77%	93.72%	84.08%	98.72%	99.91%	71.70%	96.40%	99.22%	88.18%	98.56%	99.57%	92.80%
	RTS	IRS	IRS	IRS	IRS	IRS	DRS	IRS	DRS	DRS	DRS	IRS	
ALLIANCE	Technical	61.30%	73.62%	63.97%	43.77%	57.33%	79.86%	100.00%	56.07%	100.00%	100.00%	73.26%	73.56%
	Scale	89.61%	96.06%	87.71%	97.49%	99.65%	81.63%	100.00%	90.55%	81.00%	100.00%	96.44%	92.74%
	RTS	IRS	IRS	IRS	IRS	IRS	DRS	CRS	DRS	DRS	CRS	DRS	
AMBANK	Technical	74.59%	66.76%	70.70%	45.69%	96.79%	79.89%	87.36%	62.39%	52.47%	99.51%	93.42%	75.42%
	Scale	90.66%	98.32%	94.70%	95.95%	82.46%	85.27%	99.21%	91.26%	96.07%	86.58%	84.44%	91.36%
	RTS	IRS	IRS	IRS	IRS	DRS	DRS	IRS	DRS	IRS	DRS	DRS	
CIMB	Technical	81.41%	100.00%	74.88%	50.87%	52.25%	71.21%	84.19%	65.78%	56.69%	100.00%	58.02%	72.30%
	Scale	89.67%	90.75%	92.68%	98.86%	92.04%	82.84%	99.10%	90.12%	95.61%	90.77%	99.02%	92.86%
	RTS	IRS	IRS	IRS	IRS	DRS	DRS	IRS	DRS	IRS	DRS	DRS	
HONG LEONG	Technical	62.33%	54.17%	92.84%	40.74%	63.86%	65.96%	92.88%	59.48%	60.05%	100.00%	73.15%	69.59%
	Scale	86.38%	90.86%	92.00%	99.04%	84.54%	95.35%	99.85%	84.62%	95.57%	97.43%	98.73%	93.12%
	RTS	IRS	IRS	IRS	IRS	DRS	IRS	IRS	DRS	IRS	DRS	DRS	
MAYBANK	Technical	65.14%	49.55%	100.00%	45.39%	51.82%	78.01%	100.00%	53.75%	74.30%	52.27%	90.75%	69.18%
	Scale	96.68%	91.50%	100.00%	97.47%	89.10%	95.74%	100.00%	82.70%	97.90%	96.48%	94.07%	94.69%
	RTS	IRS	IRS	CRS	IRS	DRS	IRS	CRS	DRS	IRS	IRS	DRS	
PUBLIC	Technical	100.00%	61.92%	71.14%	53.19%	48.34%	82.36%	100.00%	60.73%	60.42%	60.07%	89.08%	71.57%
	Scale	99.11%	92.75%	99.35%	97.67%	87.03%	97.91%	100.00%	75.23%	99.34%	97.35%	89.49%	94.11%
	RTS	IRS	IRS	IRS	IRS	DRS	IRS	CRS	DRS	IRS	IRS	DRS	
RHB	Technical	79.54%	57.20%	47.76%	66.97%	54.27%	79.34%	52.42%	94.74%	83.90%	69.43%	78.90%	69.50%
	Scale	97.17%	92.20%	98.01%	98.18%	83.23%	98.12%	98.72%	64.36%	96.62%	99.57%	87.08%	92.11%
	RTS	IRS	IRS	IRS	IRS	DRS	IRS	DRS	DRS	DRS	IRS	DRS	

Note: Technical Efficiency = Variable Return Score (VRS)
Scale Efficiency = Constant Return Score (CRS)/Variable Return Score (VRS)
RTS = Return to Scale

Table 1 is a profile of the efficiency (technical and scale) and return to scale of the domestic commercial banks in Malaysia in the last decade (2001-2011). The profile depicts a mixed trend in the performance of both the technical and scale efficiencies. The table clearly shows that the banks are more scale efficient going by the average efficiency scores recorded for both technical and scale efficiencies.

Looking at the technical efficiency, there was a mixed trend in the technical efficiencies of the banks but witnessed a general nose dive in the efficiency level of all the banks from 2003 to 2004 except RHB bank which increased from 47.76% in 2003 to 66.97% in 2004, however

there was a reversal in the trend in 2005 with all the banks except Public bank and RHB bank experiencing an increase in their efficiency levels. Subsequent years witnessed mixed performance in the technical efficiency scores. Year 2007 and 2010 recorded the highest number of efficient banks, with three banks attaining the maximum efficiency level in both years. Alliance bank, May bank and Public bank were the efficient banks in 2007 while Alliance bank, CIMB bank and Hong Leong bank were efficient in 2010. The table shows two technically efficient banks in 2009 and one each in 2001, 2002 and 2003. There were no technically efficient banks in 2011 but Ambank, May bank, Public bank and RHB bank were comparatively more technically efficient with efficiency scores of 93.42%, 90.75%, 89.08% and 78.90% respectively.

The scale efficiency scores however witnessed an increase in its efficiency from 2001 to 2002 with all the banks becoming more scale efficient except May bank, Public bank and RHB bank. The mixed trend sets in 2002 and 2003 with an improvement in 2004, when all the banks experienced an increase in their scale efficiency levels except May bank and Public bank with a marginal decrease in their scale efficiencies. May bank dropped from 100% in 2003 to 97.47% in 2004 while Public bank moved from 71.14% to 53.19 in the same period. 2005 witnessed more banks becoming less efficient with six banks out of eight banks dropping in their efficiency levels. Year 2007 shows all the banks becoming more scale efficient with three banks (Alliance bank, May bank and Public bank) attaining the maximum efficiency scale of 100%. The following year (2008) however saw a reversal in the efficiency performance of the banks with all the banks except Affin bank dropping in their efficiency levels. The remaining period witnessed a mixed performance in the scale efficiency of the banks.

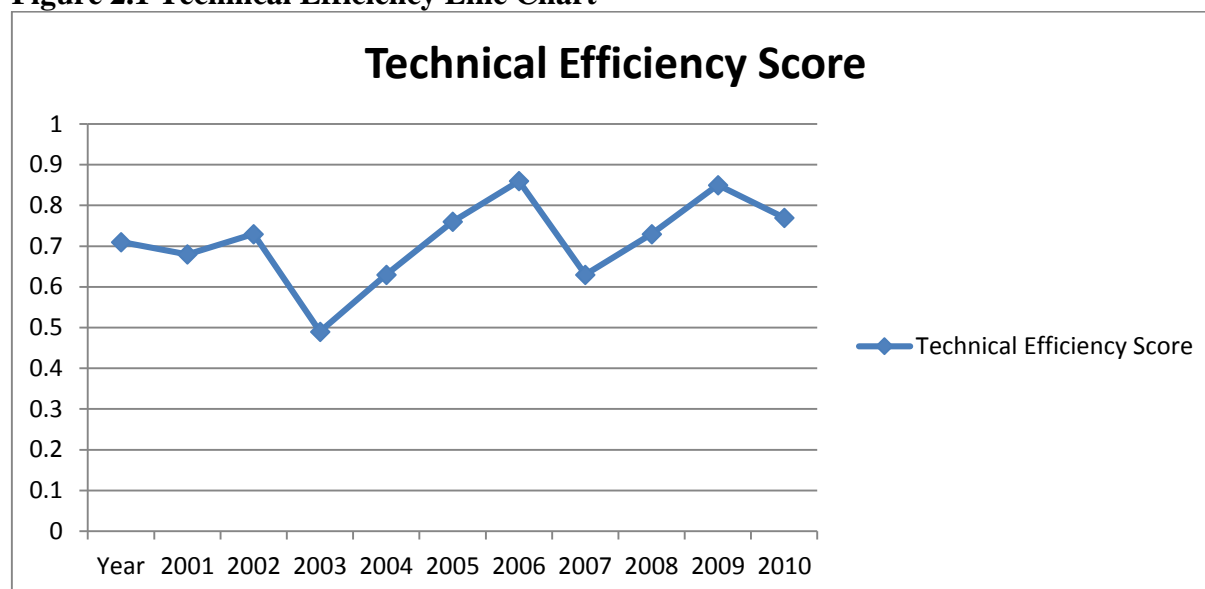
The Table also indicates a mixed performance in terms of returns to scale (RTS) of all the banks in the period under review. All the banks were in the DRS group as at 2011 except Affin Bank which recorded IRS in the same year. It is interesting to note that all the banks was in the IRS group from 2001-2004 except in 2003 where just one of the banks (May bank) was in the CRS group. Banks started falling into the DRS group in 2005 with 6 banks in that category, this trend continued till 2008 when the number of banks in DRS group rose to 8 banks, the number however decreased from 2009-2010 and eventually increased to 7 banks in the DRS group. Public Bank, Hong Leong Bank and Affin Bank were in IRS group in 7 out of the 11 years for the research was carried out, while May Bank, CIMB Bank, AmBank and RHB Bank made the IRS group 6 out of the 11 years. Alliance Bank had the least appearance in the IRS group, appearing in 5 out of 11 years in the IRS group

Table 2: Technical Efficiency (TE) and Returns to Scale (RTS)

Year	No of Efficient Banks	Average Efficiency Score	IRS	CRS	DRS
2001	1	0.71	8	0	0
2002	1	0.68	8	0	0
2003	1	0.73	7	1	0
2004	0	0.49	8	0	0
2005	0	0.63	2	0	6
2006	0	0.76	4	0	4
2007	3	0.86	4	3	1
2008	0	0.63	0	0	8

2009	2	0.73	5	0	3
2010	3	0.85	3	1	4
2011	0	0.77	1	0	7

Figure 2.1 Technical Efficiency Line Chart

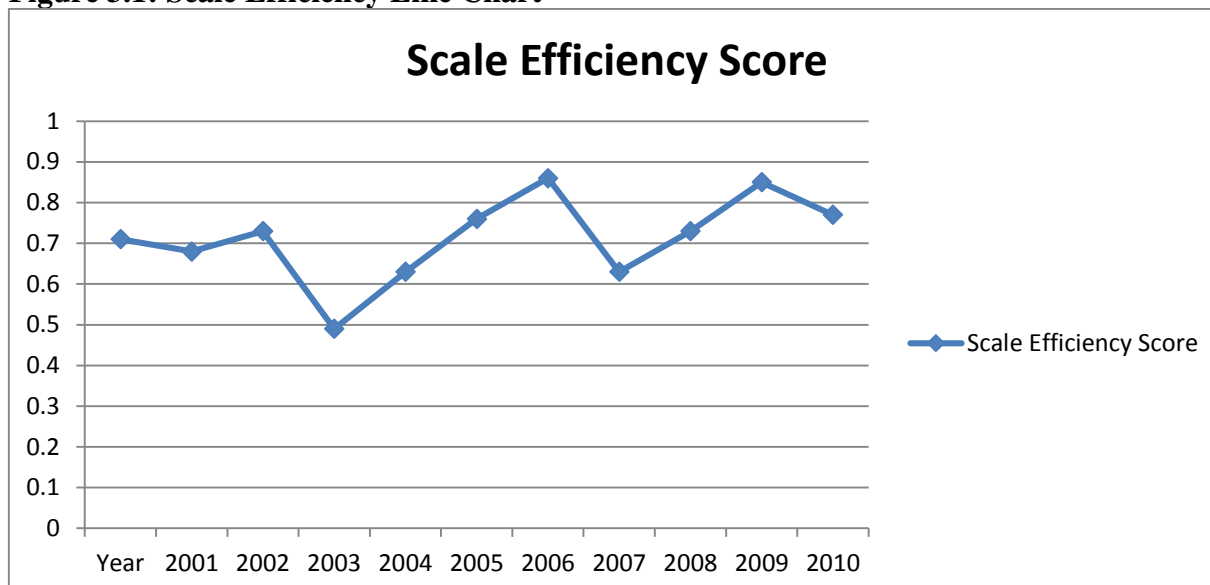


The profile of the technical efficiency scores and return to scale (RTS) of domestic banks in Malaysia, as exhibited in Table 2 indicates a high rate of inefficient banks during the period 2001-2005 with no bank attaining the efficiency level from 2004-2006. However, there was a slight increase in the number of efficient banks in 2007 when 3 out of 8 banks became efficient. This trend later reverted to the previous position with no efficient bank in 2007 and the position changed the following year with 2 efficient banks and with an additional bank making it 3 efficient banks in 2010. No efficient bank was recorded in 2011. The Average technical efficiency score however slightly increased from 0.71 to 0.77 from 2001 to 2011

Table 3: Scale Efficiency (SE) and Returns to Scale (RTS)

Year	No of Efficient Banks	Average Efficiency Score	IRS	CRS	DRS
2001	0	0.93	8	0	0
2002	0	0.93	8	0	0
2003	1	0.94	7	1	0
2004	0	0.98	8	0	0
2005	0	0.90	2	0	6
2006	0	0.89	4	0	4
2007	3	0.99	4	3	1
2008	0	0.85	0	0	8
2009	0	0.94	5	0	3
2010	1	0.96	3	1	4
2011	0	0.94	1	0	7

Figure 3.1: Scale Efficiency Line Chart



The profile of the scale efficiency scores and return to scale (RTS) of same number of Malaysian banks exhibited in table 3 is relatively similar to the technical efficiency scale. There was no efficient bank from 2001-2002 with only 1 efficient bank recorded in 2003, the years from 2004 to 2006 also witnessed an era of inefficient banks. 3 out of 8 banks however became efficient in 2007 and subsequently the number of inefficient banks increased till the end of the period of study with only one efficient bank recorded in 2010. The Average scale efficiency score also witnessed a marginal increase from 0.93 to 0.94 from 2001 to 2011

Technical Efficiency

Table 4: Technical Efficiency

Banks	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Average
AFFIN	43.97%	84.19%	59.28%	45.48%	80.75%	70.13%	67.78%	54.15%	100.00%	96.15%	63.18%	69.55%
ALLIANCE	61.30%	73.62%	63.97%	43.77%	57.33%	79.86%	100.00%	56.07%	100.00%	100.00%	73.26%	73.56%
AMBANK	74.59%	66.76%	70.70%	45.69%	96.79%	79.89%	87.36%	62.39%	52.47%	99.51%	93.42%	75.42%
CIMB	81.41%	100.00%	74.88%	50.87%	52.25%	71.21%	84.19%	65.78%	56.69%	100.00%	58.02%	72.30%
HONG LEONG	62.33%	54.17%	92.84%	40.74%	63.86%	65.96%	92.88%	59.48%	60.05%	100.00%	73.15%	69.59%
MAYBANK	65.14%	49.55%	100.00%	45.39%	51.82%	78.01%	100.00%	53.75%	74.30%	52.27%	90.75%	69.18%
PUBLIC	100.00%	61.92%	71.14%	53.19%	48.34%	82.36%	100.00%	60.73%	60.42%	60.07%	89.08%	71.57%
RHB	79.54%	57.20%	47.76%	66.97%	54.27%	79.34%	52.42%	94.74%	83.90%	69.43%	78.90%	69.50%
MEAN	71.04%	68.43%	72.57%	49.01%	63.18%	75.85%	85.58%	63.39%	73.48%	84.68%	77.47%	71.33%

Table 4 above represent the technical efficiency scores for domestic commercial bank in Malaysia. The table shows the trend in the technical efficiencies of these banks under the period of study. Despite the few actualization of optimal level by some of the banks in some years, the mean efficiency is far from been optimal. The mean of technical efficiency for year 2001 to 2005 keep fluctuating from 71.04% then declined to 68.43% and increase again to 72.57% in 2003. Then in year 2004 declined further to 49.01% and increase again to 63.18% in 2005. The mean maintained an increasing trend thereafter to 85.58% in 2007. By 2008 the mean declined back to 63.39% and increase to 73.48% and 84.68% in 2009 and 2010, and slightly fell to 77.47% 2011.

Scale Efficiency

Table 5: Scale Efficiency

Banks	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Average
AFFIN	90.77%	93.72%	84.08%	98.72%	99.91%	71.70%	96.40%	99.22%	88.18%	98.56%	99.57%	92.80%
ALLIANCE	89.61%	96.06%	87.71%	97.49%	99.65%	81.63%	100.00%	90.55%	81.00%	100.00%	96.44%	92.74%
AMBANK	90.66%	98.32%	94.70%	95.95%	82.46%	85.27%	99.21%	91.26%	96.07%	86.58%	84.44%	91.36%
CIMB	89.67%	90.75%	92.68%	98.86%	92.04%	82.84%	99.10%	90.12%	95.61%	90.77%	99.02%	92.86%
HONG LEONG	86.38%	90.86%	92.00%	99.04%	84.54%	95.35%	99.85%	84.62%	95.57%	97.43%	98.73%	93.12%
MAYBANK	96.68%	91.50%	100.00%	97.47%	89.10%	95.74%	100.00%	82.70%	97.90%	96.48%	94.07%	94.69%
PUBLIC	99.11%	92.75%	99.35%	97.67%	87.03%	97.91%	100.00%	75.23%	99.34%	97.35%	89.49%	94.11%
RHB	97.17%	92.20%	98.01%	98.18%	83.23%	98.12%	98.72%	64.36%	96.62%	99.57%	87.08%	92.11%
MEAN	92.51%	93.27%	93.57%	97.92%	89.75%	88.57%	99.16%	84.76%	93.79%	95.84%	93.61%	92.98%

Table 5 similarly describe the scale efficiency scores for domestic commercial bank in Malaysia from period of 2001 to 2011. For the year 2001, the data shows that the mean is 92.51% maintaining an increasing until year 2004 to 97.92% then declined in year 2005 and 2006 to 89.75% and 88.57%. In year 2007, the mean increase more in 2007 to 99.16% then keep fluctuating until year 2011. The mean for year 2008 declined to 84.76% then increased to 93.79% in 2009 and 95.84% in 2010 then slightly dropped to 93.61% in 2011.

DISCUSSION OF RESULTS

Reviewing the DEA analysis, Table 1 displays technical and efficiency scores as well as the returns to scale. The efficiency scores of the banks is however worrisome because most banks did not reach the maximum efficiency levels and almost all the banks except Affin bank moved to the DRS category. Conclusively, the study found out that overall mean score of the technical efficiency of domestic banks is 71.33%, lower than the mean scale efficiency of the banks with a scale efficiency score of 92.98%. The results suggest that domestic banks technical efficiency is lower than the degree of scale efficiency implying that during the period of study, domestic banks have been inefficient in controlling their costs rather than efficiently operating by optimizing the economies of scale due to their size. This is consistent with the findings that operational efficiency is negatively related to return on asset (ROA). This phenomenon needs reflection at the level of policy planners in the country.

CONCLUSION AND IMPLICATION

The importance of this study may be viewed from its immense contribution to fill an important gap in existing literature. That is, findings of this study can add to the existing literature in the study area, and may also serve as a starting point on which the need for future studies can be based. On the practical dimension, this study will go a long way in assisting bank decision makers to focus on the major banking activities that may increase the bank ranking and financial performance positions in comparison with other banks. Such information at the disposal of the management of commercial banks can help in initiating appropriate financial strategies for attaining the required planned financial performances.

The DEA efficiency scores of the banks over the study period shows a worrisome situation because most banks did not attain maximum efficiency level and almost all the banks returns witnessed a downward trend (DR) in 2011 except Affin bank with increasing returns to scale (IRS). However, the study found out that overall mean score of the technical efficiency of

domestic banks is 71.33%, lower than the mean scale efficiency of the banks with a scale efficiency score of 92.98%. The results suggest that domestic banks technical efficiency is lower than the degree of scale efficiency implying that during the period of study, domestic banks have been inefficient in controlling their costs rather than operating at the wrong scale.

Finally, the study provides bank managers and stakeholders with understanding of activities that would enhance their banks' financial performances and formulate policies that will promote effective financial system. The results of this study imply that it might be necessary for a bank management to take all the required decisions to enhance the financial positions of the bank.

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